


VITAMIN D

UpDates

Vol. 2 - N. 4 - 2019

 Editorial

 The effect of Vitamin D₃ supplementation on the risk of the onset of type 2 diabetes: are we overestimating its possible extra skeletal benefits?

 Vitamin D in oncology

 Bibliographic selection

VITAMIN D

UpDates

Editor in Chief

Maurizio Rossini

Scientific Committee

Andrea Fagiolini

Andrea Giusti

Davide Gatti

Diego Peroni

Francesco Bertoldo

Leonardo Triggiani

Paolo Gisondi

Pasquale Strazzullo

Sandro Giannini

Stefano Lello

Editorial Assistant

Sara Rossini

Copyright by

Pacini Editore srl

Managing Editor:

Patrizia Pacini

Publisher

Pacini Editore Srl

Via Gherardesca 1 • 56121 Pisa

Tel. 050 313011 • Fax 050 3130300

Info@pacinieditore.it

www.pacinieditore.it

B.U. Pacini Editore Medicina

Andrea Tognelli

Medical Project - Marketing Director

Tel. 050 3130255

atognelli@pacinieditore.it

Copy Editor

Lucia Castelli

Tel. 050 3130224

lcastelli@pacinieditore.it

Graphics and Layout

Massimo Arcidiacono

Tel. 050 3130231

marcidiacono@pacinieditore.it

Print

Industrie Grafiche Pacini • Pisa

The Publisher remains at the complete disposal of those with rights whom it was impossible to contact, and for any omissions. Photocopies, for personal use, are permitted within the limits of 15% of each publication by following payment to SIAE of the charge due, article 68, paragraphs 4 and 5 of the Law April 22, 1941, n. 633. Reproductions for professional or commercial use or for any other other purpose other than personal use can be made following a written request and specific authorization in writing from AIDRO, Corso di Porta Romana, 108, 20122 Milan, Italy (segreteria@aidro.org - www.aidro.org). Digital Edition December 2019.

EDITORIAL

Maurizio Rossini

Department of Medicine, Section of Rheumatology, University of Verona

Dear Colleagues,

As you will see, this issue features two contributions relative to the debate on the possible extra skeletal effects of vitamin D supplementation, in particular on type-2 diabetes (T2DM) and in the field of cancer treatment.

You will note that both authors correctly conclude that in general available trials have not found significant results on these fronts: rather, because they were conducted on populations which on the whole were not vitamin D deficient, they are not able to exclude a protective effect of vitamin D supplementation in subjects who are deficient, especially if we consider that sub-analyses of these subjects actually suggest a positive effect.

We see, for example, that a post-hoc analysis of the randomized clinical trial by Pittas et al. [1] on a small number of participants that had baseline circulating levels of 25-hydroxyvitamin D <1.2 ng/mL (< 30 nmol/L) showed that the risk of developing T2DM was reduced by 60% in subjects treated with cholecalciferol with respect to those given the placebo (hazard ratio [HR] 0.38, 95% IC 0.18-0.80).

We further find that in the study conducted on patients affected by lung tumors vitamin D supplementation did not on the whole produce the expected results. Yet when patients with early stage adenocarcinoma and low vitamin D levels were selected, supplementation in fact reduced mortality by over 60% with respect to the placebo (HR = 0.37; 95% IC 0.15-0.95). [2]

The time required to assess an outcome may also be fundamental: you will see, for example, that the negative conclusion of the VITAL trial [3] would change if the follow-ups of the first 1-2 years were excluded: such an exclusion, in my opinion, would be reasonable, given the biological latency. In that case, vitamin D supplementation shows a significant - 25% - reduction of death by cancer (HR = 0.75; 95% IC 0.59-0.96).

With regard to the documentation on a significant effect of vitamin D supplementation only in subjects with low baseline 25-hydroxyvitamin D3 levels, it is worth remembering that the literature contains numerous other examples, both skeletal and extra skeletal [4]. Figure 1 shows several examples of different effects of supplementation on some extra skeletal risks with respect to baseline serum levels - low and not low - in supplemented patients.

This should not surprise us [5], in view of the fact that vitamin D acts as a nutrient: it is beneficial when lacking, though not so when it is not lacking...

To conclude, I do not believe that we can affirm today that we are overestimating the possible extra skeletal benefits of vitamin D supplementation. Neither do I think that we can deny them, given that the design and results of clinical trials conducted thus far do not allow us to exclude such benefits.

What do you think?

I hope you enjoy reading this issue.

Correspondence

MAURIZIO ROSSINI

maurizio.rossini@univr.it

VITAMIN D - UpDates

2019;2(4):106-107

© Copyright by Pacini Editore srl



OPEN ACCESS

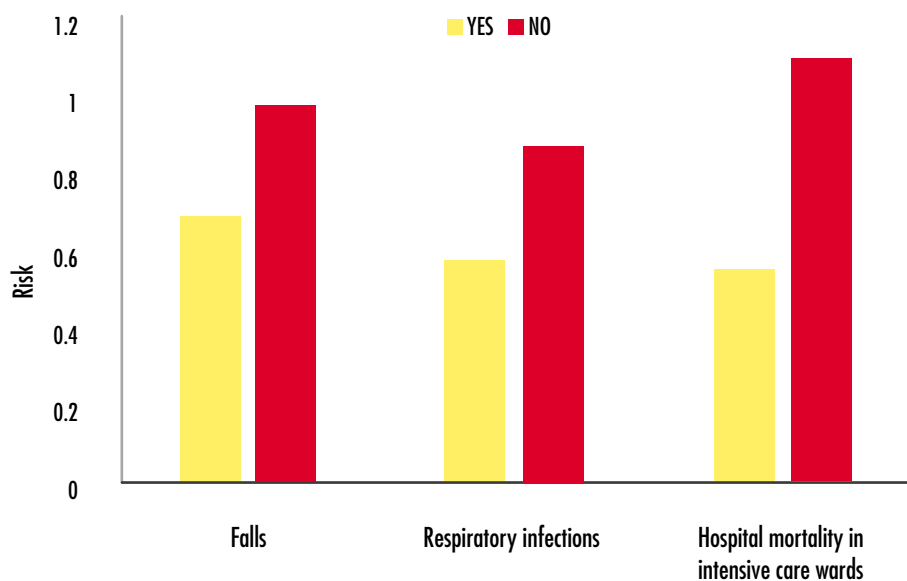


FIGURE 1.

Effects of vitamin D supplementation on extra skeletal risks (relative risk, odds ratio or hazard ratio) with respect to baseline serum levels of 25-hydroxyvitamin D3, either low (YES) or not low (NO) ($p < 0.05$ among the groups).

References

- 1 Pittas AG, Dawson-Hughes B, Sheehan P, et al; D2d Research Group. *Vitamin D supplementation and prevention of type 2 diabetes*. *N Engl J Med* 2019;381:520-530. <https://doi.org/10.1056/NEJMoa1900906>.
- 2 Akiba T, Morikawa T, Odaka M, et al. *Vitamin D supplementation and survival of patients with non-small cell lung cancer: a randomized, double-blind, placebo-controlled trial*. *Clin Cancer Res* 2018;24:4089-97. <https://doi.org/10.1158/1078-0432.CCR-18-0483>.
- 3 Manson JE, Cook NR, Lee IM, et al; VITAL Research Group. *Vitamin D supplements and prevention of cancer and cardiovascular disease*. *N Engl J Med* 2019;380:33-44. <https://doi.org/10.1056/NEJMoa1809944>.
- 4 Scragg R. *Emerging evidence of thresholds for beneficial effects from vitamin D supplementation*. *Nutrients*. 2018;10(5). pii: E561. <https://doi.org/10.3390/nu10050561>.
- 5 Fassio A, Rossini M, Gatti D. *Vitamin D: no efficacy without deficiency. What's new?* *Reumatismo* 2019;71:57-61 <https://doi.org/10.4081/reumatismo.2019.1201>.

THE EFFECT OF VITAMIN D₃ SUPPLEMENTATION ON THE RISK OF THE ONSET OF TYPE 2 DIABETES: are we overestimating its possible extra skeletal benefits?

Giovanni Targher

Division of Diabetology and Endocrinology, Department of Medicine, University of Verona

Vitamin D deficiency has been associated with the presence of multiple chronic non-skeletal pathologies (including cardiovascular diseases, hypertension, non-alcoholic hepatic steatosis, some neoplasms and diabetes), suggesting the possibility that this vitamin can have numerous pleiotropic effects at the extra skeletal level, thanks to the ubiquitous distribution of its receptor [1-3].

Among these non-skeletal chronic pathologies which are potentially associated with reduced circulating levels of vitamin D, type-2 diabetes mellitus (T2DM) has represented one of the most important focuses of scientific research in the last decade [4].

Several epidemiological studies have shown that patients with T2DM have reduced circulating levels of vitamin D with respect to the non-diabetic population (comparable for age, gender and degree of obesity) and that low vitamin D levels are associated with a greater prevalence of micro- and macro-vascular chronic diabetic complications [4-6]. Experimental models have further demonstrated that reduced vitamin D levels are associated with increased insulin resistance and impaired insulin secretion on the part of the beta-cell, in addition to high levels of various procoagulant factors and inflammatory markers, and that most of these disorders improve after vitamin D₃ administration [2, 4, 7].

On the basis of this evidence, various prospective observational studies have successively shown the existence of a significant correlation between reduced circulating levels

of vitamin D and increased risk of developing T2DM (especially in patients with reduced glucose tolerance) [8], thus confirming the biological plausibility of the involvement of vitamin D in the onset of T2DM. Nonetheless, until now available findings have been exclusively based on data that do not allow us to define a possible causal role of vitamin D in the development of diabetes. In particular, it is still not clear whether vitamin D₃ supplementation is able to reduce the risk of developing diabetes.

A recent randomized clinical trial, published by Pittas et al. in the August issue of the *New England Journal of Medicine* [9], aims to provide an answer to this question. In this broad RCT, called the "D2d trial," the authors assembled a sample of over 2,400 adults (45% females, 67% Caucasian, average age = 60 years, average BMI = 32 kg/m²) with a high risk of developing diabetes (that is, individuals with at least two of the following disorders: fasting glycemia between 100 and 125 mg/dL, glycemia two hours after OGTT between 140 and 199 mg/dL, and glycated hemoglobin between 5.7 and 6.4%) but who were not selected based on their baseline vitamin D status. Indeed, their average circulating 25-hydroxyvitamin D levels were 28 ± 10 ng/mL; only 21.7% of the sample had 25-hydroxyvitamin D baseline values < 20 ng/mL. By means of a randomized, double-blind study, these subjects were later assigned either to an active treatment group with high doses of vitamin D₃ (cholecalciferol 4,000

Correspondence

GIOVANNI TARGHER

giovanni.targher@univr.it

VITAMIN D - UpDates

2019;2(4):108-111

<https://doi.org/10.30455/2611-2876-2019-07EN>

© Copyright by Pacini Editore srl



OPEN ACCESS

This is an open access Journal distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

IU daily, n = 1,211) or to treatment with a placebo (n = 1,212). Subjects underwent a follow-up exam after 2.5 years on average. The principal outcome of the study was the appearance of new cases of T2DM. During the trial, circulating vitamin D levels more than doubled in those subjects treated with cholecalciferol (average baseline values increased from 27.7 ng/mL to 54.3 ng/mL by the end of the study), while levels remained nearly unchanged in the group treated with the placebo (with average baseline values going from 28.2 ng/mL to 28.8 ng/mL by the end of the trial). The authors of the study observed that the risk of developing T2DM during the follow-up was substantially comparable in the group treated with cholecalciferol with respect to the group given the placebo (9.4 and 10.7 events every 100 persons per year; hazard ratio 0.88, 95% CI 0.75-1.04; p = 0.12) (Fig. 1). Overall adherence of the participants to

the treatment was quite high (~86%), while the incidence of adverse events (including hypercalcemia, eGFR reduction and nephrolithiasis) was low, and perfectly comparable between subjects treated with daily doses of cholecalciferol and those taking the placebo.

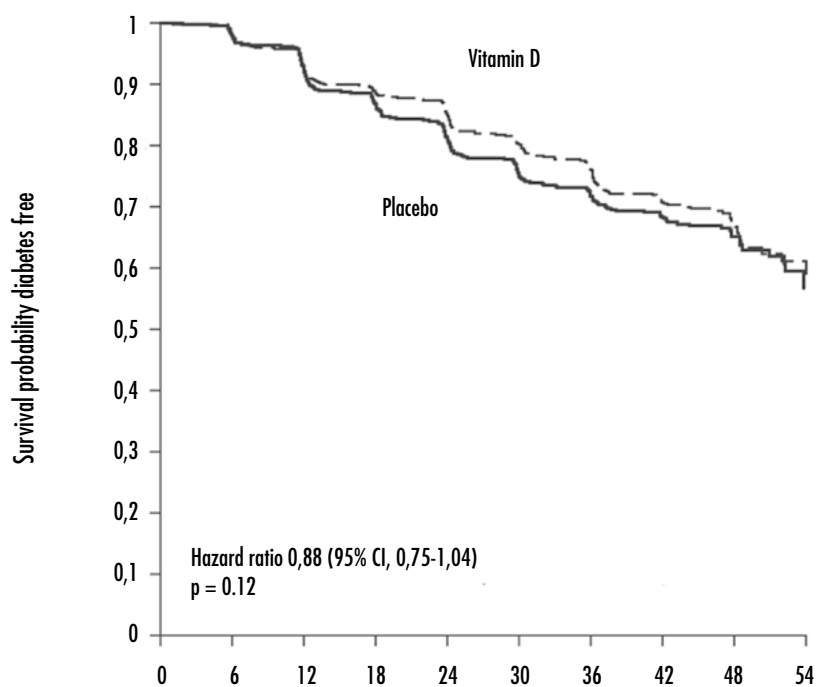
Statistical analysis conducted on the above-mentioned subgroups of subjects did not show the presence of any significant differences between the two treatment groups (Fig. 2). In particular, the results of the study did not vary when the population was divided by gender, race, geographic latitude, incidence of obesity or even by baseline circulating levels of 25-hydroxyvitamin D (< 20 ng/mL vs. ≥ 20 ng/mL) [9]. Nonetheless, a post-hoc analysis of a smaller group of participants (n = 103, 4.3% of the total) with baseline circulating 25-hydroxyvitamin D levels < 12 ng/mL (< 30 nmol/L) revealed that the risk of developing T2DM

was significantly lower in subjects treated with cholecalciferol with respect to those given the placebo (hazard ratio 0.38, 95% CI 0.18-0.80). By contrast, in participants (n = 2,319, 95.7% of the total) with baseline 25-hydroxyvitamin D levels ≥ 12 ng/mL, the risk of developing T2DM was comparable in the two treatment groups (hazard ratio 0.92, 95% CI 0.78-1.08) [9].

The results of this broad RCT show that vitamin D₃ supplementation in high doses (4,000 IU/day of cholecalciferol per os) in pre-diabetic subjects (that is, with a high risk of developing diabetes) who were not selected for baseline vitamin D deficiency is well tolerated (with no toxicity risk for excessive cholecalciferol intake); yet such supplementation cannot be associated with any significant reduction in the onset of T2DM during the 2.5-year follow-up exam [9].

For the most part, these results confirm what had already been observed in a previous RCT with a smaller sample, which was published in 2016 [9]. In this Norwegian study, called the "Tromsø Vitamin D and T2DM trial", 511 subjects with prediabetes (61% male, average age = 62 years, average BMI = 30 kg/m², and average 25-hydroxyvitamin D values = 24 ± 8 ng/mL) were randomized and treated with either a placebo or 20,000 IU cholecalciferol per week (roughly 2,900 IU/day) for a period of 5 years [9]. Similarly to what was observed in the "D2d trial", the authors of this study did not find any significant benefit of vitamin D₃ supplementation with respect to the onset of T2DM during the study's follow-up exam (hazard ratio 0.90; 95% CI 0.69-1.18) [9]. Based on the results of these two RCTs, we can conclude that vitamin D₃ supplementation in high doses (with daily doses of cholecalciferol varying between 2,900 and 4,000 IU) in adults with a high risk of diabetes who are not selected on the basis of circulating levels of 25-hydroxyvitamin D do not seem to have a significant protective effect on the risk of developing T2DM. In both clinical trials, such supplementation is only associated with an average reduction of 10-12% of the risk for developing T2DM during a follow-up period of between 2 and 5 years [9, 10].

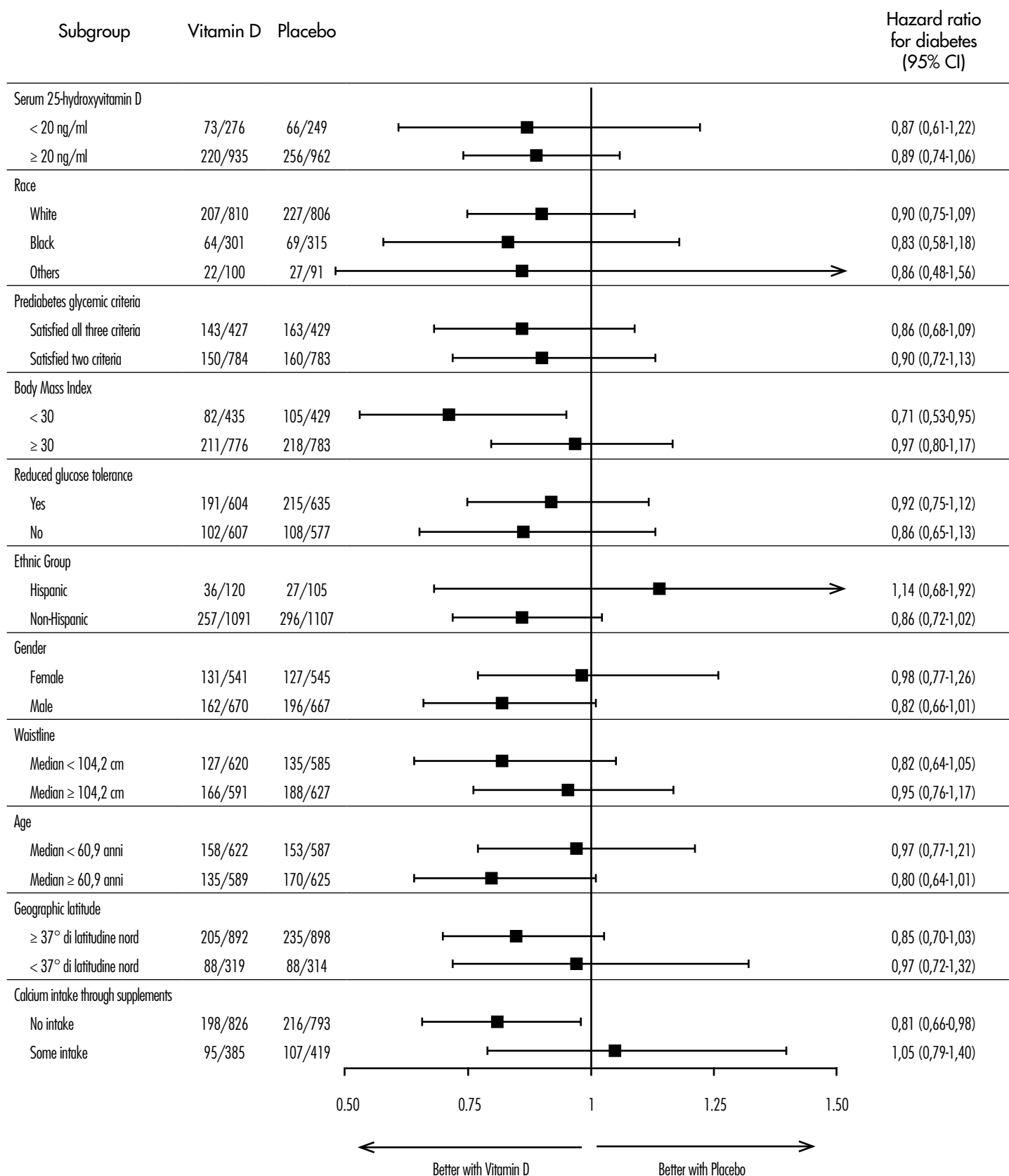
This conclusion, of course, does not exclude the possibility that future randomized clinical trials with larger samples may be able to obtain statistically significant findings showing long-term benefits of treatment with cholecalciferol with regard to T2DM development



	Number of subjects at risk									
	Months after randomization									
	0	6	12	18	24	30	36	42	48	54
Vitamin D	1211	1171	1089	1001	812	625	466	283	141	21
Placebo	1212	1171	1091	975	779	577	419	258	121	13

FIGURE 1.

Kaplan-Meier curve on effect of treating subjects with high doses of cholecalciferol (4,000 IU/day) vs. placebo on risk of developing T2DM in 2,423 prediabetic adult subjects. Data published in and taken from "D2d trial" [9].

**FIGURA 2.**

Effect of treatment with high doses of cholecalciferol (4,000 IU/day) vs. placebo on risk of developing T2DM in various subgroups of specified prediabetic subjects. Data published in and taken from "D2d trial" [9].

(given that neither of the two clinical trials in question had a sample large enough to show a significant reduction in diabetes risk of 10-12%). Another factor that is even more important to emphasize is that the majority of subjects included in the two RCTs had optimal levels of circulating vitamin D levels [9, 10]. Indeed, in the "D2d trial", 42.2% of the participants had 25-hydroxyvitamin D levels ≥ 30 ng/mL, 36.1% had values between 20 and 29 ng/mL, while only 21.7% of the participants had 25-hydroxyvitamin D levels < 20 ng/mL [9]. It is, then, possible to hypothesize that the high percentage of subjects with adequate vitamin D levels who were included in these two RCTs may have reduced the researchers' ability to find benefits of cholecalciferol supplementation with regard to the risk of T2DM onset in the two treated groups.

It is furthermore useful to recall, as we have already seen, that a post-hoc analysis of data from the "D2d trial", conducted on participants ($n = 103$, 4.3% of the total) who had extremely low baseline circulating levels of 25-hydroxyvitamin D (< 12 ng/mL), itself suggested that the risk of developing T2DM was reduced by over 60% in subjects treated with cholecalciferol compared to those given the placebo (hazard ratio 0.38, 95% CI 0.18-0.80) [9]. In an increasingly evident manner, this fact underlines the need for researchers who plan future RCTs that evaluate the possible benefits of oral supplementation of vitamin D₃ on the risk of T2DM onset (and quite probably other important skeletal and extra skeletal outcomes as well, as has been shown in recent trials and meta-trials) [11-13] to take into account the vitamin D status of the participants enlisted in such trials. Such a measure seems justifiable given that it is reasonable to believe that the benefits of vitamin D₃ supplementation at high doses with regard to the long-term risk of developing T2DM may be greater in pa-

tients with vitamin D deficiency, compared to those who have adequate levels of circulating vitamin D [14].

CONFLICT OF INTEREST

The Author declares that he has no conflict of interest.

Reference

- Holick MF. *Vitamin D deficiency*. N Engl J Med 2007;357:266-281. <https://doi.org/10.1056/NEJMra070553>.
- Targher G, Pichiri I, Lippi G. *Vitamin D, thrombosis, and hemostasis: more than skin deep*. Semin Thromb Hemost 2012;38:114-24. <https://doi.org/10.1055/s0031-1300957>.
- Targher G, Scorletti E, Mantovani A, et al. *Nonalcoholic fatty liver disease and reduced serum vitamin D₃ levels*. Metab Syndr Relat Disord 2013;11:217-28. <https://doi.org/10.1089/met.2013.0044>.
- Lips P, Eekhoff M, van Schoor N, et al. *Vitamin D and type 2 diabetes*. J Steroid Biochem Mol Biol 2017;173:280-5. <https://doi.org/10.1016/j.jsbmb.2016.11.021>.
- Cigolini M, Iagulli MP, Miconi V, et al. *Serum 25-hydroxyvitamin D₃ concentrations and prevalence of cardiovascular disease among type 2 diabetic patients*. Diabetes Care 2006;29:722-4. <https://doi.org/10.2337/diacare.29.03.06.dc05-2148>.
- Zoppini G, Galletti A, Targher G, et al. *Lower levels of 25-hydroxyvitamin D₃ are associated with a higher prevalence of microvascular complications in patients with type 2 diabetes*. BMJ Open Diabetes Res Care 2015;3: e000058. <https://doi.org/10.1136/bmjdr-2014-000058>.
- Marquina C, Mousa A, Scragg R, et al. *Vitamin D and cardiometabolic disorders: a review of current evidence, genetic de-*

terminants and pathomechanisms. Obes Rev 2019;20:262-77. <https://doi.org/10.1111/obr.12793>

- He S, Yu S, Zhou Z, et al. *Effect of vitamin D supplementation on fasting plasma glucose, insulin resistance and prevention of type 2 diabetes mellitus in non-diabetics: a systematic review and meta-analysis*. Biomed Rep 2018;8:475-84. <https://doi.org/10.3892/br.2018.1074>.
- Pittas AG, Dawson-Hughes B, Sheehan P, et al; D2d Research Group. *Vitamin D supplementation and prevention of type 2 diabetes*. N Engl J Med 2019;381:520-30. <https://doi.org/10.1056/NEJMoa1900906>.
- Jorde R, Sollid ST, Svartberg J, et al. *Vitamin D 20,000 IU per week for five years does not prevent progression from prediabetes to diabetes*. J Clin Endocrinol Metab 2016;101:1647-55. <https://doi.org/10.1210/ic.2015-4013>.
- Kahwati LC, Weber RP, Pan H, et al. *Vitamin D, calcium, or combined supplementation for the primary prevention of fractures in community-dwelling adults: evidence report and systematic review for the US Preventive Services Task Force*. JAMA 2018;319:1600-12. <https://doi.org/10.1001/jama.2017.21640>.
- Burt LA, Billington EO, Rose MS, et al. *Effect of high-dose vitamin D supplementation on volumetric bone density and bone strength*. JAMA 2019;322:736-45. <https://doi.org/10.1001/jama.2019.11889>.
- Manson JE, Cook NR, Lee IM, et al; VITAL Research Group. *Vitamin D supplements and prevention of cancer and cardiovascular disease*. N Engl J Med 2019;380:33-44. <https://doi.org/10.1056/NEJMoa1809944>.
- Lippi G, Targher G. *Are we overrating the extra-skeletal benefits of oral vitamin D supplementation?* Ann Transl Med 2019;7:499. <https://doi.org/10.21037/atm.2019.08.93>.

Sara Gandini

Group Leader, Department of Experimental Oncology,
European Institute of Oncology IRCCS, Milano

INTRODUCTION

Studies in vitro and in vivo demonstrated that the physiologically active vitamin D metabolite (1,25(OH)₂D or calcitriol), which exerts its action via the vitamin D Receptor (VDR), has antiproliferative effects in various cell types and was found to regulate the expression of tumor-related genes, mediate inhibition of cell growth, adhesion, migration, metastases and angiogenesis. Furthermore, a number of epidemiologic studies showed inverse associations of cancer incidence with high 25-hydroxycholecalciferol (25(OH)D). However, observational studies suffer from reverse causation bias and intervention studies did not confirm these associations. Discrepancies with randomised clinical trials (RCTs) suggest that low 25(OH)D could be just a marker of ill health. Inflammatory processes involved in disease occurrence and clinical course would reduce 25(OH)D, which would explain why low vitamin D status (measured by 25OHD) is reported in a wide range of disorders.

More convincing results were found for mortality, in fact evidence comes not only from observational studies but also from clinical trials. A meta-analysis of observational studies showed a nonlinear relationship of overall mortality risk with increasing circulating 25(OH)D, with optimal concentrations around 30-35 ng/ml. A meta-analysis of randomized clinical trials in healthy subjects showed that current doses of vitamin D supplements are associated with a significant decrease in overall mortality for vitamin D₃ supplementation, whereas no association with vitamin D₂ supplementation was found.

Recent evidence suggests to investigate the link of vitamin D with cancer survival and mortality, identifying this topic as one of the most promising area of research.

OBSERVATIONAL STUDIES

A meta-analysis of cohort studies (1) showed that people with high baseline 25(OH)D were at significant decreased risk of cancer deaths. Summary risk estimates were: Summary Rela-

tive Risk (SRR) = 0.91 (95% CI: 0.85-0.98) and 0.69 (95% CI: 0.61-0.78) for primary prevention cohorts (participants not selected on the basis of pre-existing chronic disease) and secondary prevention cohorts (pre-existing baseline conditions) respectively, adjusting for several potential confounding factors. Subgroup analyses indicated that the inverse associations of 25(OH)D with cancer specific mortality were significantly stronger in the populations with low prevalence of vitamin D supplement use (< 10%).

In an individual-patients pooled analysis of 8 cohorts studies a consistent increase in mortality was observed for subjects with 25(OH)D concentrations below 40 nmol/L. The prevalence of 25(OH)D concentrations below 40 nmol/L was estimated to be about 20%. No clear linear relationship between 25(OH)D and cancer mortality (2) was demonstrated, however in a previous pooled analysis a significant association with cancer mortality was observed among subjects with a history of cancer (risk ratio = 1.70 (95% CI: 1.00-2.88)) (3).

A mendelian pooled analysis of the UK Biobank evaluated whether genetically predicted 25(OH)D concentrations are associated with cancer mortality summarising data of 438 870 healthy subjects and 6998 cancer-specific deaths. Results showed that genetically low plasma 25(OH)D concentrations were not associated with cancer mortality (4). More consistent results suggesting inverse association of 25(OH)D with cancer mortality were found by meta-analyses for patients with some specific cancer sites: Pancreas, Breast, Lung, Prostate, Colorectal and Haematological (Table I). Some single cohort studies also found a significant decreased cancer mortality risk for the upper aerodigestive tract and Gastric cancer (Table II).

Since sun exposure is a recognised risk factor for melanoma, the commonly given advice to melanoma patients to reduce their sun exposure after diagnosis could further exacerbate their vitamin D insufficiency. In fact, in a pro-

Correspondence

SARA GANDINI

sara.gandini@ieo.it

VITAMIN D - UpDates

2019;2(4):84-87

<https://doi.org/10.30455/2611-2876-2019-08e>

© Copyright by Pacini Editore srl



OPEN ACCESS

This is an open access article distributed in accordance with the Creative Commons Attribution Non-Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

TABLE I.
Recent meta-analysis on 25OHD and survival/cancer mortality.

	Cancer sites	First author, Publication year	N. studies	No. subjects	Endpoint	Summary Risk estimate (95%CI)	Contrasts
Meta-analysis	Pancreas	Zhang, 2017	8	2166	Mortality	0.81 (0.68-0.96)	High vs low
	Breast	Hu, 2018	6	5984	Overall survival	0.67 (0.56-0.79)	Highest with lowest
	Lung	Huang, 2017	8	2166	Overall survival	0.80 (0.59-1.08)	High vs low
		Feng, 2017	4	17919	Mortality	0.76 (0.61-0.94)	High vs low
			5		Overall survival	1.01 (0.88-1.16)	High vs low
	Prostate	Song, 2018	7	7808	Overall survival	0.91 (0.87-0.97)	20 nmol/L increase
	Colorectal	Maalmi, 2018	11	7718	Overall survival	0.67 (0.57-0.78)	Highest with lowest
	Hematological	Wang, 2015	7	2643	Overall survival	0.54 (0.45-0.65)	Normal vs low
	Any	Chowdhury, 2014	17	120735	Mortality	0.80 (0.70-0.91)	High vs low
	Pooled-analysis any		Ong, 2018*		6998	Mortality	0.97 (0.84-1.11)
		Gaksch, 2017	8	26916	Mortality	0.79 (0.60-1.04)	> 100 vs 75-99 nmol/L
		Schöttker, 2014	8	26018	Mortality	0.60 (0.35-1.00)	Top vs bottom quintiles

* Mendelian randomisation.

spective cohort of 1171 melanoma patients the variation of 25(OH)D from baseline was found associated with risk of relapse: an increased risk was found with a reduction and an increase in 25(OH)D (5). Patients who did not change their habitudes and had sunny holidays after melanoma diagnosis likely correspond to the reference category of no change in 25(OH)D in the study by Saiag et al. (5). In a cohort of 691 melanoma patients we found that the risk of melanoma recurrence was significantly lower in patients who had holidays in the sun after melanoma diagnosis avoiding sun exposure during peak hours (6). Furthermore, sunny holidays before melanoma diagnosis were found to be significantly associated with lower

Breslow thickness, the main prognostic factor of melanoma. Number of weeks of sunny holidays was also significantly and inversely associated with thickness in a dose-dependent manner (6).

A big prospective cohort of 1,042 melanoma patients after a median follow-up time of seven years showed that low vitamin D was significantly associated with worse melanoma prognostic factors (high tumor thickness, ulcerated tumor and advanced melanoma stage). Multivariable hazards ratios confirmed a significant reduced risk of relapse, overall survival and melanoma specific survival for increasing values of 25OHD (7), adjusting for markers of inflammation.

RANDOMIZED CLINICAL TRIALS

Few RCTs investigated effect of vitamin D supplementation on cancer mortality or survival in cancer patients (Table III).

The Cochran collaboration in 2014 reviewed 18 clinical trials and showed that Vitamin D₃ (cholecalciferol), given singly (with no calcium), is associated with decreased cancer mortality and all-cause mortality, even if limitations were outlined due to low statistical power and risk of attrition bias (8). A nationwide, randomized, placebo-controlled trial (VITAL), with vitamin D₃ at a dose of 2000 IU per day, conducted on 25,871 participants, showed overall no results on all main endpoints such as cancer incidence. However when first 1-2

TABLE II.
Cohort studies on 25OHD and survival/cancer mortality for cancer sites.

Cancer site	First author, PY	Country	No. subjects	Risk estimate (95% CI)	Contrasts*
Melanoma	Fang, 2016			0.71 (0.55-0.93)	> 20 vs < 20
Upper aerodigestive tract	Gugatschka, 2011	Austria	88	0.89 (0.83-0.97)	> 10 vs < 10
Gastric	Ren, 2012 (NHANES)	China	197	0.59 (0.37-0.91)	≥ 50 vs < 50
Head and neck	Meyer, 2011	Canada	522	0.85 (0.57-1.28)	> 78 vs < 48

PY: publication year; * ng/mL.

TABLE III.
Randomised clinical trial (RCT) on vitamin D and survival/cancer mortality.

Study design	Cancer site	First author, PY	Arms	N. trials	Endpoint	N. deaths	HR (95% CI)
RTC	Breast	Chlebowski, 2008	Vitamin D + calcium Placebo	1	Mortality	46	0.99 (0.55-1.76)
Meta-analysis of RCT	Prostate	Shahvazi, 2019	Vitamin D vs control	3	Survival	477	1.05 (0.81-1.36)
RTC	Any	Trivedi, 2003	Vitamin D Placebo	1	Mortality	63	0.86 (0.61-1.20)
RTC	Any	Wactawski-Wende, 2006; Brunner, 2011	Vitamin D + calcium Placebo	1	Mortality	744	0.90 (0.77-1.05)
RTC	Any	Avenell, 2011 (RECORD)	Vitamin D Calcium Vitamin D+ Calcium Placebo	1	Mortality	329	0.85 (0.68-1.06)
Meta-analysis of RCT	Any	Keum, 2019	Vitamin D vs control	5	Mortality	1591	0.87 (0.79-0.96)

PY: publication year.

years of follow-up were excluded to take into account of latency effect, a significant decreased risk of cancer death was estimated for vitamin D arm vs placebo: Hazard Ratio (HR) = 0.75 (95% CI: 0.59-0.96) (9).

A randomized, double-blind trial in 155 lung cancer patients, who received vitamin D supplements (1,200 IU/day) for 1 year after surgery or placebo, found overall no results. However, selecting patients with early-stage adenocarcinoma with low 25(OH)D, vitamin D supplementation was found to be significantly associated with 63% decrease risk of death (HR = 0.37; 95% CI: 0.15-0.95) (10).

A randomised clinical trial in 417 digestive tract cancer patients assessed the effect of vitamin D (2000IU/d) versus placebo on relapse free survival (AMATERASU trial). Overall no effect was found, however in patients with medium baseline serum 25(OH)D levels (between 20 and 40 ng/mL), supplementation was found to be associated with a significant decreased risk of relapse (HR = 0.46; 95% CI, 0.24-0.86). No association was found for the patients with 25(OH)D below 20 ng/mL. The dose of vitamin D could have been insufficient to increase vitamin D levels in that subgroup (11).

The SUNSHINE study, a phase 2 ran-

domised clinical trial of 139 advanced/metastatic colorectal cancer patients, assessed the efficacy of high-dose vitamin D3 vs standard dose (+standard chemotherapy): 8,000 IU/d for 14 days, then 4,000 IU a day thereafter versus 400 IU/d during all cycles. Multivariable analysis showed a significant reduced risk of relapse: HR = 0.64 (95%CI: 0-0.90). The effect of high-dose vitamin D3 on progression-free survival appeared to be greater among patients with a lower BMI, more metastatic sites and KRAS wild-type cancers ($p = 0.04$, $p = 0.02$ and $p = 0.04$ respectively for interaction). Furthermore, vitamin D was associated with fewer grade 3 or higher diarrhea events (12).

In 2019 a meta-analysis summarised 5 clinical trials and included 1591 cancer deaths. The 25(OH)D levels attained was between 54 and 135 nmol/l in the intervention group and the summary risk estimate indicated a significant reduced risk of cancer death: SRR = 0.87 (95% CI: 0.79-0.96), with no heterogeneity. Interestingly the effect was largely attributable to interventions with daily dosing (as opposed to infrequent bolus dosing). No statistically significant heterogeneity was observed by attained levels of circulating 25(OH)D (13).

DISCUSSION

Findings from observational studies constitute suggestive pieces of evidence of a relationship between vitamin D and cancer survival and mortality but they are insufficient to establish causality. Main results of RCTs showed overall no effect on cancer mortality and survival, however subgroup analyses are suggestive and strong enough to consider that RCTs may not have correctly addressed the question. Several issues were raised on the validity of the conclusions. First of all, RCTs included study participants irrespective of their 25(OH)D level and may thus have failed to detect significant treatment effects in vitamin D deficient individuals. The doses used in the majority of trials are ordinary doses of vitamin D supplements as for the prevention of fractures and we do not know the exact dose that could be effective for cancer mortality and survival.

A particular case is the one of melanoma patients. Given that ultraviolet exposure is a recognized risk factor for melanoma, a common advice after melanoma diagnosis is to stop sun exposure. Thus, the UK melanoma guidelines recommend checking vitamin D levels in all melanoma patients at diagnosis and offer supplementation if necessary. However, there are some concerns that oral supplementation of vitamin D may not be as

efficient as limited controlled sun exposure and more studies are needed in this area. Obese subjects are usually vitamin D deficient because of "trapping" of the vitamin D parent compound, cholecalciferol, in adipose tissue. Moreover obesity is inversely associated with physical activity that is positively associated with 25OHD among people with normal- and overweight BMI but not in people with obese BMI. The association between physical activity and vitamin D status has often been attributed to physical activity being a surrogate for sun exposure; however, in the few studies in which both estimates are adjusted for sun exposure, the physical activity-vitamin D relationship persisted (14).

It has also been speculated that immune-modulating ability of vitamin D could offer indications for a novel application in cancer patients receiving immunotherapy, to reinforce the anti-tumoral response and to prevent and/or limit the onset of immune related adverse events (15).

Evidence from RTCs do not allow definitive answers but it raises the hypothesis that combination therapy is required for cancer survival/mortality. New RCTs should be organized in particular in this setting because we need more information on dose of vitamin D supplementation, per specific cancer sites and stages, and to assess the benefits in patients with low vitamin D status at baseline. New studies should also take into account BMI and have good follow-up of all participants, in order to reduce attrition bias, better evaluate compliance and the effect of vitamin D on cancer therapy toxicity.

Conflicts of Interest

The author declare no conflict of interest.

Bibliografia

- Chowdhury R, Kunutsor S, Vitezova A, et al., *Vitamin D and risk of cause specific death: systematic review and meta-analysis of observational cohort and randomized intervention studies*. *BMJ* 2014;348:g1903. <https://doi.org/10.1136/bmj.g1903>
- Gaksch M, Jorde R, Grimnes G, et al.. *Vitamin D and mortality: Individual participant data meta-analysis of standardized 25-hydroxyvitamin D in 26916 individuals from a European consortium*. *PLoS One* 2017;12:e0170791. <https://doi.org/10.1371/journal.pone.0170791>.
- Schöttker B, Jorde R, Peasey A, et al.. *Consortium on health and ageing: network of cohorts in Europe and the United States. Vitamin D and mortality: meta-analysis of individual participant data from a large consortium of cohort studies from Europe and the United States*. *BMJ* 2014;348:g3656. <https://doi.org/10.1136/bmj.g3656>.
- Ong J.S, Gharahkhani P, An J, et al.. *Vitamin D and overall cancer risk and cancer mortality: a Mendelian randomization study*. *Hum Mol Genet* 2018;27:4315-22. <https://doi.org/10.1093/hmg/ddy307>.
- Saiag P, Aegerter P, Vitoux D, et al.. *Prognostic value of 25-hydroxyvitamin d3 levels at diagnosis and during follow-up in melanoma patients*. *J Natl Cancer Inst* 2015;107:djv264. <https://doi.org/10.1093/jnci/djv264>.
- Gandini S, De Vries E, Tosti G, et al.. *Sunny holidays before and after melanoma diagnosis are respectively associated with lower Breslow thickness and lower relapse rates in Italy*. *PLoS One* 2013;8:e78820. <https://doi.org/10.1371/journal.pone.0078820>.
- Fang S, Sui D, Wang Y, et al.. *Association of vitamin D levels with outcome in patients with melanoma after adjustment for c-reactive protein*. *J Clin Oncol* 2016;34:1741-7. <https://doi.org/10.1200/JCO.2015.64.1357>
- Bjelakovic G, Gluud LL, Nikolova D, et al.. *Vitamin D supplementation for prevention of mortality in adults*. *Cochrane Database Syst Rev* 2011;(7):CD007470. <https://doi.org/10.1002/14651858.CD007470.pub2>.
- Manson JE, Cook NR, Lee IM, et al.; VITAL Research Group. *Vitamin D supplements and prevention of cancer and cardiovascular disease*. *N Engl J Med* 2019;380:33-44. <https://doi.org/10.1056/NEJMoa1809944>.
- Akiba T, Morikawa T, Odaka M, et al.. *Vitamin D supplementation and survival of patients with non-small cell lung cancer: a randomized, double-blind, placebo-controlled trial*. *Clin Cancer Res* 2018;24:4089-97. <https://doi.org/10.1158/1078-0432.CCR-18-0483>.
- Urashima M, Ohdaira H, Akutsu T, et al.. *Effect of vitamin D supplementation on relapse-free survival among patients with digestive tract cancers: the AMATERASU randomized clinical trial*. *JAMA* 2019;321:1361-9. <https://doi.org/10.1001/jama.2019.2210>.
- Ng K, Nimeiri HS, McCleary NJ, et al.. *Effect of high-dose vs standard-dose vitamin D3 supplementation on progression-free survival among patients with advanced or metastatic colorectal cancer: the SUNSHINE randomized clinical trial*. *JAMA* 2019;321:1370-9. <https://doi.org/10.1001/jama.2019.2402>.
- Keum N, Lee DH, Greenwood DC, et al.. *Vitamin D supplementation and total cancer incidence and mortality: a meta-analysis of randomized controlled trials*. *Ann Oncol* 2019;30:733-743. <https://doi.org/10.1093/annonc/mdz059>.
- Brock K, Huang WY, Fraser DR, et al.. *Low vitamin D status is associated with physical inactivity, obesity and low vitamin D intake in a large US sample of healthy middle-aged men and women*. *J Steroid Biochem Mol Biol* 2010;121:462-6. <https://doi.org/10.1016/j.jsbmb.2010.03.091>.
- Stucci LS, D'Oronzo S, Tucci M, et al.; Italian Melanoma Intergroup (IMI). *Vitamin D in melanoma: controversies and potential role in combination with immune check-point inhibitors*. *Cancer Treat* 2018;69:21-28. <https://doi.org/10.1016/j.ctrv.2018.05.016>.

CARDIOLOGY

- AHshaq RK, Kubatka P, Brozmanova M, et al. Health implication of vitamin D on the cardiovascular and the renal system. *Arch Physiol Biochem.* 2019 Jul 10:1-15. doi: 10.1080/13813455.2019.1628064. [Epub ahead of print].
- Al-Khalidi B, Kimball SM, Kuk JL, et al. Metabolically healthy obesity, vitamin D, and all-cause and cardiometabolic mortality risk in NHANES III. *Clin Nutr.* 2019 Apr;38(2):820-828. doi: 10.1016/j.clnu.2018.02.025. Epub 2018 Mar 2.
- Alagacone S, Verga E, Verdolini R, et al. The association between vitamin D deficiency and the risk of resistant hypertension. *Clin Exp Hypertens.* 2019 Apr 2:1-4. doi: 10.1080/10641963.2019.1601204. [Epub ahead of print].
- Anees MA, Ahmad MI, Chevli PA, et al. Association of vitamin D deficiency with electrocardiographic markers of left atrial abnormalities. *Ann Noninvasive Electrocardiol.* 2019 May;24(3):e12626. doi: 10.1111/anec.12626. Epub 2019 Jan 19.
- Aydin E, Altin C, Özcan Söylev G, et al. Assessment of Subclinical Atherosclerosis in Vitamin D Deficiency. *Ultrasound Q.* 2019 Jun;35(2):142-146. doi: 10.1097/RUQ.0000000000000386.
- Bacha F, Bartz SK, Tomsa A, et al. Free Vitamin D: Relationship to Insulin Sensitivity and Vascular Health in Youth. *J Pediatr.* 2019 Sep;212:28-34.e2. doi: 10.1016/j.jpeds.2019.04.057. Epub 2019 Jun 11.
- Bagrul D, Atik F. Vitamin D deficiency associated with ventricular repolarization abnormalities. *Kardiol Pol.* 2019 Jul 3. doi: 10.33963/KP.14888. [Epub ahead of print].
- Barbarawi M, Kheiri B, Zayed Y, et al. Vitamin D Supplementation and Cardiovascular Disease Risks in More Than 83 000 Individuals in 21 Randomized Clinical Trials: A Meta-analysis. *JAMA Cardiol.* 2019 Jun 19. doi: 10.1001/jamacardio.2019.1870. [Epub ahead of print].
- Beska B, Chan D, Gu S, et al. The association between vitamin D status and clinical events in high-risk older patients with non-ST elevation acute coronary syndrome undergoing invasive management. *PLoS One.* 2019 Jun 12;14(6):e0217476. doi: 10.1371/journal.pone.0217476. eCollection 2019.
- Bouillon R. Vitamin D and cardiovascular disorders. *Osteoporos Int.* 2019 Aug 11. doi: 10.1007/s00198-019-05098-0. [Epub ahead of print] Review.
- Chunbin W, Han W, Lin C. Efficacy of Vitamin D on Chronic Heart Failure Among Adults. *Int J Vitam Nutr Res.* 2019 Apr 16:1-10. doi: 10.1024/0300-9831/a000487. [Epub ahead of print].
- Contreras-Manzano A, Villalpando S, García-Díaz C, et al. Cardiovascular Risk Factors and Their Association with Vitamin D Deficiency in Mexican Women of Reproductive Age. *Nutrients.* 2019 May 28;11(6). pii: E1211. doi: 10.3390/nu11061211.
- Davarparand T. Vitamin D deficiency as a seed in a fertile soil: A proposed hypothesis. *Echocardiography.* 2019 May;36(5):1019. doi: 10.1111/echo.14343. Epub 2019 Apr 11.
- Derakhshanian H, Djazayeri A, Javanbakht MH, et al. Vitamin D downregulates key genes of diabetes complications in cardiomyocyte. *J Cell Physiol.* 2019 Nov;234(11):21352-21358. doi: 10.1002/jcp.28743. Epub 2019 Jun 7.
- Dogdus M, Burhan S, Bozgun Z, et al. Cardiac autonomic dysfunctions are recovered with vitamin D replacement in apparently healthy individuals with vitamin D deficiency. *Ann Noninvasive Electrocardiol.* 2019 Jul 24:e12677. doi: 10.1111/anec.12677. [Epub ahead of print].
- Fajardo VC, de Oliveira FLP, Machado-Coelho GLL, et al. Effects of vitamin D supplementation on cardiovascular risk factors in shift workers: Study protocol for randomized, double-blind, placebo-controlled clinical trial. *Medicine (Baltimore).* 2019 May;98(18):e15417. doi: 10.1097/MD.00000000000015417.

VITAMIN D - UpDates
2019;2(4):117-161

© Copyright by Pacini Editore srl



OPEN ACCESS

- Fam MS, Hassanein SI, Abdel Rahman MF, et al. Contribution of CYP27B1 and CYP24A1 Genetic Variations to the Incidence of Acute Coronary Syndrome and to Vitamin D Serum Level. *Can J Physiol Pharmacol*. 2019 Aug 9. doi: 10.1139/cjpp-2019-0258. [Epub ahead of print].
- Faraji H, Jamshidi S, Beigrezaei S, et al. Dietary Intake of Vitamin D and Its Relation with Blood Pressure in the Elderly Population. *Int J Prev Med*. 2019 Apr 3;10:40. doi: 10.4103/ijpvm.IJPVM_18_18. eCollection 2019.
- Hao Y, Chen Y. Vitamin D levels and vitamin D receptor variants are associated with chronic heart failure in Chinese patients. *J Clin Lab Anal*. 2019 May;33(4):e22847. doi: 10.1002/jcla.22847. Epub 2019 Feb 4.
- He S, Hao X. The effect of vitamin D3 on blood pressure in people with vitamin D deficiency: A system review and meta-analysis. *Medicine (Baltimore)*. 2019 May;98(19):e15284. doi: 10.1097/MD.00000000000015284.
- Hernández-Álvarez E, Pérez-Barrios C, Blanco-Navarro I, et al. Association between 25-OH-vitamin D and C-reactive protein as a marker of inflammation and cardiovascular risk in clinical practice. *Ann Clin Biochem*. 2019 Jul;56(4):502-507. doi: 10.1177/0004563219851539. Epub 2019 May 27.
- Hiemstra T, Lim K, Thadhani R, et al. Vitamin D and Atherosclerotic Cardiovascular Disease. *J Clin Endocrinol Metab*. 2019 Apr 4. pii: jc.2019-00194. doi: 10.1210/jc.2019-00194. [Epub ahead of print].
- Hosseinsabet A. Directions of future studies for assessing myocardial function in the context of vitamin D deficiency. *Echocardiography*. 2019 May;36(5):1020. doi: 10.1111/echo.14342. Epub 2019 Apr 11.
- Huang T, Afzal S, Yu C, et al. Vitamin D and cause-specific vascular disease and mortality: a Mendelian randomisation study involving 99,012 Chinese and 106,911 European adults. *BMC Med*. 2019 Aug 30;17(1):160. doi: 10.1186/s12916-019-1401-y.
- Iaccarino G, Trimarco B. Gene-environment interactions and vitamin D effects on cardiovascular risk. *BMC Med*. 2019 Aug 30;17(1):166. doi: 10.1186/s12916-019-1402-x.
- Jafari T, Fallah AA, Rostampour N, et al. Vitamin D ameliorates systolic but not diastolic blood pressure in patients with type 2 diabetes: Results from a meta-analysis of randomized controlled trials. *Int J Vitam Nutr Res*. 2018 Feb;88(1-2):90-99. doi: 10.1024/0300-9831/a000291. Epub 2019 Apr 30.
- Jiang X, Nudy M, Aragaki AK, et al. Women's Health Initiative clinical trials: potential interactive effect of calcium and vitamin D supplementation with hormonal therapy on cardiovascular disease. *Menopause*. 2019 Aug;26(8):841-849. doi: 10.1097/GME.0000000000001360.
- Kiani A, Mohamadi-Nori E, Vaisi-Raygani A, et al. Vitamin D-binding protein and vitamin D receptor genotypes and 25-hydroxyvitamin D levels are associated with development of aortic and mitral valve calcification and coronary artery diseases. *Mol Biol Rep*. 2019 Jul 29. doi: 10.1007/s11033-019-04979-1. [Epub ahead of print].
- Kouvari M, Panagiotakos DB. Vitamin D status, gender and cardiovascular diseases: a systematic review of prospective epidemiological studies. *Expert Rev Cardiovasc Ther*. 2019 Jul;17(7):545-555. doi: 10.1080/14779072.2019.1637255. Epub 2019 Jul 2.
- Laird EJ, McNicholas T, O'Halloran AM, et al. Vitamin D Status Is Not Associated With Orthostatic Hypotension in Older Adults. *Hypertension*. 2019 Sep;74(3):639-644. doi: 10.1161/HYPERTENSIONAHA.119.13064. Epub 2019 Jul 22.
- Lee TW, Kao YH, Chen YJ, et al. Therapeutic potential of vitamin D in AGE/RAGE-related cardiovascular diseases. *Cell Mol Life Sci*. 2019 Jun 27. doi: 10.1007/s00018-019-03204-3. [Epub ahead of print] Review.
- Leung PS. The Modulatory Action of Vitamin D on the Renin-Angiotensin System and the Determination of Hepatic Insulin Resistance. *Molecules*. 2019 Jul 5;24(13). pii: E2479. doi: 10.3390/molecules24132479.
- Li Q, Dai Z, Cao Y, et al. Association of C-reactive protein and vitamin D deficiency with cardiovascular disease: A nationwide cross-sectional study from National Health and Nutrition Examination Survey 2007 to 2008. *Clin Cardiol*. 2019 Jul;42(7):663-669. doi: 10.1002/clc.23189. Epub 2019 Apr 30.
- Lin L, Zhang L, Li C, et al. Vitamin D and Vitamin D Receptor: New Insights in the Treatment of Hypertension. *Curr Protein Pept Sci*. 2019 Aug 7. doi: 10.2174/1389203720666190807130504. [Epub ahead of print].
- Marawan A, Kurbanova N, Qayyum R. Association between serum vitamin D levels and cardiorespiratory fitness in the adult population of the USA. *Eur J Prev Cardiol*. 2019 May;26(7):750-755. doi: 10.1177/2047487318807279. Epub 2018 Oct 30.
- Mokhtar WA, Fawzy A, Allam RM, et al. Maternal vitamin D level and vitamin D receptor gene polymorphism as a risk factor for congenital heart diseases in offspring; An Egyptian case-control study. *Genes Dis*. 2018 Aug 26;6(2):193-200. doi: 10.1016/j.gendis.2018.08.001. eCollection 2019 Jun.
- Muscogiuri G, Barrea L, Altieri B, et al. Calcium and vitamin D supplementation. Myths and realities with regard to cardiovascular risk. *Curr Vasc Pharmacol*. 2019 Apr 8. doi: 10.2174/1570161117666190408165805. [Epub ahead of print].
- Nakhli S, Sleilaty G, El Samad S, et al. Association between vitamin D deficiency and lipid and non-lipid markers of cardiovascular diseases in the middle east region. *Eur J Clin Nutr*. 2019 Jun;73(6):850-858. doi: 10.1038/s41430-018-0280-1. Epub 2018 Aug 10.
- Nizami HL, Katara P, Prabhakar P, et al. Vitamin D Deficiency in Rats Causes Cardiac Dysfunction by Inducing Myocardial Insulin Resistance. *Mol Nutr Food Res*. 2019 May 16:e1900109. doi: 10.1002/mnfr.201900109. [Epub ahead of print].
- Nolte K, Herrmann-Lingen C, Platschek L, et al. Vitamin D deficiency in patients with diastolic dysfunction or heart failure with preserved ejection fraction. *ESC Heart Fail*. 2019 Apr;6(2):262-270. doi: 10.1002/ehf2.12413. Epub 2019 Feb 19.
- Orkaby AR, Djousse L, Manson JE. Vi-

- tamin D supplements and prevention of cardiovascular disease. *Curr Opin Cardiol.* 2019 Aug 16. doi: 10.1097/HCO.0000000000000675. [Epub ahead of print].
- Peters KM, Zhang R, Park C, et al. Vitamin D intervention does not improve vascular regeneration in diet-induced obese male mice with peripheral ischemia. *J Nutr Biochem.* 2019 Aug;70:65-74. doi: 10.1016/j.jnutbio.2019.04.010. Epub 2019 May 10.
 - Playford MP, Dey AK, Zierold C, et al. Serum active 1,25(OH)₂D, but not inactive 25(OH)D vitamin D levels are associated with cardiometabolic and cardiovascular disease risk in psoriasis. *Atherosclerosis.* 2019 Aug 17;289:44-50. doi: 10.1016/j.atherosclerosis.2019.08.006.
 - Qian X, Zhu M, Qian W, et al. Vitamin D attenuates myocardial ischemia-reperfusion injury by inhibiting inflammation via suppressing the RhoA/ROCK/NF- κ B pathway. *Biotechnol Appl Biochem.* 2019 Jun 27. doi: 10.1002/bab.1797. [Epub ahead of print].
 - Quyyumi AA, Al Mheid I. The Demise of Vitamin D for Cardiovascular Prevention. *JAMA Cardiol.* 2019 Jun 19. doi: 10.1001/jamacardio.2019.1906. [Epub ahead of print]
 - Rajakumar K, Yan Q, Khalid AT, et al. Gene Expression and Cardiometabolic Phenotypes of Vitamin D-Deficient Overweight and Obese Black Children. *Nutrients.* 2019 Aug 28;11(9). pii: E2016. doi: 10.3390/nu11092016.
 - Rizzoni D, Rizzoni M, Nardin M. Vitamin D and Ischaemic Heart Disease: A Casual or A Causal Association? : Commentary on: "Raslan E et al. Association of Vitamin D Deficiency with Chronic Stable Angina: A Case-Control Study". *High Blood Press Cardiovasc Prev.* 2019 Apr;26(2):151-155. doi: 10.1007/s40292-019-00302-y. Epub 2019 Jan 23.
 - Saponaro F, Marcocci C, Zucchi R. Vitamin D status and cardiovascular outcome. *J Endocrinol Invest.* 2019 Jun 6. doi: 10.1007/s40618-019-01057-y. [Epub ahead of print] Review.
 - Separham A, Pourafkari L, Kazemi B, et al. Vitamin D deficiency and functional response to CRT in heart failure patients. *Herz.* 2019 Apr;44(2):147-154. doi: 10.1007/s00059-017-4630-x. Epub 2017 Oct 9.
 - Si J, Li K, Shan P, et al. The combined presence of hypertension and vitamin D deficiency increased the probability of the occurrence of small vessel disease in China. *BMC Neurol.* 2019 Jul 17;19(1):164. doi: 10.1186/s12883-019-1395-2.
 - Siasos G, Theofilis P, Oikonomou E, et al. Vitamin D: A cardiovascular risk biomarker or a treatment target? *Hellenic J Cardiol.* 2019 Mar - Apr;60(2):114-116. doi:10.1016/j.hjc.2019.03.011. Epub 2019 Jul 2.
 - Sivritepe R, Basat S, Ortaboz D. Association of vitamin D status and the risk of cardiovascular disease as assessed by various cardiovascular risk scoring systems in patients with type 2 diabetes mellitus. *Aging Male.* 2019 Jun;22(2):156-162. doi: 10.1080/13685538.2018.1499080. Epub 2018 Sep 7.
 - Talari HR, Najafi V, Raygan F, et al. Long-term vitamin D and high-dose n-3 fatty acids' supplementation improve markers of cardiometabolic risk in type 2 diabetic patients with CHD. *Br J Nutr.* 2019 Jul 16:1-8. doi: 10.1017/S0007114519001132. [Epub ahead of print].
 - Trevisan C, Piovesan F, Lucato P, et al. Parathormone, vitamin D and the risk of atrial fibrillation in older adults: A prospective study. *Nutr Metab Cardiovasc Dis.* 2019 Sep;29(9):939-945. doi: 10.1016/j.numecd.2019.05.064. Epub 2019 May 29.
 - Valer-Martinez A, Martinez JA, Sayon-Orea C, et al. Vitamin D and cardio-metabolic risk factors in overweight adults: an overview of evidence. *Curr Pharm Des.* 2019 Jul 21. doi: 10.2174/1381612825666190722103919. [Epub ahead of print].
 - Varakantham V, Ale K, Sailoo AKK, et al. Sex-specific role of CYP24A1 rs2762939 in the risk of essential hypertension based on the serum vitamin D and total renin concentrations. *Genomics.* 2019 May 16. pii: S0888-7543(19)30056-4. doi: 10.1016/j.ygeno.2019.05.013. [Epub ahead of print].
 - Vatakencherry RMJ, Saraswathy L. Association between vitamin D and hypertension in people coming for health check up to a tertiary care centre in South India. *J Family Med Prim Care.* 2019 Jun;8(6):2061-2067. doi: 10.4103/jfmpc.jfmpc_236_19.
 - Verdoia M, Pergolini P, Nardin M, et al. Vitamin D levels and platelet reactivity in diabetic patients receiving dual antiplatelet therapy. *Vascul Pharmacol.* 2019 Jun 7:106564. doi: 10.1016/j.vph.2019.106564. [Epub ahead of print].
 - Wang G, Liu X, Bartell TR, et al. Vitamin D Trajectories From Birth to Early Childhood and Elevated Systolic Blood Pressure During Childhood and Adolescence. *Hypertension.* 2019 Jul 1:HYPER-TENSION-AHA11913120. doi: 10.1161/HYPERTENSIONAHA11913120. [Epub ahead of print].
 - Wang T, Liu Z, Fu J, et al. Meta-analysis of vitamin D supplementation in the treatment of chronic heart failure. *Scand Cardiovasc J.* 2019 Jun;53(3):110-116. doi: 10.1080/14017431.2019.1612084. Epub 2019 May 15.
 - Wang T, Sun H, Ge H, et al. Association between vitamin D and risk of cardiovascular disease in Chinese rural population. *PLoS One.* 2019 May 23;14(5):e0217311. doi: 10.1371/journal.pone.0217311. eCollection 2019.
 - Wolf ST, Kenney WL. The Vitamin D-Folate Hypothesis in Human Vascular Health. *Am J Physiol Regul Integr Comp Physiol.* 2019 Jul 17. doi: 10.1152/ajp-regu.00136.2019. [Epub ahead of print].
 - Wu M, Xu K, Wu Y, et al. Role of Vitamin D in Patients with Heart Failure with Reduced Ejection Fraction. *Am J Cardiovasc Drugs.* 2019 Jul 10. doi: 10.1007/s40256-019-00357-1. [Epub ahead of print] Review.
 - Yang J, Ou-Yang J, Huang J. Low serum vitamin D levels increase the mortality of cardiovascular disease in older adults: A dose-response meta-analysis of prospective studies. *Medicine (Baltimore).* 2019 Aug;98(34):e16733. doi: 10.1097/MD.00000000000016733.
 - Yuan J, Jia P, Hua L, et al. Vitamin D deficiency is associated with risk of developing peripheral arterial disease in type 2

diabetic patients. *BMC Cardiovasc Disord.* 2019 Jun 17;19(1):145. doi: 10.1186/s12872-019-1125-0.

- Zittermann A, Ernst JB, Prokop S, et al. Vitamin D supplementation of 4000 IU daily and cardiac function in patients with advanced heart failure: The EVITA trial. *Int J Cardiol.* 2019 Apr 1;280:117-123. doi: 10.1016/j.ijcard.2019.01.027. Epub 2019 Jan 9.
- Zuo K, Li J, Xu Q, et al. Dysbiotic gut microbes may contribute to hypertension by limiting vitamin D production. *Clin Cardiol.* 2019 Aug;42(8):710-719. doi: 10.1002/clc.23195. Epub 2019 May 28.

DERMATOLOGY

- Ahmed Mohamed A, Salah Ahmed EM, Farag YMK, et al. Dose-response association between vitamin D deficiency and atopic dermatitis in children, and effect modification by gender: a case-control study. *J Dermatolog Treat.* 2019 Aug 2:1-6. doi: 10.1080/09546634.2019.1643447. [Epub ahead of print].
- Akdogan N, Alli N, Incel Uysal P, et al. Role of serum 25-hydroxyvitamin D levels and vitamin D receptor gene polymorphisms in patients with rosacea: a case-control study. *Clin Exp Dermatol.* 2019 Jun;44(4):397-403. doi: 10.1111/ced.13769. Epub 2018 Sep 23.
- Algazina T, Touri G, Pshembayeva S, et al. The role of vitamin D in the development of psoriasis and acne. *Georgian Med News.* 2019 May;(290):96-100. Russian.
- Bergqvist C, Ezzedine K. Vitamin D and the skin: what should a dermatologist know? *G Ital Dermatol Venereol.* 2019 Jul 12. doi: 10.23736/S0392-0488.19.06433-2. [Epub ahead of print].
- Bikle DD. Do sunscreens block vitamin D production? A critical review by an international panel of experts. *Br J Dermatol.* 2019 Jul 1. doi: 10.1111/bjd.18126. [Epub ahead of print]
- Blake SC, Harding CJ, Doyle Z. A qualitative discourse analysis of safe sun exposure and vitamin D in Australian print media. *Australas J Dermatol.* 2019 Aug;60(3):251-253. doi: 10.1111/ajd.12984. Epub 2019 Jan 7.
- Cho YS, Lee J, Joo SY, et al. Crosstalk among adipose tissue, vitamin D level, and biomechanical properties of hypertrophic burn scars. *Burns.* 2019 Sep;45(6):1430-1437. doi: 10.1016/j.burns.2019.04.019. Epub 2019 May 7.
- Cho YS, Seo CH, Joo SY, et al. The Association Between Postburn Vitamin D Deficiency and the Biomechanical Properties of Hypertrophic Scars. *J Burn Care Res.* 2019 Apr 26;40(3):274-280. doi: 10.1093/jbcr/irz028.
- Colucci R, Conti R, Dragoni F, et al. Evidence of a possible therapeutic role of vitamin D in a cohort of adult Caucasian vitiligo patients. *Int J Vitam Nutr Res.* 2019 Aug 15:1-5. doi: 10.1024/0300-9831/a000605. [Epub ahead of print].
- Coutinho RCS, Santos AFD, Costa JGD, et al. Sun exposure, skin lesions and vitamin D production: evaluation in a population of fishermen. *An Bras Dermatol.* 2019 Jul 29;94(3):279-286. doi: 10.1590/abd1806-4841.20197201.
- Damiani G, Conic R, Orlando G, et al. Vitamin D in trichology: a comprehensive review of the role of Vitamin D and its receptor in hair and scalp disorders. *G Ital Dermatol Venereol.* 2019 Jun 17. doi: 10.23736/S0392-0488.19.06305-3. [Epub ahead of print].
- Daniluk U, Filimoniuk A, Kowalczyk-Krystoń M, et al. Association of antioxidants and vitamin D level with inflammation in children with atopic dermatitis. *Int J Dermatol.* 2019 Sep;58(9):1056-1061. doi: 10.1111/ijd.14438. Epub 2019 Apr 9.
- Das LM, Binko AM, Traylor ZP, et al. Vitamin D improves sunburns by increasing autophagy in M2 macrophages. *Autophagy.* 2019 May;15(5):813-826. doi: 10.1080/15548627.2019.1569298. Epub 2019 Jan 24.
- Fearfield L, Nobbs J, Petrukevitch A, et al. Severe vitamin D deficiency associated with BRAF mutated melanoma. *Br J Dermatol.* 2019 Aug 5. doi: 10.1111/bjd.18413. [Epub ahead of print].
- Hardie CM, Elliott F, Chan M, et al. Environmental exposures such as smoking and low vitamin D are predictive of poor outcome in cutaneous melanoma rather than other deprivation measures. *J Invest Dermatol.* 2019 Aug 16. pii: S0022-202X(19)32703-4. doi: 10.1016/j.jid.2019.05.033. [Epub ahead of print].
- Hattangdi-Haridas SR, Lanham-New SA, Wong WHS, et al. Vitamin D Deficiency and Effects of Vitamin D Supplementation on Disease Severity in Patients with Atopic Dermatitis: A Systematic Review and Meta-Analysis in Adults and Children. *Nutrients.* 2019 Aug 9;11(8). pii: E1854. doi: 10.3390/nu11081854.
- Ince B. Commentary on Effect of Vitamin D Deficiency on Hypertrophic Scarring. *Dermatol Surg.* 2019 Jun 24. doi: 10.1097/DSS.0000000000001999. [Epub ahead of print]
- Lee YH. Vitamin D receptor Apal, TaqI, BsmI, and FokI polymorphisms and psoriasis susceptibility: an updated meta-analysis. *Clin Exp Dermatol.* 2019 Jul;44(5):498-505. doi: 10.1111/ced.13823. Epub 2018 Nov 25.
- Liyanage UE, Law MH; Melanoma Meta-analysis Consortium, et al. Is there a causal relationship between vitamin D and melanoma risk? : A Mendelian randomization study. *Br J Dermatol.* 2019 Jun 19. doi: 10.1111/bjd.18238. [Epub ahead of print].
- Marahatta S, Agrawal S, Khan S. Study on Serum Vitamin D in Alopecia Areata Patients. *J Nepal Health Res Council.* 2019 Apr 28;17(1):21-25. doi: 10.33314/jnhrc.1475.
- Navarro-Triviño FJ, Arias-Santiago S, Gilaberte-Calzada Y. Vitamin D and the Skin: A Review for Dermatologists. *Actas Dermosifiliogr.* 2019 May;110(4):262-272. doi: 10.1016/j.ad.2018.08.006. Epub 2019 Mar 8. Review. English, Spanish.
- Neale RE, Khan SR, Lucas RM, et al. The effect of sunscreen on vitamin D: a review. *Br J Dermatol.* 2019 Apr 4. doi: 10.1111/bjd.17980. [Epub ahead of print] Review.
- Nemazannikova N, Blatch GL, Dass CR, et al. Vitamin D enzymes (CYP27A1, CYP27B1, and CYP24A1) and receptor expression in non-melanoma skin cancer. *Acta Biochim Biophys Sin (Shanghai).* 2019 Apr 1;51(4):444-447. doi: 10.1093/abbs/gmy170.
- Ochoa-Ramírez LA, Díaz-Camacho SP, Becerra-Loaiza DS, et al. Catalase but not

- vitamin D receptor gene polymorphisms are associated with nonsegmental vitiligo in Northwestern Mexicans. *Int J Dermatol*. 2019 May 23. doi: 10.1111/ijd.14508. [Epub ahead of print].
- Pancar Yüksel E, Aydın F. Letter to the editor regarding article "El-Hamd MA, El Taieb MA, Ibrahim HM, Aly SS. Vitamin D levels in acne vulgaris patients treated with oral isotretinoin. *J Cosmet Dermatol* 2019;18(1):16-20". *J Cosmet Dermatol*. 2019 Jun 21. doi: 10.1111/jocd.13053. [Epub ahead of print]
 - Passeron T, Bouillon R, Callender V, et al. Sunscreen photoprotection and vitamin D status. *Br J Dermatol*. 2019 May 8. doi: 10.1111/bjd.17992. [Epub ahead of print] Review.
 - Sawarkar S, Ashtekar A. Transdermal vitamin D supplementation-A potential vitamin D deficiency treatment. *J Cosmet Dermatol*. 2019 Jul 25. doi: 10.1111/jocd.13085. [Epub ahead of print] Review.
 - Singh S, Jha B, Tiwary NK, et al. Does using a high sun protection factor sunscreen on face, along with physical photoprotection advice, in patients with melasma, change serum vitamin D concentration in Indian conditions? A pragmatic pretest-posttest study. *Indian J Dermatol Venereol Leprol*. 2019 May;Jun;85(3):282-286. doi: 10.4103/ijdv.IJDVL_575_17.
 - Stanley Xavier A, Selvarajan S, Chandrasekar L, et al. Effect of Cholecalciferol Supplementation on Treatment Response and IL-10 Level in Vitamin D Deficient Parthenium Dermatitis Patients: A Randomized Double-Blind Placebo-Controlled Trial. *J Diet Suppl*. 2019 May 24:1-14. doi: 10.1080/19390211.2019.1619009. [Epub ahead of print].
 - Swelam MM, El-Barbary RAH, Saudi WM, et al. Associations among two vitamin D receptor (VDR) gene polymorphisms (Apal and TaqI) in acne vulgaris: A pilot susceptibility study. *J Cosmet Dermatol*. 2019 Aug;18(4):1113-1120. doi: 10.1111/jocd.12781. Epub 2018 Sep 15.
 - Wei J, Jaleel T, Macleod AS, et al. Inverted U-shaped relationship between vitamin D and ever-reported eczema in US adults. *Allergy*. 2019 May;74(5):964-975. doi: 10.1111/all.13708. Epub 2019 Jan 15.
 - Xiang J, Wang H, Li T. Comorbidity of Vitamin A and Vitamin D Deficiency Exacerbates the Severity of Atopic Dermatitis in Children. *Dermatology*. 2019;235(3):196-204. doi: 10.1159/000496603. Epub 2019 Apr 9.
 - Young AR, Narbutt J, Harrison GI, et al. Optimal sunscreen use, during a sun holiday with a very high ultraviolet index, allows vitamin D synthesis without sunburn. *Br J Dermatol*. 2019 May 8. doi: 10.1111/bjd.17888. [Epub ahead of print].
 - Yuan I, Katari P, Shaker M. Vitamin D treatment for chronic urticaria: a case report. *J Med Case Rep*. 2019 Jun 25;13(1):193. doi: 10.1186/s13256-019-2121-9.
 - Zaouak A, Abdessalem G, Mkaouer R, et al. Congenital lamellar ichthyosis in Tunisia associated with vitamin D rickets caused by a founder nonsense mutation in the TGM1 gene. *Int J Dermatol*. 2019 Jul;58(7):e135-e137. doi: 10.1111/ijd.14453. Epub 2019 Apr 10.
 - Cashman KD, Ritz C. Individual participant data (IPD)-level meta-analysis of randomised controlled trials among dark-skinned populations to estimate the dietary requirement for vitamin D. *Syst Rev*. 2019 May 28;8(1):128. doi: 10.1186/s13643-019-1032-6.
 - Cirillo M, Bilancio G, Guarino E, et al. Vitamin D Status and Indices of Mineral Homeostasis in the Population: Differences Between 25-Hydroxyvitamin D and 1,25-Dihydroxyvitamin D. *Nutrients*. 2019 Aug 1;11(8). pii: E1777. doi: 10.3390/nu11081777.
 - Dharmshaktu P, Saha S, Kar P, et al. Absence of vitamin D deficiency among common outdoor workers in Delhi. *Clin Endocrinol (Oxf)*. 2019 Aug;91(2):356-362. doi: 10.1111/cen.14012. Epub 2019 May 28.
 - Dogruel F, Gonen ZB, Canpolat DG, et al. Investigation of Vitamin D levels in medical staff in a dental clinic. *Niger J Clin Pract*. 2019 Apr;22(4):573-577. doi: 10.4103/njcp.njcp_523_18.
 - Enechukwu N, Cockburn M, Ogun G, et al. Higher vitamin D levels in Nigerian albinos compared with pigmented controls. *Int J Dermatol*. 2019 Aug 16. doi: 10.1111/ijd.14611. [Epub ahead of print].
 - Farhud DD, Mehrabi A, Sarafnejad A, et al. A Comprehensive, Epidemiological and Ecological Descriptive Study on Vitamin D Status in Iran (308005 People, from 2009-2018). *Iran J Public Health*. 2019 Apr;48(4):644-654.
 - Fayet-Moore F, Brock KE, Wright J, et al. Determinants of vitamin D status of healthy office workers in Sydney, Australia. *J Steroid Biochem Mol Biol*. 2019 May;189:127-134. doi: 10.1016/j.jsbmb.2019.02.017. Epub 2019 Mar 1.
 - Ferrándiz-Pulido C, Torres IB, Juárez-Dobjanschi C, et al. Vitamin D deficiency in solid-organ transplant recipients from a Spanish Mediterranean population. *Clin Exp Dermatol*. 2019 Jun;44(4):e103-e109. doi: 10.1111/ced.13915. Epub 2019 Jan 30.
 - Harinarayan CV, Akhila H. Modern India and the Tale of Twin Nutrient Deficiency-Calcium and Vitamin D-Nutrition Trend Data 50 Years-Retrospect, Introspect, and Prospect. *Front Endocrinol (Lausanne)*.

EPIDEMIOLOGY

- 2019 Aug 9;10:493. doi: 10.3389/fendo.2019.00493. eCollection 2019. Review.
- Herrick KA, Storandt RJ, Afful J, et al. Vitamin D status in the United States, 2011-2014. *Am J Clin Nutr.* 2019 May 10. pii: nqz037. doi: 10.1093/ajcn/nqz037. [Epub ahead of print].
 - Horton-French K, Dunlop E, Lucas RM, et al. Prevalence and Predictors of Vitamin D Deficiency among African Immigrants Living in Australia. *Int J Environ Res Public Health.* 2019 Aug 10;16(16). pii: E2855. doi: 10.3390/ijerph16162855.
 - Husain NE, Badie Suliman AA, Abdelrahman I, et al. Vitamin D level and its determinants among Sudanese Women: Does it matter in a sunshine African Country? *J Family Med Prim Care.* 2019 Jul;8(7):2389-2394. doi: 10.4103/jfmpc.jfmpc_247_19.
 - Jan Y, Malik M, Yaseen M, et al. Vitamin D fortification of foods in India: present and past scenario. *J Steroid Biochem Mol Biol.* 2019 Jun 24;193:105417. doi: 10.1016/j.jsbmb.2019.105417. [Epub ahead of print] Review.
 - Jiang W, Wu DB, Xiao GB, et al. An epidemiology survey of vitamin D deficiency and its influencing factors. *Med Clin (Barc).* 2019 May 24. pii: S0025-7753(19)30248-9. doi: 10.1016/j.medcli.2019.03.019. [Epub ahead of print] English, Spanish.
 - Kandhro F, Dahot U, Naqvi SHA, et al. Study of Vitamin D deficiency and contributing factors in the population of Hyderabad, Pakistan. *Pak J Pharm Sci.* 2019 May;32(3):1063-1068.
 - Khan AU, Hossain MA, Rahman MA, et al. Estimation of Vitamin D levels among Physicians Working in a Tertiary Level Hospital of Bangladesh. *Mymensingh Med J.* 2019 Apr;28(2):322-327.
 - Lautatzis ME, Sharma A, Rodd C. A closer look at rickets and vitamin D deficiency in Manitoba: The tip of the iceberg. *Paediatr Child Health.* 2019 Jun;24(3):179-184. doi: 10.1093/pch/pxy105. Epub 2018 Aug 13.
 - Lee HJ, Shin J, You KM. High-Prevalence Vitamin D Deficiency among Korean Emergency Department Homeless, with a Comparison to a Healthy Korean Population. *Nutrients.* 2019 Apr 1;11(4). pii: E763. doi: 10.3390/nu11040763.
 - Malacova E, Cheang PR, Dunlop E, et al. Prevalence and predictors of vitamin D deficiency in a nationally representative sample of adults participating in the 2011-2013 Australian Health Survey. *Br J Nutr.* 2019 Apr;121(8):894-904. doi: 10.1017/S0007114519000151. Epub 2019 Jan 24.
 - Nakhaee S, Ali Yaghoubi M, Zarban A, et al. Vitamin D deficiency and its associated risk factors in normal adult population of Birjand, Iran. *Clin Nutr ESPEN.* 2019 Aug;32:113-117. doi: 10.1016/j.clnesp.2019.04.002. Epub 2019 Apr 19.
 - Orces CH. Association between leisure-time aerobic physical activity and vitamin D concentrations among US older adults: the NHANES 2007-2012. *Aging Clin Exp Res.* 2019 May;31(5):685-693. doi: 10.1007/s40520-018-1031-9. Epub 2018 Sep 3.
 - Pürner F, Böhmer MM, Wildner M. [Epidemic Vitamin D Deficiency in Prisoners Compared to the German Population: An Analysis Based on Laboratory Results]. *Gesundheitswesen.* 2019 May;81(5):431-437. doi: 10.1055/a-0594-9280. Epub 2018 Apr 20. German.
 - Religi A, Backes C, Chatelan A, et al. Correction to: Estimation of exposure durations for vitamin D production and sunburn risk in Switzerland. *J Expo Sci Environ Epidemiol.* 2019 May 7. doi: 10.1038/s41370-019-0143-4. [Epub ahead of print].
 - Rodríguez-Rodríguez E, Aparicio Vizueté A, Sánchez-Rodríguez P, et al. [Vitamin D deficiency in Spanish population. Importance of egg on nutritional improvement]. Version 2. *Nutr Hosp.* 2019 Jul 26 [revised 2019 Jan 1]. doi: 10.20960/nh.02798. [Epub ahead of print] Spanish.
 - Sezgin G, Ozturk G, Turkal R, et al. Vitamin D Levels of Outpatients Admitted to a University Hospital in the Marmara Region of Turkey Over 3 Years. *J Med Biochem.* 2019 Mar 3;38(2):181-187. doi: 10.2478/jomb-2018-0027. eCollection 2019 Apr.
 - Shaik AP, Alsaheed AH, Faiyaz-Ul-Haque M, et al. Vitamin D Receptor FokI, Apal and TaqI Polymorphisms in Lead Exposed Subjects From Saudi Arabia. *Front Genet.* 2019 Apr 26;10:388. doi: 10.3389/fgene.2019.00388. eCollection 2019.
 - Sharawat IK, Dawman L. Vitamin D status of children in Kerala: do they have sufficient levels? *Public Health Nutr.* 2019 May 21:1-2. doi: 10.1017/S1368980019001265. [Epub ahead of print]
 - Sharif Y, Sadeghi O, Dorosty A, et al. Serum Levels of Vitamin D, Retinol and Zinc in Relation to overweight among Toddlers: Findings from a National Study in Iran. *Arch Iran Med.* 2019 Apr 1;22(4):174-181.
 - Soeharto DA, Rifai DA, Marsudidjadja S, et al. Vitamin D as an Adjunctive Treatment to Standard Drugs in Pulmonary Tuberculosis Patients: An Evidence-Based Case Report. *Adv Prev Med.* 2019 Jun 20;2019:5181847. doi: 10.1155/2019/5181847. eCollection 2019. Review.
 - Sorthe J, Moghaddam A. Lactase persistence may explain the paradoxical findings of high vitamin D concentrations in Europeans living in areas of low UV-B irradiation. *Eur J Clin Nutr.* 2019 Apr;73(4):585-593. doi: 10.1038/s41430-018-0179-x. Epub 2018 May 24.
 - Tuncel G, Temel SG, Ergoren MC. Strong association between VDR FokI (rs2228570) gene variant and serum vitamin D levels in Turkish Cypriots. *Mol Biol Rep.* 2019 Jun;46(3):3349-3355. doi: 10.1007/s11033-019-04796-6. Epub 2019 Apr 12.
 - Wang CY, Hu YL, Wang YH, et al. Association between vitamin D and latent tuberculosis infection in the United States: NHANES, 2011-2012. *Infect Drug Resist.* 2019 Jul 22;12:2251-2257. doi: 10.2147/IDR.S213845. eCollection 2019.
 - Wang J, Wang Y, Han H, et al. Association of Vitamin D Receptor Gene Polymorphisms with Metabolic Syndrome in Rural Areas of China. *Biomed Environ Sci.* 2019 Apr;32(4):304-308. doi: 10.3967/bes2019.041.
 - Wang Y, Han H, Wang J, et al. Polymorphisms in CYP2R1 Gene Associated with Serum Vitamin D Levels and Status in a Chinese Rural Population. *Biomed Environ Sci.* 2019 Jul;32(7):550-553. doi: 10.3967/bes2019.072.

- White Z, White S, Dalvie T, et al. Bone Health, Body Composition, and Vitamin D Status of Black Preadolescent Children in South Africa. *Nutrients*. 2019 May 31;11(6). pii: E1243. doi: 10.3390/nu11061243.
- Yousef S, Elliott J, Manuel D, et al. Study protocol: Worldwide comparison of vitamin D status of immigrants from different ethnic origins and native-born populations-a systematic review and meta-analysis. *Syst Rev*. 2019 Aug 22;8(1):211. doi: 10.1186/s13643-019-1123-4.
- Zainel AAL, Qotba H, Al Nuaimi A, et al. Vitamin D status among adults (18-65 years old) attending primary healthcare centres in Qatar: a cross-sectional analysis of the Electronic Medical Records for the year 2017. *BMJ Open*. 2019 Aug 18;9(8):e029334. doi: 10.1136/bmjopen-2019-029334.
- Zhang Y, Fang F, Tang J, et al. Association between vitamin D supplementation and mortality: systematic review and meta-analysis. *BMJ*. 2019 Aug 12;366:l4673. doi: 10.1136/bmj.l4673.
- et al. Effects of different vitamin D supplementation strategies in reversing metabolic syndrome and its component risk factors in adolescents. *J Steroid Biochem Mol Biol*. 2019 Jul;191:105378. doi: 10.1016/j.jsmb.2019.105378. Epub 2019 May 8.
- Al-Rawaf HA, Gabr SA, Alghadir AH. Molecular Changes in Diabetic Wound Healing following Administration of Vitamin D and Ginger Supplements: Biochemical and Molecular Experimental Study. *Evid Based Complement Alternat Med*. 2019 Jul 21;2019:4352470. doi: 10.1155/2019/4352470. eCollection 2019.
- Ali MI, Fawaz IA, Sedik EE, et al. Vitamin D status in diabetic patients (type 2) and its relation to glycemic control & diabetic nephropathy. *Diabetes Metab Syndr*. 2019 May - Jun;13(3):1971-1973. doi: 10.1016/j.dsx.2019.04.040. Epub 2019 Apr 23.
- Aljack HA, Abdalla MK, Idris OF, et al. Vitamin D deficiency increases risk of nephropathy and cardiovascular diseases in Type 2 diabetes mellitus patients. *J Res Med Sci*. 2019 May 22;24:47. doi: 10.4103/jrms.JRMS_303_18. eCollection 2019.
- Alkhatatbeh M, Abdul-Razzak KK. Neuro-pathic pain is not associated with serum vitamin D but is associated with female gender in patients with type 2 diabetes mellitus. *BMJ Open Diabetes Res Care*. 2019 Jun 12;7(1):e000690. doi: 10.1136/bmj-drc-2019-000690. eCollection 2019.
- Antinozzi C, Marampon F, Sgrò P, et al. Comparative study of testosterone and vitamin D analogue, elocalcitol, on insulin-controlled signal transduction pathway regulation in human skeletal muscle cells. *J Endocrinol Invest*. 2019 Aug;42(8):897-907. doi: 10.1007/s40618-018-0998-6. Epub 2019 Jan 1.
- Aroda VR, Sheehan PR, Vickery EM, et al. Establishing an electronic health record-supported approach for outreach to and recruitment of persons at high risk of type 2 diabetes in clinical trials: The vitamin D and type 2 diabetes (D2d) study experience. *Clin Trials*. 2019 Jun;16(3):306-315. doi: 10.1177/1740774519839062. Epub 2019 Apr 22.
- Baer AN, Jan De Beur S. Vitamin D-Binding Protein Deficiency and Homozygous Deletion of the GC Gene. *N Engl J Med*. 2019 Jun 27;380(26):2582-2583. doi: 10.1056/NEJMc1905282.
- Barrea L, Muscogiuri G, Annunziata G, et al. A New Light on Vitamin D in Obesity: A Novel Association with Trimethylamine-N-Oxide (TMAO). *Nutrients*. 2019 Jun 10;11(6). pii: E1310. doi: 10.3390/nu11061310.
- Barros-Oliveira CS, Salvatori R, Dos Santos JSS, et al. Sweat and vitamin D status in congenital, lifetime, untreated GH deficiency. *Endocrine*. 2019 Sep;65(3):710-713. doi: 10.1007/s12020-019-01998-7. Epub 2019 Jul 10.
- Bassyouni H, Lewkonja R, Marcadier JL. Vitamin D-Binding Protein Deficiency and Homozygous Deletion of the GC Gene. Reply. *N Engl J Med*. 2019 Jun 27;380(26):2586-2587. doi: 10.1056/NEJMc1905282.
- Bener A, Al-Hamaq AOAA, Öztürk M, et al. Vitamin D and Elevated Serum Uric Acid as Novel Predictors and Prognostic Markers for Type 2 Diabetes Mellitus. *J Pharm Bioallied Sci*. 2019 Apr;11(2):127-132. doi: 10.4103/jpbs.JPBS_240_18.
- Berg AH, Karumanchi SA, Thadhani R. Vitamin D-Binding Protein Deficiency and Homozygous Deletion of the GC Gene. *N Engl J Med*. 2019 Jun 27;380(26):2584-2585. doi: 10.1056/NEJMc1905282.
- Brown MA, Duncan EL, Evans DM. Vitamin D-Binding Protein Deficiency and Homozygous Deletion of the GC Gene. *N Engl J Med*. 2019 Jun 27;380(26):2583. doi: 10.1056/NEJMc1905282.
- Carvalho GB, Giraldo LR, Lira RB, et al. Pre-operative vitamin D deficiency is a risk factor for postoperative hypocalcemia in patients undergoing total thyroidectomy: retrospective cohort study. *Sao Paulo Med J*. 2019 Jul 22. pii: S1516-31802019005002101. doi: 10.1590/1516-3180.2018.0336140319. [Epub ahead of print].
- Carvalho IS, Gonçalves CI, Almeida JT, et al. Association of Vitamin D Pathway Genetic Variation and Thyroid Cancer. *Genes (Basel)*. 2019 Jul 28;10(8). pii: E572. doi: 10.3390/genes10080572.
- Chahardoli R, Saboor-Yaraghi AA, Amou

- zegar A, et al. Can Supplementation with Vitamin D Modify Thyroid Autoantibodies (Anti-TPO Ab, Anti-Tg Ab) and Thyroid Profile (T3, T4, TSH) in Hashimoto's Thyroiditis? A Double Blind, Randomized Clinical Trial. *Horm Metab Res.* 2019 May;51(5):296-301. doi: 10.1055/a-0856-1044. Epub 2019 May 9.
- Chen C, Zhai H, Cheng J, et al. Causal Link Between Vitamin D and Total Testosterone in Men: A Mendelian Randomization Analysis. *J Clin Endocrinol Metab.* 2019 Aug 1;104(8):3148-3156. doi: 10.1210/aj.2018-01874.
 - Chen LW, Chien CH, Kuo SF, et al. Low vitamin D level was associated with metabolic syndrome and high leptin level in subjects with nonalcoholic fatty liver disease: a community-based study. *BMC Gastroenterol.* 2019 Jul 16;19(1):126. doi: 10.1186/s12876-019-1040-y.
 - Corcoy R, Mendoza LC, Simmons D, et al. The DALI vitamin D randomized controlled trial for gestational diabetes mellitus prevention: No major benefit shown besides vitamin D sufficiency. *Clin Nutr.* 2019 Apr 11. pii: S0261-5614(19)30161-X. doi: 10.1016/j.clnu.2019.04.006. [Epub ahead of print].
 - Corica D, Zusi C, Olivieri F, et al. Vitamin D affects insulin sensitivity and β -cell function in obese non-diabetic youths. *Eur J Endocrinol.* 2019 Aug 1. pii: EJE-19-0369.R1. doi: 10.1530/EJE-19-0369. [Epub ahead of print].
 - Darraj H, Badedi M, Poore KR, et al. Vitamin D deficiency and glycemic control among patients with type 2 diabetes mellitus in Jazan City, Saudi Arabia. *Diabetes Metab Syndr Obes.* 2019 Jun 5;12:853-862. doi: 10.2147/DMSO.S203700. eCollection 2019.
 - Delle Monache S, Di Fulvio P, Iannetti E, et al. Body mass index represents a good predictor of vitamin D status in women independently from age. *Clin Nutr.* 2019 Apr;38(2):829-834. doi: 10.1016/j.clnu.2018.02.024. Epub 2018 Mar 2.
 - Derakhshanian H, Djalali M, Mohammad Hassan MH, et al. Vitamin D suppresses cellular pathways of diabetes complication in liver. *Iran J Basic Med Sci.* 2019 Jun;22(6):690-694. doi: 10.22038/ijbms.2019.36054.8584.
 - Dhas Y, Banerjee J, Damle G, et al. Association of vitamin D deficiency with insulin resistance in middle-aged type 2 diabetics. *Clin Chim Acta.* 2019 May;492:95-101. doi: 10.1016/j.cca.2019.02.014. Epub 2019 Feb 14.
 - Dibaba DT. Effect of vitamin D supplementation on serum lipid profiles: a systematic review and meta-analysis. *Nutr Rev.* 2019 Aug 13. pii: nuz037. doi: 10.1093/nutrit/nuz037. [Epub ahead of print].
 - Dogan B, Oner C, Feyizoglu G, et al. Vitamin D status of Turkish type 1 diabetic patients. *Diabetes Metab Syndr.* 2019 May - Jun;13(3):2037-2039. doi: 10.1016/j.dsx.2019.04.026. Epub 2019 Apr 29.
 - Durá-Travé T, Gallinas-Victoriano F, Chueca-Guindulain M, et al. Assessment of vitamin D status and parathyroid hormone during a combined intervention for the treatment of childhood obesity. *Nutr Diabetes.* 2019 Jun 4;9(1):18. doi: 10.1038/s41387-019-0083-z.
 - Edafe O, Mech CE, Balasubramanian SP. Calcium, vitamin D or recombinant parathyroid hormone for managing postthyroidectomy hypoparathyroidism. *Cochrane Database Syst Rev.* 2019 May 22;5:CD012845. doi: 10.1002/14651858.CD012845.pub2. Review.
 - Einarsdottir E, Pekkinen M, Krjutškov K, et al. A preliminary transcriptome analysis suggests a transitory effect of vitamin D on mitochondrial function in obese young Finnish subjects. *Endocr Connect.* 2019 May 1;8(5):559-570. doi: 10.1530/EC-18-0537.
 - Farrell SW, DeFina L, Willis B, et al. Cardiorespiratory fitness, different measures of adiposity, and serum vitamin D levels in African-American adults. *J Investig Med.* 2019 Jul 31. pii: jim-2019-001071. doi: 10.1136/jim-2019-001071. [Epub ahead of print].
 - Ferreira PP, Cangussu L, Bueloni-Dias FN, et al. Vitamin D supplementation improves the metabolic syndrome risk profile in postmenopausal women. *Climacteric.* 2019 May 28:1-8. doi: 10.1080/13697137.2019.1611761. [Epub ahead of print].
 - Gil-Díaz MC, Raynor J, O'Brien KO, et al. Systematic review: associations of calcium intake, vitamin D intake, and physical activity with skeletal outcomes in people with Type 1 diabetes mellitus. *Acta Diabetol.* 2019 Apr 15. doi: 10.1007/s00592-019-01334-5. [Epub ahead of print].
 - Graves CE, McManus CM, Chabot JA, et al. Vitamin D Does Not Affect Intraoperative Parathyroid Hormone Kinetics: A Mixed Linear Model Analysis. *J Surg Res.* 2019 Sep;241:199-204. doi: 10.1016/j.jss.2019.03.026. Epub 2019 Apr 24.
 - Grove-Laugesen D, Malmstroem S, Ebbehøj E, Riis AL, Watt T, Hansen KW, Rejnmark L. Effect of 9 months of vitamin D supplementation on arterial stiffness and blood pressure in Graves' disease: a randomized clinical trial. *Endocrine.* 2019 Jul 6. doi: 10.1007/s12020-019-01997-8. [Epub ahead of print].
 - Guareschi ZM, Valcanaia AC, Ceglarek VM, et al. The effect of chronic oral vitamin D supplementation on adiposity and insulin secretion in hypothalamic obese rats. *Br J Nutr.* 2019 Jun;121(12):1334-1344. doi: 10.1017/S0007114519000667. Epub 2019 Mar 29.
 - Guo J, Sun C, Wang B, et al. Associations between Vitamin D and β -Cell Function and Colorectal Cancer-Associated Tumor Markers in Chinese Type 2 Diabetic Patients with Albuminuria. *Clin Lab.* 2019 Apr 1;65(4). doi: 10.7754/Clin.Lab.2019.181111.
 - Habibian N, Amoli MM, Abbasi F, et al. Role of vitamin D and vitamin D receptor gene polymorphisms on residual beta cell function in children with type 1 diabetes mellitus. *Pharmacol Rep.* 2019 Apr;71(2):282-288. doi: 10.1016/j.pharep.2018.12.012. Epub 2018 Dec 28.
 - Hafez M, Musa N, Abdel Atty S, et al. Effect of Vitamin D Supplementation on Lipid Profile in Vitamin D-Deficient Children with Type 1 Diabetes and Dyslipidemia. *Horm Res Paediatr.* 2019 Jul 2:1-8. doi: 10.1159/000500829. [Epub ahead of print].
 - Hetta HF, Fahmy EM, Mohamed GA, et al. Does vitamin D status correlate with insulin resistance in obese prediabetic patients? An Egyptian multicenter study. *Diabetes Metab Syndr.* 2019 Jul 29;13(5):2813-2817. doi: 10.1016/j.dsx.2019.07.043. [Epub ahead of print].

- Hollis BW. Vitamin D-Binding Protein Deficiency and Homozygous Deletion of the GC Gene. *N Engl J Med*. 2019 Jun 27;380(26):2583-2584. doi: 10.1056/NEJMc1905282.
- Hosny SS, Ali HM, Mohammed WA, et al. Study of relationship between total vitamin D level and NAFLD in a sample of Egyptian patients with and without T2DM. *Diabetes Metab Syndr*. 2019 May - Jun;13(3):1769-1771. doi: 10.1016/j.dsx.2019.04.002. Epub 2019 Apr 3. Review.
- Hosseini Marnani E, Mollahosseini M, Gheflati A, et al. The effect of vitamin D supplementation on the androgenic profile in men: A systematic review and meta-analysis of clinical trials. *Andrologia*. 2019 Jul 23:e13343. doi: 10.1111/and.13343. [Epub ahead of print] Review.
- Hu Z, Chen J, Sun X, et al. Efficacy of vitamin D supplementation on glycemic control in type 2 diabetes patients: A meta-analysis of interventional studies. *Medicine (Baltimore)*. 2019 Apr;98(14):e14970. doi: 10.1097/MD.00000000000014970.
- Huang H, Guo J, Chen Q, et al. The synergistic effects of vitamin D and estradiol deficiency on metabolic syndrome in Chinese postmenopausal women. *Menopause*. 2019 Jun 10. doi: 10.1097/GME.0000000000001370. [Epub ahead of print].
- Imga NN, Karci AC, Oztas D, et al. Effects of vitamin D supplementation on insulin resistance and dyslipidemia in overweight and obese premenopausal women. *Arch Med Sci*. 2019 May;15(3):598-606. doi: 10.5114/aoms.2018.75864. Epub 2018 May 21.
- Iqbal A, Hussain A, Iqbal A, et al. Correlation Between Vitamin D Deficiency and Diabetic Ketoacidosis. *Cureus*. 2019 Apr 18;11(4):e4497. doi: 10.7759/cureus.4497. Review.
- Jaksic M, Martinovic M, Gligorovic-Barhanovic N, et al. Association between inflammation, oxidative stress, vitamin D, copper and zinc with pre-obesity and obesity in school children from the city of Podgorica, Montenegro. *J Pediatr Endocrinol Metab*. 2019 Aug 24. pii: /j/jpem.ahead-of-print/jpem-2019-0086/jpem-2019-0086.xml. doi: 10.1515/jpem-2019-0086. [Epub ahead of print].
- Jiang X, Peng M, Chen S, et al. Vitamin D deficiency is associated with dyslipidemia: a cross-sectional study in 3788 subjects. *Curr Med Res Opin*. 2019 Jun;35(6):1059-1063. doi: 10.1080/03007995.2018.1552849. Epub 2019 Jan 7.
- Kami ski M, Uruska A, Rogowicz-Frontczak A, et al. Insulin Resistance in Adults with Type 1 Diabetes is Associated with Lower Vitamin D Serum Concentration. *Exp Clin Endocrinol Diabetes*. 2019 May 2. doi: 10.1055/a-0895-5166. [Epub ahead of print].
- Kazemian E, Amouzegar A, Akbari ME, et al. Vitamin D receptor gene polymorphisms affecting changes in visceral fat, waist circumference and lipid profile in breast cancer survivors supplemented with vitamin D3. *Lipids Health Dis*. 2019 Aug 9;18(1):161. doi: 10.1186/s12944-019-1100-x.
- Khan AH, Fatima SS, Raheem A, et al. Are serum leptin levels predicted by lipoproteins, vitamin D and body composition? *World J Diabetes*. 2019 Apr 15;10(4):260-268. doi: 10.4239/wjd.v10.i4.260.
- Kim MR, Jeong SJ. Relationship between Vitamin D Level and Lipid Profile in Non-Obese Children. *Metabolites*. 2019 Jun 30;9(7). pii: E125. doi: 10.3390/metabo9070125.
- Krysiak R, Kowalcze K, Okopień B. Selenomethionine potentiates the impact of vitamin D on thyroid autoimmunity in euthyroid women with Hashimoto's thyroiditis and low vitamin D status. *Pharmacol Rep*. 2019 Apr;71(2):367-373. doi: 10.1016/j.pharep.2018.12.006. Epub 2018 Dec 14.
- Krysiak R, Kowalcze K, Okopień B. The effect of vitamin D on thyroid autoimmunity in euthyroid men with autoimmune thyroiditis and testosterone deficiency. *Pharmacol Rep*. 2019 Apr 15;71(5):798-803. doi: 10.1016/j.pharep.2019.04.010. [Epub ahead of print].
- Krysiak R, Szkróbka W, Okopie B. The effect of vitamin D and selenomethionine on thyroid antibody titers, hypothalamic-pituitary-thyroid axis activity and thyroid function tests in men with Hashimoto's thyroiditis: A pilot study. *Pharmacol Rep*. 2019 Apr;71(2):243-247. doi: 10.1016/j.pharep.2018.10.012. Epub 2018 Oct 24.
- Landrier JF, Mounien L, Tourniaire F. Obesity and Vitamin D Metabolism Modifications. *J Bone Miner Res*. 2019 Jul;34(7):1383. doi: 10.1002/jbmr.3739. Epub 2019 May 29.
- Lawson BR, Hinson AM, Lucas JC, et al. Relationship of Vitamin D Deficiency and Intraoperative Parathyroid Hormone Elevation in Completion and Total Thyroidectomy. *Otolaryngol Head Neck Surg*. 2019 Apr;160(4):612-615. doi: 10.1177/0194599818825467. Epub 2019 Jan 22.
- Lemieux P, Weisnagel JS, Caron AZ, et al. Effects of 6-month vitamin D supplementation on insulin sensitivity and secretion: a randomized, placebo-controlled trial. *Eur J Endocrinol*. 2019 Jul 1. pii: EJE-19-0156.R2. doi: 10.1530/EJE-19-0156. [Epub ahead of print].
- Lerchbaum E, Trummer C, Theiler-Schwetz V, et al. Effects of Vitamin D Supplementation on Body Composition and Metabolic Risk Factors in Men: A Randomized Controlled Trial. *Nutrients*. 2019 Aug 14;11(8). pii: E1894. doi: 10.3390/nu11081894.
- Li X, Qu C, Wang Y, et al. Associations of CYP24A1 Copy Number Variation with Vitamin D Deficiency and Insulin Secretion. *Appl Physiol Nutr Metab*. 2019 May 21. doi: 10.1139/apnm-2019-0193. [Epub ahead of print].
- Liu Q, Zheng X, Liu Z, et al. Vitamin D status is associated with 1,5-anhydro-d-glucitol status in patients with type 2 diabetes mellitus. *Appl Physiol Nutr Metab*. 2019 Aug;44(8):857-860. doi: 10.1139/apnm-2018-0719. Epub 2019 Jan 11.
- Liu Y, Li L, Yi B, et al. Activation of vitamin D receptor attenuates high glucose-induced cellular injury partially dependent on CYP2J5 in murine renal tubule epithelial cell. *Life Sci*. 2019 Aug 12;234:116755. doi: 10.1016/j.lfs.2019.116755. [Epub ahead of print].
- Lo MC, Abushamat L, Mramba LK. Effect of Treating Vitamin D Deficiency in Uncontrolled Type 2 Diabetes: A Randomized, Placebo-Controlled Study. *Am J Ther*. 2019 Jul/Aug;26(4):e441-e451. doi: 10.1097/MJT.0000000000000738.
- Loh HH, Lim LL, Yee A, et al. Effect of vitamin D replacement in primary hyperparathyroid

- ism with concurrent vitamin D deficiency: a systematic review and meta-analysis. *Minerva Endocrinol.* 2019 Jun;44(2):221-231. doi: 10.23736/S0391-1977.17.02584-6. Epub 2017 Mar 14.
- Ma CM, Yin FZ. The relationship between hypertriglyceridemic-waist phenotype and vitamin D status in type 2 diabetes. *Diabetes Metab Syndr Obes.* 2019 Apr 23;12:537-543. doi: 10.2147/DMSO.S204062. eCollection 2019.
 - Ma XH, Zhang Y, Wang Y, et al. [Study on the relationship between serum vitamin D and the risk of type 2 diabetes in Harbin residents]. *Zhonghua Yu Fang Yi Xue Za Zhi.* 2019 Jun 6;53(6):553-558. doi: 10.3760/cma.j.issn.0253-9624.2019.06.003. Chinese.
 - Malik MZ, Mirza AA, Farooqi SA, et al. Role of Preoperative Administration of Vitamin D and Calcium in Postoperative Transient Hypocalcemia after Total Thyroidectomy. *Cureus.* 2019 Apr 30;11(4):e4579. doi: 10.7759/cureus.4579.
 - Maljaei MB, Bahreini A, Namjoo I. Letter to Editor about "Effect of Vitamin D Supplementation on Weight Loss, Glycemic Indices, and Lipid Profile in Obese and Overweight Women: A Clinical Trial Study". *Int J Prev Med.* 2019 Jun 7;10:105. doi: 10.4103/ijpvm.IJPVM_406_18. eCollection 2019.
 - Martineau AR, Thummel KE, Wang Z, et al. Differential effects of oral boluses of vitamin D2 versus vitamin D3 on vitamin D metabolism: a randomized controlled trial. *J Clin Endocrinol Metab.* 2019 Jun 14. pii: jc.2019-00207. doi: 10.1210/jc.2019-00207. [Epub ahead of print].
 - Mehri Z, Salehi-Abargouei A, Shahvazi S, et al. The association between vitamin D status and metabolic syndrome and its components among female teachers residing in Yazd city. *Endocrinol Diabetes Nutr.* 2019 Apr 17. pii: S2530-0164(19)30061-8. doi: 10.1016/j.endinu.2019.02.006. [Epub ahead of print] English, Spanish.
 - Mihoubi E, Raache R, H A, et al. Metabolic imbalance and vitamin D deficiency in type 1 diabetes in the Algerian population. *Endocr Metab Immune Disord Drug Targets.* 2019 May 29. doi: 10.2174/1871530319666190529113404. [Epub ahead of print].
 - Muhammad MH, Hussien NI, Elwia SK. Vitamin D Replacement Mitigates Menopause-Associated Dyslipidaemia and Atherogenic Indices in Ovariectomized Rats; A Biochemical Study. *Exp Clin Endocrinol Diabetes.* 2019 Jun 24. doi: 10.1055/a-0934-5666. [Epub ahead of print].
 - Mutz SJ, Jokelainen J, Sebert S, et al. Vitamin D Status and Components of Metabolic Syndrome in Older Subjects from Northern Finland (Latitude 65°North). *Nutrients.* 2019 May 30;11(6). pii: E1229. doi: 10.3390/nu11061229.
 - Niroomand M. Magnitude of benefit of vitamin D supplementation and the stage of impaired glucose metabolism: Area for future studies. *Diabetes Res Clin Pract.* 2019 Jul 17:107794. doi: 10.1016/j.diabres.2019.107794. [Epub ahead of print]
 - Niu Y, Li J, Peng R, et al. Low vitamin D is associated with diabetes peripheral neuropathy in older but not in young and middle-aged patients. *Diabetes Metab Res Rev.* 2019 Sep;35(6):e3162. doi: 10.1002/dmrr.3162. Epub 2019 Apr 26.
 - Ojo O, Weldon SM, Thompson T, et al. The Effect of Vitamin D Supplementation on Glycaemic Control in Women with Gestational Diabetes Mellitus: A Systematic Review and Meta-Analysis of Randomised Controlled Trials. *Int J Environ Res Public Health.* 2019 May 16;16(10). pii: E1716. doi: 10.3390/ijerph16101716. Review.
 - Omidian M, Mahmoudi M, Javanbakht MH, et al. Effects of vitamin D supplementation on circulatory YKL-40 and MCP-1 biomarkers associated with vascular diabetic complications: A randomized, placebo-controlled, double-blind clinical trial. *Diabetes Metab Syndr.* 2019 Jul 29;13(5):2873-2877. doi: 10.1016/j.dsx.2019.07.047. [Epub ahead of print].
 - Pantovic A, Zec M, Zekovic M, et al. Vitamin D Is Inversely Related to Obesity: Cross-Sectional Study in a Small Cohort of Serbian Adults. *J Am Coll Nutr.* 2019 Jul;38(5):405-414. doi: 10.1080/07315724.2018.1538828. Epub 2019 Jan 11.
 - Pazarıcı Ö, Dogan HO, Kilinc S, et al. Evaluation of Serum Glucagon-like Peptide 1 and Vitamin D Levels in Elderly Patients with Bone Fracture. *Med Princ Pract.* 2019 Jul 17. doi: 10.1159/000502132. [Epub ahead of print].
 - Perna S. Is Vitamin D Supplementation Useful for Weight Loss Programs? A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Medicina (Kaunas).* 2019 Jul 12;55(7). pii: E368. doi: 10.3390/medicina55070368. Review.
 - Perticone M, Maio R, Sciacqua A, et al. Ketogenic Diet-Induced Weight Loss is Associated with an Increase in Vitamin D Levels in Obese Adults. *Molecules.* 2019 Jul 9;24(13). pii: E2499. doi: 10.3390/molecules24132499.
 - Pittas AG, Dawson-Hughes B, Sheehan P, et al. Vitamin D Supplementation and Prevention of Type 2 Diabetes. *N Engl J Med.* 2019 Aug 8;381(6):520-530. doi: 10.1056/NEJMoa1900906. Epub 2019 Jun 7.
 - Pramono A, Jocken JWE, Blak EE. Vitamin D deficiency in the aetiology of obesity-related insulin resistance. *Diabetes Metab Res Rev.* 2019 Jul;35(5):e3146. doi: 10.1002/dmrr.3146. Epub 2019 Mar 18. Review.
 - Rahimi MH, Mollahosseini M, Mirzababaei A, et al. Interactions between vitamin D binding protein variants and major dietary patterns on the odds of metabolic syndrome and its components in apparently healthy adults. *Diabetol Metab Syndr.* 2019 Apr 8;11:28. doi: 10.1186/s13098-019-0422-1. eCollection 2019.
 - Rodrigues KF, Pietrani NT, Bosco AA, et al. Lower Vitamin D Levels, but Not VDR Polymorphisms, Influence Type 2 Diabetes Mellitus in Brazilian Population Independently of Obesity. *Medicina (Kaunas).* 2019 May 22;55(5). pii: E188. doi: 10.3390/medicina55050188.
 - Roizen JD, Levine MA. Response to: Obesity and Vitamin D Metabolism Modifications. *J Bone Miner Res.* 2019 Jul;34(7):1384. doi: 10.1002/jbmr.3743. Epub 2019 May 29.
 - Sahin E, Col Madendag I, Sahin ME, et al. Effect of vitamin D deficiency on the 75g oral glucose tolerance test screening and insulin resistance. *Gynecol Endocrinol.* 2019 Jun;35(6):535-538. doi: 10.1080/09513590.2018.1554038. Epub 2019 Jan 9.
 - Sangouni AA, Ghavamzadeh S, Jamalzahi A. A narrative review on effects of vitamin D

- on main risk factors and severity of Non-Alcoholic Fatty Liver Disease. *Diabetes Metab Syndr*. 2019 May - Jun;13(3):2260-2265. doi: 10.1016/j.dsx.2019.05.013. Epub 2019 May 22. Review.
- Sayadi Shahraki M, Khalili N, Yousefvand S, et al. Severe obesity and vitamin D deficiency treatment options before bariatric surgery: a randomized clinical trial. *Surg Obes Relat Dis*. 2019 Jun 12. pii: S1550-7289(19)30259-X. doi: 10.1016/j.soard.2019.05.033. [Epub ahead of print].
 - Sencar ME, Sakiz D, Unsal IO, et al. Serum Vitamin D Level Does not Affect The Sensitivity of Parathyroid Adenoma Localization Tests. *Sci Rep*. 2019 Aug 19;9(1):12035. doi: 10.1038/s41598-019-48536-z.
 - Seyed Hosseini E, Haddad Kashani H, Nikzad H, et al. Diabetic hemodialysis: vitamin D supplementation and its related signaling pathways involved in insulin and lipid metabolism. *Curr Mol Med*. 2019 Jun 18. doi: 10.2174/1566524019666190618144712. [Epub ahead of print].
 - Shen F, Wang Y, Sun H, et al. Vitamin D receptor gene polymorphisms are associated with triceps skin fold thickness and body fat percentage but not with body mass index or waist circumference in Han Chinese. *Lipids Health Dis*. 2019 Apr 11;18(1):97. doi: 10.1186/s12944-019-1027-2.
 - Simas LAW, Zanatta LCB, Moreira CA, et al. Body composition and nutritional and metabolic parameters in postmenopausal women sufficient, insufficient and deficient in vitamin D. *Arch Endocrinol Metab*. 2019 May/ Jun;63(3):265-271. doi: 10.20945/2359-3997000000121. Epub 2019 Apr 25.
 - Slomski A. Vitamin D Doesn't Protect Against Diabetes. *JAMA*. 2019 Aug 27;322(8):717. doi: 10.1001/jama.2019.11564.
 - Smith LM, Gallagher JC. Effect of vitamin D supplementation on total and free 25 hydroxyvitamin D and parathyroid hormone. An analysis of two randomized controlled trials. *J Intern Med*. 2019 Jun 18. doi: 10.1111/joim.12950. [Epub ahead of print].
 - Song N, Yang S, Wang YY, et al. The Impact of Vitamin D Receptor Gene Polymorphisms on the Susceptibility of Diabetic Vascular Complications: A Meta-Analysis. *Genet Test Mol Biomarkers*. 2019 Aug;23(8):533-556. doi: 10.1089/gtmb.2019.0037.
 - Switkowski KM, Camargo CA, Perron P, et al. Cord blood vitamin D status is associated with cord blood insulin and c-peptide in two cohorts of mother-newborn pairs. *J Clin Endocrinol Metab*. 2019 Apr 24. pii: jc.2018-02550. doi: 10.1210/jc.2018-02550. [Epub ahead of print].
 - Szymczak-Pajor I, Śliwińska A. Analysis of Association between Vitamin D Deficiency and Insulin Resistance. *Nutrients*. 2019 Apr 6;11(4). pii: E794. doi: 10.3390/nu11040794. Review.
 - Tang JCY, Jackson S, Walsh NP, et al. The dynamic relationships between the active and catabolic vitamin D metabolites, their ratios, and associations with PTH. *Sci Rep*. 2019 May 6;9(1):6974. doi: 10.1038/s41598-019-43462-6.
 - Tapia G, Mårild K, Dahl SR, et al. Maternal and Newborn Vitamin D-Binding Protein, Vitamin D Levels, Vitamin D Receptor Genotype, and Childhood Type 1 Diabetes. *Diabetes Care*. 2019 Apr;42(4):553-559. doi: 10.2337/dc18-2176. Epub 2019 Jan 28.
 - Ucak S, Sevim E, Ersoy D, et al. Evaluation of the relationship between microalbuminuria and 25-(OH) vitamin D levels in patients with type 2 diabetes mellitus. *Aging Male*. 2019 Jun;22(2):116-120. doi: 10.1080/13685538.2018.1479385. Epub 2018 Jun 26.
 - Ursem S, Francic V, Keppel M, et al. The effect of vitamin D supplementation on plasma non-oxidised PTH in a randomised clinical trial. *Endocr Connect*. 2019 May 1;8(5):518-527. doi: 10.1530/EC-19-0097.
 - Usategui-Martín R, Pérez-Alonso M, Socorro-Briangos L, et al. Estrogen receptor genes polymorphisms determine serum lipid profile in healthy postmenopausal women treated with calcium, vitamin D, and genistein. *J Cell Biochem*. 2019 Aug;120(8):13115-13120. doi: 10.1002/jcb.28584. Epub 2019 Mar 18.
 - Valladares T, Cardoso MR, Aldrighi JM. Higher serum levels of vitamin D are associated with lower blood glucose levels. *Menopause*. 2019 Jul;26(7):781-784. doi: 10.1097/GME.0000000000001308.
 - Veneti S, Anagnostis P, Adamidou F, et al. Association between vitamin D receptor gene polymorphisms and Graves' disease: a systematic review and meta-analysis. *Endocrine*. 2019 Aug;65(2):244-251. doi: 10.1007/s12020-019-01902-3. Epub 2019 Mar 28.
 - Vigna L, Silvia Tirelli A, Grossi E, et al. Directional Relationship Between Vitamin D Status and Prediabetes: A New Approach from Artificial Neural Network in a Cohort of Workers with Overweight-Obesity. *J Am Coll Nutr*. 2019 Apr 25:1-12. doi: 10.1080/07315724.2019.1590249. [Epub ahead of print].
 - Vranić L, Mikolašević I, Milić S. Vitamin D Deficiency: Consequence or Cause of Obesity? *Medicina (Kaunas)*. 2019 Aug 28;55(9). pii: E541. doi: 10.3390/medicina55090541. Review.
 - Wan H, Wang Y, Zhang K, et al. Associations between vitamin d and microvascular complications in middle-aged and elderly diabetic patients. *Endocr Pract*. 2019 Aug;25(8):809-816. doi: 10.4158/EP-2019-0015. Epub 2019 Apr 23.
 - Wang N, Wang C, Chen X, et al. Vitamin D, prediabetes and type 2 diabetes: bidirectional Mendelian randomization analysis. *Eur J Nutr*. 2019 May 10. doi: 10.1007/s00394-019-01990-x. [Epub ahead of print].
 - Wenclewska S, Szymczak-Pajor I, Drzewoski J, et al. Vitamin D Supplementation Reduces Both Oxidative DNA Damage and Insulin Resistance in the Elderly with Metabolic Disorders. *Int J Mol Sci*. 2019 Jun 13;20(12). pii: E2891. doi: 10.3390/ijms20122891.
 - Xia J, Song Y, Rawal S, et al. Vitamin D status during pregnancy and the risk of gestational diabetes mellitus: A longitudinal study in a multiracial cohort. *Diabetes Obes Metab*. 2019 Aug;21(8):1895-1905. doi: 10.1111/dom.13748. Epub 2019 May 14.
 - Yalla N, Bobba G, Guo G, et al. Parathyroid hormone reference ranges in healthy individuals classified by vitamin D status. *J Endocrinol Invest*. 2019 Jul 4. doi: 10.1007/s40618-019-01075-w. [Epub ahead of print].
 - Yassin MM, Masoud AED, Yasin MM.

Serum vitamin D status in type 2 diabetic patients from Gaza Strip. *Diabetes Metab Syndr*. 2019 May - Jun;13(3):1865-1870. doi: 10.1016/j.dsx.2019.04.015. Epub 2019 Apr 17.

- Yu P, Song H, Gao J, et al. Vitamin D (1,25-(OH)₂D₃) regulates the gene expression through competing endogenous RNAs networks in high glucose-treated endothelial progenitor cells. *J Steroid Biochem Mol Biol*. 2019 Jul 11;193:105425. doi: 10.1016/j.jsbmb.2019.105425. [Epub ahead of print].
- Zhang Q, Wu Y, Lu Y, et al. Role of vitamin D in risk factors of patients with type 2 diabetes mellitus. *Med Clin (Barc)*. 2019 Jun 26. pii: S0025-7753(19)30347-1. doi: 10.1016/j.medcli.2019.04.019. [Epub ahead of print] English, Spanish.
- Zheng JS, Imamura F, Sharp SJ, et al. Association of Plasma Vitamin D Metabolites With Incident Type 2 Diabetes: EPIC-InterAct Case-Cohort Study. *J Clin Endocrinol Metab*. 2019 Apr 1;104(4):1293-1303. doi: 10.1210/jc.2018-01522.

GASTROENTEROLOGY

- Abbasnezhad A, Amani R, Hasanvand A, et al. Association of Serum Vitamin D Concentration With Clinical Symptoms and Quality of Life in Patients With Irritable Bowel Syndrome. *J Am Coll Nutr*. 2019 May;Jun;38(4):327-333. doi: 10.1080/07315724.2018.1510349. Epub 2018 Sep 25.
- Ahlawat R, Weinstein T, Markowitz J, et al. Should We Assess Vitamin D Status in Pediatric Patients with Celiac Disease? *J Pediatr Gastroenterol Nutr*. 2019 Jun 18. doi: 10.1097/MPG.0000000000002417. [Epub ahead of print].
- Ahamed Z R, Dutta U, Sharma V, et al. Oral Nano Vitamin D Supplementation Reduces Disease Activity in Ulcerative Colitis: A Double-Blind Randomized Parallel Group Placebo-controlled Trial. *J Clin Gastroenterol*. 2019 Jul 26. doi: 10.1097/MCG.0000000000001233. [Epub ahead of print].
- Arai T, Atsukawa M, Tsubota A, et al. Association of vitamin D levels and vitamin D-related gene polymorphisms with liver fibrosis in patients with biopsy-proven nonalcohol-

ic fatty liver disease. *Dig Liver Dis*. 2019 Jul;51(7):1036-1042. doi: 10.1016/j.dld.2018.12.022. Epub 2019 Jan 9.

- Arihiro S, Nakashima A, Matsuoka M, et al. Randomized Trial of Vitamin D Supplementation to Prevent Seasonal Influenza and Upper Respiratory Infection in Patients With Inflammatory Bowel Disease. *Inflamm Bowel Dis*. 2019 May 4;25(6):1088-1095. doi: 10.1093/ibd/izy346.
- Barbalho SM, Goulart RA, Araújo AC, et al. Irritable bowel syndrome: a review of the general aspects and the potential role of vitamin D. *Expert Rev Gastroenterol Hepatol*. 2019 Apr;13(4):345-359. doi: 10.1080/17474124.2019.1570137. Epub 2019 Jan 23. Review.
- Buonomo AR, Arcopinto M, Scotto R, et al. The serum-ascites vitamin D gradient (SADG): A novel index in spontaneous bacterial peritonitis. *Clin Res Hepatol Gastroenterol*. 2019 Aug;43(4):e57-e60. doi: 10.1016/j.clinre.2018.10.001. Epub 2018 Oct 24.
- Burrelli Scotti G, Afferi MT, De Carolis A, et al. Factors affecting vitamin D deficiency in active inflammatory bowel diseases. *Dig Liver Dis*. 2019 May;51(5):657-662. doi: 10.1016/j.dld.2018.11.036. Epub 2018 Dec 7.
- Cantorna MT, Rogers CJ, Arora J. Aligning the Paradoxical Role of Vitamin D in Gastrointestinal Immunity. *Trends Endocrinol Metab*. 2019 Jul;30(7):459-466. doi: 10.1016/j.tem.2019.04.005. Epub 2019 May 20. Review.
- Chen C, Luo Y, Su Y, et al. The vitamin D receptor (VDR) protects pancreatic beta cells against Forkhead box class O1 (FOXO1)-induced mitochondrial dysfunction and cell apoptosis. *Biomed Pharmacother*. 2019 Sep;117:109170. doi: 10.1016/j.biopha.2019.109170. Epub 2019 Jun 29.
- Chen HD, Wang CC. Letter: severe vitamin D deficiency is a prognostic biomarker in autoimmune hepatitis-offender or bystander? *Aliment Pharmacol Ther*. 2019 Apr;49(7):958. doi: 10.1111/apt.15165.
- Cho YH, Kim JW, Shim JO, et al. Association Between Vitamin D Deficiency and Suspected Nonalcoholic Fatty Liver Disease in an Adolescent Population. *Pediatr Gastroenterol*

Hepatol Nutr. 2019 May;22(3):233-241. doi: 10.5223/pghn.2019.22.3.233. Epub 2019 Apr 16.

- Ebadi M, Czaja AJ, Montano-Loza AJ. Letter: severe vitamin D deficiency is a prognostic biomarker in autoimmune hepatitis-offender or bystander? Authors' reply. *Aliment Pharmacol Ther*. 2019 Apr;49(7):959-960. doi: 10.1111/apt.15180.
- Ebadi M, Czaja AJ, Montano-Loza AJ. Letter: vitamin D deficiency and autoimmune hepatitis - from research to treatment-authors' reply. *Aliment Pharmacol Ther*. 2019 Apr;49(8):1104-1105. doi: 10.1111/apt.15154.
- Fan HZ, Zhang R, Tian T, et al. CYP24A1 genetic variants in the vitamin D metabolic pathway are involved in the outcomes of hepatitis C virus infection among high-risk Chinese population. *Int J Infect Dis*. 2019 Jul;84:80-88. doi: 10.1016/j.ijid.2019.04.032. Epub 2019 May 7.
- Fletcher J, Cooper SC, Ghosh S, et al. The Role of Vitamin D in Inflammatory Bowel Disease: Mechanism to Management. *Nutrients*. 2019 May 7;11(5). pii: E1019. doi: 10.3390/nu11051019. Review.
- Haifer C, Lawrance IC, Center JR, et al. Vitamin D metabolites are lower with active Crohn's disease and spontaneously recover with development of remission. *Therap Adv Gastroenterol*. 2019 Jul 26;12:1756284819865144. doi: 10.1177/1756284819865144. eCollection 2019.
- Han C, Ni Z, Yuan T, et al. Influence of serum vitamin D level on *Helicobacter pylori* eradication: A multi-center, observational, prospective and cohort study. *J Dig Dis*. 2019 Aug;20(8):421-426. doi: 10.1111/1751-2980.12793. Epub 2019 Jul 3.
- Hassanshahi M, Anderson PH, Sylvester CL, et al. Highlight article: Current evidence for vitamin D in intestinal function and disease. *Exp Biol Med (Maywood)*. 2019 Sep;244(12):1040-1052. doi: 10.1177/1535370219867262. Epub 2019 Jul 31.
- Hausmann J, Kubesch A, Amiri M, et al. Vitamin D Deficiency is Associated with Increased Disease Activity in Patients with Inflammatory Bowel Disease. *J Clin Med*.

- 2019 Aug 27;8(9). pii: E1319. doi: 10.3390/jcm8091319.
- Hu CQ, Xu M, Yang BB, et al. Vitamin D Deficiency Attenuates Acute Alcohol-Induced Hepatic Lipid Accumulation in Mice. *Lipids*. 2019 Aug 28. doi: 10.1002/lipd.12188. [Epub ahead of print].
 - Hu YC, Wang WW, Jiang WY, et al. Low vitamin D levels are associated with high viral loads in patients with chronic hepatitis B: a systematic review and meta-analysis. *BMC Gastroenterol*. 2019 Jun 11;19(1):84. doi: 10.1186/s12876-019-1004-2.
 - Hwang SW. Can vitamin D supplementation help control inflammation in inflammatory bowel disease beyond its classical role in bone health? *Intest Res*. 2019 Apr;17(2):157-159. doi: 10.5217/ir.2019.00038. Epub 2019 Apr 24.
 - Izadi A, Aliasghari F, Gargari BP, et al. Strong association between serum Vitamin D and Vaspin Levels, AIP, VAI and liver enzymes in NAFLD patients. *Int J Vitam Nutr Res*. 2019 Apr 1:1-8. doi: 10.1024/0300-9831/a000443. [Epub ahead of print].
 - Jahn D, Dorbath D, Schilling AK, et al. Intestinal vitamin D receptor modulates lipid metabolism, adipose tissue inflammation and liver steatosis in obese mice. *Biochim Biophys Acta Mol Basis Dis*. 2019 Jun 1;1865(6):1567-1578. doi: 10.1016/j.bbadis.2019.03.007. Epub 2019 Mar 21.
 - Janssen CE, Globig AM, Busse Grawitz A, et al. Seasonal variability of vitamin D status in patients with inflammatory bowel disease - A retrospective cohort study. *PLoS One*. 2019 May 23;14(5):e0217238. doi: 10.1371/journal.pone.0217238. eCollection 2019.
 - Javad Hosseinzadeh-Attar M, Sharifi A, Nedjat S, et al. The Effect of Vitamin D on Serum Asymmetric Dimethylarginine in Patients with Mild to Moderate Ulcerative Colitis. *Int J Vitam Nutr Res*. 2019 Apr 15:1-6. doi: 10.1024/0300-9831/a000303. [Epub ahead of print].
 - Jun JC, Yoon H, Choi YJ, et al. The effect of vitamin D administration on inflammatory markers in patients with inflammatory bowel disease. *Intest Res*. 2019 Apr;17(2):210-217. doi: 10.5217/ir.2018.00081. Epub 2018 Nov 27.
 - Jun S. Ethnicity May Be Important for Studying the Role of the Microbiome and Vitamin D Receptor in IBD. *Inflamm Bowel Dis*. 2019 Apr 11;25(5):e54. doi: 10.1093/ibd/izy285.
 - Licata A, Minissale MG, Montalto FA, et al. Is vitamin D deficiency predictor of complications development in patients with HCV-related cirrhosis? *Intern Emerg Med*. 2019 Aug;14(5):735-737. doi: 10.1007/s11739-019-02072-w. Epub 2019 Mar 16.
 - Linneman Z, Reis C, Balaji K, et al. The vitamin D positive feedback hypothesis of inflammatory bowel diseases. *Med Hypotheses*. 2019 Jun;127:154-158. doi: 10.1016/j.mehy.2019.04.005. Epub 2019 Apr 16.
 - López-Muñoz P, Beltrán B, Sáez-González E, et al. Influence of Vitamin D Deficiency on Inflammatory Markers and Clinical Disease Activity in IBD Patients. *Nutrients*. 2019 May 11;11(5). pii: E1059. doi: 10.3390/nu11051059.
 - Maia-Ceciliano TC, Dutra RR, Aguila MB, et al. The deficiency and the supplementation of vitamin D and liver: Lessons of chronic fructose-rich diet in mice. *J Steroid Biochem Mol Biol*. 2019 Sep;192:105399. doi: 10.1016/j.jsbmb.2019.105399. Epub 2019 Jun 5.
 - Mechie NC, Mavropoulou E, Ellenrieder V, et al. Serum vitamin D but not zinc levels are associated with different disease activity status in patients with inflammatory bowel disease. *Medicine (Baltimore)*. 2019 Apr;98(15):e15172. doi: 10.1097/MD.00000000000015172.
 - Mut Surmeli D, Surmeli ZG, Bahsi R, et al. Vitamin D deficiency and risk of Helicobacter pylori infection in older adults: a cross-sectional study. *Aging Clin Exp Res*. 2019 Jul;31(7):985-991. doi: 10.1007/s40520-018-1039-1. Epub 2018 Sep 28.
 - O'Sullivan F, Raftery T, van Weele M, et al. Sunshine is an Important Determinant of Vitamin D Status Even Among High-dose Supplement Users: Secondary Analysis of a Randomized Controlled Trial in Crohn's Disease Patients. *Photochem Photobiol*. 2019 Jul;95(4):1060-1067. doi: 10.1111/php.13086. Epub 2019 Mar 12.
 - Palazzo D, Biliotti E, Esvan R, et al. Vitamin D deficiency and health-related quality of life in chronic hepatitis C. *J Viral Hepat*. 2019 Jun;26(6):774-777. doi: 10.1111/jvh.13076. Epub 2019 Mar 5.
 - Panarese A, Pesce F, Porcelli P, et al. Chronic functional constipation is strongly linked to vitamin D deficiency. *World J Gastroenterol*. 2019 Apr 14;25(14):1729-1740. doi: 10.3748/wjg.v25.i14.1729.
 - Peng CH, Lee HC, Jiang CB, et al. Serum vitamin D level is inversely associated with liver fibrosis in post Kasai's portoenterostomy biliary atresia patients living with native liver. *PLoS One*. 2019 Jun 26;14(6):e0218896. doi: 10.1371/journal.pone.0218896. eCollection 2019.
 - Schardey J, Globig AM, Janssen C, et al. Vitamin D inhibits pro-inflammatory T cell function in patients with inflammatory bowel disease. *J Crohns Colitis*. 2019 May 4. pii: ijz090. doi: 10.1093/ecco-jcc/ijz090. [Epub ahead of print].
 - Scott MJ. The upside-downside nature of Vitamin D signaling in liver. *J Leukoc Biol*. 2019 Aug 5. doi: 10.1002/JLB.3CE0519-157R. [Epub ahead of print]
 - Sharifi A, Vahedi H, Nedjat S, et al. Effect of single-dose injection of vitamin D on immune cytokines in ulcerative colitis patients: a randomized placebo-controlled trial. *APMIS*. 2019 Jul 5. doi: 10.1111/apm.12982. [Epub ahead of print].
 - Sirajudeen S, Shah I, Al Menhali A. A Narrative Role of Vitamin D and Its Receptor: With Current Evidence on the Gastric Tissues. *Int J Mol Sci*. 2019 Aug 5;20(15). pii: E3832. doi: 10.3390/ijms20153832. Review.
 - Szymczak-Tomczak A, Krela-Kaźmierczak I, Kaczmarek-Ryś M, et al. Vitamin D receptor (VDR) TaqI polymorphism, vitamin D and bone mineral density in patients with inflammatory bowel diseases. *Adv Clin Exp Med*. 2019 Jul;28(7):975-980. doi: 10.17219/acem/97376.
 - Tavakoli H, Rostami H, Avan A, et al. High dose vitamin D supplementation is associated with an improvement in serum markers of liver function. *Biofactors*. 2019 May;45(3):335-342. doi: 10.1002/biof.1496. Epub 2019 Feb 13.

- Thanapirom K, Suksawatamnuay S, Sukeepaisarnjaroen W, et al. Vitamin D-Binding protein Gene Polymorphism Predicts Pegylated Interferon-Related HBsAg Seroclearance in HBeAg-Negative Thai Chronic Hepatitis B Patients: A Multicentre Study. *Asian Pac J Cancer Prev.* 2019 Apr 29;20(4):1257-1264.
- Vahid F, Hekmatdoost A, Mirmajidi S, et al. Association Between Index of Nutritional Quality and Nonalcoholic Fatty Liver Disease: The Role of Vitamin D and B Group. *Am J Med Sci.* 2019 Sep;358(3):212-218. doi: 10.1016/j.amjms.2019.06.008. Epub 2019 Jul 1.
- Vivan MA, Kops NL, Fülber ER, et al. Prevalence of Vitamin D Depletion, and Associated Factors, among Patients Undergoing Bariatric Surgery in Southern Brazil. *Obes Surg.* 2019 May 25. doi: 10.1007/s11695-019-03963-9. [Epub ahead of print].
- Wang J, Xu J, Shao X, et al. Letter: vitamin D deficiency and autoimmune hepatitis - from research to treatment. *Aliment Pharmacol Ther.* 2019 Apr;49(8):1103. doi: 10.1111/apt.15147.
- Xia Y, Chen H, Xiao H, et al. Immune regulation mechanism of vitamin D level and IL-17/IL-17R pathway in Crohn's disease. *Exp Ther Med.* 2019 May;17(5):3423-3428. doi: 10.3892/etm.2019.7389. Epub 2019 Mar 13.
- Yang L, He X, Li L, et al. Effect of vitamin D on *Helicobacter pylori* infection and eradication: A meta-analysis. *Helicobacter.* 2019 Aug 14:e12655. doi: 10.1111/hel.12655. [Epub ahead of print].
- Yao B, He J, Yin X, et al. The protective effect of lithocholic acid on the intestinal epithelial barrier is mediated by the vitamin D receptor via a SIRT1/Nrf2 and NF- κ B dependent mechanism in Caco-2 cells. *Toxicol Lett.* 2019 Aug 28. pii: S0378-4274(19)30238-3. doi: 10.1016/j.toxlet.2019.08.024.
- Yodoshi T, Orkin S, Arce-Clachar AC, et al. Vitamin D deficiency: prevalence and association with liver disease severity in pediatric nonalcoholic fatty liver disease. *Eur J Clin Nutr.* 2019 Aug 23. doi: 10.1038/s41430-019-0493-y. [Epub ahead of print].
- Yoo JS, Park CY, Seo YK, et al. Vitamin D supplementation partially affects colonic changes in dextran sulfate sodium-induced colitis obese mice but not lean mice. *Nutr Res.* 2019 Jul;67:90-99. doi: 10.1016/j.nutres.2019.03.009. Epub 2019 Mar 20.
- Yousif MM, Sadek AMEM, Farrag HA, et al. Associated vitamin D deficiency is a risk factor for the complication of HCV-related liver cirrhosis including hepatic encephalopathy and spontaneous bacterial peritonitis. *Intern Emerg Med.* 2019 Aug;14(5):753-761. doi: 10.1007/s11739-019-02042-2. Epub 2019 Jan 31.
- Zelber-Sagi S, Zur R, Thurm T, et al. Low serum vitamin D is independently associated with unexplained elevated ALT only among non-obese men in the general population. *Ann Hepatol.* 2019 Jul - Aug;18(4):578-584. doi: 10.1016/j.aohep.2019.03.006. Epub 2019 May 7.
- Zhao J, Wang Y, Gu Q, et al. The association between serum vitamin D and inflammatory bowel disease. *Medicine (Baltimore).* 2019 May;98(18):e15233. doi: 10.1097/MD.00000000000015233.
- Zhou Q, Li L, Chen Y, et al. Vitamin D supplementation could reduce the risk of acute cellular rejection and infection in vitamin D deficient liver allograft recipients. *Int Immunopharmacol.* 2019 Aug 15;75:105811. doi: 10.1016/j.intimp.2019.105811. [Epub ahead of print].
- Review.
- Lin X, Zhang HQ, Shou LH, et al. Efficacy of vitamin D plus calcium with/without alendronate on bone metabolism in immunologic thrombocytopenic purpura patients with steroid treatment: Nine-month results of a randomized, double-blinded, controlled trial. *Exp Ther Med.* 2019 Aug;18(2):1391-1398. doi: 10.3892/etm.2019.7694. Epub 2019 Jun 20.
- Muggeo P, Muggeo VMR, Giordano P, et al. Cardiovascular dysfunction and vitamin D status in childhood acute lymphoblastic leukemia survivors. *World J Pediatr.* 2019 May 4. doi: 10.1007/s12519-019-00258-y. [Epub ahead of print].
- Müller-Thomas C, Tüchler H, Rudelius M, Schneider H, et al. Serum Vitamin D Levels in Patients with Myelodysplastic Syndromes: A Retrospective Single-Center Analysis. *Acta Haematol.* 2019;141(4):225-231. doi: 10.1159/000496014. Epub 2019 Apr 9.
- Nachliely M, Trachtenberg A, Khalfin B, et al. Dimethyl fumarate and vitamin D derivatives cooperatively enhance VDR and Nrf2 signaling in differentiating AML cells in vitro and inhibit leukemia progression in a xenograft mouse model. *J Steroid Biochem Mol Biol.* 2019 Apr;188:8-16. doi: 10.1016/j.jsbmb.2018.11.017. Epub 2018 Nov 30.
- Nath K, Ganeshalingam V, Ewart B, et al. A retrospective analysis of the prevalence and clinical outcomes of vitamin D deficiency in myeloma patients in tropical Australia. *Support Care Cancer.* 2019 Jun 21. doi: 10.1007/s00520-019-04942-7. [Epub ahead of print].
- Neme A, Seuter S, Malinen M, et al. In vivo transcriptome changes of human white blood cells in response to vitamin D. *J Steroid Biochem Mol Biol.* 2019 Apr;188:71-76. doi: 10.1016/j.jsbmb.2018.11.019. Epub 2018 Dec 8.
- Park HY, Hong YC, Lee K, et al. Vitamin D status and risk of non-Hodgkin lymphoma: An updated meta-analysis. *PLoS One.* 2019 Apr 29;14(4):e0216284. doi: 10.1371/journal.pone.0216284. eCollection 2019.
- Ros-Soto J, Anthias C, Madrigal A, et al. Vitamin D: is it important in haematopoietic

HEMATOLOGY

- Delvin E, Alos N, Rauch F, et al. Vitamin D nutritional status and bone turnover markers in childhood acute lymphoblastic leukemia survivors: A PETALE study. *Clin Nutr.* 2019 Apr;38(2):912-919. doi: 10.1016/j.clnu.2018.02.006. Epub 2018 Feb 21.
- Delvin E, Marcil V, Alos N, et al. Is there a relationship between vitamin D nutritional status and metabolic syndrome in childhood acute lymphoblastic leukemia survivors? A PETALE study. *Clin Nutr ESPEN.* 2019 Jun;31:28-32. doi: 10.1016/j.clnesp.2019.03.006. Epub 2019 Apr 2.
- Katayama Y. Vitamin D receptor: A critical regulator of inter-organ communication between skeletal and hematopoietic systems. *J Steroid Biochem Mol Biol.* 2019 Jun;190:281-283. doi: 10.1016/j.jsbmb.2019.02.001. Epub 2019 Feb 4.

stem cell transplantation? A review. *Bone Marrow Transplant.* 2019 Jun;54(6):810-820. doi: 10.1038/s41409-018-0377-0. Epub 2018 Nov 6. Review.

- Ros-Soto J, Snowden JA, Salooja N, et al. Current Practice in Vitamin D Management in Allogeneic Hematopoietic Stem Cell Transplantation: A Survey by the Transplant Complications Working Party of the European Society for Blood and Marrow Transplantation. *Biol Blood Marrow Transplant.* 2019 Jun 21. pii: S1083-8791(19)30379-9. doi: 10.1016/j.bbmt.2019.06.015. [Epub ahead of print].
- Rui H, Liu Y, Lin M, et al. Vitamin D receptor gene polymorphism is associated with multiple myeloma. *J Cell Biochem.* 2019 Jun 6. doi: 10.1002/jcb.29135. [Epub ahead of print].
- Thiagarajan NR, Kumar CGD, Sahoo J, et al. Effect of Vitamin D and Calcium Supplementation on Bone Mineral Content in Children with Thalassemia. *Indian Pediatr.* 2019 Apr 15;56(4):307-310.
- Wakahashi K, Minagawa K, Kawano Y, et al. Vitamin D receptor-mediated skewed differentiation of macrophages initiates myelofibrosis and subsequent osteosclerosis. *Blood.* 2019 Apr 11;133(15):1619-1629. doi: 10.1182/blood-2018-09-876615. Epub 2019 Feb 4.

IMMUNOLOGY

- Aguilar-Jimenez W, Zapata W, Rivero-Juárez A, et al. Genetic associations of the vitamin D and antiviral pathways with natural resistance to HIV-1 infection are influenced by interpopulation variability. *Infect Genet Evol.* 2019 Sep;73:276-286. doi: 10.1016/j.meegid.2019.05.014. Epub 2019 May 16.
- Amo G, Martí M, García-Menaya JM, et al. Identification of Novel Biomarkers for Drug Hypersensitivity After Sequencing of the Promoter Area in 16 Genes of the Vitamin D Pathway and the High-Affinity IgE Receptor. *Front Genet.* 2019 Jun 25;10:582. doi: 10.3389/fgene.2019.00582. eCollection 2019.
- Arboleda JF, Fernandez GJ, Urcuqui-Inchima S. Vitamin D-mediated attenuation of miR-155 in human macrophages infected with dengue virus: Implications for the cy-

tokine response. *Infect Genet Evol.* 2019 Apr;69:12-21. doi: 10.1016/j.meegid.2018.12.033. Epub 2019 Jan 9.

- Baisa GA, Plum L, Marling S, et al. Vitamin D is not required for adaptive immunity to listeria. *Physiol Rep.* 2019 Aug;7(16):e14209. doi: 10.14814/phy2.14209.
- Bakshae M, Sharifian M, Esmatinia F, et al. Therapeutic effect of vitamin D supplementation on allergic rhinitis. *Eur Arch Otorhinolaryngol.* 2019 Jul 22. doi: 10.1007/s00405-019-05546-x. [Epub ahead of print].
- Balcells ME, Yokobori N, Hong BY, et al. The lung microbiome, vitamin D, and the tuberculous granuloma: A balance triangle. *Microb Pathog.* 2019 Jun;131:158-163. doi: 10.1016/j.micpath.2019.03.041. Epub 2019 Apr 3. Review.
- Büki B, Jünger H, Zhang Y, et al. The Price of Immune Responses and the Role of Vitamin D in the Inner Ear. *Otol Neurotol.* 2019 Jul;40(6):701-709. doi: 10.1097/MAO.0000000000002258.
- Calza L, di Pietro G, Colangeli V, et al. Factors associated with vitamin D deficiency in HIV-1 infected patients on combination antiretroviral therapy: a case-control study. *New Microbiol.* 2019 Jul 15;42(2). [Epub ahead of print].
- Cantorna MT, Lin YD, Arora J, et al. Vitamin D Regulates the Microbiota to Control the Numbers of ROR γ t/FoxP3+ Regulatory T Cells in the Colon. *Front Immunol.* 2019 Jul 30;10:1772. doi: 10.3389/fimmu.2019.01772. eCollection 2019.
- Cantorna MT, Snyder L, Arora J. Vitamin A and vitamin D regulate the microbial complexity, barrier function, and the mucosal immune responses to ensure intestinal homeostasis. *Crit Rev Biochem Mol Biol.* 2019 Apr;54(2):184-192. doi: 10.1080/10409238.2019.1611734. Epub 2019 May 14.
- Carrillo-Cruz E, García-Lozano JR, Márquez-Malaver FJ, et al. Vitamin D Modifies the Incidence of Graft-versus-Host Disease after Allogeneic Stem Cell Transplantation Depending on the Vitamin D Receptor (VDR) Polymorphisms. *Clin Cancer Res.* 2019 Aug 1;25(15):4616-4623. doi: 10.1158/1078-0432.CCR-18-3875. Epub 2019 May 1.

- Cervantes JL, Oak E, Garcia J, et al. Vitamin D modulates human macrophage response to *Mycobacterium tuberculosis* DNA. *Tuberculosis (Edinb).* 2019 May;116S:S131-S137. doi: 10.1016/j.tube.2019.04.021. Epub 2019 May 3.
- Cruciani S, Santaniello S, Garroni G, et al. Myrtus Polyphenols, from Antioxidants to Anti-Inflammatory Molecules: Exploring a Network Involving Cytochromes P450 and Vitamin D. *Molecules.* 2019 Apr 17;24(8). pii: E1515. doi: 10.3390/molecules24081515.
- Cruz JRS, Silva R, Andrade IGA, et al. Assessment of vitamin D status in common variable immunodeficiency or ataxia-telangiectasia patients. *Allergol Immunopathol (Madr).* 2019 Sep - Oct;47(5):499-505. doi: 10.1016/j.aller.2019.03.004. Epub 2019 Jul 31.
- Dal NE, Cerci P, Olmez U, et al. The role of vitamin D receptor gene polymorphisms in the pathogenesis of Behçet's disease: A case-control study in Turkish population. *Ann Hum Genet.* 2019 May;83(3):177-186. doi: 10.1111/ahg.12301. Epub 2019 Feb 7.
- Dankers W, Davelaar N, van Hamburg JP, et al. Human Memory Th17 Cell Populations Change Into Anti-inflammatory Cells With Regulatory Capacity Upon Exposure to Active Vitamin D. *Front Immunol.* 2019 Jul 17;10:1504. doi: 10.3389/fimmu.2019.01504. eCollection 2019.
- Dias ASO, Santos ICL, Delphim L, et al. Serum leptin levels correlate negatively with the capacity of vitamin D to modulate the in vitro cytokines production by CD4+ T cells in asthmatic patients. *Clin Immunol.* 2019 Aug;205:93-105. doi: 10.1016/j.clim.2019.06.001. Epub 2019 Jun 4.
- Dimeloe S, Rice LV, Chen H, et al. Vitamin D (1,25(OH)2D3) induces α -1-antitrypsin synthesis by CD4+ T cells, which is required for 1,25(OH)2D3-driven IL-10. *J Steroid Biochem Mol Biol.* 2019 May;189:1-9. doi: 10.1016/j.jsbmb.2019.01.014. Epub 2019 Jan 25.
- El-Boshy M, BaSalamah MA, Ahmad J, et al. Vitamin D protects against oxidative stress, inflammation and hepatorenal damage induced by acute paracetamol toxicity in rat. *Free Radic Biol Med.* 2019 Sep;141:310-321. doi: 10.1016/j.fre

- eradbiomed.2019.06.030. Epub 2019 Jun 27.
- Elenkova M, Tipton DA, Karydis A, et al. Vitamin D attenuates human gingival fibroblast inflammatory cytokine production following advanced glycation end product interaction with receptors for AGE. *J Periodontol Res.* 2019 Apr;54(2):154-163. doi: 10.1111/jre.12613. Epub 2018 Oct 8.
 - Fakhrieh Kashan Z, Shojaee S, Keshavarz H, et al. Vitamin D Deficiency and Toxoplasma Infection. *Iran J Public Health.* 2019 Jun;48(6):1184-1186.
 - Fiske CT, Blackman A, Maruri F, et al. Increased vitamin D receptor expression from macrophages after stimulation with *M. tuberculosis* among persons who have recovered from extrapulmonary tuberculosis. *BMC Infect Dis.* 2019 Apr 30;19(1):366. doi: 10.1186/s12879-019-3958-7.
 - Hagag AA, El Fragy MS, Houdeeb HA. Therapeutic value of Vitamin D as an adjuvant therapy in neonates with sepsis. *Infect Disord Drug Targets.* 2019 Jun 26. doi:10.2174/1871526519666190626141859. [Epub ahead of print].
 - Häusler D, Torke S, Peelen E, et al. High dose vitamin D exacerbates central nervous system autoimmunity by raising T-cell excitatory calcium. *Brain.* 2019 Jul 13. pii: awz190. doi: 10.1093/brain/awz190. [Epub ahead of print].
 - He L, Zhou M, Li YC. Vitamin D/Vitamin D Receptor Signaling Is Required for Normal Development and Function of Group 3 Innate Lymphoid Cells in the Gut. *iScience.* 2019 Jul 26;17:119-131. doi: 10.1016/j.isci.2019.06.026. Epub 2019 Jun 20.
 - Illescas-Montes R, Melguizo-Rodríguez L, Ruiz C, et al. Vitamin D and autoimmune diseases. *Life Sci.* 2019 Sep 15;233:116744. doi: 10.1016/j.lfs.2019.116744. Epub 2019 Aug 8. Review.
 - Jiao X, Wang L, Wei Z, et al. Vitamin D deficiency during pregnancy affects the function of Th1/Th2 cells and methylation of IFN- γ gene in offspring rats. *Immunol Lett.* 2019 Aug;212:98-105. doi: 10.1016/j.imlet.2019.06.012. Epub 2019 Jun 28.
 - Kew RR. The Vitamin D Binding Protein and Inflammatory Injury: A Mediator or Sentinel of Tissue Damage? *Front Endocrinol (Lausanne).* 2019 Jul 10;10:470. doi: 10.3389/fendo.2019.00470. eCollection 2019. Review.
 - Li YP, Deng HL, Xu LH, et al. Association of polymorphisms in the vitamin D receptor gene with severity of hand, foot, and mouth disease caused by enterovirus 71. *J Med Virol.* 2019 Apr;91(4):598-605. doi: 10.1002/jmv.25349. Epub 2018 Nov 22.
 - Litonjua AA. Vitamin D and childhood asthma: causation and contribution to disease activity. *Curr Opin Allergy Clin Immunol.* 2019 Apr;19(2):126-131. doi: 10.1097/ACI.0000000000000509.
 - Liu H, Feng X, Wu S, et al. Vitamin D Resists Cyclophosphamide-Induced Genomic and DNA Damage in CHL Cells In Vitro and in Mice In Vivo. *Nutr Cancer.* 2019;71(6):1030-1039. doi: 10.1080/01635581.2019.1595050. Epub 2019 Apr 30.
 - Matsui T, Tanaka K, Yamashita H, et al. Food allergy is linked to season of birth, sun exposure, and vitamin D deficiency. *Allergol Int.* 2019 Apr;68(2):172-177. doi: 10.1016/j.alit.2018.12.003. Epub 2019 Jan 19. Review.
 - Mirijello A, Tosoni A, Zaccone V, et al. MEDS score and vitamin D status are independent predictors of mortality in a cohort of Internal Medicine patients with microbiological identified sepsis. *Eur Rev Med Pharmacol Sci.* 2019 May;23(9):4033-4043. doi: 10.26355/eurrev_201905_17834.
 - Missailidis C, Sørensen N, Ashenafi S, et al. Vitamin D and Phenylbutyrate Supplementation Does Not Modulate Gut Derived Immune Activation in HIV-1. *Nutrients.* 2019 Jul 21;11(7). pii: E1675. doi: 10.3390/nu11071675.
 - Murdaca G, Tonacci A, Negrini S, et al. Emerging role of vitamin D in autoimmune diseases: An update on evidence and therapeutic implications. *Autoimmun Rev.* 2019 Sep;18(9):102350. doi: 10.1016/j.autrev.2019.102350. Epub 2019 Jul 16. Review.
 - Öztekin A, Öztekin C. Vitamin D Levels in Patients with Recurrent Herpes Labialis. *Viral Immunol.* 2019 Jul/Aug;32(6):258-262. doi: 10.1089/vim.2019.0013. Epub 2019 May 30.
 - Pastuszek-Lewandoska D, Domańska-Senderowska D, Kiszalkiewicz J, et al. Expression levels of selected cytokines and microRNAs in response to vitamin D supplementation in ultra-marathon runners. *Eur J Sport Sci.* 2019 Jul 16:1-10. doi: 10.1080/17461391.2019.1635649. [Epub ahead of print].
 - Saad K, Abdelmoghny A, Aboul-Khair MD, et al. Vitamin D Status in Egyptian Children With Allergic Rhinitis. *Ear Nose Throat J.* 2019 May 15:145561319850814. doi: 10.1177/0145561319850814. [Epub ahead of print].
 - Schröder-Heurich B, von Hardenberg S, Brodowski L, et al. Vitamin D improves endothelial barrier integrity and counteracts inflammatory effects on endothelial progenitor cells. *FASEB J.* 2019 Aug;33(8):9142-9153. doi: 10.1096/fj.201802750RR. Epub 2019 May 14.
 - Schrupf JA, Ninaber DK, van der Does AM, et al. TGF- β 1 Impairs Vitamin D-Induced and Constitutive Airway Epithelial Host Defense Mechanisms. *J Innate Immun.* 2019 Apr 10:1-16. doi: 10.1159/000497415. [Epub ahead of print].
 - Scott JM, Kazman JB, Palmer J, et al. Effects of vitamin D supplementation on salivary immune responses during Marine Corps basic training. *Scand J Med Sci Sports.* 2019 Sep;29(9):1322-1330. doi: 10.1111/sms.13467. Epub 2019 Jun 3.
 - Shirvani SS, Nouri M, Sakhinia E, et al. The molecular and clinical evidence of vitamin D signaling as a modulator of the immune system: Role in Behçet's disease. *Immunol Lett.* 2019 Jun;210:10-19. doi: 10.1016/j.imlet.2019.03.017. Epub 2019 Mar 29.
 - Singh P, Kumar M, Al Khodor S. Vitamin D Deficiency in the Gulf Cooperation Council: Exploring the Triad of Genetic Predisposition, the Gut Microbiome and the Immune System. *Front Immunol.* 2019 May 10;10:1042. doi: 10.3389/fimmu.2019.01042. eCollection 2019. Review.
 - Suberviola B, Lavin BA, Jimenez AF, et al. Vitamin D binding protein, but not vitamin D

- or vitamin D-related peptides, is associated with septic shock mortality. *Enferm Infecc Microbiol Clin*. 2019 Apr;37(4):239-243. doi: 10.1016/j.eimc.2018.06.011. Epub 2018 Nov 20. English, Spanish.
- Talebi F, Rasooli Nejad M, et al. Association of Vitamin D Status with the Severity and Mortality of Community-Acquired Pneumonia in Iran during 2016-2017: A Prospective Cohort Study. *Rep Biochem Mol Biol*. 2019 Apr;8(1):85-90.
 - Thorisdottir B, Gunnarsdottir I, Vidarsdottir AG, et al. Infant Feeding, Vitamin D and IgE Sensitization to Food Allergens at 6 Years in a Longitudinal Icelandic Cohort. *Nutrients*. 2019 Jul 23;11(7). pii: E1690. doi: 10.3390/nu11071690.
 - Umeda N, Endo-Umeda K, Nakashima H, et al. Frontline Science: Concanavalin A-induced acute hepatitis is attenuated in vitamin D receptor knockout mice with decreased immune cell function. *J Leukoc Biol*. 2019 Apr 29. doi: 10.1002/JLB.3HI0219-048R. [Epub ahead of print].
 - Vanherwegen AS, Cook DP, Ferreira GB, et al. Vitamin D-modulated dendritic cells delay lethal graft-versus-host disease through induction of regulatory T cells. *J Steroid Biochem Mol Biol*. 2019 Apr;188:103-110. doi: 10.1016/j.jsbmb.2018.12.013. Epub 2018 Dec 31.
 - Wang Y, Li HJ. A meta-analysis on associations between vitamin D receptor genetic variants and tuberculosis. *Microb Pathog*. 2019 May;130:59-64. doi: 10.1016/j.micpath.2019.02.027. Epub 2019 Feb 26.
 - Weinberg A, Huo Y, Kacanek D, et al. Markers of Spontaneous Preterm Delivery in Women living with HIV: Relationship with Protease Inhibitors and Vitamin D. *J Acquir Immune Defic Syndr*. 2019 May 28. doi: 10.1097/QAI.0000000000002111. [Epub ahead of print].
 - Wolf TA, Wimalawansa SJ, Razzaque MS. Procalcitonin as a biomarker for critically ill patients with sepsis: Effects of vitamin D supplementation. *J Steroid Biochem Mol Biol*. 2019 Jul 16;193:105428. doi: 10.1016/j.jsbmb.2019.105428. [Epub ahead of print] Review.
 - Xu X, Shen M. Associations between vitamin D receptor genetic variants and tuberculosis: a meta-analysis. *Innate Immun*. 2019 Jul;25(5):305-313. doi: 10.1177/1753425919842643. Epub 2019 Apr 16.
 - Yamamoto E, Jørgensen TN. Immunological effects of vitamin D and their relations to autoimmunity. *J Autoimmun*. 2019 Jun;100:7-16. doi: 10.1016/j.jaut.2019.03.002. Epub 2019 Mar 8. Review.
 - Yin MT, Chan ES, Brown TT, et al. Vitamin D does not modulate immune-mediated bone loss during ART initiation. *Antivir Ther*. 2019 May 14. doi: 10.3851/IMP3316. [Epub ahead of print].
 - Youssef MAM, Zahran AM, Hussien AM, et al. In neonates with vitamin D deficiency, low lymphocyte activation markers are risk factors for infection. *Paediatr Int Child Health*. 2019 May;39(2):111-118. doi: 10.1080/20469047.2018.1528755. Epub 2018 Oct 30.
 - Zhou W, Yuan G, Wang Q. Vitamin D attenuates lipopolysaccharide-induced inflammatory response in endothelial cells through inhibition of PI3K/Akt/NF- κ B signaling pathway. *Pharmazie*. 2019 Jul 1;74(7):412-417. doi: 10.1691/ph.2019.9373.
 - Bikle DD, Schwartz J. Vitamin D Binding Protein, Total and Free Vitamin D Levels in Different Physiological and Pathophysiological Conditions. *Front Endocrinol (Lausanne)*. 2019 May 28;10:317. doi: 10.3389/fendo.2019.00317. eCollection 2019. Review.
 - Erdman P, Palmer-Toy DE, Horowitz G, et al. Accuracy-Based Vitamin D Survey: Six Years of Quality Improvement Guided by Proficiency Testing. *Arch Pathol Lab Med*. 2019 May 22. doi: 10.5858/arpa.2018-0625-CP. [Epub ahead of print].
 - Fu X, Dolnikowski GG, Patterson WB, et al. Determination of Vitamin D and Its Metabolites in Human Brain Using an Ultra-Pressure LC-Tandem Mass Spectra Method. *Curr Dev Nutr*. 2019 Jun 21;3(7):nzz074. doi: 10.1093/cdn/nzz074. eCollection 2019 Jul.
 - Gallelli L, Michniewicz A, Cione E, et al. 25-Hydroxy Vitamin D Detection Using Different Analytic Methods in Patients with Migraine. *J Clin Med*. 2019 Jun 22;8(6). pii: E895. doi: 10.3390/jcm8060895.
 - Garnett E, Li J, Rajapakshe D, et al. Efficacy of two vitamin D immunoassays to detect 25-OH vitamin D2 and D3. *Pract Lab Med*. 2019 Jul 29;17:e00130. doi: 10.1016/j.plabm.2019.e00130. eCollection 2019 Nov.
 - Jenkinson C. The vitamin D metabolome: An update on analysis and function. *Cell Biochem Funct*. 2019 Aug;37(6):408-423. doi: 10.1002/cbf.3421. Epub 2019 Jul 22. Review.
 - Kaykhaei MA, Khodadoost M, Dashipour AR, et al. Baseline levels determine magnitude of increment in 25 hydroxy vitamin D following vitamin D3 prescription in healthy subjects. *Endocrine*. 2019 May;64(2):378-383. doi: 10.1007/s12020-019-01881-5. Epub 2019 Mar 14.
 - Komba S, Kotake-Nara E, Tsuzuki W. Simultaneous Synthesis of Vitamins D2, D4, D5, D6, and D7 from Commercially Available Phytosterol, β -Sitosterol, and Identification of Each Vitamin D by HSQC NMR. *Metabolites*. 2019 Jun 6;9(6). pii: E107. doi: 10.3390/metabo9060107.
 - Kumar A, Estrada DF. Specificity of the Redox Complex between Cytochrome

LABORATORY

- P450 24A1 and Adrenodoxin Relies on Carbon-25 Hydroxylation of Vitamin-D Substrate. *Drug Metab Dispos.* 2019 Sep;47(9):974-982. doi: 10.1124/dmd.119.087759. Epub 2019 Jul 9.
- Lai YT, Cerquinho RG, Perez MM, et al. Determination of vitamin D in tears of healthy individuals by the electrochemiluminescence method. *J Clin Lab Anal.* 2019 May;33(4):e22830. doi: 10.1002/jcla.22830. Epub 2019 Jan 21.
 - Liu TT, Cheong LZ, Man QQ, et al. Simultaneous profiling of vitamin D metabolites in serum by supercritical fluid chromatography-tandem mass spectrometry (SFC-MS/MS). *J Chromatogr B Analyt Technol Biomed Life Sci.* 2019 Jul 1;1120:16-23. doi: 10.1016/j.jchromb.2019.04.050. Epub 2019 Apr 27.
 - Masuno H, Kazui Y, Tanatani A, et al. Development of novel lithocholic acid derivatives as vitamin D receptor agonists. *Bioorg Med Chem.* 2019 Aug 15;27(16):3674-3681. doi: 10.1016/j.bmc.2019.07.003. Epub 2019 Jul 3.
 - Navarro Suarez L, Thein S, Kallinich C, et al. Electrochemical Oxidation as a Tool for Generating Vitamin D Metabolites. *Molecules.* 2019 Jun 26;24(13). pii: E2369. doi: 10.3390/molecules24132369.
 - Pooyan S, Rahimi MH, Mollahosseini M, et al. The Association between Vitamin D Deficiency and variants of Vitamin D Binding protein gene among Healthy Iranian Adults. *Int J Vitam Nutr Res.* 2019 Apr 16;1-8. doi: 10.1024/0300-9831/a000580. [Epub ahead of print].
 - Reiter FP, Ye L, Bösch F, Wimmer R, et al. Antifibrotic effects of hypocalcemic vitamin D analogs in murine and human hepatic stellate cells and in the CCl4 mouse model. *Lab Invest.* 2019 Aug 29. doi: 10.1038/s41374-019-0310-1. [Epub ahead of print].
 - Shin MH, Lee Y, Kim MK, et al. UV increases skin-derived 1 α ,25-dihydroxyvitamin D3 production, leading to MMP-1 expression by altering the balance of vitamin D and cholesterol synthesis from 7-dehydrocholesterol. *J Steroid Biochem Mol Biol.* 2019 Aug 27;105449. doi: 10.1016/j.jsbmb.2019.105449. [Epub ahead of print].
 - Siekkeri Vandikas M, Hellström E, Malmberg P, et al. Imaging of vitamin D in psoriatic skin using time-of-flight secondary ion mass spectrometry (ToF-SIMS): A pilot case study. *J Steroid Biochem Mol Biol.* 2019 May;189:154-160. doi: 10.1016/j.jsbmb.2019.02.015. Epub 2019 Feb 28.
 - Šimoliūnas E, Rinkūnaitė I, Bukelskienė Ž, et al. Bioavailability of Different Vitamin D Oral Supplements in Laboratory Animal Model. *Medicina (Kaunas).* 2019 Jun 10;55(6). pii: E265. doi: 10.3390/medicina55060265.
 - Viraraghavan VR. Importance of the method used to estimate 25(OH)D and the definition used for vitamin D status classification in a clinical trial on vitamin D metabolism. *Paediatr Int Child Health.* 2019 May 16:1. doi: 10.1080/20469047.2019.1616149. [Epub ahead of print]
 - Yang MY, Huang CY, Chiu THT, et al. Using gas chromatography and mass spectrometry to determine 25-hydroxyvitamin D levels for clinical assessment of vitamin D deficiency. *J Food Drug Anal.* 2019 Apr;27(2):494-501. doi: 10.1016/j.jfda.2018.12.010. Epub 2019 Jan 8.
 - Yu S, Li X, Wang Y, et al. Family-based Association between Allele T of rs4646536 in CYP27B1 and vitamin D deficiency. *J Clin Lab Anal.* 2019 Jul;33(6):e22898. doi: 10.1002/jcla.22898. Epub 2019 Apr 16.
 - Zakaria R, Allen KJ, Koplín JJ, et al. Candidate reference method for determination of vitamin D from dried blood spot samples. *Clin Chem Lab Med.* 2019 Jul 25. pii: /j/cclm.ahead-of-print/cclm-2019-0397/cclm-2019-0397.xml. doi: 10.1515/cclm-2019-0397. [Epub ahead of print].
 - Zhao Y, Ran Z, Jiang Q, et al. Vitamin D Alleviates Rotavirus Infection through a MicroRNA-155-5p Mediated Regulation of the TBK1/IRF3 Signaling Pathway In Vivo and In Vitro. *Int J Mol Sci.* 2019 Jul 21;20(14). pii: E3562. doi: 10.3390/ijms20143562.
 - cal Site Infection. *J Surg Res.* 2019 Aug 16;245:338-343. doi: 10.1016/j.jss.2019.07.036. [Epub ahead of print].
 - Abdellah MM, Mohamed Mostafa E, Salama EH, et al. Association of Serum 25-Hydroxyl Vitamin D Deficiency and Age-Related Cataract: A Case-Control Study. *J Ophthalmol.* 2019 Apr 15;2019:9312929. doi: 10.1155/2019/9312929. eCollection 2019.
 - Abedi S, Taebi M, Nasr Esfahani MH. Effect of Vitamin D Supplementation on Intracytoplasmic Sperm Injection Outcomes: A Randomized Double-Blind Placebo-Controlled Trial. *Int J Fertil Steril.* 2019 Apr;13(1):18-23. doi: 10.22074/ijfs.2019.5470. Epub 2019 Jan 6.
 - Aguiar M, Andronis L, Pallan M, et al. The economic case for prevention of population vitamin D deficiency: a modelling study using data from England and Wales. *Eur J Clin Nutr.* 2019 Aug 20. doi: 10.1038/s41430-019-0486-x. [Epub ahead of print].
 - Akcan FA, Dündar Y, Akcan HB, et al. Evaluation of nasal mucociliary clearance time in patients with Vitamin-D deficiency. *Eur Arch Otorhinolaryngol.* 2019 Apr;276(4):1075-1080. doi: 10.1007/s00405-019-05286-y. Epub 2019 Jan 14.
 - Akkaya S, Ulusoy DM. Serum Vitamin D Levels in Patients with Keratoconus. *Ocul Immunol Inflamm.* 2019 Apr 22:1-6. doi: 10.1080/09273948.2019.1604002. [Epub ahead of print].
 - Alam C, Aufreiter S, Georgiou CJ, et al. Upregulation of reduced folate carrier by vitamin D enhances brain folate uptake in mice lacking folate receptor alpha. *Proc Natl Acad Sci U S A.* 2019 Aug 27;116(35):17531-17540. doi: 10.1073/pnas.1907077116. Epub 2019 Aug 12.
 - Alimoradi K, Nikooyeh B, Ravasi AA, et al. Efficacy of Vitamin D Supplementation in Physical Performance of Iranian Elite Athletes. *Int J Prev Med.* 2019 Jun 7;10:100. doi: 10.4103/ijpvm.IJPVM_227_18. eCollection 2019.
 - Aloia JF, Rubinova R, Fazzari M, et al. Vitamin D and Falls in Older African American Women: The PODA Randomized

MISCELLANEOUS

- Abdehghah AG, Monshizadeh A, Tehrani MM, et al. Relationship Between Preoperative 25-Hydroxy Vitamin D and Surgi-

- Clinical Trial. *J Am Geriatr Soc.* 2019 May;67(5):1043-1049. doi: 10.1111/jgs.15760. Epub 2019 Jan 30. Erratum in: *J Am Geriatr Soc.* 2019 Jul;67(7):1538.
- Aoun A, Maalouf J, Fahed M, et al. When and How to Diagnose and Treat Vitamin D Deficiency in Adults: A Practical and Clinical Update. *J Diet Suppl.* 2019 Apr 7:1-19. doi: 10.1080/19390211.2019.1577935. [Epub ahead of print].
 - Atalay K, Savur FG, Kirgiz A, et al. Serum levels of thyroid hormone, vitamin D, vitamin B12, folic acid, C-reactive protein, and hemoglobin in Pseudoexfoliation and primary open angle Glaucoma. *J Fr Ophtalmol.* 2019 Sep;42(7):730-738. doi: 10.1016/j.jfo.2019.01.002. Epub 2019 May 15.
 - Auguste BL, Bargman J. The authors respond to "Misconception about the cause of vitamin D toxicity". *CMAJ.* 2019 Jul 8;191(27):E770. doi: 10.1503/cmaj.72513.
 - Aujla RS, Allen PE, Ribbans WJ. Vitamin D levels in 577 consecutive elective foot & ankle surgery patients. *Foot Ankle Surg.* 2019 Jun;25(3):310-315. doi: 10.1016/j.fas.2017.12.007. Epub 2017 Dec 23.
 - Bahrami A, Mehramiz M, Ghayour-Mobarhan M, et al. A genetic variant in the cytochrome P450 family 2 subfamily R member 1 determines response to vitamin D supplementation. *Clin Nutr.* 2019 Apr;38(2):676-681. doi: 10.1016/j.clnu.2018.03.018. Epub 2018 Apr 26.
 - Bauer P, Kraushaar L, Hölscher S, et al. Elite athletes as research model: vitamin D insufficiency associates with elevated central blood pressure in professional handball athletes. *Eur J Appl Physiol.* 2019 Aug 19. doi: 10.1007/s00421-019-04210-w. [Epub ahead of print].
 - Baur AC, Kühn J, Brandsch C, et al. Intake of ergosterol increases the vitamin D concentrations in serum and liver of mice. *J Steroid Biochem Mol Biol.* 2019 Jul 25;194:105435. doi: 10.1016/j.jsbmb.2019.105435. [Epub ahead of print].
 - Bezuglov E, Tikhonova A, Zueva A, et al. The Dependence of Running Speed and Muscle Strength on the Serum Concentration of Vitamin D in Young Male Professional Football Players Residing in the Russian Federation. *Nutrients.* 2019 Aug 21;11(9). pii: E1960. doi: 10.3390/nu11091960.
 - Bhargava A, Rastogi P, Lal N, et al. Relationship between VITAMIN D and chronic periodontitis. *J Oral Biol Craniofac Res.* 2019 Apr-Jun;9(2):177-179. doi: 10.1016/j.jobcr.2018.07.001. Epub 2018 Jul 9.
 - Bischoff-Ferrari HA. [Vitamin D Supplementation in Older Adults: is the Hype Definitely Over?] *Dtsch Med Wochenschr.* 2019 Aug;144(15):1018-1021. doi: 10.1055/a-0851-9737. Epub 2019 Jul 26. German.
 - Boucher BJ, Grant WB. Re: Scragg-Emerging Evidence of Thresholds for Beneficial Effects from Vitamin D Supplementation. *Nutrients.* 2019 Jun 13;11(6). pii: E1321. doi: 10.3390/nu11061321.
 - Boucher BJ. Validating the effects of correcting vitamin D deficiency; time for reappraisal of clinical trial design. *QJM.* 2019 Apr 24. pii: hcz086. doi: 10.1093/qjmed/hcz086. [Epub ahead of print]
 - Calvo MS. Monitoring vitamin D status and intake in the US population: essential to understanding the role of vitamin D in health. *Am J Clin Nutr.* 2019 May 10. pii: nqz069. doi: 10.1093/ajcn/nqz069. [Epub ahead of print]
 - Canat L, Degirmençtepe RB, Atalay HA, et al. Low serum vitamin D is associated with an increased likelihood of acquired premature ejaculation. *Int Braz J Urol.* 2019 May-Jun;45(3):621-628. doi: 10.1590/S1677-5538.IBJU.2018.0887.
 - Carlberg C. Vitamin D: A Micronutrient Regulating Genes. *Curr Pharm Des.* 2019 Jul 5. doi: 10.2174/1381612825666190705193227. [Epub ahead of print].
 - Cashman KD. Vitamin D Deficiency: Defining, Prevalence, Causes, and Strategies of Addressing. *Calcif Tissue Int.* 2019 May 8. doi: 10.1007/s00223-019-00559-4. [Epub ahead of print] Review.
 - Charoengam N, Hossein-Nezhad A, Hanley DA, et al. Misconception about the cause of vitamin D toxicity. *CMAJ.* 2019 Jul 8;191(27):E769. doi: 10.1503/cmaj.72511.
 - Chen H, Chen X, Chen J, Zhao H, Wang B, Zheng W, Lü J, Du J. [Protective effect of vitamin D against hyperoxia-induced bronchopulmonary dysplasia in newborn mice]. *Nan Fang Yi Ke Da Xue Xue Bao.* 2019 Jul 30;39(7):816-822. doi: 10.12122/j.issn.1673-4254.2019.07.11. Chinese.
 - Chen H, Wiepjes CM, van Schoor NM, et al. Changes of Vitamin D-Binding Protein, and Total, Bioavailable, and Free 25-Hydroxyvitamin D in Transgender People. *J Clin Endocrinol Metab.* 2019 Jul 1;104(7):2728-2734. doi: 10.1210/jc.2018-02602.
 - Chen SM, Li ZQ, Zhou LM, et al. [Analysis on correlation between single nucleotide polymorphisms of vitamin D receptor gene with susceptibility to allergic rhinitis]. *Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi.* 2019 May;33(5):402-406. doi: 10.13201/j.issn.1001-1781.2019.05.005. Chinese.
 - Coskun Benlidayi I. Is vitamin D a panacea? *Rheumatol Int.* 2019 May 23. doi: 10.1007/s00296-019-04328-2. [Epub ahead of print]
 - Crowe FL, Jolly K, MacArthur C, et al. Trends in the incidence of testing for vitamin D deficiency in primary care in the UK: a retrospective analysis of The Health Improvement Network (THIN), 2005-2015. *BMJ Open.* 2019 Jun 4;9(6):e028355. doi: 10.1136/bmjopen-2018-028355.
 - Debruin DA, Andreacchio N, Hanson ED, et al. The Effect of Vitamin D Supplementation on Skeletal Muscle in the mdx Mouse Model of Duchenne Muscular Dystrophy. *Sports (Basel).* 2019 Apr 26;7(5). pii: E96. doi: 10.3390/sports7050096.
 - DeFontes K 3rd, Smith JT. Surgical Considerations for Vitamin D Deficiency in Foot and Ankle Surgery. *Orthop Clin North Am.* 2019 Apr;50(2):259-267. doi: 10.1016/j.ocl.2018.10.008. Epub 2019 Feb 12. Review.
 - Dzik KP, Kaczor JJ. Mechanisms of vitamin D on skeletal muscle function: oxidative stress, energy metabolism and anabolic state. *Eur J Appl Physiol.* 2019 Apr;119(4):825-839. doi: 10.1007/s00421-019-04104-x. Epub 2019 Mar 4. Review.
 - Entezari V, Lazarus M. Surgical Considerations in Managing Osteoporosis, Osteopenia, and Vitamin D Deficiency During Arthroscopic Rotator Cuff Repair. *Orthop Clin*

- North Am. 2019 Apr;50(2):233-243. doi: 10.1016/j.ocl.2018.10.006. Review.
- Ferrer-Mayorga G, Niell N, Cantero R, et al. Vitamin D and Wnt3A have additive and partially overlapping modulatory effects on gene expression and phenotype in human colon fibroblasts. *Sci Rep.* 2019 May 30;9(1):8085. doi: 10.1038/s41598-019-44574-9.
 - Fleet JC, Campbell MJ, Carlberg C, et al. Highlights from the 21st Workshop on Vitamin D in Barcelona, May 2018. *J Steroid Biochem Mol Biol.* 2019 May;189:210-217. doi: 10.1016/j.jsbmb.2019.03.026. Epub 2019 Mar 26.
 - Gaffney-Stomberg E, Nakayama AT, Guerriere KI, et al. Calcium and vitamin D supplementation and bone health in Marine recruits: Effect of season. *Bone.* 2019 Jun;123:224-233. doi: 10.1016/j.bone.2019.03.021. Epub 2019 Mar 20.
 - Gasparri C, Perna S, Spadaccini D, et al. Is vitamin D-fortified yogurt a value-added strategy for improving human health? A systematic review and meta-analysis of randomized trials. *J Dairy Sci.* 2019 Aug 7. pii: S0022-0302(19)30676-9. doi: 10.3168/jds.2018-16046. [Epub ahead of print].
 - Gerveieeha Z, Siassi F, Qorbani M, et al. The effect of different amounts of vitamin D supplementation on serum calcidiol, anthropometric status, and body composition in overweight or obese nursing women: a study protocol for a randomized placebo-controlled clinical trial. *Trials.* 2019 Aug 30;20(1):542. doi: 10.1186/s13063-019-3622-y.
 - Gilaberte Y. The Importance of Vitamin D. *Actas Dermosifiliogr.* 2019 May;110(4):257-258. doi: 10.1016/j.ad.2019.04.001. English, Spanish.
 - Girgis E, Reyad AA. Vitamin D: Pharmacology and Clinical Challenges in Oral Health Care. *J Int Acad Periodontol.* 2019 Jul 1;21(1):118-124.
 - Glowka E, Stasiak J, Lulek J. Drug Delivery Systems for Vitamin D Supplementation and Therapy. *Pharmaceutics.* 2019 Jul 18;11(7). pii: E347. doi: 10.3390/pharmaceutics11070347. Review.
 - Gomes TL, Fernandes RC, Vieira LL, et al. Low vitamin D at ICU admission is associated with cancer, infections, acute respiratory insufficiency, and liver failure. *Nutrition.* 2019 Apr;60:235-240. doi: 10.1016/j.nut.2018.10.018. Epub 2018 Oct 24.
 - Gonoodi K, Tayefi M, Bahrami A, et al. Determinants of the magnitude of response to vitamin D supplementation in adolescent girls identified using a decision tree algorithm. *Biofactors.* 2019 Jul 29. doi: 10.1002/biof.1540. [Epub ahead of print].
 - Grant WB, Boucher BJ. Marine n-3 Fatty Acids and Vitamin D Supplementation and Primary Prevention. *N Engl J Med.* 2019 May 9;380(19):1879. doi: 10.1056/NEJMc1902636.
 - Griebing TL. Re: Comparing Vitamin D Supplementation versus Placebo for Urgency Urinary Incontinence: A Pilot Study. *J Urol.* 2019 Jul 26;10109701JU0000578928840912d. doi: 10.1097/O1.JU.0000578928.84091.2d. [Epub ahead of print]
 - Guénard F, Jacques H, Gagnon C, et al. Acute Effects of Single Doses of Bonito Fish Peptides and Vitamin D on Whole Blood Gene Expression Levels: A Randomized Controlled Trial. *Int J Mol Sci.* 2019 Apr 20;20(8). pii: E1944. doi: 10.3390/ijms20081944.
 - Hamdan AL, Khalifee E, Souky NA, et al. The Prevalence of Dysphonia and Dysphagia in Patients with Vitamin D Deficiency. *J Voice.* 2019 Apr 11. pii: S0892-1997(18)30496-X. doi: 10.1016/j.jvoice.2019.03.007. [Epub ahead of print].
 - Hanel A, Carlberg C. Vitamin D and evolution: Pharmacologic implications. *Biochem Pharmacol.* 2019 Aug 1. pii: S0006-2952(19)30279-5. doi: 10.1016/j.bcp.2019.07.024. [Epub ahead of print] Review.
 - Hayes A, Rybalka E, Debruin DA, et al. The Effect of Yearly-Dose Vitamin D Supplementation on Muscle Function in Mice. *Nutrients.* 2019 May 17;11(5). pii: E1097. doi: 10.3390/nu11051097.
 - Hernigou P, Sitbon J, Dubory A, et al. Vitamin D history part III: the "modern times"-new questions for orthopaedic practice: deficiency, cell therapy, osteomalacia, fractures, supplementation, infections. *Int Orthop.* 2019 Jul;43(7):1755-1771. doi: 10.1007/s00264-019-04334-w. Epub 2019 Apr 29. Review.
 - Holvik K, Meyer HE, Madar AA, et al. High-dosage vitamin D supplements are unnecessary. *Tidsskr Nor Laegeforen.* 2019 Apr 8;139(7). doi: 10.4045/tidsskr.18.0749. Print 2019 Apr 9. Norwegian, English.
 - Huertas JR, Rodríguez Lara A, González Acevedo O, et al. [Milk and dairy products as vehicle for calcium and vitamin D: role of calcium enriched milks]. *Nutr Hosp.* 2019 Aug 26;36(4):962-973. doi: 10.20960/nh.02570. Spanish.
 - Jakobsen J, Smith C, Bysted A, et al. Vitamin D in Wild and Farmed Atlantic Salmon (*Salmo Salar*)-What Do We Know? *Nutrients.* 2019 Apr 29;11(5). pii: E982. doi: 10.3390/nu11050982.
 - Jannasari N, Fathi M, Moshtaghian SJ, et al. Microencapsulation of vitamin D using gelatin and cress seed mucilage: Production, characterization and in vivo study. *Int J Biol Macromol.* 2019 May 15;129:972-979. doi: 10.1016/j.ijbiomac.2019.02.096. Epub 2019 Feb 16.
 - Jones G, Kaufmann M. Update on pharmacologically-relevant vitamin D analogues. *Br J Clin Pharmacol.* 2019 Jun;85(6):1095-1102. doi: 10.1111/bcp.13781. Epub 2018 Nov 22. Review.
 - Jueraitetibaik K, Ding Z, Wang DD, et al. The effect of vitamin D on sperm motility and the underlying mechanism. *Asian J Androl.* 2019 Jul-Aug;21(4):400-407. doi: 10.4103/aja.aja_105_18.
 - Kaarniranta K, Pawlowska E, Szczepanska J, et al. Can vitamin D protect against age-related macular degeneration or slow its progression? *Acta Biochim Pol.* 2019 Jun 18;66(2):147-158. doi: 10.18388/abp.2018_2810.
 - Kalra K, Treloar V. Marine n-3 Fatty Acids and Vitamin D Supplementation and Primary Prevention. *N Engl J Med.* 2019 May 9;380(19):1878. doi: 10.1056/NEJMc1902636.
 - Khayyatzadeh SS, Bagherniya M, Abdollahi Z, et al. What is the best solution to manage vitamin D deficiency? *IUBMB Life.* 2019 Sep;71(9):1190-1191. doi:

- 10.1002/iub.2038. Epub 2019 Apr 1. Review.
- Khayyat-zadeh SS, Mehramiz M, Esmaeily H, et al. A variant in CYP2R1 predicts circulating vitamin D levels after supplementation with high-dose of vitamin D in healthy adolescent girls. *J Cell Physiol.* 2019 Aug;234(8):13977-13983. doi: 10.1002/jcp.28083. Epub 2019 Jan 9.
 - Kim KL, Moon SY, Noh HM, et al. Serum and aqueous humor vitamin D levels in patients with diabetic macular edema. *Graefes Arch Clin Exp Ophthalmol.* 2019 Jun;257(6):1191-1198. doi: 10.1007/s00417-019-04305-2. Epub 2019 Apr 1.
 - Książek A, Zagrodna A, Słowińska-Lisowska M. Vitamin D, Skeletal Muscle Function and Athletic Performance in Athletes-A Narrative Review. *Nutrients.* 2019 Aug 4;11(8). pii: E1800. doi: 10.3390/nu11081800.
 - Kühn J, Wassermann C, Ebschke S, et al. Feasibility of artificial light regimes to increase the vitamin D content in indoor-laid eggs. *Poult Sci.* 2019 Apr 30. pii: pez234. doi: 10.3382/ps/pez234. [Epub ahead of print].
 - Kusu H, Yoshida H, Kudo M, et al. Tomatidine, a Steroidal Alkaloid from Green Tomatoes, Reduces Palmitate-Induced Lipid Accumulation by Activating AMPK via Vitamin D Receptor-Mediated Signaling in Human HepG2 Hepatocytes. *Mol Nutr Food Res.* 2019 Aug 27:e1801377. doi: 10.1002/mnfr.201801377. [Epub ahead of print].
 - Langlois PL, D'Aragnon F, Manzanares W. Vitamin D in the ICU: More sun for critically ill adult patients? *Nutrition.* 2019 May;61:173-178. doi: 10.1016/j.nut.2018.11.001. Epub 2018 Nov 16. Review.
 - Lansdown TC, Cowan S, Nioi A, et al. Vitamin D and UV exposure in construction workers-a randomized control trial using text messaging to promote positive behaviours. *J Public Health (Oxf).* 2019 May 23. pii: fdz056. doi: 10.1093/pubmed/fdz056. [Epub ahead of print].
 - Lee S, Lee E, Maneno MK, et al. Predictive Factors of Vitamin D Inadequacy among Older Adults in the United States. *Int J Vitam Nutr Res.* 2019 Jul;89(1-2):55-61. doi: 10.1024/0300-9831/a000564. Epub 2019 Feb 28.
 - Leitch BA, Wilson PB, Ufholz KE, et al. Vitamin D Awareness and Intake in Collegiate Athletes. *J Strength Cond Res.* 2019 Jul 31. doi: 10.1519/JSC.0000000000003240. [Epub ahead of print].
 - Lipowski M, Walczak-Kozłowska T, Lipowska M, et al. Improvement of Attention, Executive Functions, and Processing Speed in Elderly Women as a Result of Involvement in the Nordic Walking Training Program and Vitamin D Supplementation. *Nutrients.* 2019 Jun 11;11(6). pii: E1311. doi: 10.3390/nu11061311.
 - Liu KH, Fu J, Zhou N, et al. 1,25-Dihydroxyvitamin D3 Prevents Epithelial-Mesenchymal Transition of HMrSV5 Human Peritoneal Mesothelial Cells by Inhibiting Histone Deacetylase 3 (HDAC3) and Increasing Vitamin D Receptor (VDR) Expression Through the Wnt/ β -Catenin Signaling Pathway. *Med Sci Monit.* 2019 Aug 8;25:5892-5902. doi: 10.12659/MSM.916313.
 - Lodha S, Pal R, Bhadada SK. Spontaneous simultaneous bilateral quadriceps tendon rupture associated with severe vitamin D deficiency. *Clin Endocrinol (Oxf).* 2019 Jul 31. doi: 10.1111/cen.14070. [Epub ahead of print].
 - Lordick F. [Vitamin D and omega-3 fatty acid supplementation does not reduce the cancer and cardiovascular risk]. *Strahlenther Onkol.* 2019 Jul;195(7):693-694. doi: 10.1007/s00066-019-01455-4. German.
 - Lu R, Zhang YG, Xia Y, et al. Imbalance of autophagy and apoptosis in intestinal epithelium lacking the vitamin D receptor. *FASEB J.* 2019 Jul 30:fj201900727R. doi: 10.1096/fj.201900727R. [Epub ahead of print].
 - Lu X, Chen Z, Sarah V, et al. Vitamin D receptor and metabolite effects on corneal epithelial cell gap junction proteins. *Exp Eye Res.* 2019 Aug 26:107776. doi: 10.1016/j.exer.2019.107776. [Epub ahead of print].
 - Lucock M, Thota R, Garg M, et al. Early lifecycle UV-exposure calibrates adult vitamin D metabolism: Evidence for a developmentally originated vitamin D homeostat that may alter related adult phenotypes. *Am J Hum Biol.* 2019 Jul;31(4):e23272. doi: 10.1002/ajhb.23272. Epub 2019 Jun 11.
 - Maciejewski A, Kowalczyk MJ, Gasińska T, et al. The Role of Vitamin D Receptor Gene Polymorphisms in Thyroid-Associated Orbitopathy. *Ocul Immunol Inflamm.* 2019 Aug 19:1-8. doi: 10.1080/09273948.2019.1629605. [Epub ahead of print].
 - Maestro MA, Molnár F, Carlberg C. Vitamin D and Its Synthetic Analogs. *J Med Chem.* 2019 Aug 8;62(15):6854-6875. doi: 10.1021/acs.jmedchem.9b00208. Epub 2019 Apr 2.
 - Magic M, Zeljic K, Jovandic S, et al. Hedgehog signaling pathway and vitamin D receptor gene variants as potential risk factors in odontogenic cystic lesions. *Clin Oral Investig.* 2019 Jun;23(6):2675-2684. doi: 10.1007/s00784-018-2686-5. Epub 2018 Oct 17.
 - Magnusson P, Nilsen P, Schedvin G. [Appropriate use of vitamin D assessments in primary health care: Impact of new strategies for the introduction and follow-up of analyses in Östergötland]. *Lakartidningen.* 2019 May 15;116. pii: FFPX. Swedish.
 - Maha QA, Masood L, Rehman R. Vitamin D Receptor Polymorphism and Male Factor Infertility - Letter To Editor. *J Pak Med Assoc.* 2019 Apr;69(4):603-604.
 - Mäkitaipale J, Sievänen H, Sankari S, et al. Diet is a main source of vitamin D in Finnish pet rabbits (*Oryctolagus cuniculus*). *J Anim Physiol Anim Nutr (Berl).* 2019 May 31. doi: 10.1111/jpn.13120. [Epub ahead of print].
 - Malihi Z, Wu Z, Lawes CMM, et al. Adverse events from large dose vitamin D supplementation taken for one year or longer. *J Steroid Biochem Mol Biol.* 2019 Apr;188:29-37. doi: 10.1016/j.jsbmb.2018.12.002. Epub 2018 Dec 6.
 - Manson JE, Mora S, Cook NR. Marine n-3 Fatty Acids and Vitamin D Supplementation and Primary Prevention. Reply. *N Engl J Med.* 2019 May 9;380(19):1879-1880. doi: 10.1056/NEJMc1902636.
 - Marino R, Misra M. Extra-Skeletal Effects of Vitamin D. *Nutrients.* 2019 Jun 27;11(7).

- pii: E1460. doi: 10.3390/nu11071460. Review.
- Martucci G, McNally D, Parekh D, et al. Trying to identify who may benefit most from future vitamin D intervention trials: a post hoc analysis from the VITDALHCU study excluding the early deaths. *Crit Care*. 2019 Jun 4;23(1):200. doi: 10.1186/s13054-019-2472-z.
 - Marwaha RK, Dabas A. Interventions for Prevention and Control of Epidemic of Vitamin D Deficiency. *Indian J Pediatr*. 2019 Jun;86(6):532-537. doi: 10.1007/s12098-019-02857-z. Epub 2019 Jan 16.
 - Masoud MS, Yakout SM, Al-Attas OS, et al. The association between iron and vitamin D status in Arab adolescents. *Public Health Nutr*. 2019 May 17;1-6. doi: 10.1017/S1368980019001113. [Epub ahead of print].
 - Meghil MM, Hutchens L, Raed A, et al. The influence of vitamin D supplementation on local and systemic inflammatory markers in periodontitis patients: A pilot study. *Oral Dis*. 2019 Jul;25(5):1403-1413. doi: 10.1111/odi.13097. Epub 2019 Apr 21.
 - Mehmood T, Ahmed A, Ahmed Z, et al. Optimization of soya lecithin and Tween 80 based novel vitamin D nanoemulsions prepared by ultrasonication using response surface methodology. *Food Chem*. 2019 Aug 15;289:664-670. doi: 10.1016/j.foodchem.2019.03.112. Epub 2019 Mar 22.
 - Menzel LP, Ruddick W, Chowdhury MH, et al. Activation of vitamin D in the gingival epithelium and its role in gingival inflammation and alveolar bone loss. *J Periodontol Res*. 2019 Aug;54(4):444-452. doi: 10.1111/jre.12646. Epub 2019 Feb 25.
 - Mick PJ, Peng SA, Loftus JP. Serum Vitamin D Metabolites and CXCL10 Concentrations Associate With Survival in Dogs With Immune Mediated Disease. *Front Vet Sci*. 2019 Jul 30;6:247. doi: 10.3389/fvets.2019.00247. eCollection 2019.
 - Min K, Lee JM, Kim MJ, et al. Restoration of Cellular Proliferation and Characteristics of Human Tenocytes by Vitamin D. *J Orthop Res*. 2019 May 22. doi: 10.1002/jor.24352. [Epub ahead of print].
 - Mitchell BL, Zhu G, Medland SE, Renteria ME, et al. Half the Genetic Variance in Vitamin D Concentration is Shared with Skin Colour and Sun Exposure Genes. *Behav Genet*. 2019 Jul;49(4):386-398. doi: 10.1007/s10519-019-09954-x. Epub 2019 Mar 15.
 - Mo M, Wang S, Chen Z, et al. A systematic review and meta-analysis of the response of serum 25-hydroxyvitamin D concentration to vitamin D supplementation from RCTs from around the globe. *Eur J Clin Nutr*. 2019 Jun;73(6):816-834. doi: 10.1038/s41430-019-0417-x. Epub 2019 Mar 14. Review.
 - Moon AS, Boudreau S, Mussell E, et al. Current concepts in vitamin D and orthopaedic surgery. *Orthop Traumatol Surg Res*. 2019 Apr;105(2):375-382. doi: 10.1016/j.otsr.2018.12.006. Epub 2019 Mar 8. Review.
 - Moradi S, Shahdadian F, Mohammadi H, et al. A comparison of the effect of supplementation and sunlight exposure on serum vitamin D and parathyroid hormone: A systematic review and meta-analysis. *Crit Rev Food Sci Nutr*. 2019 May 20:1-9. doi: 10.1080/10408398.2019.1611538. [Epub ahead of print].
 - Moyersoen I, Devleeschauwer B, Dekkers A, et al. A Novel Approach to Optimize Vitamin D Intake in Belgium through Fortification Based on Representative Food Consumption Data. *J Nutr*. 2019 Jun 17. pii: nxz119. doi: 10.1093/jn/nxz119. [Epub ahead of print].
 - Muñoz García A, Eijssen LM, Kutmon M, et al. A bioinformatics workflow to decipher transcriptomic data from vitamin D studies. *J Steroid Biochem Mol Biol*. 2019 May;189:28-35. doi: 10.1016/j.jsbmb.2019.01.003. Epub 2019 Feb 1. Review.
 - Murthykumar K, Arjunker R, Jayaseelan VP. Association of vitamin D receptor gene polymorphism (rs10735810) and chronic periodontitis. *J Investig Clin Dent*. 2019 Jul 19:e12440. doi: 10.1111/jicd.12440. [Epub ahead of print].
 - Mutchie TR, Yu OB, Di Milo ES, et al. Alternative binding sites at the vitamin D receptor and their ligands. *Mol Cell Endocrinol*. 2019 Apr 5;485:1-8. doi: 10.1016/j.mce.2019.01.011. Epub 2019 Jan 14. Review.
 - Myers EF. Considerations Identified from the Dialogue Focused on Evidence-Based Decision Making and Vitamin D: Implications for the Nutrition Care Process. *J Acad Nutr Diet*. 2019 Jun;119(6):910-914. doi: 10.1016/j.jand.2018.04.014. Epub 2018 Jul 10.
 - Nakaoka K, Yamada A, Noda S, et al. Influence of dietary vitamin D deficiency on bone strength, body composition, and muscle in ovariectomized rats fed a high-fat diet. *Nutrition*. 2019 Apr;60:87-93. doi: 10.1016/j.nut.2018.09.001. Epub 2018 Sep 5.
 - Nandi AA, Wadhvani NS, Joshi SR. Maternal vitamin D deficiency increases the thromboxane/prostacyclin ratio through alterations in the one-carbon cycle in Wistar rats. *Biofactors*. 2019 Jul;45(4):548-555. doi: 10.1002/biof.1510. Epub 2019 Apr 15.
 - Nino S, Soïn SP, Avilucea FR. Vitamin D and Metabolic Supplementation in Orthopedic Trauma. *Orthop Clin North Am*. 2019 Apr;50(2):171-179. doi: 10.1016/j.ocl.2018.12.001. Review.
 - Ofem OE, Okon UE, Ujong GO, et al. Calcium-rich diet and vitamin D supplementation improves lipid profiles and reduces atherogenic index in high salt fed male Wistar rat. *Niger J Physiol Sci*. 2019 Jun 30;34(1):27-31.
 - Oikeh I, Sakkas P, Blake DP, et al. Interactions between dietary calcium and phosphorus level, and vitamin D source on bone mineralization, performance, and intestinal morphology of coccidia-infected broilers1. *Poult Sci*. 2019 Jun 21. pii: pez350. doi: 10.3382/ps/pez350. [Epub ahead of print].
 - Pasquali M, Tartaglione L, Rotondi S, et al. Clinical impact of vitamin D hydroxylation efficiency. *Minerva Med*. 2019 Jun;110(3):259-262. doi: 10.23736/S0026-4806.19.06029-4. Epub 2019 Feb 22.
 - Pilz S. Marine n-3 Fatty Acids and Vitamin D Supplementation and Primary Prevention. *N Engl J Med*. 2019 May 9;380(19):1878-1879. doi: 10.1056/NEJMc1902636.
 - Pludowski P, Grant WB, Konstantynowicz

- J, et al. Editorial: Classic and Pleiotropic Actions of Vitamin D. *Front Endocrinol (Lausanne)*. 2019 May 29;10:341. doi: 10.3389/fendo.2019.00341. eCollection 2019.
- Potvin P. Marine n-3 Fatty Acids and Vitamin D Supplementation and Primary Prevention. *N Engl J Med*. 2019 May 9;380(19):1878. doi: 10.1056/NEJMc1902636.
 - Pritchard L, Lewis S, Hickson M. Comparative effectiveness of vitamin D supplementation via buccal spray versus oral supplements on serum 25-hydroxyvitamin D concentrations in humans: a systematic review protocol. *JBI Database System Rev Implement Rep*. 2019 Apr;17(4):487-499. doi: 10.11124/JBISRIIR-2017-003907.
 - Razaghi M, Djekic-Ivankovic M, Agellon S, et al. Lean body mass accretion is elevated in response to dietary vitamin D: A dose-response study in female weanling rats. *Nutr Res*. 2019 Jul 30;68:92-100. doi: 10.1016/j.nutres.2019.07.004. [Epub ahead of print].
 - Saddoris KL, Fleet JC, Radcliffe JS. The effect of dietary vitamin D supplementation on sodium-dependent phosphate uptake and expression of NaPi-IIb in the small intestine of weanling pigs. *J Anim Sci*. 2019 Apr 5. pii: skz106. doi: 10.1093/jas/skz106. [Epub ahead of print].
 - Sakkas P, Oikeh I, Blake DP, et al. Dietary vitamin D improves performance and bone mineralisation, but increases parasite replication and compromises gut health in Eimeria-infected broilers. *Br J Nutr*. 2019 Jun 10:1-13. doi: 10.1017/S0007114519001375. [Epub ahead of print].
 - Scragg RKR. Overview of results from the Vitamin D Assessment (ViDA) study. *J Endocrinol Invest*. 2019 May 23. doi: 10.1007/s40618-019-01056-z. [Epub ahead of print] Review.
 - Sheng L, Turner AG, Barratt K, et al. Mammary-specific ablation of Cyp24a1 inhibits development, reduces proliferation and increases sensitivity to vitamin D. *J Steroid Biochem Mol Biol*. 2019 May;189:240-247. doi: 10.1016/j.jsbmb.2019.01.005. Epub 2019 Jan 14.
 - Singh V, Misra AK, Singh M, et al. An open-label, randomized, 10 weeks prospective study on the efficacy of vitamin D (daily low dose and weekly high dose) in vitamin D deficient patients. *J Family Med Prim Care*. 2019 Jun;8(6):1958-1963. doi: 10.4103/jfmpc.jfmpc_272_19.
 - Sivakumar G, Koziarz A, Farrokhyar F. Vitamin D Supplementation in Military Personnel: A Systematic Review of Randomized Controlled Trials. *Sports Health*. 2019 Sep/Oct;11(5):425-431. doi: 10.1177/1941738119857717. Epub 2019 Jul 3.
 - Snow D. Vitamin D Screening and Supplementation. *MCN Am J Matern Child Nurs*. 2019 May/June;44(3):172. doi: 10.1097/NMC.0000000000000528.
 - Song YP, Chen HL. Comment on "Vitamin D Status Is Associated With Development of Hospital-Acquired Pressure Injuries in Critically Ill Surgical Patients". *Nutr Clin Pract*. 2019 Jun;34(3):475-476. doi: 10.1002/ncp.10246. Epub 2019 Jan 15.
 - Szychlinska MA, Imbesi R, Castrogiovanni P, et al. Assessment of Vitamin D Supplementation on Articular Cartilage Morphology in a Young Healthy Sedentary Rat Model. *Nutrients*. 2019 Jun 3;11(6). pii: E1260. doi: 10.3390/nu11061260.
 - Tagliaferri S, Porri D, De Giuseppe R, et al. The controversial role of vitamin D as an antioxidant: results from randomised controlled trials. *Nutr Res Rev*. 2019 Jun;32(1):99-105. doi: 10.1017/S0954422418000197. Epub 2018 Oct 17.
 - Taneja SS. Re: Vitamin D Supplements and Prevention of Cancer and Cardiovascular Disease. *J Urol*. 2019 Aug;202(2):211-212. doi: 10.1097/01.JU.0000559602.40778.1d. Epub 2019 Jul 8.
 - Tao T, Jiang Y, Li W, et al. Relationship of vitamin D receptor gene polymorphisms with susceptibility, surgical outcome and prognosis of hallux valgus in a Chinese Han population. *Foot Ankle Surg*. 2019 Apr;25(2):198-203. doi: 10.1016/j.fas.2017.10.010. Epub 2017 Oct 28.
 - Tayem Y, Alotaibi R, Hozayen R, et al. Therapeutic regimens for vitamin D deficiency in postmenopausal women: a systematic review. *Prz Menopauzalny*. 2019 Apr;18(1):57-62. doi: 10.5114/pm.2019.84159. Epub 2019 Apr 9. Review.
 - Taylor CL, Rosen CJ, Dwyer JT. Considerations in Dietetic Counseling for Vitamin D. *J Acad Nutr Diet*. 2019 Jun;119(6):901-909. doi: 10.1016/j.jand.2018.04.013. Epub 2018 Jul 10.
 - Teixeira P, Santos AC, Casalta-Lopes J, et al. Prevalence of vitamin D deficiency amongst soccer athletes and effects of 8 weeks supplementation. *J Sports Med Phys Fitness*. 2019 Apr;59(4):693-699. doi: 10.23736/S0022-4707.18.08551-1. Epub 2018 Oct 31.
 - Thomas DT, Schnell DM, Redzic M, et al. Local In Vivo Measures of Muscle Lipid and Oxygen Consumption Change in Response to Combined Vitamin D Repletion and Aerobic Training in Older Adults. *Nutrients*. 2019 Apr 25;11(4). pii: E930. doi: 10.3390/nu11040930.
 - Tohari AM, Alhasani RH, Biswas L, et al. Vitamin D Attenuates Oxidative Damage and Inflammation in Retinal Pigment Epithelial Cells. *Antioxidants (Basel)*. 2019 Aug 24;8(9). pii: E341. doi: 10.3390/antiox8090341.
 - Upadhaya SD, Cho SH, Chung TK, et al. Anti-coccidial effect of essential oil blends and vitamin D on broiler chickens vaccinated with purified mixture of coccidian oocyst from Eimeria tenella and Eimeria maxima. *Poult Sci*. 2019 Jul 1;98(7):2919-2926. doi: 10.3382/ps/pez040.
 - Veleva BI, Caljouw MAA, van der Steen JT, et al. Vitamin D Supplementation in Older Persons: Guidelines Versus Practice. *J Am Med Dir Assoc*. 2019 May;20(5):639-640. doi: 10.1016/j.jamda.2018.11.001. Epub 2018 Dec 19.
 - Veselka B, Brickley MB, D'Ortenzio L, et al. Micro-CT assessment of dental mineralization defects indicative of vitamin D deficiency in two 17th-19th century Dutch communities. *Am J Phys Anthropol*. 2019 May;169(1):122-131. doi: 10.1002/ajpa.23819. Epub 2019 Mar 18.
 - Vieth R. Hypercalcemia and a "no observed adverse effect level" intake of vitamin D. *CMAJ*. 2019 Jul 8;191(27):E768. doi: 10.1503/cmaj.72512.
 - Wagner CL, Shary JR, Nietert PJ, et al. Bio-

- equivalence Studies of Vitamin D Gummies and Tablets in Healthy Adults: Results of a Cross-Over Study. *Nutrients*. 2019 May 7;11(5). pii: E1023. doi: 10.3390/nu11051023.
- Walker P, Kifley A, Kurrle S, et al. Process outcomes of a multifaceted, interdisciplinary knowledge translation intervention in aged care: results from the vitamin D implementation (ViDAus) study. *BMC Geriatr*. 2019 Jun 25;19(1):177. doi: 10.1186/s12877-019-1187-y.
 - Walker RE, Bartley J, Camargo CA Jr, et al. Vitamin D and Otitis Media. *Curr Allergy Asthma Rep*. 2019 Jun 3;19(7):33. doi: 10.1007/s11882-019-0866-2. Review.
 - Wan QS, Li L, Yang SK, et al. Role of Vitamin D Receptor Gene Polymorphisms on the Susceptibility to Periodontitis: A Meta-Analysis of a Controversial Issue. *Genet Test Mol Biomarkers*. 2019 Aug 26. doi: 10.1089/gtmb.2019.0021. [Epub ahead of print].
 - Weaver CM, Bischoff-Ferrari HA, Shanahan CJ. Cost-benefit analysis of calcium and vitamin D supplements. *Arch Osteoporos*. 2019 Apr 30;14(1):50. doi: 10.1007/s11657-019-0589-y.
 - Wei Y, Chen P, Chen Q, et al. Serum vitamin D levels and erectile dysfunction: A systematic review and meta-analysis. *Andrologia*. 2019 Apr;51(3):e13211. doi: 10.1111/and.13211. Epub 2018 Dec 6.
 - Wimalawansa SJ. Vitamin D Deficiency: Effects on Oxidative Stress, Epigenetics, Gene Regulation, and Aging. *Biology (Basel)*. 2019 May 11;8(2). pii: E30. doi: 10.3390/biology8020030. Review.
 - Xie J, Zhu L, Zhu T, et al. Vitamin D-supplemented yogurt drink reduces *Candida* infections in a paediatric intensive care unit: a randomised, placebo-controlled clinical trial. *J Hum Nutr Diet*. 2019 Aug;32(4):512-517. doi: 10.1111/jhn.12634. Epub 2019 Feb 18.
 - Yu X, Zong X, Pan Y. Associations between vitamin D receptor genetic variants and periodontitis: a meta-analysis. *Acta Odontol Scand*. 2019 Apr 8;1-11. doi: 10.1080/00016357.2019.1597160. [Epub ahead of print].
 - Zendejdel A, Arefi M. Molecular evidence of role of vitamin D deficiency in various extraskeletal diseases. *J Cell Biochem*. 2019 Jun;120(6):8829-8840. doi: 10.1002/jcb.28185. Epub 2019 Jan 4.
 - Zhang L, Quan M, Cao ZB. Effect of vitamin D supplementation on upper and lower limb muscle strength and muscle power in athletes: A meta-analysis. *PLoS One*. 2019 Apr 30;14(4):e0215826. doi: 10.1371/journal.pone.0215826. eCollection 2019.
 - Zhou Y, Dong B, Kim KH, et al. Vitamin D receptor activation in liver macrophages protects against hepatic endoplasmic reticulum stress in mice. *Hepatology*. 2019 Aug 5. doi: 10.1002/hep.30887. [Epub ahead of print].
- ## NEUROLOGY
- Abbatemarco JR, Fox RJ, Li H, et al. Vitamin D and MRI measures in progressive multiple sclerosis. *Mult Scler Relat Disord*. 2019 Aug 13;35:276-282. doi: 10.1016/j.msard.2019.08.014. [Epub ahead of print].
 - AbdulRazzak KK, Alshogran OY, Altawalbeh SM, et al. Overactive bladder and associated psychological symptoms: A possible link to vitamin D and calcium. *Neurourol Urodyn*. 2019 Apr;38(4):1160-1167. doi: 10.1002/nau.23975. Epub 2019 Mar 14.
 - Al-Amin MM, Sullivan RKP, Kurniawan ND, et al. Adult vitamin D deficiency disrupts hippocampal-dependent learning and structural brain connectivity in BALB/c mice. *Brain Struct Funct*. 2019 Apr;224(3):1315-1329. doi: 10.1007/s00429-019-01840-w. Epub 2019 Feb 2.
 - Bahat G, Altinkaynak M, Tascioglu C. Comment on Comparing Vitamin D Supplementation Versus Placebo for Urgency Urinary Incontinence: A Pilot Study. *J Am Geriatr Soc*. 2019 Jun;67(6):1299. doi: 10.1111/jgs.15878. Epub 2019 Mar 25.
 - Bahrami A, Khayatzadeh SS, Jaber N, Tayefi M, Mohammadi F, Ferns GA, Sadeghnia HR, Ghayour-Mobarhan M. Common Polymorphisms in Genes Related to Vitamin D Metabolism Affect the Response of Cognitive Abilities to Vitamin D Supplementation. *J Mol Neurosci*. 2019 Sep;69(1):150-156. doi: 10.1007/s12031-019-01344-6. Epub 2019 Jul 16.
 - Barry HC. Vitamin D is Equal to Placebo for Preventing Cognitive Decline in African-American Women with Low Vitamin D Levels. *Am Fam Physician*. 2019 Jul 15;100(2):118.
 - Berghout BP, Fani L, Heshmatollah A, et al. Vitamin D Status and Risk of Stroke. *Stroke*. 2019 Sep;50(9):2293-2298. doi: 10.1161/STROKEAHA.119.025449. Epub 2019 Aug 8.
 - Bivona G, Agnello L, Bellia C, et al. Non-Skeletal Activities of Vitamin D: From Physiology to Brain Pathology. *Medicina (Kaunas)*. 2019 Jul 5;55(7). pii: E341. doi: 10.3390/medicina55070341. Review.
 - Bivona G, Gambino CM, Iacolino G, et al. Vitamin D and the nervous system. *Neurol Res*. 2019 Sep;41(9):827-835. doi: 10.1080/01616412.2019.1622872. Epub 2019 May 30.
 - Bivona G, Lo Sasso B, Iacolino G, et al. Standardized measurement of circulating vitamin D [25(OH)D] and its putative role as a serum biomarker in Alzheimer's disease and Parkinson's disease. *Clin Chim Acta*. 2019 Oct;497:82-87. doi: 10.1016/j.cca.2019.07.022. Epub 2019 Jul 19. Review.
 - Breuer J, Loser K, Mykicky N, et al. Does the environment influence multiple sclerosis pathogenesis via UVB light and/or induction of vitamin D? *J Neuroimmunol*. 2019 Apr 15;329:1-8. doi: 10.1016/j.jneuroim.2018.05.006. Epub 2018 May 18. Review.
 - Caballero-Villarraso J, Jiménez-Jiménez MJ, Escribano BM, et al. Role of Vitamin D in Multiple Sclerosis and Other Neurodegenerative Processes: Bibliometric Analysis and Systematic Review. *CNS Neurol Disord Drug Targets*. 2019 Jul 2. doi: 10.2174/1871527318666190703102330. [Epub ahead of print].
 - Conte C, Arcuri C, Cataldi S, et al. Niemann-Pick Type A Disease: Behavior of Neutral Sphingomyelinase and Vitamin D Receptor. *Int J Mol Sci*. 2019 May 13;20(9). pii: E2365. doi: 10.3390/ijms20092365.
 - Cui C, Xu P, Li G, et al. Vitamin D receptor activation regulates microglia polarization

- and oxidative stress in spontaneously hypertensive rats and angiotensin II-exposed microglial cells: Role of renin-angiotensin system. *Redox Biol.* 2019 Aug 8;26:101295. doi: 10.1016/j.redox.2019.101295. [Epub ahead of print].
- da Rosa MI, Beck WO, Colonetti T, et al. Association of vitamin D and vitamin B12 with cognitive impairment in elderly aged 80 years or older: a cross-sectional study. *J Hum Nutr Diet.* 2019 Aug;32(4):518-524. doi: 10.1111/jhn.12636. Epub 2019 Feb 28.
 - Ding J, Liu L, Kong WK, et al. Serum levels of 25-hydroxy vitamin D correlate with idiopathic benign paroxysmal positional vertigo. *Biosci Rep.* 2019 Apr 30;39(4). pii: BSR20190142. doi: 10.1042/BSR20190142. Print 2019 Apr 30.
 - Dobson R. Clinical commentary on 'Life-threatening vitamin D intoxication due to intake of ultra-high doses in multiple sclerosis: a note of caution'. *Mult Scler.* 2019 Aug;25(9):1328-1329. doi: 10.1177/1352458518807053. Epub 2018 Oct 25.
 - Engkasan JP. Does Vitamin D reduce disease activity in people with multiple sclerosis? A Cochrane Review summary with commentary. *NeuroRehabilitation.* 2019 Aug 5. doi: 10.3233/NRE-189008. [Epub ahead of print].
 - Feige J, Salmhofer H, Hecker C, et al. Life-threatening vitamin D intoxication due to intake of ultra-high doses in multiple sclerosis: A note of caution. *Mult Scler.* 2019 Aug;25(9):1326-1328. doi: 10.1177/1352458518807059. Epub 2018 Oct 25.
 - Frighi V, Morovat A, Andrews TM, et al. Vitamin D, bone mineral density and risk of fracture in people with intellectual disabilities. *J Intellect Disabil Res.* 2019 Apr;63(4):357-367. doi: 10.1111/jir.12581. Epub 2018 Dec 19.
 - Ghaderi A, Rasouli-Azad M, Farhadi MH, et al. Exploring the Effects of Vitamin D Supplementation on Cognitive Functions and Mental Health Status in Subjects Under Methadone Maintenance Treatment. *J Addict Med.* 2019 May 24. doi: 10.1097/ADM.0000000000000550. [Epub ahead of print].
 - Ghajarzadeh M, Keshikar AA, Azimi A, et al. The Effect of Vitamin D Supplements on Clinical and Para-Clinical Outcomes in Patients With Multiple Sclerosis: Protocol for a Systematic Review. *JMIR Res Protoc.* 2019 Apr 22;8(4):e12045. doi: 10.2196/12045.
 - Ghorbani Z, Togha M, Rafiee P, et al. Vitamin D in migraine headache: a comprehensive review on literature. *Neural Sci.* 2019 Aug 3. doi: 10.1007/s10072-019-04021-z. [Epub ahead of print].
 - Goischke HK. Vitamin D supplementation for the prevention or depletion of side effects of therapy with alemtuzumab in multiple sclerosis. *Ther Clin Risk Manag.* 2019 Jul 12;15:891-904. doi: 10.2147/TCRM.S188941. eCollection 2019.
 - Graves JS, Barcellos LF, Krupp L, et al. Vitamin D genes influence MS relapses in children. *Mult Scler.* 2019 May 13:1352458519845842. doi: 10.1177/1352458519845842. [Epub ahead of print].
 - Grimm MOW, Lauer AA, Grösgen S, et al. Profiling of Alzheimer's disease related genes in mild to moderate vitamin D hypovitaminosis. *J Nutr Biochem.* 2019 May;67:123-137. doi: 10.1016/j.jnutbio.2019.01.015. Epub 2019 Feb 11.
 - Gugger A, Marzel A, Orav EJ, et al. Effect of Monthly High-Dose Vitamin D on Mental Health in Older Adults: Secondary Analysis of a RCT. *J Am Geriatr Soc.* 2019 Jun;67(6):1211-1217. doi: 10.1111/jgs.15808. Epub 2019 Feb 1.
 - Hajimohammadebrahim-Ketabforoush M, Shahmohammadi M, Khoundabi B, et al. Effect of Vitamin D Supplementation on Postcraniotomy Pain After Brain Tumor Surgery: A Randomized Clinical Trial. *World Neurosurg.* 2019 Jun 7. pii: S1878-8750(19)31527-X. doi: 10.1016/j.wneu.2019.05.250. [Epub ahead of print].
 - Hancı F, Kabakuş N, Türay S, et al. The role of obesity and vitamin D deficiency in primary headaches in childhood. *Acta Neurol Belg.* 2019 Apr 8. doi: 10.1007/s13760-019-01134-2. [Epub ahead of print].
 - Hoepner R, Bagnoud M, Pistor M, et al. Vitamin D increases glucocorticoid efficacy via inhibition of mTORC1 in experimental models of multiple sclerosis. *Acta Neuropathol.* 2019 Sep;138(3):443-456. doi: 10.1007/s00401-019-02018-8. Epub 2019 Apr 27.
 - Ismailova K, Poudel P, Parlesak A, et al. Vitamin D in early life and later risk of multiple sclerosis-A systematic review, meta-analysis. *PloS One.* 2019 Aug 27;14(8):e0221645. doi: 10.1371/journal.pone.0221645. eCollection 2019.
 - Jeon SG, Cha MY, Kim JI, et al. Vitamin D-binding protein-loaded PLGA nanoparticles suppress Alzheimer's disease-related pathology in 5XFAD mice. *Nanomedicine.* 2019 Apr;17:297-307. doi: 10.1016/j.nano.2019.02.004. Epub 2019 Feb 19.
 - Jia J, Hu J, Huo X, et al. Effects of vitamin D supplementation on cognitive function and blood A β -related biomarkers in older adults with Alzheimer's disease: a randomised, double-blind, placebo-controlled trial. *J Neurol Neurosurg Psychiatry.* 2019 Jul 11. pii: jnnp-2018-320199. doi: 10.1136/jnnp-2018-320199. [Epub ahead of print].
 - Kaur P, Chakrabarty B. Vitamin D and Neurological Disorders: The Conundrum Continues. *Indian J Pediatr.* 2019 Sep;86(9):771-772. doi: 10.1007/s12098-019-02992-7. Epub 2019 May 30. Review.
 - Kija E, Gidal BE, Shapson-Coe A, et al. Vitamin D abnormalities and bone turn over analysis in children with Epilepsy in the Western Cape of South Africa. *Seizure.* 2019 Aug 13. pii: S1059-1311(19)30514-X. doi: 10.1016/j.seizure.2019.07.018. [Epub ahead of print]
 - Kija E, Gidal BE, Shapson-Coe A, et al. Vitamin D abnormalities and bone turn over analysis in children with epilepsy in the Western Cape of South Africa. *Seizure.* 2019 Jul;69:186-192. doi: 10.1016/j.seizure.2019.04.020. Epub 2019 Apr 29.
 - Kiliç B, Kiliç M. Evaluation of Vitamin D Levels and Response to Therapy of Childhood Migraine. *Medicina (Kaunas).* 2019 Jun 28;55(7). pii: E321. doi: 10.3390/medicina55070321.
 - Kotb MA, Kamal AM, Aldossary NM, et al. Effect of vitamin D replacement on depres-

- sion in multiple sclerosis patients. *Mult Scler Relat Disord*. 2019 Apr;29:111-117. doi: 10.1016/j.msard.2019.01.029. Epub 2019 Jan 23.
- Langer-Gould A, Lucas RM. Vitamin D deficiency is an etiological factor for MS - No. *Mult Scler*. 2019 Apr;25(5):639-641. doi: 10.1177/1352458518808469. Epub 2018 Nov 30.
 - Lee DH, Kang H, Kim JH, et al. Cerebrospinal fluid vitamin D-binding protein as a new biomarker for the diagnosis of meningitis. *Neurol Sci*. 2019 Aug;40(8):1597-1605. doi: 10.1007/s10072-019-03873-9. Epub 2019 Apr 13.
 - Long HC, Wu R, Liu CF, et al. MiR-125a-5p Regulates Vitamin D Receptor Expression in a Mouse Model of Experimental Autoimmune Encephalomyelitis. *Neurosci Bull*. 2019 Aug 19. doi: 10.1007/s12264-019-00418-0. [Epub ahead of print].
 - Lu BC, Shi XJ, Liang L, et al. Platelet Surface CD62p and Serum Vitamin D Levels are Associated with Clopidogrel Resistance in Chinese Patients with Ischemic Stroke. *J Stroke Cerebrovasc Dis*. 2019 May;28(5):1323-1328. doi: 10.1016/j.jstrokecerebrovasdis.2019.01.031. Epub 2019 Feb 20.
 - Macpherson H, Brownell S, Duckham RL, et al. Multifaceted intervention to enhance cognition in older people at risk of cognitive decline: study protocol for the Protein Omega-3 and Vitamin D Exercise Research (PONDER) study. *BMJ Open*. 2019 May 9;9(5):e024145. doi: 10.1136/bmjopen-2018-024145.
 - Manousaki D, Richards JB. Vitamin D deficiency is an etiological factor for MS - Yes. *Mult Scler*. 2019 Apr;25(5):637-639. doi: 10.1177/1352458518809301. Epub 2018 Nov 30.
 - Markland AD, Tangpricha V, Beasley TM, et al. Reply to: "Suggestions for Vitamin D Supplementation for Urgency Urinary Incontinence Study". *J Am Geriatr Soc*. 2019 Jun;67(6):1300-1301. doi: 10.1111/jgs.15876. Epub 2019 Mar 24.
 - Mayne PE, Burne THJ. Vitamin D in Synaptic Plasticity, Cognitive Function, and Neuropsychiatric Illness. *Trends Neurosci*. 2019 Apr;42(4):293-306. doi: 10.1016/j.tins.2019.01.003. Epub 2019 Feb 19. Review.
 - Mazdeh M, Zamani M, Eftekharian MM, et al. Expression analysis of vitamin D receptor-associated lncRNAs in epileptic patients. *Metab Brain Dis*. 2019 Jun 11. doi: 10.1007/s11011-019-00446-9. [Epub ahead of print].
 - Momosaki R, Abo M, Urashima M. Vitamin D Supplementation and Post-Stroke Rehabilitation: A Randomized, Double-Blind, Placebo-Controlled Trial. *Nutrients*. 2019 Jun 7;11(6). pii: E1295. doi: 10.3390/nu11061295.
 - Pál É, Hadjadj L, Fontányi Z, et al. Gender, hyperandrogenism and vitamin D deficiency related functional and morphological alterations of rat cerebral arteries. *PLoS One*. 2019 May 13;14(5):e0216951. doi: 10.1371/journal.pone.0216951. eCollection 2019.
 - Papassava M, Nakou I, Siomou E, et al. Vitamin D supplementation and bone markers in ambulatory children on long-term valproic acid therapy. A prospective interventional study. *Epilepsy Behav*. 2019 Aug;97:192-196. doi: 10.1016/j.yebeh.2019.05.029. Epub 2019 Jun 26.
 - Patel U, Kodumuri N, Malik P, et al. Hypocalcemia and Vitamin D Deficiency amongst Migraine Patients: A Nationwide Retrospective Study. *Medicina (Kaunas)*. 2019 Jul 25;55(8). pii: E407. doi: 10.3390/medicina55080407.
 - Pytel V, Matías-Guiu JA, Torre-Fuentes L, et al. Exonic variants of genes related to the vitamin D signaling pathway in the families of familial multiple sclerosis using whole-exome next generation sequencing. *Brain Behav*. 2019 Apr;9(4):e01272. doi: 10.1002/brb3.1272. Epub 2019 Mar 21.
 - Rhim GI. Serum Vitamin D and Long-term Outcomes of Benign Paroxysmal Positional Vertigo. *Clin Exp Otorhinolaryngol*. 2019 Aug;12(3):273-278. doi: 10.21053/ceo.2018.00381. Epub 2019 Mar 1.
 - Rui-Hua C, Yong-de P, Xiao-Zhen J, et al. Decreased Levels of Serum IGF-1 and Vitamin D Are Associated With Cognitive Impairment in Patients With Type 2 Diabetes. *Am J Alzheimers Dis Other Dement*. 2019 Jul 18;1533317519860334. doi: 10.1177/1533317519860334. [Epub ahead of print].
 - Saylor D, Nakigozi G, Pardo CA, et al. Vitamin D is not associated with HIV-associated neurocognitive disorder in Rakai, Uganda. *J Neuroviral*. 2019 Jun;25(3):410-414. doi: 10.1007/s13365-018-00719-6. Epub 2019 Jan 22.
 - Sazci A, Uren N, Idrisoglu HA, et al. The rs2228570 Variant of the Vitamin D Receptor Gene is Associated with Essential Tremor. *Neurosci Bull*. 2019 Apr;35(2):362-364. doi: 10.1007/s12264-018-0287-6. Epub 2018 Sep 17.
 - Schietzel S, Fischer K, Brugger P, et al. Effect of 2000 IU compared with 800 IU vitamin D on cognitive performance among adults age 60 years and older: a randomized controlled trial. *Am J Clin Nutr*. 2019 Jun 1. pii: nqz081. doi: 10.1093/ajcn/nqz081. [Epub ahead of print].
 - Sharawat IK, Dawman L. Bone turnover analysis and vitamin D status in children with epilepsy. *Seizure*. 2019 Aug 13. pii: S1059-1311(19)30457-1. doi: 10.1016/j.seizure.2019.07.013. [Epub ahead of print].
 - Simpson S Jr, van der Mei I. Vitamin D deficiency is an etiological factor for MS - Commentary. *Mult Scler*. 2019 Apr;25(5):641-643. doi: 10.1177/1352458518815605. Epub 2018 Nov 30.
 - Siniscalchi A, Lochner P, Cione E, et al. Improved Efficacy of Pregabalin by Restoring Plasma Vitamin D Levels in Migraine: a Case Report. *Psychopharmacol Bull*. 2019 Jun 20;49(2):41-45.
 - Tavakolizadeh R, Ardalani M, Shariatpanahi G, et al. Is There Any Relationship between Vitamin D Deficiency and Gross Motor Development in 12-Month-Old Children? *Iran J Child Neurol*. 2019 Summer;13(3):55-60.
 - Trojsi F, Siciliano M, Passaniti C, et al. Vitamin D supplementation has no effects on progression of motor dysfunction in amyotrophic lateral sclerosis (ALS). *Eur J Clin Nutr*. 2019 Jun 13. doi: 10.1038/s41430-019-0448-3. [Epub ahead of print].
 - Tutor JC. Vitamin D supplementation in multiple sclerosis - Can be done something more? *Med Hypotheses*. 2019 Aug;129:109256. doi: 10.1016/j.mehy.2019.109256. Epub 2019 Jun 3.

- Vergori A, Pinnetti C, Lorenzini P, et al. Vitamin D deficiency is associated with neurocognitive impairment in HIV-infected subjects. *Infection*. 2019 Jun 10. doi: 10.1007/s15010-019-01313-6. [Epub ahead of print].
- Voo VTF, O'Brien T, Butzkueven H, et al. The role of vitamin D and P2X7R in multiple sclerosis. *J Neuroimmunol*. 2019 May 15;330:159-169. doi: 10.1016/j.jneuroim.2019.03.004. Epub 2019 Mar 14. Review.
- Vyas CM, Okereke OI. Vitamin D and Psychosis in Alzheimer Disease: New Insights From Pharmacogenomics Research. *Am J Geriatr Psychiatry*. 2019 Sep;27(9):918-919. doi: 10.1016/j.jagp.2019.05.021. Epub 2019 Jun 4.
- Wajda J, Świat M, Owczarek AJ, et al. Severity of Vitamin D Deficiency Predicts Mortality in Ischemic Stroke Patients. *Dis Markers*. 2019 May 2;2019:3652894. doi: 10.1155/2019/3652894. eCollection 2019.
- Wali SO, Abaalkhail B, Alhejaili F, et al. Efficacy of vitamin D replacement therapy in restless legs syndrome: a randomized control trial. *Sleep Breath*. 2019 Jun;23(2):595-601. doi: 10.1007/s11325-018-1751-2. Epub 2018 Nov 14.
- Wang X, Shen N, Lu Y, et al. Vitamin D receptor polymorphisms and the susceptibility of Parkinson's disease. *Neurosci Lett*. 2019 Apr 23;699:206-211. doi: 10.1016/j.neulet.2019.02.018. Epub 2019 Feb 11.
- Xu Z, Jing X, Li G, et al. Valproate decreases vitamin D levels in pediatric patients with epilepsy. *Seizure*. 2019 Jun 11;71:60-65. doi: 10.1016/j.seizure.2019.06.009. [Epub ahead of print] Review.
- Yang K, Chen J, Li X, et al. Vitamin D concentration and risk of Alzheimer disease: A meta-analysis of prospective cohort studies. *Medicine (Baltimore)*. 2019 Aug;98(35):e16804. doi: 10.1097/MD.00000000000016804.
- involved mechanisms. *J Dev Orig Health Dis*. 2019 Aug;10(4):497-501. doi: 10.1017/S2040174418000909. Epub 2019 Feb 6.
- Araujo LMQ, Moreira PFDP, Almada Filho CM, et al. Functional capacity, renal function and vitamin D in community-dwelling oldest old. *Int Urol Nephrol*. 2019 Apr;51(4):713-721. doi: 10.1007/s11255-019-02081-w. Epub 2019 Jan 30.
- Auguste BL, Avila-Casado C, Bargman JM. Use of vitamin D drops leading to kidney failure in a 54-year-old man. *CMAJ*. 2019 Apr 8;191(14):E390-E394. doi: 10.1503/cmaj.180465.
- Banerjee D, Jha V. Vitamin D and Cardiovascular Complications of CKD: What's Next? *Clin J Am Soc Nephrol*. 2019 Jun 7;14(6):932-934. doi: 10.2215/CJN.12581018. Epub 2019 May 7.
- Battaglia Y, Cojocararu E, Fiorini F, et al. Vitamin D in kidney transplant recipients. *Clin Nephrol*. 2019 Jul 19. doi: 10.5414/CN109735. [Epub ahead of print].
- Boudelique E, Tang E, Perez J, et al. Vitamin D and calcium supplementation accelerates Randall's plaque formation in a murine model. *Am J Pathol*. 2019 Aug 23. pii: S0002-9440(19)30669-8. doi: 10.1016/j.ajpath.2019.07.013. [Epub ahead of print].
- Cavalier E, Sagou Yayo E, Attoungbre-Hauhouot ML, et al. Vitamin D, bone alkaline phosphatase and parathyroid hormone in healthy subjects and haemodialysed patients from West Africa: impact of reference ranges and parathyroid hormone generation assays on the KDIGO guidelines. *Clin Kidney J*. 2018 Sep 5;12(2):288-293. doi: 10.1093/ckj/sfy074. eCollection 2019 Apr.
- Cetin N, Gencler A, Sivrikoz IA. Bone mineral density and vitamin D status in children with remission phase of steroid-sensitive nephrotic syndrome. *Saudi J Kidney Dis Transpl*. 2019 Jul-Aug;30(4):853-862. doi: 10.4103/1319-2442.265461.
- Chen X, Lu YP, Luo T, et al. Free 25-Vitamin D Is Correlated with Cardiovascular Events in Prevalent Hemodialysis Patients but Not with Markers of Renal Mineral Bone Disease. *Kidney Blood Press Res*. 2019;44(3):344-353. doi: 10.1159/000499878. Epub 2019 Jun 14.
- D'arrigo G, Pizzini P, Cutrupi S, et al. Vitamin D receptor activation raises soluble thrombomodulin levels in chronic kidney disease patients: a double blind, randomized trial. *Nephrol Dial Transplant*. 2019 May 1;34(5):819-824. doi: 10.1093/ndt/gfy085.
- Damiani S. A Pilot Study to Assess Kidney Functions and Toxic Dimethyl-arginines as Risk Biomarkers in Women with Low Vitamin D Levels. *J Med Biochem*. 2019 Mar 3;38(2):145-152. doi: 10.2478/jomb-2018-0025. eCollection 2019 Apr.
- Dou D, Yang B, Gan H, et al. Vitamin D supplementation for the improvement of vascular function in patients with chronic kidney disease: a meta-analysis of randomized controlled trials. *Int Urol Nephrol*. 2019 May;51(5):851-858. doi: 10.1007/s11255-019-02088-3. Epub 2019 Feb 8. Review.
- Du J, Jiang S, Hu Z, et al. Vitamin D receptor activation protects against lipopolysaccharide-induced acute kidney injury through suppression of tubular cell apoptosis. *Am J Physiol Renal Physiol*. 2019 May 1;316(5):F1068-F1077. doi: 10.1152/ajprenal.00332.2018. Epub 2019 Mar 13.
- Fan W, Peng Y, Liang Z, et al. A negative feedback loop of H19/miR-675/EGR1 is involved in diabetic nephropathy by downregulating the expression of the vitamin D receptor. *J Cell Physiol*. 2019 Aug;234(10):17505-17513. doi: 10.1002/jcp.28373. Epub 2019 Feb 27.
- Ferreira D, de Bragança AC, Volpini RA, et al. Vitamin D deficiency is a potential risk factor for lipid Amphotericin B nephrotoxicity. *PLoS Negl Trop Dis*. 2019 Jul 11;13(7):e0007567. doi: 10.1371/journal.pntd.0007567. eCollection 2019 Jul.
- Ferreira de Almeida L, Della Coletta Francescato H, Antunes-Rodrigues J, et al. Imbalance of Pro- and Anti-Angiogenic Factors Due to Maternal Vitamin D Deficiency Causes Renal Microvasculature Alterations Affecting the Adult Kidney Function. *Nutrients*. 2019 Aug 16;11(8). pii: E1929. doi: 10.3390/nu11081929.

NEPHROLOGY

- Almeida LF, Francescato HDC, Silva RS, et al. Renal developmental disturbances and their long-term consequences in female pups from vitamin D-deficient mothers: in-

- Gembillo G, Cernaro V, Salvo A, et al. Role of Vitamin D Status in Diabetic Patients with Renal Disease. *Medicina (Kaunas)*. 2019 Jun 13;55(6). pii: E273. doi: 10.3390/medicina55060273. Review.
- González-Castro TB, Blachman-Braun R, Hernández-Díaz Y, et al. Association of vitamin D receptor polymorphisms and nephrolithiasis: A meta-analysis. *Gene*. 2019 Aug 30;711:143936. doi: 10.1016/j.gene.2019.06.026. Epub 2019 Jun 15.
- Hu C, Wu X. Effect of vitamin D supplementation on vascular function and inflammation in patients with chronic kidney disease: a controversial Issue. *Ther Apher Dial*. 2019 Aug 9. doi: 10.1111/1744-9987.13428. [Epub ahead of print] Review.
- Junarta J, Jha V, Banerjee D. Insight into the impact of vitamin D on cardiovascular outcomes in chronic kidney disease. *Nephrology (Carlton)*. 2019 Aug;24(8):781-790. doi: 10.1111/nep.13569. Epub 2019 May 2. Review.
- Kara AV, Soylu YE. The relationship between vitamin D and inflammatory markers in maintenance hemodialysis patients. *Int Urol Nephrol*. 2019 Sep;51(9):1659-1665. doi: 10.1007/s11255-019-02250-x. Epub 2019 Aug 5.
- Li A, Zhang H, Han H, et al. LC3 promotes the nuclear translocation of the vitamin D receptor and decreases fibrogenic gene expression in proximal renal tubules. *Metabolism*. 2019 Sep;98:95-103. doi: 10.1016/j.metabol.2019.06.008. Epub 2019 Jun 18.
- Li K, Luo Y, Mo Y, et al. Association between vitamin D receptor gene polymorphisms and idiopathic hypocitraturia in a Chinese Bai population. *Urolithiasis*. 2019 Jun;47(3):235-242. doi: 10.1007/s00240-018-1069-3. Epub 2018 Jun 20.
- Lundwall K, Mörtberg J, Mobarrez F, et al. Changes in microparticle profiles by vitamin D receptor activation in chronic kidney disease - a randomized trial. *BMC Nephrol*. 2019 Aug 1;20(1):290. doi: 10.1186/s12882-019-1445-4.
- Lynch Cronin I, Byrne F, Doyle R, et al. The Effect of Short-Term Vitamin D Supplementation on Calcium Status in Vitamin D Insufficient Renal Transplant Recipients at Risk of Hypercalcemia. *J Ren Nutr*. 2019 May;29(3):181-187. doi: 10.1053/j.jrn.2018.11.012. Epub 2019 Jan 25.
- Malihi Z, Lawes CMM, Wu Z, et al. Monthly high-dose vitamin D supplementation does not increase kidney stone risk or serum calcium: results from a randomized controlled trial. *Am J Clin Nutr*. 2019 Jun 1;109(6):1578-1587. doi: 10.1093/ajcn/nqy378.
- Mehrotra S, Sharma RK, Patel MR. Vitamin D, 1,25-Dihydroxyvitamin D, FGF23, and Graft Function after Renal Transplantation. *Indian J Nephrol*. 2019 Jul-Aug;29(4):242-247. doi: 10.4103/ijn.ijn_307_18.
- Milajerdi A, Ostadmohammadi V, Amirjani S, et al. The effects of vitamin D treatment on glycemic control, serum lipid profiles, and C-reactive protein in patients with chronic kidney disease: a systematic review and meta-analysis of randomized controlled trials. *Int Urol Nephrol*. 2019 Sep;51(9):1567-1580. doi: 10.1007/s11255-019-02236-9. Epub 2019 Jul 23. Review.
- Musavi Mehdiabadi F, Ahmadi F, Lesan Pezeshki M, et al. The Relationship Between Serum Level of 25-hydroxy Vitamin D and Cytomegalovirus Infection in Kidney Transplant Recipients. *Iran J Kidney Dis*. 2019 Jul;13(4):225-231.
- Nguyen-Yamamoto L, Tanaka KI, St-Arnaud R, et al. Vitamin D-regulated osteocytic sclerostin and BMP2 modulate uremic extraskelatal calcification. *JCI Insight*. 2019 Jul 11;4(13). pii: 126467. doi: 10.1172/jci.insight.126467. eCollection 2019 Jul 11.
- Ni LH, Yuan C, Song KY, et al. Efficacy and safety of cinacalcet and active vitamin D in the treatment of secondary hyperparathyroidism in patients with chronic kidney disease: a network meta-analysis. *Ann Transl Med*. 2019 Jul;7(14):322. doi: 10.21037/atm.2019.05.84.
- Pawlak D, Domaniewski T, Znorko B, et al. The use of LP533401 as a therapeutic option for renal osteodystrophy affects, renal calcium handling, vitamin D metabolism, and bone health in uremic rats. *Expert Opin Ther Targets*. 2019 Apr;23(4):353-364. doi: 10.1080/14728222.2019.1586883. Epub 2019 Mar 12.
- Prytuła A, Cransberg K, Raes A. Drug-metabolizing enzymes CYP3A as a link between tacrolimus and vitamin D in renal transplant recipients: is it relevant in clinical practice? *Pediatr Nephrol*. 2019 Jul;34(7):1201-1210. doi: 10.1007/s00467-018-4030-3. Epub 2018 Jul 30.
- Ryu H, Cho H, Oh YK, et al. Association between vitamin D level and hematuria from a dipstick test in a large scale population based study: Korean National Health and nutrition examination survey. *BMC Nephrol*. 2019 May 24;20(1):187. doi: 10.1186/s12882-019-1369-z.
- Singh GV, Hampson G, Thomas K, et al. Vitamin D and kidney stones - is there an association? *BJU Int*. 2019 May;123(5):751-752. doi: 10.1111/bju.14658. Epub 2019 Jan 6.
- Song J, Xu S, Zhang ZH, et al. The correlation between low vitamin D status and renal interleukin-6/STAT3 hyper-activation in patients with clear cell renal cell carcinoma. *Steroids*. 2019 Oct;150:108445. doi: 10.1016/j.steroids.2019.108445. Epub 2019 Jul 8.
- Thorsen IS, Bleskestad IH, Åsberg A, et al. Vitamin D as a risk factor for patient survival after kidney transplantation: A prospective observational cohort study. *Clin Transplant*. 2019 May;33(5):e13517. doi: 10.1111/ctr.13517. Epub 2019 Mar 28.
- Vendramini LC, Dalboni MA, de Carvalho JTG Jr, et al. Association of Vitamin D Levels With Kidney Volume in Autosomal Dominant Polycystic Kidney Disease (ADPKD). *Front Med (Lausanne)*. 2019 May 24;6:112. doi: 10.3389/fmed.2019.00112. eCollection 2019.
- Zhang X, Zhao Y, Zhu X, et al. Active vitamin D regulates macrophage M1/M2 phenotypes via the STAT1-TREM1 pathway in diabetic nephropathy. *J Cell Physiol*. 2019 May;234(5):6917-6926. doi: 10.1002/jcp.27450. Epub 2018 Nov 27.
- Zhu X, Wu S, Guo H. Active Vitamin D and Vitamin D Receptor Help Prevent High Glucose Induced Oxidative Stress of Renal Tubular Cells via AKT/UCP2 Signaling Pathway. *Biomed Res Int*. 2019 May 28;2019:9013904. doi: 10.1155/2019/9013904. eCollection 2019.

ONCOLOGY

- Abdel-Razeq H. Prognostic Significance of Serum Vitamin D Levels in Egyptian Females with Breast Cancer. *Asian Pac J Cancer Prev*. 2019 Apr 28;20(4):983-983.
- Abrahamsson H, Porojnicu AC, Lindström JC, et al. High level of circulating vitamin D during neoadjuvant therapy may lower risk of metastatic progression in high-risk rectal cancer. *BMC Cancer*. 2019 May 23;19(1):488. doi: 10.1186/s12885-019-5724-z.
- Alkan A, Türkkan G, Tanriverdi Ö. Vitamin D deficiency in oncology practice-more roads to cross. *Support Care Cancer*. 2019 Aug 3. doi: 10.1007/s00520-019-05024-4. [Epub ahead of print]
- An HJ, Song DH. Displacement of Vitamin D Receptor Is Related to Lower Histological Grade of Endometrioid Carcinoma. *Anticancer Res*. 2019 Aug;39(8):4143-4147. doi: 10.21873/anticancer.13573.
- Arnaout A, Robertson S, Pond GR, et al. Randomized window of opportunity trial evaluating high-dose vitamin D in breast cancer patients. *Breast Cancer Res Treat*. 2019 Aug 9. doi: 10.1007/s10549-019-05392-9. [Epub ahead of print].
- Barry EL, Passarelli MN, Baron JA. Vitamin D as Cancer Therapy?: Insights From 2 New Trials. *JAMA*. 2019 Apr 9;321(14):1354-1355. doi: 10.1001/jama.2019.2589.
- Baumann B, Lugli G, Gao S, et al. High levels of PIWI-interacting RNAs are present in the small RNA landscape of prostate epithelium from vitamin D clinical trial specimens. *Prostate*. 2019 Jun;79(8):840-855. doi: 10.1002/pros.23789. Epub 2019 Mar 24.
- Baykan O, Akgul M, Uren N, et al. The Relationship Between Urothelial Type Bladder Cancer, Plasma 25-Hydroxyvitamin D Levels, and Vitamin D Receptor Apal Bsm1 FokI, and TaqI Polymorphisms. *Clin Lab*. 2019 Apr 1;65(4). doi: 10.7754/Clin.Lab.2018.180339.
- Bedogni A, Bettini G, Bedogni G, et al. Is vitamin D deficiency a risk factor for osteonecrosis of the jaw in patients with cancer? A matched case-control study. *J Craniomaxillofac Surg*. 2019 Aug;47(8):1203-1208. doi: 10.1016/j.jcms.2019.03.007. Epub 2019 Mar 13.
- Brown RB. Vitamin D, cancer, and dysregulated phosphate metabolism. *Endocrine*. 2019 Aug;65(2):238-243. doi: 10.1007/s12020-019-01985-y. Epub 2019 Jun 23. Review.
- Calderwood AH, Baron JA, Mott LA, et al. No Evidence for Posttreatment Effects of Vitamin D and Calcium Supplementation on Risk of Colorectal Adenomas in a Randomized Trial. *Cancer Prev Res (Phila)*. 2019 May;12(5):295-304. doi: 10.1158/1940-6207.CAPR-19-0023. Epub 2019 Mar 4.
- Cavagnari MAV, Vidigal VM, Silva TD, et al. Adiponectin, vitamin d and nutritional status in patients with advanced colorectal cancer or during follow-up. *Arq Gastroenterol*. 2019 Aug 13;56(2):172-177. doi: 10.1590/S0004-2803.201900000-34.
- Chatterjee R, Erban JK, Fuss P, et al. Vitamin D supplementation for prevention of cancer: The D2d cancer outcomes (D2dCA) study. *Contemp Clin Trials*. 2019 Jun;81:62-70. doi: 10.1016/j.cct.2019.04.015. Epub 2019 Apr 29.
- Crew KD, Anderson GL, Hershman DL, et al. Randomized Double-Blind Placebo-Controlled Biomarker Modulation Study of Vitamin D Supplementation in Premenopausal Women at High Risk for Breast Cancer (SWOG S0812). *Cancer Prev Res (Phila)*. 2019 Jul;12(7):481-490. doi: 10.1158/1940-6207.CAPR-18-0444. Epub 2019 May 28.
- Dougherty U, Mustafi R, Haider HI, et al. Losartan and Vitamin D Inhibit Colonic Tumor Development in a Conditional Apc-Deleted Mouse Model of Sporadic Colon Cancer. *Cancer Prev Res (Phila)*. 2019 Jul;12(7):433-448. doi: 10.1158/1940-6207.CAPR-18-0380. Epub 2019 May 14.
- Elmaci I, Ozpinar A, Ozpinar A, et al. From epidemiology and neurometabolism to treatment: Vitamin D in pathogenesis of glioblastoma Multiforme (GBM) and a proposal for Vitamin D + all-trans retinoic acid + Temozolomide combination in treatment of GBM. *Metab Brain Dis*. 2019 Jun;34(3):687-704. doi: 10.1007/s11011-019-00412-5. Epub 2019 Apr 1. Review.
- Fedirko V, Mandle HB, Zhu W, et al. Vitamin D-Related Genes, Blood Vitamin D Levels and Colorectal Cancer Risk in Western European Populations. *Nutrients*. 2019 Aug 20;11(8). pii: E1954. doi: 10.3390/nu11081954.
- Fernández-Barral A, Costales-Carrera A, Buira SP, et al. Vitamin D differentially regulates colon stem cells in patient-derived normal and tumor organoids. *FEBS J*. 2019 Jul 15. doi: 10.1111/febs.14998. [Epub ahead of print].
- Fleet JC, Kovalenko PL, Li Y, et al. Vitamin D Signaling Suppresses Early Prostate Carcinogenesis in TgAPT121 Mice. *Cancer Prev Res (Phila)*. 2019 Jun;12(6):343-356. doi: 10.1158/1940-6207.CAPR-18-0401. Epub 2019 Apr 26.
- Goyal H, Perisetti A, Rahman MR, et al. Vitamin D and Gastrointestinal Cancers: A Narrative Review. *Dig Dis Sci*. 2019 May;64(5):1098-1109. doi: 10.1007/s10620-018-5400-1. Epub 2018 Dec 3. Review.
- Grant DJ, Manichaikul A, Alberg AJ, et al. Evaluation of vitamin D biosynthesis and pathway target genes reveals UGT2A1/2 and EGFR polymorphisms associated with epithelial ovarian cancer in African American Women. *Cancer Med*. 2019 May;8(5):2503-2513. doi: 10.1002/cam4.1996. Epub 2019 Apr 18.
- Grant WB. In defense of the UVB-vitamin D-cancer hypothesis. *Endocrine*. 2019 Aug 7. doi: 10.1007/s12020-019-02040-6. [Epub ahead of print]
- Haidari F, Abiri B, Irvani M, et al. Randomized Study of the Effect of Vitamin D and Omega-3 Fatty Acids Cosupplementation as Adjuvant Chemotherapy on Inflammation and Nutritional Status in Colorectal Cancer Patients. *J Diet Suppl*. 2019 May 20:1-17. doi:10.1080/19390211.2019.1600096. [Epub ahead of print].
- Hemida MA, AbdElmoneim NA, Hewala TI, et al. Vitamin D Receptor in Breast Cancer Tissues and Its Relation to Estrogen Receptor Alpha (ER- α) Gene Expression and Serum 25-hydroxyvitamin D Levels in Egyptian Breast Cancer Patients: A Case-control Study. *Clin Breast Cancer*. 2019 Jun;19(3):e407-e414. doi: 10.1016/j.clbc.2018.12.019. Epub 2019 Jan 6.

- Horas K, Zheng Y, Fong-Yee C, et al. Loss of the Vitamin D Receptor in Human Breast Cancer Promotes Epithelial to Mesenchymal Cell Transition and Skeletal Colonization. *J Bone Miner Res.* 2019 Apr 17. doi: 10.1002/jbmr.3744. [Epub ahead of print].
- Hossain S, Beydoun MA, Beydoun HA, et al. Vitamin D and breast cancer: A systematic review and meta-analysis of observational studies. *Clin Nutr ESPEN.* 2019 Apr;30:170-184. doi: 10.1016/j.clnesp.2018.12.085. Epub 2019 Jan 9.
- Husain NE, Suliman AA, Abdelrahman I, et al. Serum vitamin D level, sun-exposed area, dietary factors, and physical activity as predictors of invasive breast cancer risk among Sudanese women: A case-control study. *J Family Med Prim Care.* 2019 May;8(5):1706-1714. doi: 10.4103/jfmpc.jfmpc_197_19.
- Huss L, Butt ST, Borgquist S, et al. Vitamin D receptor expression in invasive breast tumors and breast cancer survival. *Breast Cancer Res.* 2019 Jul 29;21(1):84. doi: 10.1186/s13058-019-1169-1.
- Ince B, Yildirim MEC, Dadaci M. Assessing the Effect of Vitamin D Replacement on Basal Cell Carcinoma Occurrence and Recurrence Rates in Patients with Vitamin D Deficiency. *Horm Cancer.* 2019 Jun 28. doi: 10.1007/s12672-019-00365-2. [Epub ahead of print].
- Ismayilova N, Palamar M, Onay H, et al. Vitamin D receptor gene polymorphisms in ocular surface squamous cell neoplasms. *Eur J Ophthalmol.* 2019 Jun 24;1120672119858225. doi: 10.1177/1120672119858225. [Epub ahead of print].
- Ji M, Liu L, Hou Y, et al. $1\alpha,25$ -Dihydroxyvitamin D3 restrains stem cell-like properties of ovarian cancer cells by enhancing vitamin D receptor and suppressing CD44. *Oncol Rep.* 2019 Jun;41(6):3393-3403. doi: 10.3892/or.2019.7116. Epub 2019 Apr 15.
- Joanna B, Jolanta B, Agnieszka G, et al. Vitamin D, linoleic acid, arachidonic acid and COX-2 in colorectal cancer patients in relation to disease stage, tumour localisation and disease progression. *Arab J Gastroenterol.* 2019 Jul 1. pii: S1687-1979(19)30050-4. doi: 10.1016/j.ajg.2019.05.007. [Epub ahead of print].
- Juhász O, Jakab Z, Szabó A, et al. Examining the Vitamin D Status of Children With Solid Tumors. *J Am Coll Nutr.* 2019 Jun 6:1-7. doi: 10.1080/07315724.2019.1616233. [Epub ahead of print].
- Kalia S, Kwong YKK. Relationship between sun safety behaviours and modifiable lifestyle cancer risk factors and vitamin D levels. *Photodermatol Photoimmunol Photomed.* 2019 Jun 5. doi: 10.1111/phpp.12494. [Epub ahead of print].
- Karkeni E, Morin SO, Bou Tayeh B, et al. Vitamin D Controls Tumor Growth and CD8+ T Cell Infiltration in Breast Cancer. *Front Immunol.* 2019 Jun 6;10:1307. doi: 10.3389/fimmu.2019.01307. eCollection 2019.
- Kazemian E, Akbari ME, Moradi N, et al. Vitamin D Receptor Genetic Variation and Cancer Biomarkers among Breast Cancer Patients Supplemented with Vitamin D3: A Single-Arm Non-Randomized Before and After Trial. *Nutrients.* 2019 Jun 4;11(6). pii: E1264. doi: 10.3390/nu11061264.
- Keshavarzi Z, Janghorban R, Alipour S, et al. The effect of vitamin D and E vaginal suppositories on tamoxifen-induced vaginal atrophy in women with breast cancer. *Support Care Cancer.* 2019 Apr;27(4):1325-1334. doi: 10.1007/s00520-019-04684-6. Epub 2019 Feb 7.
- Keum N, Lee DH, Greenwood DC, et al. Vitamin D supplementation and total cancer incidence and mortality: a meta-analysis of randomized controlled trials. *Ann Oncol.* 2019 May 1;30(5):733-743. doi: 10.1093/annonc/mdz059.
- Khan NA, Stopsack KH, Allott EH, et al. Intratumoral Sterol-27-Hydroxylase (CYP27A1) Expression in Relation to Cholesterol Synthesis and Vitamin D Signaling and Its Association with Lethal Prostate Cancer. *Cancer Epidemiol Biomarkers Prev.* 2019 Jun;28(6):1052-1058. doi: 10.1158/1055-9965.EPI-18-1083. Epub 2019 Mar 13.
- Kluwe L, Hagel C, Friedrich RE, et al. Vitamin D receptor expression and serum 25(OH)D concentration inversely associates with burden of neurofibromas. *Eur J Cancer Prev.* 2019 May;28(3):220-224. doi: 10.1097/CEJ.0000000000000467.
- Kotlarz A, Przybyszewska M, Swoboda P, et al. Imatinib inhibits the regrowth of human colon cancer cells after treatment with 5-FU and cooperates with vitamin D analogue PRI-2191 in the downregulation of expression of stemness-related genes in 5-FU refractory cells. *J Steroid Biochem Mol Biol.* 2019 May;189:48-62. doi: 10.1016/j.jsbmb.2019.02.003. Epub 2019 Feb 14.
- Kwan AK, Um CY, Rutherford RE, et al. Effects of vitamin D and calcium on expression of MSH2 and transforming growth factors in normal-appearing colorectal mucosa of sporadic colorectal adenoma patients: A randomized clinical trial. *Mol Carcinog.* 2019 Apr;58(4):511-523. doi: 10.1002/mc.22945. Epub 2018 Dec 21.
- Li M, Liu X, Liu N, et al. Association between Polymorphisms of Vitamin D Receptor and Lung Cancer Susceptibility: Evidence from an Updated Meta-analysis. *J Cancer.* 2019 Jun 9;10(16):3639-3649. doi: 10.7150/jca.33431. eCollection 2019.
- Maj E, Trynda J, Maj B, et al. Differential response of lung cancer cell lines to vitamin D derivatives depending on EGFR, KRAS, p53 mutation status and VDR polymorphism. *J Steroid Biochem Mol Biol.* 2019 Jul 18;193:105431. doi: 10.1016/j.jsbmb.2019.105431. [Epub ahead of print].
- Mandle HB, Jahan FA, Bostick RM, et al. Effects of supplemental calcium and vitamin D on tight-junction proteins and mucin-12 expression in the normal rectal mucosa of colorectal adenoma patients. *Mol Carcinog.* 2019 Jul;58(7):1279-1290. doi: 10.1002/mc.23010. Epub 2019 Apr 2.
- Markiewicz A, Brożyna AA, Podgórska E, et al. Vitamin D receptors (VDR), hydroxylases CYP27B1 and CYP24A1 and retinoid-related orphan receptors (ROR) level in human uveal tract and ocular melanoma with different melanization levels. *Sci Rep.* 2019 Jun 24;9(1):9142. doi: 10.1038/s41598-019-45161-8.
- Markotic A, Langer S, Kelava T, et al. Higher Post-Operative Serum Vitamin D Level is Associated with Better Survival Outcome in Colorectal Cancer Patients. *Nutr Cancer.* 2019;71(7):1078-1085. doi: 10.1080/01635581.2019.1597135. Epub 2019 Apr 4.

- Marques da Costa P, Martins I, Neves J, et al. Serum vitamin D levels correlate with the presence and histological grading of colorectal adenomas in peri and postmenopausal women. *Clin Nutr.* 2019 Jun;38(3):1390-1397. doi: 10.1016/j.clnu.2018.06.959. Epub 2018 Jun 21.
- Matsuda A, Ishiguro K, Yan IK, et al. Therapeutic Efficacy of Vitamin D in Experimental c-MET/ β -Catenin-Driven Hepatocellular Cancer. *Gene Expr.* 2019 Apr 18;19(2):151-159. doi: 10.3727/105221618X15355518848281. Epub 2018 Aug 29.
- McNamara M, Rosenberger KD. The Significance of Vitamin D Status in Breast Cancer: A State of the Science Review. *J Midwifery Womens Health.* 2019 May;64(3):276-288. doi: 10.1111/jmwh.12968. Epub 2019 Apr 12. Review.
- Mohamed AA, Aref AM, Talima SM, et al. Association of serum level of vitamin D and VDR polymorphism FokI with the risk or survival of pancreatic cancer in Egyptian population. *Indian J Cancer.* 2019 Apr-Jun;56(2):130-134. doi: 10.4103/ijc.IJC_299_18.
- Moreno-Arrones OM, Zegeer J, Gerbo M, et al. Decreased vitamin D serum levels at melanoma diagnosis are associated with tumor ulceration and high tumor mitotic rate. *Melanoma Res.* 2019 Aug 28. doi: 10.1097/CMR.0000000000000638. [Epub ahead of print].
- Naska A, Lagiou P. Vitamin D: should public health recommendations also consider cancer outcomes? *Ann Oncol.* 2019 May 1;30(5):667-668. doi: 10.1093/annonc/mdz089.
- Parizadeh SM, Ghandehari M, Jafarzadeh-Esfehani R, et al. The Relationship Between Vitamin D Status and Risk of Gastric Cancer. *Nutr Cancer.* 2019 Jul 5:1-9. doi: 10.1080/01635581.2019.1616779. [Epub ahead of print].
- Peiris CD, Jaroudi S, Byrd T. Role of Monthly High-Dose Vitamin D Supplementation in Cancer Prevention. *JAMA Oncol.* 2019 Apr 1;5(4):572. doi: 10.1001/jamaoncol.2018.7214.
- Petrou S, Mamais I, Lavranos G, et al. Effect of Vitamin D Supplementation in Prostate Cancer: A Systematic Review of Randomized Control Trials. *Int J Vitam Nutr Res.* 2018 Feb;88(1-2):100-112. doi: 10.1024/0300-9831/a000494. Epub 2019 Apr 30.
- Piotrowska A, Wierzbicka J, Rybarczyk A, et al. Vitamin D and its low calcemic analogs modulate the anticancer properties of cisplatin and dacarbazine in the human melanoma A375 cell line. *Int J Oncol.* 2019 Apr;54(4):1481-1495. doi: 10.3892/ijo.2019.4725. Epub 2019 Feb 25.
- Provisiero DP, Negri M, de Angelis C, et al. Vitamin D reverts resistance to the mTOR inhibitor everolimus in hepatocellular carcinoma through the activation of a miR-375/ oncogenes circuit. *Sci Rep.* 2019 Aug 12;9(1):11695. doi: 10.1038/s41598-019-48081-9.
- Ranji P, Agah S, Heydari Z, et al. Effects of Lactobacillus acidophilus and Bifidobacterium bifidum probiotics on the serum biochemical parameters, and the vitamin D and leptin receptor genes on mice colon cancer. *Iran J Basic Med Sci.* 2019 Jun;22(6):631-636. doi: 10.22038/ijbms.2019.32624.7806.
- Ratnadiwakara M, Rooke M, Ohms SJ, et al. The SuprMam1 breast cancer susceptibility locus disrupts the vitamin D/ calcium/ parathyroid hormone pathway and alters bone structure in congenic mice. *J Steroid Biochem Mol Biol.* 2019 Apr;188:48-58. doi: 10.1016/j.jsbmb.2018.12.004. Epub 2018 Dec 7.
- Ravid A, Rapaport N, Issachar A, et al. 25-Hydroxyvitamin D Inhibits Hepatitis C Virus Production in Hepatocellular Carcinoma Cell Line by a Vitamin D Receptor-Independent Mechanism. *Int J Mol Sci.* 2019 May 13;20(9). pii: E2367. doi: 10.3390/ijms20092367.
- Razak S, Alam I, Afsar T, et al. A Prospective Evaluation of Serum Vitamin D (1, 25(OH)₂ D₃) and Endogenous Sex Hormone Levels in Colorectal Cancer Patients. *Front Oncol.* 2019 Jun 4;9:468. doi: 10.3389/fonc.2019.00468. eCollection 2019.
- Savoie MB, Paciorek A, Zhang L, et al. Vitamin D Levels in Patients with Colorectal Cancer and Matched Household Members. *J Clin Nutr Food Sci.* 2019;2. pii: 006-009. Epub 2019 Jul 12.
- Scragg R, Camargo CA Jr. Role of Monthly High-Dose Vitamin D Supplementation in Cancer Prevention-In Reply. *JAMA Oncol.* 2019 Apr 1;5(4):572-573. doi: 10.1001/jamaoncol.2018.7233.
- Skrajnowska D, Bobrowska-Korczyk B. Potential Molecular Mechanisms of the Anti-cancer Activity of Vitamin D. *Anticancer Res.* 2019 Jul;39(7):3353-3363. doi: 10.21873/anticancer.13478. Review.
- Sulibhavi A, Rohlfing ML, Jalisi SM, et al. Vitamin D deficiency and its relationship to cancer stage in patients who underwent thyroidectomy for papillary thyroid carcinoma. *Am J Otolaryngol.* 2019 Jul-Aug;40(4):536-541. doi: 10.1016/j.amjoto.2019.04.013. Epub 2019 Apr 22.
- Urashima M, Ohdaira H, Akutsu T, et al. Effect of Vitamin D Supplementation on Relapse-Free Survival Among Patients With Digestive Tract Cancers: The AMATERASU Randomized Clinical Trial. *JAMA.* 2019 Apr 9;321(14):1361-1369. doi: 10.1001/jama.2019.2210.
- Vasilovici AF, Grigore LE, Ungureanu L, et al. Vitamin D receptor polymorphisms and melanoma. *Oncol Lett.* 2019 May;17(5):4162-4169. doi: 10.3892/ol.2018.9733. Epub 2018 Nov 19. Review.
- Vaughan-Shaw PG, Zgaga L, Ooi LY, et al. Low plasma vitamin D is associated with adverse colorectal cancer survival after surgical resection, independent of systemic inflammatory response. *Gut.* 2019 Apr 25. pii: gutjnl-2018-317922. doi: 10.1136/gutjnl-2018-317922. [Epub ahead of print].
- Vaughan-Shaw PG, Zgaga L, Theodoratou E, et al. Whether vitamin D supplementation protects against colorectal cancer risk remains an open question. *Eur J Cancer.* 2019 Jul;115:1-3. doi: 10.1016/j.ejca.2019.03.024. Epub 2019 May 10.
- Vojdeman FJ, Madsen CM, Frederiksen K, et al. Vitamin D levels and cancer incidence in 217,244 individuals from primary health care in Denmark. *Int J Cancer.* 2019 Jul 15;145(2):338-346. doi: 10.1002/ijc.32105. Epub 2019 Jan 20.
- Waterhouse M, English DR, Armstrong BK, et al. A randomized placebo-controlled trial of vitamin D supplementation for reduction of mortality and cancer: Statistical analysis plan for the DHealth Trial. *Contemp Clin Trials Commun.* 2019 Feb 20;14:100333. doi: 10.1016/j.conctc.2019.100333. eCollection 2019 Jun.

- Wijnia JW, Oudman E, Wierdsma AI, et al. Vitamin D supplementation after malnutrition associated with time-related increase of cancer diagnoses: A cohort study of 389 patients with Wernicke-Korsakoff syndrome. *Nutrition*. 2019 Oct;66:166-172. doi: 10.1016/j.nut.2019.05.008. Epub 2019 May 29.
- Wu YQ, Fan WZ, Xue M, et al. 25-OH-vitamin D deficiency identifies poor tumor response in hepatocellular carcinoma treated with transarterial chemoembolization. *Clin Transl Oncol*. 2019 Jun 10. doi: 10.1007/s12094-019-02146-3. [Epub ahead of print].
- Yan Y, Gong Z, Xu Z. Vitamin D supplementation and colorectal cancer prognosis. *Med Oncol*. 2019 Jun 12;36(8):69. doi: 10.1007/s12032-019-1293-x.
- Yu M, Pan L, Sang C, et al. Apolipoprotein M could inhibit growth and metastasis of SMMC7721 cells via vitamin D receptor signaling. *Cancer Manag Res*. 2019 Apr 30;11:3691-3701. doi: 10.2147/CMAR.S202799. eCollection 2019.
- Yuan C, Renfro L, Ambadwar PB, et al. Influence of genetic variation in the vitamin D pathway on plasma 25-hydroxyvitamin D3 levels and survival among patients with metastatic colorectal cancer. *Cancer Causes Control*. 2019 Jul;30(7):757-765. doi: 10.1007/s10552-019-01183-1. Epub 2019 May 18.
- Yuan C, Shui IM, Wilson KM, et al. Circulating 25-hydroxyvitamin D, vitamin D binding protein and risk of advanced and lethal prostate cancer. *Int J Cancer*. 2019 May 15;144(10):2401-2407. doi: 10.1002/ijc.31966. Epub 2018 Dec 6.
- Zhan Y, Zhu H, Liu C, et al. Associations between vitamin D receptor genetic variations and lung cancer: a meta-analysis. *J Biol Regul Homeost Agents*. 2019 May-Jun;33(3):941-946.
- Zhang J, Yang S, Xu B, et al. p62 functions as an oncogene in colorectal cancer through inhibiting apoptosis and promoting cell proliferation by interacting with the vitamin D receptor. *Cell Prolif*. 2019 May;52(3):e12585. doi: 10.1111/cpr.12585. Epub 2019 Feb 22.
- Zhang P, Schatz A, Adeyemi B, et al. Vitamin D and testosterone co-ordinately modulate intracellular zinc levels and energy metabolism in prostate cancer

cells. *J Steroid Biochem Mol Biol*. 2019 May;189:248-258. doi: 10.1016/j.jsbmb.2019.01.006. Epub 2019 Jan 18.

- Zhu M, Tan Z, Luo Z, et al. Association of the vitamin D metabolism gene GC and CYP27B1 polymorphisms with cancer susceptibility: a meta-analysis and trial sequential analysis. *Biosci Rep*. 2019 Aug 29. pii: BSR20190368. doi: 10.1042/BSR20190368. [Epub ahead of print].

OBSTETRICS GYNECOLOGY

- Abdollahi R, Abiri B, Sarbakhsh P, et al. The Effect of Vitamin D Supplement Consumption on Premenstrual Syndrome in Vitamin D-Deficient Young Girls: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial. *Complement Med Res*. 2019 May 17:1-7. doi: 10.1159/000500016. [Epub ahead of print].
- Aji AS, Erwinda E, Yusrawati Y, et al. Vitamin D deficiency status and its related risk factors during early pregnancy: a cross-sectional study of pregnant Minangkabau women, Indonesia. *BMC Pregnancy Childbirth*. 2019 May 22;19(1):183. doi: 10.1186/s12884-019-2341-4.
- Albertini F, Marquant E, Reynaud R, et al. Two cases of fractures in neonates associated with maternofetal vitamin D deficiency. *Arch Pediatr*. 2019 Jul 25. pii: S0929-693X(19)30107-1. doi: 10.1016/j.arcped.2019.06.004. [Epub ahead of print].
- Anusha K, Hettiaratchi U, Gunasekera D, et al. Maternal Vitamin D Status and Its Effect on Vitamin D Levels in Early Infancy in a Tertiary Care Centre in Sri Lanka. *Int J Endocrinol*. 2019 Jul 9;2019:9017951. doi: 10.1155/2019/9017951. eCollection 2019.
- Arab A, Golpour-Hamedani S, Rafie N. The Association Between Vitamin D and Premenstrual Syndrome: A Systematic Review and Meta-Analysis of Current Literature. *J Am Coll Nutr*. 2019 May 10:1-9. doi: 10.1080/07315724.2019.1566036. [Epub ahead of print].
- Arslan E, Gorkem U, Togrul C. Is There a Relationship Between Vitamin D Deficiency Status and PCOS in Infertile Women? *Geburtshilfe Frauenheilkd*. 2019 Jul;79(7):723-730. doi: 10.1055/a-0871-6831. Epub

2019 Jul 10.

- Baek JC, Jo JY, Lee SM, et al. Differences in 25-hydroxy vitamin D and vitamin D-binding protein concentrations according to the severity of endometriosis. *Clin Exp Reprod Med*. 2019 Aug 1. doi: 10.5653/term.2018.00416. [Epub ahead of print].
- Baki Yildirim S, Koşar Can Ö. An investigation of vitamin D deficiency in pregnant women and their infants in Giresun province located in the Black Sea region of Turkey. *J Obstet Gynaecol*. 2019 May;39(4):498-503. doi: 10.1080/01443615.2018.1539469. Epub 2019 Feb 16.
- Bärebring L, O'Connell M, Winkvist A, et al. Serum cortisol and vitamin D status are independently associated with blood pressure in pregnancy. *J Steroid Biochem Mol Biol*. 2019 May;189:259-264. doi: 10.1016/j.jsbmb.2019.01.019. Epub 2019 Jan 30.
- Barišić A, Pereza N, Hodžić A, et al. Genetic variation in the maternal vitamin D receptor FOKI gene as a risk factor for recurrent pregnancy loss. *J Matern Fetal Neonatal Med*. 2019 Aug 25:1-281. doi: 10.1080/14767058.2019.1660768. [Epub ahead of print].
- Bednarska-Czerwińska A, Olszak-Wąsik K, Olejek A, et al. Vitamin D and Anti-Müllerian Hormone Levels in Infertility Treatment: The Change-Point Problem. *Nutrients*. 2019 May 10;11(5). pii: E1053. doi: 10.3390/nu11051053.
- Beentjes CHL, Taylor-King JP, Bayani A, et al. Defining vitamin D status using multi-metabolite mathematical modelling: A pregnancy perspective. *J Steroid Biochem Mol Biol*. 2019 Jun;190:152-160. doi: 10.1016/j.jsbmb.2019.03.024. Epub 2019 Mar 26.
- Bilic M, Qamar H, Onoyowwi A, et al. Prenatal vitamin D and cord blood insulin-like growth factors in Dhaka, Bangladesh. *Endocr Connect*. 2019 May 1. pii: EC-19-0123.R1. doi: 10.1530/EC-19-0123. [Epub ahead of print].
- Bøllehuus Hansen L, Lorenzen M, Bentin-Ley U, et al. Presence of the vitamin D inactivating enzyme CYP24A1 in human sperm and prediction of the success of intrauterine insemination: A prospective study. *J Steroid*

- Biochem Mol Biol. 2019 Jul;191:105353. doi: 10.1016/j.jsmb.2019.04.002. Epub 2019 Apr 6.
- Borges CC, Bringham I, Aguila MB, et al. Vitamin D restriction enhances periovarian adipose tissue inflammation in a model of menopause. *Climacteric*. 2019 Apr 23:1-6. doi: 10.1080/13697137.2019.1597841. [Epub ahead of print].
 - Bosdou JK, Konstantinidou E, Anagnostis P, et al. Vitamin D and Obesity: Two Interacting Players in the Field of Infertility. *Nutrients*. 2019 Jun 27;11(7). pii: E1455. doi: 10.3390/nu11071455. Review.
 - Branco JC, Cardoso MF, Anapaz V, et al. Vitamin D Deficiency in a Portuguese Cohort of Patients with Inflammatory Bowel Disease: Prevalence and Relation to Disease Activity. *GE Port J Gastroenterol*. 2019 May;26(3):155-162. doi: 10.1159/000488744. Epub 2018 May 14.
 - Brodowski L, Schröder-Heurich B, Hubel CA, et al. Role of vitamin D in cell-cell interaction of fetal endothelial progenitor cells and umbilical cord endothelial cells in a preeclampsia-like model. *Am J Physiol Cell Physiol*. 2019 Aug 1;317(2):C348-C357. doi: 10.1152/ajpcell.00109.2019. Epub 2019 Jun 5.
 - Burke NL, Harville EW, Wickliffe JK, et al. Determinants of vitamin D status among Black and White low-income pregnant and non-pregnant reproductive-aged women from Southeast Louisiana. *BMC Pregnancy Childbirth*. 2019 Apr 2;19(1):111. doi: 10.1186/s12884-019-2246-2.
 - Chikwati RP, Musarurwa C, Duri K, et al. Maternal plasma vitamin D levels and associated determinants in late pregnancy in Harare, Zimbabwe: a cross-sectional study. *BMC Pregnancy Childbirth*. 2019 Jun 28;19(1):218. doi: 10.1186/s12884-019-2362-z.
 - Cho MC, Kim JH, Jung MH, et al. Analysis of vitamin D-binding protein (VDBP) gene polymorphisms in Korean women with and without endometriosis. *Clin Exp Reprod Med*. 2019 Aug 13. doi: 10.5653/cerm.2019.00122. [Epub ahead of print].
 - Chu J, Gallos I, Tobias A, et al. Vitamin D and assisted reproductive treatment outcome: a prospective cohort study. *Reprod Health*. 2019 Jul 15;16(1):106. doi: 10.1186/s12978-019-0769-7.
 - Cito G, Cacci A, Micelli E, et al. Vitamin D and Male Fertility: An Updated Review. *World J Mens Health*. 2019 May 17. doi: 10.5534/wjmh.190057. [Epub ahead of print] Review.
 - Davis EM, Peck JD, Hansen KR, et al. Associations between vitamin D levels and polycystic ovary syndrome phenotypes. *Minerva Endocrinol*. 2019 Jun;44(2):176-184. doi: 10.23736/S0391-1977.18.02824-9. Epub 2018 Apr 12.
 - Dawodu A, Salameh KM, AlJanahi NS, et al. The Effect of High-Dose Postpartum Maternal Vitamin D Supplementation Alone Compared with Maternal Plus Infant Vitamin D Supplementation in Breastfeeding Infants in a High-Risk Population. A Randomized Controlled Trial. *Nutrients*. 2019 Jul 17;11(7). pii: E1632. doi: 10.3390/nu11071632.
 - Dwarkanath P, Vinotha P, Thomas T, et al. Relationship of Early Vitamin D Concentrations and Gestational Diabetes Mellitus in Indian Pregnant Women. *Front Nutr*. 2019 Aug 6;6:116. doi: 10.3389/fnut.2019.00116. eCollection 2019.
 - Ede G, Keskin U, Cemal Yenen M, et al. Lower vitamin D levels during the second trimester are associated with developing gestational diabetes mellitus: an observational cross-sectional study. *Gynecol Endocrinol*. 2019 Jun;35(6):525-528. doi: 10.1080/09513590.2018.1548593. Epub 2019 Jan 1.
 - Esmeraldo CUP, Martins MEP, Maia ER, et al. Vitamin D in Term Newborns: Relation with Maternal Concentrations and Birth Weight. *Ann Nutr Metab*. 2019 Aug 7:1-8. doi: 10.1159/000502044. [Epub ahead of print].
 - Fang K, He Y, Mu M, et al. Maternal vitamin D deficiency during pregnancy and low birth weight: a systematic review and meta-analysis. *J Matern Fetal Neonatal Med*. 2019 Jul 8:1-7. doi: 10.1080/14767058.2019.1623780. [Epub ahead of print].
 - Farajian-Mashhadi F, Eskandari F, Rezaei M, et al. The possible role of maternal and placental vitamin D receptor polymorphisms and haplotypes in pathogenesis of preeclampsia. *Clin Exp Hypertens*. 2019 Apr 20:1-6. doi: 10.1080/10641963.2019.1601203. [Epub ahead of print].
 - Figueiredo ACC, Carrilho TRB, Batalha MA, et al. Association between vitamin D status during pregnancy and total gestational weight gain and postpartum weight retention: a prospective cohort. *Eur J Clin Nutr*. 2019 Jul 15. doi: 10.1038/s41430-019-0465-2. [Epub ahead of print].
 - Gaffer AA, Rayis DA, Elhussein OG, et al. Vitamin D status in Sudanese pregnant women: a cross-sectional study. *Trans R Soc Trop Med Hyg*. 2019 Jul 4. pii: trz054. doi: 10.1093/trstmh/trz054. [Epub ahead of print].
 - Ghanbari Z, Karamali M, Mirhosseini N, et al. Vitamin D Status in Women with Pelvic Floor Disorders: A Meta-Analysis of Observational Studies. *J Midlife Health*. 2019 Apr-Jun;10(2):57-62. doi: 10.4103/jmh.JMH_9_19. Review.
 - Giampaolino P, Della Corte L, Foreste V, et al. Is there a relationship between Vitamin D and Endometriosis? An overview of literature. *Curr Pharm Des*. 2019 Jul 21. doi: 10.2174/1381612825666190722095401. [Epub ahead of print].
 - Hadjadj L, Pál É, Monori-Kiss A, et al. Vitamin D deficiency and androgen excess result eutrophic remodeling and reduced myogenic adaptation in small cerebral arterioles in female rats. *Gynecol Endocrinol*. 2019 Jun;35(6):529-534. doi: 10.1080/09513590.2018.1554037. Epub 2019 Jan 9.
 - Hajhashemi M, Ansari M, Haghollahi F, et al. The effect of vitamin D supplementation on the size of uterine leiomyoma in women with vitamin D deficiency. *Caspian J Intern Med*. 2019 Spring;10(2):125-131. doi: 10.22088/cjim.10.2.125.
 - Hajhashemi M, Khorsandi A, Haghollahi F. Comparison of sun exposure versus vitamin D supplementation for pregnant women with vitamin D deficiency. *J Matern Fetal Neonatal Med*. 2019 Apr;32(8):1347-1352. doi: 10.1080/14767058.2017.1406470. Epub 2017 Nov 28.
 - Hyde NK, Brennan-Olsen SL, Mohebbi M, et al. Maternal vitamin D in pregnancy and offspring bone measures in childhood:

- The Vitamin D in Pregnancy study. *Bone*. 2019 Jul;124:126-131. doi: 10.1016/j.bone.2019.04.013. Epub 2019 Apr 24.
- Janbek J, Specht IO, Heitmann BL. Associations between vitamin D status in pregnancy and offspring neurodevelopment: a systematic literature review. *Nutr Rev*. 2019 May 1;77(5):330-349. doi: 10.1093/nutrit/nyy071.
 - Jefferson KK, Parikh HI, Garcia EM, et al. Relationship between vitamin D status and the vaginal microbiome during pregnancy. *J Perinatol*. 2019 Jun;39(6):824-836. doi: 10.1038/s41372-019-0343-8. Epub 2019 Mar 11.
 - Ji J, Zhai H, Zhou H, et al. The role and mechanism of vitamin D-mediated regulation of Treg/Th17 balance in recurrent pregnancy loss. *Am J Reprod Immunol*. 2019 Jun;81(6):e13112. doi: 10.1111/aji.13112. Epub 2019 Apr 18.
 - Jiang L, Ji L, Song J, et al. The effect of serum vitamin D levels in couples on embryo development and clinical outcomes. *Reprod Biomed Online*. 2019 May;38(5):699-710. doi: 10.1016/j.rbmo.2018.12.036. Epub 2018 Dec 26.
 - Jin D, Tao RX, Yin M, et al. [Association between vitamin D level and lipid metabolism during second trimester]. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2019 Jul 10;40(7):815-820. doi: 10.3760/cma.j.issn.0254-6450.2019.07.016. Chinese.
 - Jin D, Yao MN, Yin M, et al. [The association of Vitamin D levels with lipid metabolism during pregnancy]. *Zhonghua Yu Fang Yi Xue Za Zhi*. 2019 Jun 6;53(6):628-632. doi: 10.3760/cma.j.issn.0253-9624.2019.06.017. Review. Chinese.
 - Judistiani RTD, Madjid TH, Irianti S, et al. Association of first trimester maternal vitamin D, ferritin and hemoglobin level with third trimester fetal biometry: result from cohort study on vitamin D status and its impact during pregnancy and childhood in Indonesia. *BMC Pregnancy Childbirth*. 2019 Apr 2;19(1):112. doi: 10.1186/s12884-019-2263-1.
 - Judistiani RTD, Nirmala SA, Rahmawati M, et al. Optimizing ultraviolet B radiation exposure to prevent vitamin D deficiency among pregnant women in the tropical zone: report from cohort study on vitamin D status and its impact during pregnancy in Indonesia. *BMC Pregnancy Childbirth*. 2019 Jun 21;19(1):209. doi: 10.1186/s12884-019-2306-7.
 - Kadoura S, Alhalabi M, Nattouf AH. Effect of Calcium and Vitamin D Supplements as an Adjuvant Therapy to Metformin on Menstrual Cycle Abnormalities, Hormonal Profile, and IGF-1 System in Polycystic Ovary Syndrome Patients: A Randomized, Placebo-Controlled Clinical Trial. *Adv Pharmacol Sci*. 2019 Jul 1;2019:9680390. doi: 10.1155/2019/9680390. eCollection 2019.
 - Kamrul-Hasan AB, Aalpona FZ. Association of Vitamin D Status with Metabolic Syndrome and its Components in Polycystic Ovary Syndrome. *Mymensingh Med J*. 2019 Jul;28(3):547-552.
 - Kanatani KT, Adachi Y, Hamazaki K, et al. Association between vitamin D deficiency and allergic symptom in pregnant women. *PLoS One*. 2019 Apr 10;14(4):e0214797. doi: 10.1371/journal.pone.0214797. eCollection 2019.
 - Keskin Ü, Basat S. The effect of vitamin D levels on gastrointestinal bleeding in patients with warfarin therapy. *Blood Coagul Fibrinolysis*. 2019 Aug 13. doi: 10.1097/MBC.0000000000000841. [Epub ahead of print].
 - Kokanalı D, Karaca M, Ozakşit G, et al. Serum Vitamin D Levels in Fertile and Infertile Women with Polycystic Ovary Syndrome. *Geburtshilfe Frauenheilkd*. 2019 May;79(5):510-516. doi: 10.1055/a-0828-7798. Epub 2019 Mar 29.
 - Kong F, Du C, Wang Y. MicroRNA-9 affects isolated ovarian granulosa cells proliferation and apoptosis via targeting vitamin D receptor. *Mol Cell Endocrinol*. 2019 Apr 15;486:18-24. doi: 10.1016/j.mce.2019.02.012. Epub 2019 Feb 19.
 - Kumar J, Yadav A. Vitamin D deficiency pandemic among pregnant women. *J Family Med Prim Care*. 2019 Apr;8(4):1515-1516. doi: 10.4103/jfmpc.jfmpc_202_19.
 - Leere JS, Vestergaard P. Calcium Metabolic Disorders in Pregnancy: Primary Hyperparathyroidism, Pregnancy-Induced Osteoporosis, and Vitamin D Deficiency in Pregnancy. *Endocrinol Metab Clin North Am*. 2019 Sep;48(3):643-655. doi: 10.1016/j.ecl.2019.05.007. Epub 2019 Jun 14. Review.
 - Li X, Wang Y, Gao G, et al. High Prevalence of Vitamin D Deficiency in Pregnant Women in South China. *Int J Vitam Nutr Res*. 2019 Jun 12:1-6. doi: 10.1024/0300-9831/a000592. [Epub ahead of print].
 - Liu X, Zhang W, Xu Y, et al. Effect of vitamin D status on normal fertilization rate following in vitro fertilization. *Reprod Biol Endocrinol*. 2019 Jul 18;17(1):59. doi: 10.1186/s12958-019-0500-0.
 - Mansour-Ghanaei F, Pourmasoumi M, Hadi A, et al. The Efficacy of Vitamin D Supplementation against Nonalcoholic Fatty Liver Disease: A Meta-Analysis. *J Diet Suppl*. 2019 Jul 1:1-19. doi: 10.1080/19390211.2019.1624671. [Epub ahead of print].
 - Masjedi F, Keshtgar S, Agah F, et al. Association Between Sex Steroids and Oxidative Status with Vitamin D Levels in Follicular Fluid of Non-obese PCOS and Healthy Women. *J Reprod Infertil*. 2019 Jul-Sep;20(3):132-142.
 - Menichini D, Facchinetti F. Effects of vitamin D supplementation in women with polycystic ovary syndrome: a review. *Gynecol Endocrinol*. 2019 Jun 12:1-5. doi: 10.1080/09513590.2019.1625881. [Epub ahead of print].
 - Miliku K, Felix JF, Voortman T, et al. Associations of maternal and fetal vitamin D status with childhood body composition and cardiovascular risk factors. *Matern Child Nutr*. 2019 Apr;15(2):e12672. doi: 10.1111/mcn.12672. Epub 2018 Sep 21.
 - Muyayalo KP, Huang XB, Qian Z, et al. Low circulating levels of vitamin D may contribute to the occurrence of preeclampsia through deregulation of Treg /Th17 cell ratio. *Am J Reprod Immunol*. 2019 Jul 12:e13168. doi: 10.1111/aji.13168. [Epub ahead of print].
 - Nassar SZ, Badae NM. Protective effect of vitamin D supplementation in a rat model of preeclampsia: a possible implication of chemerin. *Hypertens Pregnancy*. 2019 Aug;38(3):149-156. doi: 10.1080/10641955.2019.1597108. Epub 2019 Mar 29.
 - Nema J, Sundrani D, Joshi S. Role

- of vitamin D in influencing angiogenesis in preeclampsia. *Hypertens Pregnancy*. 2019 Jul 24;1-7. doi: 10.1080/10641955.2019.1647231. [Epub ahead of print].
- Nørrisgaard PE, Haubek D, Kühnisch J, et al. Association of High-Dose Vitamin D Supplementation During Pregnancy With the Risk of Enamel Defects in Offspring: A 6-Year Follow-up of a Randomized Clinical Trial. *JAMA Pediatr*. 2019 Aug 5. doi: 10.1001/jamapediatrics.2019.2545. [Epub ahead of print].
 - Palacios C, Kostiuk LK, Peña-Rosas JP. Vitamin D supplementation for women during pregnancy. *Cochrane Database Syst Rev*. 2019 Jul 26;7:CD008873. doi: 10.1002/14651858.CD008873.pub4. Review.
 - Paliga M, Horak S. The impact of vitamin D on the course and results of IMSI treatment in patients with endometriosis. *Minerva Med*. 2019 Jun 25. doi: 10.23736/S0026-4806.19.06076-2. [Epub ahead of print]
 - Pereira-Santos M, Carvalho GQ, Dos Santos DB, et al. Influence of vitamin D serum concentration, prenatal care and social determinants on birth weight: a northeastern Brazilian cohort study. *Br J Nutr*. 2019 Aug 14;122(3):284-292. doi: 10.1017/S0007114519001004. Epub 2019 Jun 11.
 - Pereira-Santos M, Carvalho GQ, Louro ID, et al. Polymorphism in the vitamin D receptor gene is associated with maternal vitamin D concentration and neonatal outcomes: A Brazilian cohort study. *Am J Hum Biol*. 2019 Jul;31(4):e23250. doi: 10.1002/ajhb.23250. Epub 2019 May 9.
 - Powell AM, Shary JR, Loudon C, et al. Association of Bacterial Vaginosis with Vitamin D in Pregnancy: Secondary Analysis from the Kellogg Pregnancy Study. *AJP Rep*. 2019 Jul;9(3):e226-e234. doi: 10.1055/s-0039-1693163. Epub 2019 Jul 11.
 - Rezavand N, Tabarok S, Rahimi Z, et al. The effect of VDR gene polymorphisms and vitamin D level on blood pressure, risk of preeclampsia, gestational age, and body mass index. *J Cell Biochem*. 2019 Apr;120(4):6441-6448. doi: 10.1002/jcb.27934. Epub 2018 Nov 11.
 - Rudnicka A, Adoamnei E, Noguera-Velasco JA, et al. Vitamin D status is not associated with reproductive parameters in young Spanish men. *Andrology*. 2019 Aug 5. doi: 10.1111/andr.12690. [Epub ahead of print].
 - Salehpour S, Hosseini S, Nazari L, et al. The Effect of Vitamin D Supplementation on Insulin Resistance among Women with Polycystic Ovary Syndrome. *JBRA Assist Reprod*. 2019 Aug 22;23(3):235-238. doi: 10.5935/1518-0557.20190032.
 - Shen Y, Pu L, Si S, et al. Vitamin D nutrient status during pregnancy and its influencing factors. *Clin Nutr*. 2019 Jun 8. pii: S0261-5614(19)30256-0. doi: 10.1016/j.clnu.2019.06.002. [Epub ahead of print].
 - Shi D, Wang D, Meng Y, et al. Maternal vitamin D intake during pregnancy and risk of asthma and wheeze in children: a systematic review and meta-analysis of observational studies. *J Matern Fetal Neonatal Med*. 2019 May 7:1-7. doi: 10.1080/14767058.2019.1611771. [Epub ahead of print].
 - Siqueira TW, Araujo Júnior E, Mattar R, et al. Assessment of Polymorphism of the VDR Gene and Serum Vitamin D Values in Gestational Diabetes Mellitus. *Rev Bras Ginecol Obstet*. 2019 Jul;41(7):425-431. doi: 10.1055/s-0039-1693678. Epub 2019 Jul 25.
 - Sliva J. Importance of vitamin D in gynecology. *Cas Lek Cesk*. 2019 Summer;158(3-4):138-140.
 - Smith M, O'Brien EC, Alberdi G, et al. Association between vitamin D status in early pregnancy and atopy in offspring in a vitamin D deplete cohort. *Ir J Med Sci*. 2019 Aug 29. doi: 10.1007/s11845-019-02078-5. [Epub ahead of print].
 - Sudfeld CR, Jacobson DL, Rueda NM, et al. Third Trimester Vitamin D Status Is Associated With Birth Outcomes and Linear Growth of HIV-Exposed Uninfected Infants in the United States. *J Acquir Immune Defic Syndr*. 2019 Jul 1;81(3):336-344. doi: 10.1097/QAI.0000000000002041.
 - Szafarowska M, Dziech E, Kaleta B, et al. Anti-Müllerian hormone level is associated with vitamin D receptor polymorphisms in women with polycystic ovary syndrome. *J Assist Reprod Genet*. 2019 Jun;36(6):1281-1289. doi: 10.1007/s10815-019-01472-3. Epub 2019 May 14.
 - Tamblyn JA, Jeffery L, Susarla R, et al. Transcriptomic analysis of vitamin D responses in uterine and peripheral NK cells. *Reproduction*. 2019 Jun 1. pii: REP-18-0509.R1. doi: 10.1530/REP-18-0509. [Epub ahead of print].
 - Tanvig MH, Jensen DM, Andersen MS, et al. Vitamin D levels were significantly higher during and after lifestyle intervention in pregnancy: a randomised controlled trial. *Acta Obstet Gynecol Scand*. 2019 Aug 29. doi: 10.1111/aogs.13722. [Epub ahead of print].
 - Thorsteinsdottir F, Maslova E, Jacobsen R, et al. Exposure to Vitamin D Fortification Policy in Prenatal Life and the Risk of Childhood Asthma: Results From the D-Tect Study. *Nutrients*. 2019 Apr 24;11(4). pii: E924. doi: 10.3390/nu11040924.
 - Tohma YA, Akad S, Colak E, et al. Vitamin D receptor gene TaqI single nucleotide polymorphism is not associated with lead levels in maternal and umbilical cord blood. *J Matern Fetal Neonatal Med*. 2019 Aug;32(15):2506-2511. doi: 10.1080/14767058.2018.1439011. Epub 2018 Feb 20.
 - Trummer C, Schwetz V, Kollmann M, et al. Effects of vitamin D supplementation on metabolic and endocrine parameters in PCOS: a randomized-controlled trial. *Eur J Nutr*. 2019 Aug;58(5):2019-2028. doi: 10.1007/s00394-018-1760-8. Epub 2018 Jun 26.
 - Vafaei H, Asadi N, Kasraeian M, et al. Positive effect of low dose vitamin D supplementation on growth of fetal bones: A randomized prospective study. *Bone*. 2019 May;122:136-142. doi: 10.1016/j.bone.2019.02.022. Epub 2019 Feb 21.
 - Van Winden KR, Bearden A, Kono N, et al. Low Bioactive Vitamin D Is Associated with Pregnancy-Induced Hypertension in a Cohort of Pregnant HIV-Infected Women Sampled Over a 23-Year Period. *Am J Perinatol*. 2019 Jul 31. doi: 10.1055/s-0039-1694007. [Epub ahead of print].
 - Woo J, Giurgescu C, Wagner CL. Evidence of an Association Between Vitamin D Deficiency and Preterm Birth and Preeclampsia: A Critical Review. *J Midwifery Womens*

- Health. 2019 Aug 14. doi: 10.1111/jmwh.13014. [Epub ahead of print] Review.
- Woon FC, Chin YS, Ismail IH, et al. Vitamin D deficiency during pregnancy and its associated factors among third trimester Malaysian pregnant women. *PLoS One*. 2019 Jun 24;14(6):e0216439. doi: 10.1371/journal.pone.0216439. eCollection 2019.
 - Xu J, Gu Y, Lewis DF, Cooper DB, et al. Downregulation of vitamin D receptor and miR-126-3p expression contributes to increased endothelial inflammatory response in preeclampsia. *Am J Reprod Immunol*. 2019 Jul 19:e13172. doi: 10.1111/aji.13172. [Epub ahead of print].
 - Zhang Q, Chen H, Wang Y, et al. Severe vitamin D deficiency in the first trimester is associated with placental inflammation in high-risk singleton pregnancy. *Clin Nutr*. 2019 Aug;38(4):1921-1926. doi: 10.1016/j.clnu.2018.06.978. Epub 2018 Jul 9.
 - Zhao J, Liu S, Wang Y, et al. Vitamin D improves in-vitro fertilization outcomes in infertile women with polycystic ovary syndrome and insulin resistance. *Minerva Med*. 2019 Jun;110(3):199-208. doi: 10.23736/S0026-4806.18.05946-3. Epub 2019 Jan 4.
 - Zhao Y, Wang L, Liu H, et al. Particulate Air Pollution Exposure and Plasma Vitamin D Levels in Pregnant Women: A Longitudinal Cohort Study. *J Clin Endocrinol Metab*. 2019 Aug 1;104(8):3320-3326. doi: 10.1210/jc.2018-02713.
 - Zhou Z, Li X, Jiang G, et al. [Vitamin D down-regulates microRNA-21 expression to promote human placental trophoblast cell migration and invasion in vitro]. *Nan Fang Yi Ke Da Xue Xue Bao*. 2019 Apr 30;39(4):437-442. doi: 10.12122/j.issn.1673-4254.2019.04.09. Chinese.
 - Zhu B, Huang K, Yan S, et al. VDR Variants rather than Early Pregnancy Vitamin D Concentrations Are Associated with the Risk of Gestational Diabetes: The Ma'anshan Birth Cohort (MABC) Study. *J Diabetes Res*. 2019 Jun 24;2019:8313901. doi: 10.1155/2019/8313901. eCollection 2019.
 - T, et al. Prenatal vitamin D levels and child wheeze and asthma. *J Matern Fetal Neonatal Med*. 2019 May 2:1-9. doi: 10.1080/14767058.2019.1607286. [Epub ahead of print].
 - Adikaram SGS, Samaranyake DBDL, Atapattu N, et al. Prevalence of vitamin D deficiency and its association with metabolic derangements among children with obesity. *BMC Pediatr*. 2019 Jun 8;19(1):186. doi: 10.1186/s12887-019-1558-8.
 - Agrawal A, Gupta A, Shrivastava J. Role of Vitamin-D Deficiency in Term Neonates with Late-Onset Sepsis: A Case-Control Study. *J Trop Pediatr*. 2019 Apr 21. pii: fmz021. doi: 10.1093/tropej/fmz021. [Epub ahead of print].
 - Ahmed AE, Sakhr HM, Hassan MH, et al. Vitamin D receptor rs7975232, rs731236 and rs1544410 single nucleotide polymorphisms, and 25-hydroxyvitamin D levels in Egyptian children with type 1 diabetes mellitus: effect of vitamin D co-therapy. *Diabetes Metab Syndr Obes*. 2019 May 14;12:703-716. doi: 10.2147/DMSO.S201525. eCollection 2019.
 - Akinkugbe AA, Moreno O, Brickhouse TH. Serum cotinine, vitamin D exposure levels and dental caries experience in U.S. adolescents. *Community Dent Oral Epidemiol*. 2019 Apr;47(2):185-192. doi: 10.1111/cdoe.12442. Epub 2018 Dec 10.
 - Alavi Foumani A, Mehrdad M, Jafarinezhad A, et al. Impact of vitamin D on spirometry findings and quality of life in patients with chronic obstructive pulmonary disease: a randomized, double-blinded, placebo-controlled clinical trial. *Int J Chron Obstruct Pulmon Dis*. 2019 Jul 8;14:1495-1501. doi: 10.2147/COPD.S207400. eCollection 2019.
 - Almoudi MM, Hussein AS, Abu Hassan MI, et al. Dental caries and vitamin D status in children in Asia. *Pediatr Int*. 2019 Apr;61(4):327-338. doi: 10.1111/ped.13801. Review.
 - Alonso MA, Mantecón L, Santos F. Vitamin D deficiency in children: a challenging diagnosis! *Pediatr Res*. 2019 Apr;85(5):596-601. doi: 10.1038/s41390-019-0289-8. Epub 2019 Jan 17. Review.
 - Alshamrani HA, Alloub H, Burke D, et al. Vitamin D intake, calcium intake and physical activity among children with wrist and ankle injuries and the association with fracture risk. *Nutr Health*. 2019 Jun;25(2):113-118. doi: 10.1177/0260106019826422. Epub 2019 Feb 6.
 - Aly H, Mohsen L, Bhattacharjee I, et al. Vitamin D supplementation and T Cell Regulation In Preterm Infants: A Randomized Controlled Trial. *J Pediatr Gastroenterol Nutr*. 2019 Jul 22. doi: 10.1097/MPG.0000000000002448. [Epub ahead of print].
 - Angurana SK, Dayal D. Vitamin D Supplementation: Do Indian Children Need Higher Dose? *Indian Pediatr*. 2019 May 15;56(5):429.
 - Anik A, Akbaba Ö. Vitamin D Deficiency and Insufficiency According to the Current Criteria for Children: Vitamin D Status of Elementary School Children in Turkey. *J Clin Res Pediatr Endocrinol*. 2019 Jul 24. doi: 10.4274/jcrpe.galenos.2019.0103. [Epub ahead of print]
 - Archontogeorgis K, Papanas N, Rizos EC, et al. Reduced Serum Vitamin D Levels Are Associated with Insulin Resistance in Patients with Obstructive Sleep Apnea Syndrome. *Medicina (Kaunas)*. 2019 May 20;55(5). pii: E174. doi: 10.3390/medicina55050174.
 - Arman D, Çetiner Z. The relationship between serum vitamin D levels and intima-media thickness in term infants. *Eur J Pediatr*. 2019 Jul;178(7):1087-1093. doi: 10.1007/s00431-019-03389-6. Epub 2019 May 22.
 - Aul AJ, Fischer PR, O'Grady JS, et al. Population-Based Incidence of Potentially Life-Threatening Complications of Hypocalcemia and the Role of Vitamin D Deficiency. *J Pediatr*. 2019 Aug;211:98-104.e4. doi: 10.1016/j.jpeds.2019.02.018. Epub 2019 Apr 4.
 - Bagińska J, Liszewska A, Korzeniecka-Kozerska A. The role of vitamin D replacement therapy in serum FGF23 concentration in children with myelomeningocele compared with healthy children - a preliminary study. *J Pediatr Endocrinol Metab*. 2019 Aug 29. pii: /j/jpem.ahead-of-print/jpem-2018-0509/jpem-2018-0509.xml. doi: 10.1515/jpem-2018-0509. [Epub ahead of print].

PEDIATRICS

- Adams SN, Adgent MA, Gebretsadik
- Alshamrani HA, Alloub H, Burke D, et al. Vi-

- Baneen U, Naseem S. Correlation of severity of chronic obstructive pulmonary disease with serum vitamin-D level. *J Family Med Prim Care*. 2019 Jul;8(7):2268-2277. doi: 10.4103/jfmpc.jfmpc_404_19.
- Bayramoğlu E, Şavaş Erdevi Ş, Shi Y, et al. Experience of intravenous calcium treatment and long-term responses to treatment in a patient with hereditary vitamin D-resistant rickets resulting from a novel mutation. *J Pediatr Endocrinol Metab*. 2019 Jun 26;32(6):647-651. doi: 10.1515/jpem-2018-0399.
- Benjeddou K, Qandoussi L, Mekkaoui B, et al. Effect of multiple micronutrient fortified milk consumption on vitamin D status among school-aged children in rural region of Morocco. *Appl Physiol Nutr Metab*. 2019 May;44(5):461-467. doi: 10.1139/apnm-2018-0368. Epub 2018 Oct 4.
- Boucher BJ. Comment on Di Marco, N., Kaufman, J., Rodda, C.P. Shedding Light on Vitamin D Status and Its Complexities during Pregnancy, Infancy and Childhood: An Australian Perspective. *Int. J. Environ. Res. Public Health* 2019, 16 (4), 538, doi:10.3390/ijerph16040538. *Int J Environ Res Public Health*. 2019 Apr 16;16(8). pii: E1373. doi: 10.3390/ijerph16081373.
- Boutaoui N, Puranik S, Zhang R, et al. Epigenome-wide effects of vitamin D on asthma bronchial epithelial cells. *Epigenetics*. 2019 Sep;14(9):844-849. doi: 10.1080/15592294.2019.1622993. Epub 2019 Jun 3.
- Camargo CA, Sluyter J, Stewart AW, et al. Effect of monthly high-dose vitamin D supplementation on acute respiratory infections in older adults: A randomized controlled trial. *Clin Infect Dis*. 2019 Aug 17. pii: ciz801. doi: 10.1093/cid/ciz801. [Epub ahead of print].
- Cariolou M, Cupp MA, Evangelou E, et al. Importance of vitamin D in acute and critically ill children with subgroup analyses of sepsis and respiratory tract infections: a systematic review and meta-analysis. *BMJ Open*. 2019 May 22;9(5):e027666. doi: 10.1136/bmjopen-2018-027666.
- Chang SW, Lee HC. Vitamin D and health - The missing vitamin in humans. *Pediatr Neonatol*. 2019 Jun;60(3):237-244. doi: 10.1016/j.pedneo.2019.04.007. Epub 2019 Apr 17. Review.
- Chawla D, Fuemmeler B, Benjamin-Neelon SE, et al. Early prenatal vitamin D concentrations and social-emotional development in infants. *J Matern Fetal Neonatal Med*. 2019 May;32(9):1441-1448. doi: 10.1080/14767058.2017.1408065. Epub 2017 Dec 4.
- Chlebna-Sokół D, Konstantynowicz J, Abramowicz P, et al. Evidence of a significant vitamin D deficiency among 9-13-year-old Polish children: results of a multicentre study. *Eur J Nutr*. 2019 Aug;58(5):2029-2036. doi: 10.1007/s00394-018-1756-4. Epub 2018 Jun 23.
- Clemente MG, Argiolas D, Blue ME, et al. Family-related factors may affect serum vitamin D levels. *Acta Paediatr*. 2019 Aug 20. doi: 10.1111/apa.14978. [Epub ahead of print].
- Day RE, Krishnarao R, Sahota P, et al. We still don't know that our children need vitamin D daily: a study of parents' understanding of vitamin D requirements in children aged 0-2 years. *BMC Public Health*. 2019 Aug 15;19(1):1119. doi: 10.1186/s12889-019-7340-x.
- Della Volpe A, Ricci G, Ralli M, et al. The effects of oral supplements with *Sambucus nigra*, Zinc, Tyndallized *Lactobacillus acidophilus* (H122), Arabinogalactans, vitamin D, vitamin E and vitamin C in otitis media with effusion in children: a randomized controlled trial. *Eur Rev Med Pharmacol Sci*. 2019 Jul;23(14):6360-6370. doi: 10.26355/eurrev_201907_18460.
- Demir K, Döneray H, Kara C, et al. Comparison of Treatment Regimens in Management of Severe Hypercalcemia Due to Vitamin D Intoxication in Children. *J Clin Res Pediatr Endocrinol*. 2019 May 28;11(2):140-148. doi: 10.4274/jcrpe.galenos.2018.2018.0131. Epub 2018 Nov 5.
- Dhamayanti M, Noviandhari A, Supriadi S, et al. Association of maternal vitamin D deficiency and infants' neurodevelopmental status: A cohort study on vitamin D and its impact during pregnancy and childhood in Indonesia. *J Paediatr Child Health*. 2019 May 6. doi: 10.1111/jpc.14481. [Epub ahead of print].
- Dharmo B, Miliku K, Voortman T, et al. The Associations of Maternal and Neonatal Vitamin D with Dental Development in Childhood. *Curr Dev Nutr*. 2019 Mar 7;3(4):nzy100. doi: 10.1093/cdn/nzy100. eCollection 2019 Apr.
- Di Marco N, Kaufman J, Rodda CP. Reply to Comment on Di Marco, N., Kaufman, J., Rodda, C.P. Shedding Light on Vitamin D Status and Its Complexities during Pregnancy, Infancy and Childhood: An Australian Perspective. *Int. J. Environ. Res. Public Health* 2019, 16 (4), 538, doi:10.3390/ijerph16040538. *Int J Environ Res Public Health*. 2019 May 6;16(9). pii: E1576. doi: 10.3390/ijerph16091576.
- Dodamani MH, Muthu V, Thakur R, et al. A randomised trial of vitamin D in acute-stage allergic bronchopulmonary aspergillosis complicating asthma. *Mycoses*. 2019 Apr;62(4):320-327. doi: 10.1111/myc.12879. Epub 2019 Feb 5.
- Enlund-Cerullo M, Koljonen L, Holmlund-Suila E, et al. Genetic Variation of the Vitamin D Binding Protein Affects Vitamin D Status and Response to Supplementation in Infants. *J Clin Endocrinol Metab*. 2019 Jul 31. pii: jc.2019-00630. doi: 10.1210/jc.2019-00630. [Epub ahead of print].
- Fei J, Fu L, Cao W, et al. Low Vitamin D Status Is Associated with Epithelial-Mesenchymal Transition in Patients with Chronic Obstructive Pulmonary Disease. *J Immunol*. 2019 Aug 19. pii: ji1900229. doi: 10.4049/jimmunol.1900229. [Epub ahead of print].
- Fouad H, Yahia S, Elsaid A, et al. Oxidative stress and vitamin D receptor Bsm1 gene polymorphism in Egyptian children with systemic lupus erythematosus: a single center study. *Lupus*. 2019 May;28(6):771-777. doi: 10.1177/0961203319846380. Epub 2019 May 1.
- García-Nieto V, Ontoria Betancort MC, Carballo Martín P, et al. [Vitamin D and its receptor: Reflections on the unusual tendency to create supposed diseases]. *An Pediatr (Barc)*. 2019 Jun 4. pii: S1695-4033(19)30184-5. doi: 10.1016/j.anpedi.2019.04.016. [Epub ahead of print] Spanish.
- Ghobadi S, Rostami ZH, Marzijarani MS, et al. Association of Vitamin D Status and Metabolic Syndrome Components in Iranian Children. *Int J Prev Med*. 2019 May 17;10:77. doi: 10.4103/ijpvm.ijpvm_242_17. eCollection 2019.

- Hassam I, Kisenge R, Aboud S, et al. Association of vitamin D and diarrhoea in children aged less than five years at Muhimbili national hospital, Dar es Salaam: an unmatched case control study. *BMC Pediatr.* 2019 Jul 15;19(1):237. doi: 10.1186/s12887-019-1614-4.
- Hassan MM, Emam AM, Mahmoud AM, et al. Congenital laryngomalacia: Is it an inflammatory disease? The role of vitamin D. *Laryngoscope.* 2019 Apr 11. doi: 10.1002/lary.27997. [Epub ahead of print].
- Hocaoglu-Emre FS, Saribal D, Oğuz O. Vitamin D Deficiency and Insufficiency According to the Current Criteria for Children: Vitamin D Status of Elementary School Children in Turkey. *J Clin Res Pediatr Endocrinol.* 2019 May 28;11(2):181-188. doi: 10.4274/jcrpe.galenos.2018.2018.0272. Epub 2018 Dec 28.
- Hoevenaer-Blom MP, Wienders JP, Groeneveld H, et al. Prevalence and determinants of vitamin D deficiency in infants and toddlers in the Netherlands: a pilot study. *Ann Clin Biochem.* 2019 Sep;56(5):613-618. doi: 10.1177/0004563219857772. Epub 2019 Jul 2.
- Hollis BW, Wagner CL, Howard CR, et al. Maternal Versus Infant Vitamin D Supplementation During Lactation: A Randomized Controlled Trial. *Pediatrics.* 2015;136(4):625-634 erratum .*Pediatrics.* 2019 Jul;144(1). pii: e20191063. doi: 10.1542/peds.2019-1063.
- Horan MP, Williams K, Hughes D. The Role of Vitamin D in Pediatric Orthopedics. *Orthop Clin North Am.* 2019 Apr;50(2):181-191. doi: 10.1016/j.ocl.2018.10.002. Review.
- Hu G, Dong T, Wang S, et al. Vitamin D3-vitamin D receptor axis suppresses pulmonary emphysema by maintaining alveolar macrophage homeostasis and function. *EBioMedicine.* 2019 Jul;45:563-577. doi: 10.1016/j.ebiom.2019.06.039. Epub 2019 Jul 2.
- Hueniken K, Aglipay M, Birken CS, et al. Effect of High-Dose Vitamin D Supplementation on Upper Respiratory Tract Infection Symptom Severity in Healthy Children. *Pediatr Infect Dis J.* 2019 Jun;38(6):564-568. doi: 10.1097/INF.0000000000002225.
- Hyun DG, Oh YM, Lee SW, et al. Clinical Phenotypes, Comorbidities, and Exacerbations according to Serum 25-OH Vitamin D and Plasma Fibrinogen Levels in Chronic Obstructive Pulmonary Disease. *J Korean Med Sci.* 2019 Jul 29;34(29):e195. doi: 10.3346/jkms.2019.34.e195.
- Inaloo S, Paktinat M, Saki F, et al. Bone mineral density loss in ambulatory children with epilepsy in spite of using supplemental vitamin D in Southern Iran: a case-control study. *J Bone Miner Metab.* 2019 May;37(3):537-544. doi: 10.1007/s00774-018-0951-y. Epub 2018 Sep 6.
- Islam S, Sarkar NK, Mujahid AA, et al. Association of Serum Vitamin D (25OHD) Level with Acute Exacerbation of Chronic Obstructive Pulmonary Disease. *Mymensingh Med J.* 2019 Apr;28(2):441-448.
- Jensen ME, Murphy VE, Gibson PG, et al. Vitamin D status in pregnant women with asthma and its association with adverse respiratory outcomes during infancy. *J Matern Fetal Neonatal Med.* 2019 Jun;32(11):1820-1825. doi: 10.1080/14767058.2017.1419176. Epub 2018 Jan 5.
- Jolliffe DA, Greenberg L, Hooper RL, et al. Vitamin D to prevent exacerbations of COPD: systematic review and meta-analysis of individual participant data from randomised controlled trials. *Thorax.* 2019 Apr;74(4):337-345. doi: 10.1136/thoraxjnl-2018-212092. Epub 2019 Jan 10.
- Kelly RS, Chawes BL, Guo F, et al. The Role of the 17q21 Genotype in the Prevention of Early Childhood Asthma and Recurrent Wheeze by Vitamin D. *Eur Respir J.* 2019 Aug 22. pii: 1900761. doi: 10.1183/13993003.00761-2019. [Epub ahead of print].
- Khanna R, Nandy D, Senapati S. Systematic Review and Meta-Analysis to Establish the Association of Common Genetic Variations in Vitamin D Binding Protein With Chronic Obstructive Pulmonary Disease. *Front Genet.* 2019 May 16;10:413. doi: 10.3389/fgene.2019.00413. eCollection 2019.
- Kiebzak GM, Neal KM. Impact of Race Subgroups on the Assessment of Vitamin D Status in Adolescent Idiopathic Scoliosis. *Orthopedics.* 2019 May 1;42(3):158-162. doi: 10.3928/01477447-20190424-07.
- Kim I, Kim SS, Song JI, et al. Association between vitamin D level at birth and respiratory morbidities in very-low-birth-weight infants. *Korean J Pediatr.* 2019 May;62(5):166-172. doi: 10.3345/kjp.2018.06632. Epub 2018 Oct 24.
- Kim S, Kang Y, Park S, et al. Association of Vitamin D with Inflammatory Bowel Disease Activity in Pediatric Patients. *J Korean Med Sci.* 2019 Aug 19;34(32):e204. doi: 10.3346/jkms.2019.34.e204.
- Kolluri H, Deplewski D. Dilemmas in Vitamin D Management in Children and Adolescents. *Pediatr Ann.* 2019 Aug 1;48(8):e298-e303. doi: 10.3928/19382359-20190724-01.
- Kunz C, Hower J, Knoll A, et al. No improvement in vitamin D status in German infants and adolescents between 2009 and 2014 despite public recommendations to increase vitamin D intake in 2012. *Eur J Nutr.* 2019 Jun;58(4):1711-1722. doi: 10.1007/s00394-018-1717-y. Epub 2018 May 18.
- Lane G, Nisbet C, Whiting SJ, et al. Canadian newcomer children's bone health and vitamin D status. *Appl Physiol Nutr Metab.* 2019 Jul;44(7):796-803. doi: 10.1139/apnm-2018-0705. Epub 2019 Apr 24.
- Lehoux Dubois C, Labrèche E, Boudreau V, et al. Extra-skeletal impact of vitamin D supplementation protocol in an adult population with cystic fibrosis. *Clin Nutr.* 2019 Aug;38(4):1666-1671. doi: 10.1016/j.clnu.2018.08.013. Epub 2018 Aug 25.
- Loukou I, Moustaki M, Sardeli O, et al. Association of vitamin D status with lung function measurements in children and adolescents with cystic fibrosis. *Pediatr Pulmonol.* 2019 Jul 24. doi: 10.1002/ppul.24460. [Epub ahead of print].
- Lourenço BH, Silva LL, Fawzi WW, et al. Vitamin D sufficiency in young Brazilian children: associated factors and relationship with vitamin A corrected for inflammatory status. *Public Health Nutr.* 2019 Aug 23:1-10. doi: 10.1017/S1368980019002283. [Epub ahead of print].
- Maes K, Serré J, Mathysen C, et al. Targeting Vitamin D Deficiency to Limit Exacerbations in Respiratory Diseases: Utopia or Strategy With Potential? *Calcif Tissue Int.*

- 2019 Jul 26. doi: 10.1007/s00223-019-00591-4. [Epub ahead of print] Review.
- Mandlik R, Chiplonkar S, Kajale N, et al. Infection Status of Rural Schoolchildren and its Relationship with Vitamin D Concentrations. *Indian J Pediatr.* 2019 Aug;86(8):675-680. doi: 10.1007/s12098-019-02933-4. Epub 2019 Mar 26.
 - Mansy W, Ibrahim NH, Al-Gawhary S, et al. Correction to: Vitamin D status and vitamin D receptor gene polymorphism in Saudi children with acute lower respiratory tract infection. *Mol Biol Rep.* 2019 May 15. doi: 10.1007/s11033-019-04849-w. [Epub ahead of print].
 - Mansy W, Ibrahim NH, Al-Gawhary S, et al. Vitamin D status and vitamin D receptor gene polymorphism in Saudi children with acute lower respiratory tract infection. *Mol Biol Rep.* 2019 Apr;46(2):1955-1962. doi: 10.1007/s11033-019-04645-6. Epub 2019 Feb 5. Erratum in: *Mol Biol Rep.* 2019 May 15.
 - Marshall B, Bennett N, Smith A, et al. PURL: Can vitamin D prevent acute respiratory infections? *J Fam Pract.* 2019 May;68(4):230-231.
 - Mattila T, Vasankari T, Rissanen H, et al. Airway obstruction, serum vitamin D and mortality in a 33-year follow-up study. *Eur J Clin Nutr.* 2019 Jul;73(7):1024-1032. doi: 10.1038/s41430-018-0299-3. Epub 2018 Sep 13.
 - Minkowitz B, Nadel L, McDermott M, et al. Obtaining Vitamin D Levels in Children With Fractures Improves Supplementation Compliance. *J Pediatr Orthop.* 2019 Jul;39(6):e436-e440. doi: 10.1097/BPO.0000000000001363.
 - Mirzakhani H, Carey VJ, Zeiger R, et al. Impact of parental asthma, prenatal maternal asthma control, and vitamin D status on risk of asthma and recurrent wheeze in 3-year-old children. *Clin Exp Allergy.* 2019 Apr;49(4):419-429. doi: 10.1111/cea.13320. Epub 2019 Jan 3.
 - Montazeri-Najafabady N, Dabbaghmanesh MH, Mohammadian Amiri R, et al. Association of Vitamin D Receptor Bsm1 Gene Polymorphism with BMD Z-Score in Iranian Children and Adolescents (9 - 18 Years Old). *Int J Endocrinol Metab.* 2019 Apr 23;17(2):e82677. doi: 10.5812/ijem.82677. eCollection 2019 Apr.
 - Moon RJ, Davies JH, Cooper C, et al. Vitamin D, and Maternal and Child Health. *Calcif Tissue Int.* 2019 May 14. doi: 10.1007/s00223-019-00560-x. [Epub ahead of print] Review.
 - Motamed S, Nikooyeh B, Kashanian M, et al. Efficacy of two different doses of oral vitamin D supplementation on inflammatory biomarkers, and maternal and neonatal outcomes. *Matern Child Nutr.* 2019 Jun 27:e12867. doi: 10.1111/mcn.12867. [Epub ahead of print].
 - Nalbantoğlu A, Nalbantoğlu B. Vitamin D deficiency as a risk factor for PFAPA syndrome. *Int J Pediatr Otorhinolaryngol.* 2019 Jun;121:55-57. doi: 10.1016/j.ijporl.2019.02.047. Epub 2019 Mar 4.
 - Nam HK, Rhie YJ, Lee KH. Vitamin D level and gene polymorphisms in Korean children with type 1 diabetes. *Pediatr Diabetes.* 2019 Sep;20(6):750-758. doi: 10.1111/peidi.12878. Epub 2019 Jul 2.
 - Newton DA, Baatz JE, Kindy MS, et al. Insights image for vitamin D binding protein polymorphisms significantly impact vitamin D status in children. *Pediatr Res.* 2019 Jun 24. doi: 10.1038/s41390-019-0476-7. [Epub ahead of print]
 - Oliveira MS, Matsunaga NY, Rodrigues MLE, et al. Lung disease and vitamin D levels in cystic fibrosis infants and preschoolers. *Pediatr Pulmonol.* 2019 May;54(5):563-574. doi: 10.1002/ppul.24260. Epub 2019 Jan 20.
 - Panda S, Tiwari A, Luthra K, et al. Status of vitamin D and the associated host factors in pulmonary tuberculosis patients and their household contacts: A cross sectional study. *J Steroid Biochem Mol Biol.* 2019 Jun 27;193:105419. doi: 10.1016/j.jsbmb.2019.105419. [Epub ahead of print].
 - Park SH. Association of vitamin D status at birth and respiratory outcomes in preterm infants. *Korean J Pediatr.* 2019 May;62(5):162-163. doi: 10.3345/kjp.2018.07311. Epub 2019 Apr 8.
 - Park SY, Yoo KH. Vitamin D and Chronic Obstructive Pulmonary Disease: Biomarker Related to Outcomes. *J Korean Med Sci.* 2019 Jul 29;34(29). doi: 10.3346/jkms.2019.34.e196.
 - Park S, Lee MG, Hong SB, et al. Effect of vitamin D deficiency in Korean patients with acute respiratory distress syndrome. *Korean J Intern Med.* 2019 May;34(3):685. doi: 10.3904/kjim.2017.380.e1. Epub 2019 Apr 30.
 - Ramirez N, Ortiz-Fullana JL, Arciniegas N, et al. Vitamin D levels and fracture risk among Hispanic children. *Eur J Orthop Surg Traumatol.* 2019 Apr;29(3):531-536. doi: 10.1007/s00590-018-2315-7. Epub 2018 Oct 13.
 - Reinehr T, Schnabel D, Wabitsch M, et al. Vitamin D supplementation after the second year of life: joint position of the Committee on Nutrition, German Society for Pediatric and Adolescent Medicine (DGKJ e.V.), and the German Society for Pediatric Endocrinology and Diabetology (DGKED e.V.). *Mol Cell Pediatr.* 2019 May 6;6(1):3. doi: 10.1186/s40348-019-0090-0.
 - Robinson SL, Marín C, Oliveros H, et al. Vitamin D Deficiency in Middle Childhood Is Related to Behavior Problems in Adolescence. *J Nutr.* 2019 Aug 20. pii: nxz185. doi: 10.1093/jn/nxz185. [Epub ahead of print].
 - Rosendahl J, Pelkonen AS, Helve O, et al. High-Dose Vitamin D Supplementation Does Not Prevent Allergic Sensitization of Infants. *J Pediatr.* 2019 Jun;209:139-145.e1. doi: 10.1016/j.jpeds.2019.02.021. Epub 2019 Mar 20.
 - Saboute M, Yavar R, Kashaki M, et al. Investigation of association between maternal 25-OH vitamin D serum levels and neonatal early onset sepsis in newborns by evaluating key factors. *Lipids Health Dis.* 2019 Jul 13;18(1):153. doi: 10.1186/s12944-019-1095-3.
 - Sankar J, Ismail J, Das R, et al. Effect of Severe Vitamin D Deficiency at Admission on Shock Reversal in Children With Septic Shock: A Prospective Observational Study. *J Intensive Care Med.* 2019 May;34(5):397-403. doi: 10.1177/0885066617699802. Epub 2017 Mar 24.
 - Santi M, Janner M, Simonetti GD, et al. Prescription of vitamin D among Swiss pediatricians. *Eur J Pediatr.* 2019 Jul;178(7):1119-1123. doi: 10.1007/s00431-019-03400-0. Epub 2019 May 27.

- Sauder KA, Stamatoiu AV, Leshchinskaya E, et al. Cord Blood Vitamin D Levels and Early Childhood Blood Pressure: The Healthy Start Study. *J Am Heart Assoc.* 2019 May 7;8(9):e011485. doi: 10.1161/JAHA.118.011485.
- Scullion L, Baker D, Healey P, et al. No Association between Vitamin D and Acute Respiratory Tract Infections Amongst Elite New Zealand Rugby Players and Rowers. *Int J Vitam Nutr Res.* 2018 Feb;88(1-2):8-15. doi: 10.1024/0300-9831/a000285. Epub 2019 Apr 11.
- Sertpoyraz FM, Deniz S. Bone mineral density and vitamin D levels in patients with group a COPD. *Ageing Male.* 2019 May 14:1-6. doi: 10.1080/13685538.2019.1612869. [Epub ahead of print].
- Shah I, Tolani D, Bansal N, et al. Vitamin D Status in Children with Tuberculosis. *Indian J Pediatr.* 2019 Jul 23. doi: 10.1007/s12098-019-03034-y. [Epub ahead of print]
- Sharawat IK, Dawman L. Effect of vitamin D supplementation on serum vitamin D status in children on anti-epileptic drugs. *Clin Nutr ESPEN.* 2019 Jun;31:100-101. doi: 10.1016/j.clnesp.2019.03.011. Epub 2019 Mar 30.
- Singh N, Kamble D, Mahantshetti NS. Effect of Vitamin D Supplementation in the Prevention of Recurrent Pneumonia in Under-Five Children. *Indian J Pediatr.* 2019 Jul 25. doi: 10.1007/s12098-019-03025-z. [Epub ahead of print].
- Singleton R, Day G, Thomas T, et al. Association of Maternal Vitamin D Deficiency with Early Childhood Caries. *J Dent Res.* 2019 May;98(5):549-555. doi: 10.1177/0022034519834518. Epub 2019 Mar 14.
- Solarin AU, Nourse P, Gajjar P. Vitamin D status of children with moderate to severe chronic Kidney Disease at a Tertiary Pediatric Center in Cape Town. *Saudi J Kidney Dis Transpl.* 2019 Jul-Aug;30(4):781-794. doi: 10.4103/1319-2442.265453.
- Specht IO, Janbek J, Thorsteinsdottir F, et al. Neonatal vitamin D levels and cognitive ability in young adulthood. *Eur J Nutr.* 2019 Jul 5. doi: 10.1007/s00394-019-02042-0. [Epub ahead of print].
- Stefanidis C, Martineau AR, Nwokoro C, et al. Vitamin D for secondary prevention of acute wheeze attacks in preschool and school-age children. *Thorax.* 2019 Jul 5. pii: thoraxjnl-2019-213278. doi: 10.1136/thoraxjnl-2019-213278. [Epub ahead of print].
- Sujeta A, Capkauskiene S, Vizbaraitė D, et al. Low-Dose Omega-3 Fatty Acid and Vitamin D for Anthropometric, Biochemical Blood Indices and Respiratory Function. Does it work? *Int J Vitam Nutr Res.* 2019 Apr 1:1-17. doi: 10.1024/0300-9831/a000476. [Epub ahead of print].
- Tannous P, Fisceletti M, Wood N, et al. Safety and effectiveness of stoss therapy in children with vitamin D deficiency. *J Paediatr Child Health.* 2019 May 28. doi: 10.1111/jpc.14497. [Epub ahead of print].
- Tao S, Zhang H, Xue L, et al. Vitamin D protects against particles-caused lung injury through induction of autophagy in an Nrf2-dependent manner. *Environ Toxicol.* 2019 May;34(5):594-609. doi: 10.1002/tox.22726. Epub 2019 Jan 30.
- Taylor LN, Aesif SW, Matson KM. A case of Pneumocystis pneumonia, with a granulomatous response and vitamin D-mediated hypercalcemia, presenting 13 years after renal transplantation. *Transpl Infect Dis.* 2019 Jun;21(3):e13081. doi: 10.1111/tid.13081. Epub 2019 Apr 5.
- Tzilas V, Bouros E, Barbayianni I, et al. Vitamin D prevents experimental lung fibrosis and predicts survival in patients with idiopathic pulmonary fibrosis. *Pulm Pharmacol Ther.* 2019 Apr;55:17-24. doi: 10.1016/j.pupt.2019.01.003. Epub 2019 Jan 16.
- Ukarapong S, Zegarra W, Navarrete C, et al. Vitamin D status among preterm infants with cholestasis and metabolic bone disease. *Pediatr Res.* 2019 Jul 22. doi: 10.1038/s41390-019-0501-x. [Epub ahead of print].
- Umarov J, Kerimov F, Toychiev A, et al. Association the 25(OH) Vitamin D status with upper respiratory tract infections morbidity in water sports elite athletes. *J Sports Med Phys Fitness.* 2019 May 2. doi: 10.23736/S0022-4707.19.09834-7. [Epub ahead of print].
- Wang M, Liu M, Wang C, et al. Association between vitamin D status and asthma control: A meta-analysis of randomized trials. *Respir Med.* 2019 Apr;150:85-94. doi: 10.1016/j.rmed.2019.02.016. Epub 2019 Feb 21. Review.
- Wang Y, Shi C, Yang Z, et al. Vitamin D deficiency and clinical outcomes related to septic shock in children with critical illness: a systematic review. *Eur J Clin Nutr.* 2019 Aug;73(8):1095-1101. doi: 10.1038/s41430-018-0249-0. Epub 2018 Jul 13. Review.
- Wani WA, Nazir M, Bhat JI, et al. Vitamin D status correlates with the markers of cystic fibrosis-related pulmonary disease. *Pediatr Neonatol.* 2019 Apr;60(2):210-215. doi: 10.1016/j.pedneo.2018.07.001. Epub 2018 Jul 19.
- Williams K, Hughes D, Horan M. Vitamin D Trends in the Pediatric Orthopaedic Population: A Survey. *J Pediatr Orthop.* 2019 Apr 16. doi: 10.1097/BPO.0000000000001394. [Epub ahead of print].
- Win SS, Camargo CA Jr, Khaw KT, et al. Cross-sectional associations of vitamin D status with asthma prevalence, exacerbations, and control in New Zealand adults. *J Steroid Biochem Mol Biol.* 2019 Apr;188:1-7. doi: 10.1016/j.jsbmb.2018.11.016. Epub 2018 Nov 30.
- Xu Y, Qian J, Yu Z. Budesonide up-regulates vitamin D receptor expression in human bronchial fibroblasts and enhances the inhibitory effect of calcitriol on airway remodeling. *Allergol Immunopathol (Madr).* 2019 Jun 13. pii: S0301-0546(19)30052-7. doi: 10.1016/j.aller.2019.05.001.
- Yakah W, Fenton JI, Sikorskii A, et al. Serum Vitamin D is Differentially Associated with Socioemotional Adjustment in Early School-Aged Ugandan Children According to Perinatal HIV Status and In Utero/Peripartum Antiretroviral Exposure History. *Nutrients.* 2019 Jul 12;11(7). pii: E1570. doi: 10.3390/nu11071570.
- Yan YX, Li YN. [Pathogenesis of steroid-resistant asthma and the influence of vitamin D]. *Zhongguo Dang Dai Er Ke Za Zhi.* 2019 Jul;21(7):724-729. Review. Chinese.
- Zhu S, Wang Y, Luo F, et al. The Level of Vitamin D in Children and Adoles-

cents with Nonalcoholic Fatty Liver Disease: A Meta-Analysis. *Biomed Res Int*. 2019 Jul 14;2019:7643542. doi: 10.1155/2019/7643542. eCollection 2019. Review.

PSYCHIATRY

- Abu-Samak MS, AbuRuz ME, Masa'Deh R, et al. Correlation of selected stress associated factors with vitamin D deficiency in Jordanian men and women. *Int J Gen Med*. 2019 Jun 28;12:225-233. doi: 10.2147/IJGM.S198175. eCollection 2019.
- Ali A, Vasileva S, Langguth M, et al. Developmental Vitamin D Deficiency Produces Behavioral Phenotypes of Relevance to Autism in an Animal Model. *Nutrients*. 2019 May 27;11(5). pii: E1187. doi: 10.3390/nu11051187.
- Bičíková M, Máčová L, Ostatníková D, et al. Vitamin D in autistic children and healthy controls. *Physiol Res*. 2019 Apr 30;68(2):317-320. Epub 2019 Jan 10.
- Briggs R, McCarroll K, O'Halloran A, et al. Vitamin D Deficiency Is Associated With an Increased Likelihood of Incident Depression in Community-Dwelling Older Adults. *J Am Med Dir Assoc*. 2019 May;20(5):517-523. doi: 10.1016/j.jamda.2018.10.006. Epub 2018 Nov 20.
- Casseb GAS, Kaster MP, Rodrigues ALS. Potential Role of Vitamin D for the Management of Depression and Anxiety. *CNS Drugs*. 2019 Jul;33(7):619-637. doi: 10.1007/s40263-019-00640-4.
- Coentre R, Canelas da Silva I. Symptomatic Correlates of Vitamin D Deficiency in First-Episode Psychosis. *Psychiatry J*. 2019 May 2;2019:7839287. doi: 10.1155/2019/7839287. eCollection 2019.
- de Koning EJ, Lips P, Penninx BW, et al. Vitamin D supplementation for the prevention of depression and poor physical function in older persons: the D-Vitaal study, a randomized clinical trial. *Am J Clin Nutr*. 2019 Jul 24. pii: nqz141. doi: 10.1093/ajcn/nqz141. [Epub ahead of print].
- Gan J, Galer P, Ma D, et al. The Effect of Vitamin D Supplementation on Attention-Deficit/Hyperactivity Disorder: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *J Child Adolesc Psychopharmacol*. 2019 Aug 1. doi: 10.1089/cap.2019.0059. [Epub ahead of print].
- Jalali-Chimeh F, Gholamrezaei A, Vafa M, et al. Effect of Vitamin D Therapy on Sexual Function in Women with Sexual Dysfunction and Vitamin D Deficiency: A Randomized, Double-Blind, Placebo Controlled Clinical Trial. *J Urol*. 2019 May;201(5):987-993. doi: 10.1016/j.juro.2018.10.019.
- Jamilian H, Amirani E, Milajerdi A, et al. The effects of vitamin D supplementation on mental health, and biomarkers of inflammation and oxidative stress in patients with psychiatric disorders: A systematic review and meta-analysis of randomized controlled trials. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019 Aug 30;94:109651. doi: 10.1016/j.pnpbp.2019.109651. Epub 2019 May 13. Review.
- Jeyaseelan L. Interpreting the meta-analysis of efficacy of vitamin D supplementation in major depression. *J Postgrad Med*. 2019 Apr-Jun;65(2):70-71. doi: 10.4103/jpgm.JPGM_267_18.
- Libuda L, Laabs BH, Ludwig C, et al. Vitamin D and the Risk of Depression: A Causal Relationship? Findings from a Mendelian Randomization Study. *Nutrients*. 2019 May 16;11(5). pii: E1085. doi: 10.3390/nu11051085.
- Manel N, Manel MB, Wassim G, et al. [Bipolar disorder vulnerability: The vitamin D path]. *Can J Psychiatry*. 2019 Aug 21:706743719870513. doi: 10.1177/0706743719870513. [Epub ahead of print] French.
- Mazahery H, Conlon CA, Beck KL, et al. A Randomised-Controlled Trial of Vitamin D and Omega-3 Long Chain Polyunsaturated Fatty Acids in the Treatment of Core Symptoms of Autism Spectrum Disorder in Children. *J Autism Dev Disord*. 2019 May;49(5):1778-1794. doi: 10.1007/s10803-018-3860-y.
- Mohaddesi H, Saei Ghare Naz M, Najrzadeh M, et al. Correlation between Depression with Serum Levels of Vitamin D, Calcium and Magnesium in Women of Reproductive Age. *J Caring Sci*. 2019 Jun 1;8(2):117-119. doi: 10.15171/jcs.2019.017. eCollection 2019 Jun.
- Omidian M, Mahmoudi M, Abshirini M, et al. Effects of vitamin D supplementation on depressive symptoms in type 2 diabetes mellitus patients: Randomized placebo-controlled double-blind clinical trial. *Diabetes Metab Syndr*. 2019 Jul - Aug;13(4):2375-2380. doi: 10.1016/j.dsx.2019.06.011. Epub 2019 Jun 11.
- Park H, Suh B, Lee SJ. Shift work and depressive symptoms: the mediating effect of vitamin D and sleep quality. *Chronobiol Int*. 2019 May;36(5):689-697. doi: 10.1080/07420528.2019.1585367. Epub 2019 Mar 7.
- Saad K, Abdel-Rahman A, Elserogy Y, et al. Retraction: Randomized controlled trial of vitamin D supplementation in children with autism spectrum disorder. *J Child Psychol Psychiatry*. 2019 Jun;60(6):711. doi: 10.1111/jcpp.13076. Epub 2019 May 6.
- Schmidt RJ, Niu Q, Eyles DW, et al. Neonatal vitamin D status in relation to autism spectrum disorder and developmental delay in the CHARGE case-control study. *Autism Res*. 2019 Jun;12(6):976-988. doi: 10.1002/aur.2118. Epub 2019 May 16.
- Vafa M, Azizi-Soleiman F, Kazemi SM, et al. Comparing the effectiveness of vitamin D plus iron vs vitamin D on depression scores in anemic females: Randomized triple-masked trial. *Med J Islam Repub Iran*. 2019 Jul 3;33:64. doi: 10.34171/mjiri.33.64. eCollection 2019.
- van der Leeuw C, de Witte LD, Stellinga A, et al. Vitamin D concentration and psychotic disorder: associations with disease status, clinical variables and urbanicity. *Psychol Med*. 2019 Jul 22:1-7. doi: 10.1017/S0033291719001739. [Epub ahead of print].
- Vellekkatt F, Menon V. Efficacy of vitamin D supplementation in major depression: A meta-analysis of randomized controlled trials. *J Postgrad Med*. 2019 Apr-Jun;65(2):74-80. doi: 10.4103/jpgm.JPGM_571_17.
- Windham GC, Pearl M, Anderson MC, et al. Newborn vitamin D levels in relation to autism spectrum disorders and intellectual disability: A case-control study in California. *Autism Res*. 2019 Jun;12(6):989-998. doi: 10.1002/aur.2092. Epub 2019 Mar 18.

- Yazici AB, Akcay Ciner O, Yazici E, et al. Comparison of vitamin B12, vitamin D and folic acid blood levels in patients with schizophrenia, drug addiction and controls. *J Clin Neurosci.* 2019 Jul;65:11-16. doi: 10.1016/j.jocn.2019.04.031. Epub 2019 May 7.
- Yazici E, Mutu Pek T, Guzel D, et al. Klotho, vitamin D and homocysteine levels during acute episode and remission periods in schizophrenia patients. *Nord J Psychiatry.* 2019 Apr;73(3):178-184. doi: 10.1080/08039488.2019.1582697. Epub 2019 Mar 21.
- Zhang H, Liu S, Si Y, et al. Natural sunlight plus vitamin D supplementation ameliorate delayed early motor development in newborn infants from maternal perinatal depression. *J Affect Disord.* 2019 Oct 1;257:241-249. doi: 10.1016/j.jad.2019.07.010. Epub 2019 Jul 5.
- Zhu DM, Zhao W, Zhang B, et al. The Relationship Between Serum Concentration of Vitamin D, Total Intracranial Volume, and Severity of Depressive Symptoms in Patients With Major Depressive Disorder. *Front Psychiatry.* 2019 May 9;10:322. doi: 10.3389/fpsy.2019.00322. eCollection 2019.
- Bone Turnover Markers, and Bone Mineral Density in Young Kuwaiti Females. *Int J Endocrinol.* 2019 Jun 23;2019:6794837. doi: 10.1155/2019/6794837. eCollection 2019.
- Alkhatatbeh MJ, Abdul-Razzak KK, Amara NA, et al. Non-cardiac Chest Pain and Anxiety: A Possible Link to Vitamin D and Calcium. *J Clin Psychol Med Settings.* 2019 Jun;26(2):194-199. doi: 10.1007/s10880-018-9579-2.
- Aloia JF, Mikhail M, Fazzari M, et al. Physical Performance and Vitamin D in Elderly Black Women-The PODA Randomized Clinical Trial. *J Clin Endocrinol Metab.* 2019 May 1;104(5):1441-1448. doi: 10.1210/jc.2018-01418.
- Amin OA, Abouzeid SM, Ali SA, et al. Clinical association of vitamin D and serotonin levels among patients with fibromyalgia syndrome. *Neuropsychiatr Dis Treat.* 2019 May 27;15:1421-1426. doi: 10.2147/NDT.S198434. eCollection 2019.
- Anand K, Niravath P. Acupuncture and Vitamin D for the Management of Aromatase Inhibitor-Induced Arthralgia. *Curr Oncol Rep.* 2019 Apr 17;21(6):51. doi: 10.1007/s11912-019-0795-1. Review.
- Aslam MM, John P, Bhatti A, et al. Vitamin D as a Principal Factor in Mediating Rheumatoid Arthritis-Derived Immune Response. *Biomed Res Int.* 2019 May 7;2019:3494937. doi: 10.1155/2019/3494937. eCollection 2019. Review.
- Assimos DG. Re: Vitamin D, Calcium, or Combined Supplementation for the Primary Prevention of Fractures in Community-Dwelling Adults: An Evidence Review for the U.S. Preventive Services Task Force. *J Urol.* 2019 Apr;201(4):663. doi: 10.1097/01.JU.0000553270.08001.75.
- Azar FM. Surgical Considerations for Osteoporosis, Osteopenia, and Vitamin D Deficiency. *Orthop Clin North Am.* 2019 Apr;50(2):xi. doi: 10.1016/j.ocl.2019.01.001. Epub 2019 Feb 12.
- Azzam EZ, Ata MN, Younan DN, et al. DObesity: Relationship between vitamin D deficiency, obesity and sclerostin as a novel biomarker of bone metabolism. *J Clin Transl Endocrinol.* 2019 May 21;17:100197. doi: 10.1016/j.jcte.2019.100197. eCollection 2019 Sep.
- Bischoff-Ferrari HA. Should vitamin D administration for fracture prevention be continued? : A discussion of recent meta-analysis findings. *Z Gerontol Geriatr.* 2019 Aug;52(5):428-432. doi: 10.1007/s00391-019-01573-9. Epub 2019 Jul 1. Review.
- Bouillon R, Marcocci C, Carmeliet G, et al. Skeletal and Extraskeletal Actions of Vitamin D: Current Evidence and Outstanding Questions. *Endocr Rev.* 2019 Aug 1;40(4):1109-1151. doi: 10.1210/er.2018-00126.
- Buchebner D, Bartosch P, Malmgren L, et al. The Association Between Vitamin D, Frailty and Progression of Frailty in Community-Dwelling Older Women. *J Clin Endocrinol Metab.* 2019 Jul 9. pii: jc.2019-00573. doi: 10.1210/jc.2019-00573. [Epub ahead of print].
- Burt LA, Billington EO, Rose MS, et al. Effect of High-Dose Vitamin D Supplementation on Volumetric Bone Density and Bone Strength: A Randomized Clinical Trial. *JAMA.* 2019 Aug 27;322(8):736-745. doi: 10.1001/jama.2019.11889.
- Byun SE, Lee S, Kim JW, et al. Preventive Effects of Low Parathyroid Hormone Levels on Hip Fracture in Patients with Vitamin D Deficiency. *J Bone Metab.* 2019 May;26(2):89-95. doi: 10.11005/jbm.2019.26.2.89. Epub 2019 May 31.
- Caimmi C, Bertoldo E, Pozza A, et al. Vitamin D serum levels and the risk of digital ulcers in systemic sclerosis: A longitudinal study. *Int J Rheum Dis.* 2019 Jun;22(6):1041-1045. doi: 10.1111/1756-185X.13554. Epub 2019 Apr 2.
- Charoenngam N, Rujirachun P, Holick MF, et al. Oral vitamin D3 supplementation increases serum fibroblast growth factor 23 concentration in vitamin D-deficient patients: a systematic review and meta-analysis. *Osteoporos Int.* 2019 Aug 1. doi: 10.1007/s00198-019-05102-7. [Epub ahead of print] Review.
- Conzade R, Grill E, Bischoff-Ferrari HA, et al. Vitamin D in Relation to Incident Sarcopenia and Changes in Muscle Parameters Among Older Adults: The KORA-Age Study. *Calcif Tissue Int.* 2019 Aug;105(2):173-182. doi: 10.1007/s00223-019-00558-5. Epub 2019 May 8.
- Correa Freitas E, Evelyn Karnopp T, de Sou

- za Silva JM, et al. Vitamin D supplementation ameliorates arthritis but does not alleviate renal injury in pristane-induced lupus model. *Autoimmunity*. 2019 Mar;52(2):69-77. doi: 10.1080/08916934.2019.1613383. Epub 2019 May 15.
- Costa PLF, França MM, Katayama ML, et al. Transcriptomic Response to 1,25-Dihydroxyvitamin D in Human Fibroblasts with or without a Functional Vitamin D Receptor (VDR): Novel Target Genes and Insights into VDR Basal Transcriptional Activity. *Cells*. 2019 Apr 5;8(4). pii: E318. doi: 10.3390/cells8040318.
 - Degli Esposti L, Girardi A, Saragoni S, et al. Use of antiosteoporotic drugs and calcium/vitamin D in patients with fragility fractures: impact on re-fracture and mortality risk. *Endocrine*. 2019 May;64(2):367-377. doi: 10.1007/s12020-018-1824-9. Epub 2018 Dec 4.
 - Dhoother DJ, Bopitiya DS, Taha DH, et al. Effect of Low Dose Oral Vitamin D on Bone Mineral Density Changes in HIV Patients. *Infect Disord Drug Targets*. 2019 Jun 18. doi: 10.2174/1871526519666190618160748. [Epub ahead of print].
 - Diachkova GV, Novikov KI, Effatparvar MR, et al. Detecting reasons for recurrent deformity in treatment of patients with vitamin D-resistant rickets using diagnostic imaging. *J Orthop*. 2019 Mar 22;16(4):325-328. doi: 10.1016/j.jor.2019.02.033. eCollection 2019 Jul-Aug.
 - Donnally CJ 3rd, Sheu JI, Bondar KJ, et al. Is There a Correlation Between Preoperative or Postoperative Vitamin D Levels with Pseudarthrosis, Hardware Failure, and Revisions After Lumbar Spine Fusion? *World Neurosurg*. 2019 Jun 22. pii: S1878-8750(19)31661-4. doi: 10.1016/j.wneu.2019.06.109. [Epub ahead of print].
 - Dutta C, Kakati S, Barman B, et al. Vitamin D status and its relationship with systemic lupus erythematosus as a determinant and outcome of disease activity. *Horm Mol Biol Clin Investig*. 2019 Apr 3;38(3). pii: /j/hmbci.2019.38.issue-3/hmbci-2018-0064/hmbci-2018-0064.xml. doi: 10.1515/hmbci-2018-0064.
 - Dyer SM, Cumming RG, Hill KD, et al. Benefits of Vitamin D supplementation in older people living in nursing care facilities. *Age Ageing*. 2019 Jul 12. pii: afz081. doi: 10.1093/ageing/afz081. [Epub ahead of print]
 - Dzik KP, Skrobot W, Kaczor KB, et al. Vitamin D Deficiency Is Associated with Muscle Atrophy and Reduced Mitochondrial Function in Patients with Chronic Low Back Pain. *Oxid Med Cell Longev*. 2019 Jun 2;2019:6835341. doi: 10.1155/2019/6835341. eCollection 2019.
 - Emini-Sadiku M, Morina-Kuqi N. Concealing Clothing Leading to Severe Vitamin D Deficiency, Osteomalacia and Muscle Weakness. *Open Access Maced J Med Sci*. 2019 Jul 14;7(13):2146-2149. doi: 10.3889/oamjms.2019.584. eCollection 2019 Jul 15.
 - Erem S, Afifi A, Razzaque MS. Anabolic effects of vitamin D and magnesium in aging bone. *J Steroid Biochem Mol Biol*. 2019 Jun 5;193:105400. doi: 10.1016/j.jsbmb.2019.105400. [Epub ahead of print] Review.
 - Fassio A, Rossini M, Gatti D. Vitamin D: no efficacy without deficiency. What's new? *Reumatismo*. 2019 Jul 9;71(2):57-61. doi: 10.4081/reumatismo.2019.1201.
 - Fraissler L, Boelch SP, Schäfer T, et al. Vitamin D Deficiency in Patients With Idiopathic and Traumatic Osteochondritis Dissecans of the Talus. *Foot Ankle Int*. 2019 Aug 2;1071100719864325. doi: 10.1177/1071100719864325. [Epub ahead of print].
 - Fukui K, Kaneuji A, Hirata H, et al. Bilateral spontaneous simultaneous femoral neck occult fracture in a middle-aged man due to osteoporosis and vitamin D deficiency osteomalacia: A case report and literature review. *Int J Surg Case Rep*. 2019;60:358-362. doi: 10.1016/j.ijscr.2019.06.058. Epub 2019 Jun 28.
 - Garcia M, Seelaender M, Sotiropoulos A, et al. Vitamin D, muscle recovery, sarcopenia, cachexia, and muscle atrophy. *Nutrition*. 2019 Apr;60:66-69. doi: 10.1016/j.nut.2018.09.031. Epub 2018 Oct 7. Review.
 - Garcia-Alfaro P, Garcia S, Rodríguez I, et al. Factors related to muscle strength in postmenopausal women aged younger than 65 years with normal vitamin D status. *Climacteric*. 2019 Aug;22(4):390-394. doi: 10.1080/13697137.2018.1554645. Epub 2019 Jan 17.
 - Girgis CM, Cha KM, So B, et al. Mice with myocyte deletion of vitamin D receptor have sarcopenia and impaired muscle function. *J Cachexia Sarcopenia Muscle*. 2019 Jun 21. doi: 10.1002/jcsm.12460. [Epub ahead of print].
 - Girgis CM. Vitamin D and Skeletal Muscle: Emerging Roles in Development, Anabolism and Repair. *Calcif Tissue Int*. 2019 Jul 16. doi: 10.1007/s00223-019-00583-4. [Epub ahead of print] Review.
 - Gopal K, Thevarajah M, Ng CM, et al. Effects of vitamin D on disease activity and serum interleukin-6 in rheumatoid arthritis. *Int J Rheum Dis*. 2019 May;22(5):834-841. doi: 10.1111/1756-185X.13484. Epub 2019 Feb 6.
 - Guida F, Boccella S, Belardo C, et al. Altered gut microbiota and endocannabinoid system tone in vitamin D deficiency-mediated chronic pain. *Brain Behav Immun*. 2019 Apr 3. pii: S0889-1591(18)31247-9. doi: 10.1016/j.bbi.2019.04.006. [Epub ahead of print].
 - Hangelbroek RWJ, Vaes AMM, Boekschooten MV, et al. No effect of 25-hydroxyvitamin D supplementation on the skeletal muscle transcriptome in vitamin D deficient frail older adults. *BMC Geriatr*. 2019 May 28;19(1):151. doi: 10.1186/s12877-019-1156-5.
 - Harrison SR, Li D, Jeffery LE, et al. Vitamin D, Autoimmune Disease and Rheumatoid Arthritis. *Calcif Tissue Int*. 2019 Jul 8. doi: 10.1007/s00223-019-00577-2. [Epub ahead of print] Review.
 - Hax V, Gasparin AA, Schneider L, et al. Vitamin D and Cytokine Profiles in Patients With Systemic Sclerosis. *J Clin Rheumatol*. 2019 Aug 6. doi: 10.1097/RHU.0000000000001112. [Epub ahead of print].
 - Heneghan C, Mahtani KR. Vitamin D does not prevent fractures and falls. *BMJ Evid Based Med*. 2019 Aug;24(4):147-148. doi: 10.1136/bmjebm-2018-111129. Epub 2019 Apr 3. Review.
 - Hill TR, Verlaan S, Biesheuvel E, et al. A Vitamin D, Calcium and Leucine-Enriched

- Whey Protein Nutritional Supplement Improves Measures of Bone Health in Sarcopenic Non-Malnourished Older Adults: The PROVIDE Study. *Calcif Tissue Int.* 2019 Jul 23. doi: 10.1007/s00223-019-00581-6. [Epub ahead of print].
- Hochberg Z, Hochberg I. Evolutionary Perspective in Rickets and Vitamin D. *Front Endocrinol (Lausanne).* 2019 May 15;10:306. doi: 10.3389/fendo.2019.00306. eCollection 2019. Review.
 - Huang H, Cheng S, Zheng T, et al. Vitamin D retards intervertebral disc degeneration through inactivation of the NF- κ B pathway in mice. *Am J Transl Res.* 2019 Apr 15;11(4):2496-2506. eCollection 2019.
 - Huovinen J, Haj Hussain M, Niemelä M, et al. Pharmacokinetics of intra-articular vitamin D analogue calcipotriol in sheep and metabolism in human synovial and mesenchymal stromal cells. *J Steroid Biochem Mol Biol.* 2019 Apr;188:172-184. doi: 10.1016/j.jsbmb.2018.12.006. Epub 2018 Dec 15.
 - Jadai R, Venna N, Ajumeera R, et al. Isoflavones rich cowpea and vitamin D induces the proliferation and differentiation of human osteoblasts via BMP-2/Smad pathway activation: Mechanistic approach. *IUBMB Life.* 2019 Jul 18. doi: 10.1002/iub.2127. [Epub ahead of print].
 - Jiajue R, Jiang Y, Qi X, et al. Calcitropic Hormones and the Prevalence of Vertebral Fractures in Chinese Postmenopausal Women with Vitamin D Insufficiency: Peking Vertebral Fracture Study. *Calcif Tissue Int.* 2019 Jun;104(6):622-630. doi: 10.1007/s00223-019-00531-2. Epub 2019 Feb 8.
 - Jiang Y, Tang H, Ma X, et al. Eldecalcitol increases bone mineral density in Chinese osteoporotic patients without vitamin D or calcium supplementation. *J Bone Miner Metab.* 2019 May 13. doi: 10.1007/s00774-019-01009-9. [Epub ahead of print].
 - Jorde R, Stunes AK, Kubiak J, et al. Effects of vitamin D supplementation on bone turnover markers and other bone-related substances in subjects with vitamin D deficiency. *Bone.* 2019 Jul;124:7-13. doi: 10.1016/j.bone.2019.04.002. Epub 2019 Apr 5.
 - Khajoei S, Hassaninevisi M, Kianmehr N, et al. Serum levels of adiponectin and vitamin D correlate with activity of Rheumatoid Arthritis. *Mol Biol Rep.* 2019 Apr;46(2):2505-2512. doi: 10.1007/s11033-019-04682-1. Epub 2019 Mar 27.
 - Khamar P, Nair AP, Shetty R, et al. Dysregulated Tear Fluid Nociception-Associated Factors, Corneal Dendritic Cell Density, and Vitamin D Levels in Evaporative Dry Eye. *Invest Ophthalmol Vis Sci.* 2019 Jun 3;60(7):2532-2542. doi: 10.1167/iov.19-26914.
 - Khan AH, Jafri L, Siddiqui A, et al. Polymorphisms in the GC Gene for Vitamin D Binding Protein and Their Association with Vitamin D and Bone Mass in Young Adults. *J Coll Physicians Surg Pak.* 2019 Aug;29(8):715-719. doi: 10.29271/jcpsp.2019.08.715.
 - Kim YM, Jang YY, Jeong JE, et al. A case of vitamin D hydroxylation-deficient rickets type 1A caused by 2 novel pathogenic variants in CYP27B1 gene. *Ann Pediatr Endocrinol Metab.* 2019 Jun;24(2):137-141. doi: 10.6065/apem.2019.24.2.137. Epub 2019 Jun 30.
 - Kolahi S, Khabbazi A, Kazemi N, et al. Does vitamin D deficiency contribute to higher disease activity in patients with spondyloarthritis? *Immunol Lett.* 2019 Aug;212:1-5. doi: 10.1016/j.imlet.2019.06.005. Epub 2019 Jun 18.
 - Kositsawat J, Kuo CL, Barry L, et al. Interaction between Vitamin D and Interleukin 6 on Slow Gait Speed: 6-year Follow-up Data of Older Adults from InCHIANTI. *J Gerontol A Biol Sci Med Sci.* 2019 Jul 6. pii: glz165. doi: 10.1093/gerona/glz165. [Epub ahead of print].
 - Kow M, Akam E, Singh P, et al. Vitamin D receptor (VDR) gene polymorphism and osteoporosis risk in White British men. *Ann Hum Biol.* 2019 Aug 26:1-14. doi: 10.1080/03014460.2019.1659851. [Epub ahead of print].
 - Krasowska K, Skrobot W, Liedtke E, et al. The Preoperative Supplementation With Vitamin D Attenuated Pain Intensity and Reduced the Level of Pro-inflammatory Markers in Patients After Posterior Lumbar Interbody Fusion. *Front Pharmacol.* 2019 May 22;10:527. doi: 10.3389/fphar.2019.00527. eCollection 2019.
 - Kwon HJ. Vitamin D Receptor Signaling Regulates Craniofacial Cartilage Development in Zebrafish. *J Dev Biol.* 2019 Jun 22;7(2). pii: E13. doi: 10.3390/jdb7020013.
 - Lara Alvarez SE, Bell K, Ward N, et al. Seasonality of hip fracture and vitamin D deficiency persists in a sub-tropical climate. *Intern Med J.* 2019 Aug;49(8):1029-1032. doi: 10.1111/imj.14391.
 - Lee MH, Gong HS, Lee MH, et al. The Effect of Vitamin D Deficiency Correction on the Outcomes in Women After Carpal Tunnel Release. *J Hand Surg Am.* 2019 Aug;44(8):649-654. doi: 10.1016/j.jhsa.2019.03.008. Epub 2019 Apr 29.
 - Lelli D, Pérez Bazan IM, Calle Egusquiza A, et al. 25(OH) vitamin D and functional outcomes in older adults admitted to rehabilitation units: the safari study. *Osteoporos Int.* 2019 Apr;30(4):887-895. doi: 10.1007/s00198-019-04845-7. Epub 2019 Jan 16.
 - Li CF, Ettinger B, Chandra M, et al. Vitamin D Status Among Older Women Initiating Osteoporosis Therapy. *J Am Geriatr Soc.* 2019 Aug 23. doi: 10.1111/jgs.16133. [Epub ahead of print].
 - Liberman K, Njemini R, Luiking Y, et al. Thirteen weeks of supplementation of vitamin D and leucine-enriched whey protein nutritional supplement attenuates chronic low-grade inflammation in sarcopenic older adults: the PROVIDE study. *Aging Clin Exp Res.* 2019 Jun;31(6):845-854. doi: 10.1007/s40520-019-01208-4. Epub 2019 May 2.
 - Lowe K, Kubra KT, He ZY, et al. Vitamin D Supplementation to Treat Statin-Associated Muscle Symptoms: A Review. *Sr Care Pharm.* 2019 Apr 1;34(4):253-257. doi: 10.4140/TCP.n.2019.253.. Review.
 - Maekawa M. Bone Deformities of Osteomalacia with Vitamin D Deficiency. *Intern Med.* 2019 Jul 1;58(13):1973-1974. doi: 10.2169/internalmedicine.2164-18. Epub 2019 Mar 28.
 - May PB Jr, Winters SJ. Weight-Bearing Physical Activity Influences the Effect of Vitamin D on Bone Turnover Markers in Patients with Intellectual Disability. *South Med J.* 2019 Aug;112(8):428-432. doi: 10.14423/SMJ.0000000000001010.

- Mellor-Pita S, Tutor-Ureta P, Rosado S, et al. Calcium and vitamin D supplement intake may increase arterial stiffness in systemic lupus erythematosus patients. *Clin Rheumatol.* 2019 Apr;38(4):1177-1186. doi: 10.1007/s10067-018-04416-x. Epub 2019 Jan 9.
- Mendes MM, Hart KH, Lanham-New SA, Botelho PB. Association between 25-Hydroxyvitamin D, Parathyroid Hormone, Vitamin D and Calcium Intake, and Bone Density in Healthy Adult Women: A Cross-Sectional Analysis from the D-SOL Study. *Nutrients.* 2019 Jun 4;11(6). pii: E1267. doi: 10.3390/nu11061267.
- Meng YF, Xin Q, Lu J, et al. Association Between Single Nucleotide Polymorphisms in the Vitamin D Receptor and Incidence of Dry Eye Disease in Chinese Han Population. *Med Sci Monit.* 2019 Jun 27;25:4759-4765. doi: 10.12659/MSM.915434.
- Montenegro KR, Cruzat V, Carlessi R, et al. Mechanisms of vitamin D action in skeletal muscle. *Nutr Res Rev.* 2019 Jun 17:1-13. doi: 10.1017/S0954422419000064. [Epub ahead of print].
- Nanayakkara DD, Sun X, Morris S, et al. Effect of Vitamin D Supplementation on Bone Turnover Markers During HIV Pre-Exposure Prophylaxis Using Tenofovir Disoproxil Fumarate-Etricitabine in Men Who Have Sex with Men. *AIDS Res Hum Retroviruses.* 2019 Jul;35(7):608-614. doi: 10.1089/AID.2018.0280. Epub 2019 May 8.
- Niu A, Carpenter TO, Grams JM, et al. High dose vitamin D supplementation does not rescue bone loss following Roux-en-Y gastric bypass in female rats. *Bone.* 2019 Oct;127:172-180. doi: 10.1016/j.bone.2019.06.015. Epub 2019 Jun 19.
- Orces C. Vitamin D concentrations among older adults according to physical disability status: NHANES 2007-2014. *Nutr Hosp.* 2019 Jul 1;36(3):571-577. doi: 10.20960/nh.2507.
- Partan RU, Hidayat R, Saputra N, et al. Seluang Fish (*Rasbora* Spp.) Oil Decreases Inflammatory Cytokines Via Increasing Vitamin D Level in Systemic Lupus Erythematosus. *Open Access Maced J Med Sci.* 2019 May 5;7(9):1418-1421. doi: 10.3889/oamjms.2019.308. eCollection 2019 May 15.
- Pereira RC, Salusky IB, Bowen RE, et al. Vitamin D sterols increase FGF23 expression by stimulating osteoblast and osteocyte maturation in CKD bone. *Bone.* 2019 Oct;127:626-634. doi: 10.1016/j.bone.2019.07.026. Epub 2019 Aug 1.
- Pérez-Ferro M, Romero-Bueno FI, Serrano Del Castillo C, et al. A subgroup of lupus patients with nephritis, innate T cell activation and low vitamin D is identified by the enhancement of circulating MHC class I-related chain A. *Clin Exp Immunol.* 2019 Jun;196(3):336-344. doi: 10.1111/cei.13273. Epub 2019 Feb 27.
- Plum IA, Zella J, Clagett-Dame M, et al. A New 1,25 Dihydroxy Vitamin D Analog with Strong Bone Anabolic Activity in OVX Rats with Little or no Bone Resorptive Activity. *J Bone Miner Res.* 2019 Aug 1. doi: 10.1002/jbmr.3838. [Epub ahead of print].
- Quesada Gómez JM, Nogues X, Sosa Henríquez M, et al. Vitamin D supplementation and musculoskeletal health. A controversial necessity. *Med Clin (Barc).* 2019 Jul 19. pii: S0025-7753(19)30419-1. doi: 10.1016/j.medcli.2019.05.010. [Epub ahead of print] English, Spanish.
- Ranathunga RMTK, Hill TR, Mathers JC, et al. No effect of monthly supplementation with 12000 IU, 24000 IU or 48000 IU vitamin D3 for one year on muscle function: The vitamin D in older people study. *J Steroid Biochem Mol Biol.* 2019 Jun;190:256-262. doi: 10.1016/j.jsbmb.2018.12.008. Epub 2018 Dec 21.
- Rendina D, De Filippo G, Merlotti D, et al. Vitamin D Status in Paget Disease of Bone and Efficacy-Safety Profile of Cholecalciferol Treatment in Pagetic Patients with Hypovitaminosis D. *Calcif Tissue Int.* 2019 Jun 24. doi: 10.1007/s00223-019-00578-1. [Epub ahead of print].
- Renerts K, Fischer K, Dawson-Hughes B, et al. Effects of a simple home exercise program and vitamin D supplementation on health-related quality of life after a hip fracture: a randomized controlled trial. *Qual Life Res.* 2019 May;28(5):1377-1386. doi: 10.1007/s11136-019-02100-4. Epub 2019 Feb 9.
- Romeu Montenegro K, Carlessi R, Cruzat V, et al. Effects of vitamin D on primary human skeletal muscle cell proliferation, differentiation, protein synthesis and bioenergetics. *J Steroid Biochem Mol Biol.* 2019 Jul 3;193:105423. doi: 10.1016/j.jsbmb.2019.105423. [Epub ahead of print].
- Saini A, Björkhem-Bergman L, Boström J, et al. Impact of vitamin D and vitamin D receptor TaqI polymorphism in primary human myoblasts. *Endocr Connect.* 2019 Jul 29;8(7):1070-1081. doi: 10.1530/EC-19-0194.
- Schlereth F, Badenhop K. [Osteoporosis - Is There An Indication For Vitamin D Supplementation?] *Dtsch Med Wochenschr.* 2019 Aug;144(16):1120-1124. doi: 10.1055/a-0803-8126. Epub 2019 Aug 15. German.
- Servaes S, States L, Wood J, et al. Rachitic change and vitamin D status in young children with fractures. *Skeletal Radiol.* 2019 Jun 26. doi: 10.1007/s00256-019-03261-6. [Epub ahead of print].
- Shahnazari B, Moghimi J, Foroutan M, et al. Comparison of the effect of vitamin D on osteoporosis and osteoporotic patients with healthy individuals referred to the Bone Density Measurement Center. *Biomol Concepts.* 2019 Apr 3;10(1):44-50. doi: 10.1515/bmc-2019-0005.
- Silva SSC, Kathurirathne G, Mahesh B, et al. Prevalence of vitamin D deficiency and its associated factors among rheumatoid arthritis patients managed in a rheumatology unit of a tertiary care hospital in Sri Lanka. *Clin Med (Lond).* 2019 Jun;19(Suppl 3):30. doi: 10.7861/clinmedicine.19-3-s30.
- Souberbielle JC, Cormier C, Cavalier E, et al. Vitamin D Supplementation in France in patients with or at risk for osteoporosis: Recent data and new practices. *Joint Bone Spine.* 2019 Apr 30. pii: S1297-319X(19)30067-3. doi: 10.1016/j.jbspin.2019.04.004. [Epub ahead of print].
- Spira D, Buchmann N, König M, et al. Sex-specific differences in the association of vitamin D with low lean mass and frailty: Results from the Berlin Aging Study II. *Nutrition.* 2019 Jun;62:1-6. doi: 10.1016/j.nut.2018.11.020. Epub 2018 Nov 23.
- Sun J, Liu C, Zhang S, et al. Correction to: Vitamin D receptor expression in peripheral blood mononuclear cells is inversely associated with disease activity and inflammation in lupus patients. *Clin Rheumatol.*

- 2019 Aug;38(8):2289. doi: 10.1007/s10067-019-04634-x.
- Sun J, Liu C, Zhang S, et al. Vitamin D receptor expression in peripheral blood mononuclear cells is inversely associated with disease activity and inflammation in lupus patients. *Clin Rheumatol.* 2019 Sep;38(9):2509-2518. doi: 10.1007/s10067-019-04594-2. Epub 2019 May 18. Erratum in: *Clin Rheumatol.* 2019 Aug;38(8):2289.
 - Tong T, Liu Z, Zhang H, et al. Age-dependent expression of the vitamin D receptor and the protective effect of vitamin D receptor activation on H₂O₂-induced apoptosis in rat intervertebral disc cells. *J Steroid Biochem Mol Biol.* 2019 Jun;190:126-138. doi: 10.1016/j.jsbmb.2019.03.013. Epub 2019 Mar 21.
 - Wakefield CB, Yumol JL, Sacco SM, et al. Bone structure is largely unchanged in growing male CD-1 mice fed lower levels of vitamin D and calcium than in the AIN-93G diet. *Bone Rep.* 2018 Dec 30;10:100191. doi: 10.1016/j.bonr.2018.100191. eCollection 2019 Jun.
 - Wang J, Wang X, Gu Y, et al. Vitamin D is related to handgrip strength in adult men aged 50 years and over: A population study from the TCLSIIH cohort study. *Clin Endocrinol (Oxf).* 2019 May;90(5):753-765. doi: 10.1111/cen.13952. Epub 2019 Mar 15.
 - Wang W, Gao Y, Liu H, et al. Eldecalcitol, an active vitamin D analog, effectively prevents cyclophosphamide-induced osteoporosis in rats. *Exp Ther Med.* 2019 Sep;18(3):1571-1580. doi: 10.3892/etm.2019.7759. Epub 2019 Jul 9.
 - Wang W, Li C, Zhang Z, et al. Arsenic Trioxide in Synergy with Vitamin D Rescues the Defective VDR-PPAR- γ Functional Module of Autophagy in Rheumatoid Arthritis. *PPAR Res.* 2019 May 7;2019:6403504. doi: 10.1155/2019/6403504. eCollection 2019.
 - Winters SJ. Systemic Lupus Erythematosus and Vitamin D: Should We Recommend That Our Patients Take Supplements? *Am J Med Sci.* 2019 Aug;358(2):93-94. doi: 10.1016/j.amjms.2019.05.009. Epub 2019 May 25.
 - Yan L, Wu P, Gao DM, et al. The Impact of Vitamin D on Cognitive Dysfunction in Mice with Systemic Lupus Erythematosus. *Med Sci Monit.* 2019 Jun 25;25:4716-4722. doi: 10.12659/MSM.915355.
 - Yang Q, Liu Y, Guan Y, et al. Vitamin D Receptor gene polymorphisms and plasma levels are associated with lumbar disc degeneration. *Sci Rep.* 2019 May 24;9(1):7829. doi: 10.1038/s41598-019-44373-2.
 - Yang Y, Wu F, Winzenberg T, et al. The Association of Vitamin D in Youth and Early Adulthood with Bone Mineral Density and Microarchitecture in Early Adulthood. *Calcif Tissue Int.* 2019 Jun;104(6):605-612. doi: 10.1007/s00223-019-00529-w. Epub 2019 Feb 1.
 - Yoo KO, Kim MJ, Ly SY. Association between vitamin D intake and bone mineral density in Koreans aged \geq 50 years: analysis of the 2009 Korea National Health and Nutrition Examination Survey using a newly established vitamin D database. *Nutr Res Pract.* 2019 Apr;13(2):115-125. doi: 10.4162/nrp.2019.13.2.115. Epub 2019 Jan 9.
 - Ženata O, Marcalíková A, Vrzal R. The Effect of Caffeine on Calcitriol-Inducible Vitamin D Receptor-Controlled Gene Expression in Intestinal and Osteoblastic Cells. *Calcif Tissue Int.* 2019 Aug 30. doi: 10.1007/s00223-019-00602-4. [Epub ahead of print].
 - Zhang ZY, Tian SF, Li H, et al. [The correlations between serum vitamin D, parathyroid hormone, and bone mineral density with benign paroxysmal positional vertigo]. *Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi.* 2019 Jun;33(6):504-507. doi: 10.13201/j.issn.1001-1781.2019.06.007. Chinese.
 - Zheng R, Gonzalez A, Yue J, et al. Efficacy and Safety of Vitamin D Supplementation in Patients With Systemic Lupus Erythematosus: A Meta-analysis of Randomized Controlled Trials. *Am J Med Sci.* 2019 Aug;358(2):104-114. doi: 10.1016/j.amjms.2019.04.020. Epub 2019 Apr 26.
 - Zhu K, Lewis JR, Sim M, et al. Low Vitamin D Status Is Associated With Impaired Bone Quality and Increased Risk of Fracture-Related Hospitalization in Older Australian Women. *J Bone Miner Res.* 2019 Jun 24. doi: 10.1002/jbmr.3818. [Epub ahead of print].