

Table A1: In Vitro Studies and Brief Perspectives with Summaries of Pertinent Previously Published Data (141 entries)			
1st Author /Location	Title (Truncated)	Supporting Information* /# of pages	Recommendation for Covid-19 & D (dose-who-why)
Adams/ USA	Myth Busters: Dietary Supplements and COVID-19(1)	R,J,C 7 pages	600-4000IU/day – all adults - R
Alabada/ Iraq	Vitamin D effectiveness and pathology in humans and domestic animals(2)	C 15 pages	None - Covid-19 barely mentioned
Álvarez-López /Mexico	Vitamin D y la pandemia por Covid-19 (Vitamin D and the pandemic of Covid-19)(3)	P,R,F,J,C 6 pages	10- 25 mcg/day - high risk – D, Goal = 30 ng/ml
Anderson/ UK & USA	Covid-19 Pathophysiology: Interactions of Gut Microbiome, Melatonin, Vitamin D, Stress, Kynurenine... Nicotinic ... Treatment Implications(4)	P,R,F,J,C,S 24 pages	Vitamin D supplements - no details provided
Annweiler /France & China	Counter-regulatory ‘Renin-Angiotensin’ System-... Drugs to Treat COVID-19 ...infected patients(5)	F,C,S 2 pages	RAS regulators to treat Covid-19 - no vitamin D mention
Alpalhão/ Portugal	SARS-CoV-2 pandemic and Vitamin D deficiency—A double trouble(6)	D,R,F 2 pages	20-40 min sun/day; 10-50mcg/day; test (more if deficient)
Arboleda-Alzate/ Columbia	Vitamin D supplementation: a potential approach for COVID-19 therapeutics(7)	G,R,F,C,S 9 pages	“Conventional” oral vitamin D supplementation
Ardiaria/ Indonesia	Peran vitamin d dalam pencegahan influenza dan covid-19(8)	P,R,C,J 7 pages	Clinical trials are needed urgently
Arya/ India	Synergistic effect of Vitamin D and Remdesivir can fight COVID-19(9)	R,C, 4 pages	D plus Remdesivir should be trialed
Aslan/ Turkey	Is vitamin D one of the key elements in Covid-19 days?(10)	D,G,P,R,C,S 2 pages	Supplement entire population
Aygun/ Turkey	Vitamin D can prevent COVID-19 infection-induced multiple organ damage(11)	G,R,C,S 4 pages	Supplement due to R,F
Bakare/ UK	A cost-effective preventative approach to ...save lives ...using Vitamin D, Curcumin, ... Vitamin C(12)	R,C, 7 pages	Supplement with no added calcium
Barazzoni/ Italy, Israel, Germany, Denmark, Russia, Croatia	ESPEN expert statements and practical guidance for nutritional management of individuals with SARS-CoV-2 infection(13)	R 9 pages	Screen at-risk populations and patients for malnutrition, including vitamin D, and supplement accordingly
Barron/ UK	Vitamin D: A rapid review of the evidence for treatment or prevention of COVID-19 in adults (excluding pregnant & breastfeeding women)(14)	P,R 10 pages	Those at risk of deficiency should take 400IU/day
Bauer/	What is the role of supplementation with	D,P,R,C,	No known risks,

USA	ascorbic acid, zinc, vitamin D, or N-acetylcysteine for prevention or treatment of COVID-19?(15)	3 pages	but recommend D only after RCTs
Belančić /Croatia	Potential pathophysiological mechanisms leading to increased COVID-19 ... in obesity(16)	D,P,R,C, 3 pages	Measure D and supplement obese
Biesalski/ Germany	Vitamin D deficiency and co-morbidities in COVID-19 patients – A fatal relationship?(17)	D,G,P,R,F,C,J, T,S 13 pages	D prevents storm Supplement
Bloukh/ UAE, India	Prevalence of COVID-19: A Look behind the Scenes(18)	D,P,R,C 18 pages	Prophylactically supplement if low
Brown/ UK, India	Vitamin D deficiency: a factor in COVID-19 progression severity and mortality? An urgent call for research(19,20)	D,G,P,R,F,C 29 pages	Urgent call for research, possible supplementation
Brown / UK	Rapid Response: Re: Preventing a covid-19 pandemic - COVID-19: Vitamin D deficiency; and, death rates; ... connection? Research urgently...(21)	D,G,P 4 pages	Urgent call for research, possible supplementation
Brown/ UK, India, Philippines, Austria, France, Australia, Ireland, Canada, Italy, USA, Sweden, Greece, Turkey	COVID-19 ICU risk – 20-fold greater in the Vitamin D Deficient... Sun and D-supplementation – Game-changers? Research urgently required(22)	P,R,C,J,S 6 pages	Urgent call for research, correct deficiencies
Buttriss/ UK	Is a vitamin D fortification strategy needed?(23)	D,R 8 pages	400IU/day due to staying indoors
Caccialanza/ Italy	Early nutritional supplementation in non-critically ill patients hospitalized for ...(COVID-19): protocol(24)	R,C 5 pages	Correct deficiency aggressively
Calder/UK, USA, New Zealand, The Netherlands	Optimal Nutritional Status for a Well-Functioning Immune System Is an Important Factor to Protect against Viral Infections(25)	D,R, 10 pages	All adults should take 2000 IU of vitamin D/day, US National Academy recommendations
Cao/China , France	SARS-CoV-2 & Covid-19: Key-Roles of the 'Renin-Angiotensin' System / Vitamin D Impacting ...(26)	P,R,F,C,S 2 pages	Take note: vitamin D is crucial
Carter /USA	Considerations for Obesity, Vitamin D, and Physical Activity Amid the COVID-19 Pandemic(27)	P,R,C,S 2 pages	Encourage outdoor activities, give D
Chakhtoura/Italy, USA, Lebanon	Commentary: Myths and facts on vitamin D amidst the COVID-19 pandemic(28)	G,D,R,C, 3 pages	Supplement with 1000-4000IU/day to achieve >30ng/ml 25(OH)D
Chan/ Hong Kong	What can we do for the Personal Protection against the CoVID-19 infection? Immuno-boosting(29)	R,C 6 pages	Supplement with vitamin D, herbals

Chhetri/ China, Indonesia, Japan, Korea, Thailand, Sri Lanka	Prevention of covid-19 in older adults: A brief guidance from The International Association for Gerontology and Geriatrics (IAGG) Asia/Oceania Region(30)	R 2 pages	Get enough sunlight “in the morning” for vitamin D production
Crane- Godreau/ USA	Vitamin D Deficiency and Air Pollution Exacerbate COVID-19 Through Suppression of Antiviral Peptide LL37(31)	D,G,P,R,F,C, 5 pages	Deficiency + air pollution is trouble Daily dose is best
Dasgupta / India	Nsp7 and Spike Glycoprotein of SARS-CoV-2 ...Potential Targets of Vitamin D and Ivermectin(32)	R,C, 13 pages	D may dock onto virus, be curative
De Lucena /Brazil	Mechanism of inflammatory response in associated comorbidities in COVID-19(33)	R,C,S 4 pages	D can decrease complications
Dhillon/ UK	COVID-19 breakthroughs: separating fact from fiction(34)	P,R, 37 pages	Evidence is weak But, supplement
Docea/ USA, Greece, Romania, Russia	A new threat from an old enemy: Re-emergence of coronavirus (Review)(35)	R,C 13 pages	Evidence is weak, but biologically plausible Try D for prevention and treatment
Ebadi/ Canada	Perspective: improving vitamin D status in the management of COVID-19(36)	G,P,R,C,S 4 pages	Very plausible High doses for pts.
Ekiz/ Turkey	Relationship between COVID-19 and obesity(37)	P,R,C 3 pages	Plausible link Supplement
Ekiz/ Turkey	Revisiting vitamin D and ... exercises for patients with sleep apnea ... the COVID-19 quarantine(38)	P,R 6 pages	10,000IU/day x1mo then 5000IU/day
Fabbri/US A, Italy	Editorial – Vitamin D status: a key modulator of innate immunity and natural defense ...(39)	D,R,C 5 pages	Up to 6000IU/day Goal: 30 - 60ng/ml
Facchiano /Italy, USA	Reply to Jakovac: About COVID-19 and vitamin D (In support of Jakovac)(40)	R,C,S 1 page	No doubt Conduct trials, give
Farias/ Brazil	Vitamin D as an Immunological Factor in Combating COVID-19(41)	D,P,R,C 10 pages	Immune benefits Eat fish and eggs
Froom/ USA	Vitamin D and COVID 19 disease severity: An old ally in a new war(42)	R,C,J, 5 pages	Dentists should test, supplement
Garami/S witzerland	Re: Preventing a covid-19 pandemic - Is there a magic bullet to save patients?... give it a try!(43)	D,G,C,S 3 pages	Biological plausibility, give D!
Garg/UK, Australia	Editorial: low population mortality from COVID-19 ... latitude 35 degrees North—supports vitamin D as a factor determining severity. Authors' reply(44)	D – denies others 2 pages	Premature, but for musculoskeletal health, give D
Gasmi/ Iran, Pakistan, Norway, Thailand,	Individual risk management strategy and potential therapeutic options for the COVID-19 pandemic(45)	D,P,R 9 pages	vitamin D prevents infections when given prior to exposure Goal 40-60ng/ml

Luxembourg, France			10,000IU/day x1mo then 5000IU/day
Gee/UK	Management of clozapine treatment during the COVID-19 pandemic(46)	D,P,R,C 10 pages	D decreases risk Supplement
Ghavidel-darestani/Iran	Role of vitamin D in pathogenesis and severity of COVID-19 infection(47)	D,P,R,C,S 16 pages	Biological plausibility D for all deficient
Glinsky/USA	Tripartite Combination of ... Pandemic Mitigation Agents: Vitamin D, Quercetin, and Estradiol(48)	D,R,C,S 26 pages	The 3 listed agents should be given
González/Puerto Rico	2020 Covid-19 Protocol(49)	R,F 9 pages	Support immune system: 10,000IU/d Infected: 25,000IU
Grant/USA, Hungary	Evidence that Vitamin D Supplementation Could Reduce Risk of Influenza and COVID-19 Infections And Deaths(50)	R,F,C,S (full review) 19 pages	Evidence is strong Goal:40-60ng/ml 2000-5000IU+ daily
Grant/USA, Hastie/UK	Letter in response to the article: Vitamin D concentrations and COVID-19 infection in UK biobank (Hastie et al.) and Response to letter(51)	Debate - see section 1.1 2 pages	Researchers of differing views fail to communicate
Grant/USA	Reply: "Vitamin D Supplementation in Influenza and COVID-19 Infections. Comment on: Evidence ..."(52)	See section 1.2, 5 pages	Response to Kow softened D dose
Guan/USA, China, Australia, Brazil, UK, Korea, South Africa, Sweden, Morocco, Russia, Mexico, Canada, Netherlands, Chile	Promoting healthy movement behaviours among children during the COVID-19 pandemic(53)	Vitamin D mentioned in passing only, assumed to be beneficial 3 pages	Children need to play outdoors
Gupta/India	Is Immuno-modulation the Key to COVID-19 Pandemic?(54)	R,C 4 pages	D helps immunity BCG vaccine
Hamad/Sudan	Vitamin D Supplements Improve Efficacy of Minocycline...Triple Therapy to COVID-19 ...(55)	R,C 2 pages	Improves immune Add D to treatment
Hasan/Saudi Arabia, Qatar, UAE, Iran, Iraq	A review on the cleavage priming of the spike protein on coronavirus by angiotensin-converting enzyme-2 and furin (56)	S 9 pages	D can inhibit ACE-2 therefore could be therapeutic
Heiser/USA	Identification of potential treatments for COVID-19 through artificial intelligence-enabled ...analysis of	P,C 15 pages	Weak effect in D analogues – study

	human cells infected with SARS-CoV-2(57)		for new drugs
Hossain/B angladesh	Natural Polyphenol ... Crops based Diet to Promote Innate Immunity to Combat Covid-19 Disease(58)	R,C 22 pages	Polyphenols + D enhance immunity
Hribar/UK, USA	Potential Role of Vitamin D in the Elderly to Resist COVID-19 and to Slow ... Parkinson's Disease(59)	D,P,R,F,C,J,S? 8 pages	Enhances immunity 2000-5000IU/day
Isaia / Italy	Possible prevention and therapeutic role of vitamin D in ... the COVID-19 2020 pandemics(60)	D,G,P,R,C,J,	Enhances immunity Lit. review only
Islam /Germany	A transcriptome analysis identifies potential preventive 1 and therapeutic 2 approaches ...(61)	C, 21 Pages	Improves immune Give D + ketogenic
Jakovac /Croatia	COVID-19 and vitamin D—Is there a link and an opportunity for intervention?(62)	R,C 1 page	D link is intriguing D now – no harm
Jayawarde na/Greece Sri Lanka, Australia	Enhancing Immunity in Viral Infections, with special emphasis on COVID-19: A Review(63)	D,R,C, 59 pages	supplementation of vitamins for Covid- 19 is appropriate, especially D 5000IU
Jukic/ Croatia, Spain,	Strategies and Solutions for Team Sports Athletes in Isolation due to COVID-19(64)	No details 9 pages	Educate about nutrition Give D
Kakodkar/ Ireland	A Comprehensive Literature Review on the Clinical Presentation, and Management ... (COVID-19)(65)	R, 18 pages	Prophylaxis and treatment
Kalantar- Zadeh/ USA	Impact of Nutrition and Diet on COVID-19 Infection ..Implications for Kidney Health ...(66)	No details 4 pages	Improves overall health
Kamani/ Iran	Effect of Low Level Yellow Laser Light 589nm on Virus Prevention Corona Virus (COVID-19)(67)	R 4 pages	Use their device to increase D
Khalil/Ban gladesh	Sub-continental Atmosphere and Inherent Immune System ... Impact ...Covid-19... South East Asia(68)	R 9 pages	Influences immune Get vitamin D (sun)
Khunti/UK , India	Is ethnicity linked to incidence or outcomes of covid-19?(69)	P 3 pages	D one of many possible reasons
Koenig/ USA, Iran, China, Saudi Arabia	Ways of Protecting Religious Older Adults from the Consequences of COVID-19(70)	P,R 9 pages	D is often deficient in elderly, needed for immunity Take supplements
Kow/ UK, Malaysia	Vitamin D ...in Influenza and COVID-19 Infections Comment on: "Evidence that Vitamin D ..." (71)	Rationale OK 2 pages	High dose lacks evidence – trials 1 st
Kumar/ India	Letter: does vitamin D have a potential role against COVID-19? (Comment on Tian, et al.)(72)	R,C,S 2 pages	D has two roles
Kurthkoti/ India	Potential benefits of Vitamin D supplementation in COVID-19 patients. A Hypothesis(73)	G,R,C 4 pages	Influences immune Supplement all
La Vignera / Italy	Sex-Specific SARS-CoV-2 Mortality: Among Hormone-Modulated ACE2 Expression, Risk of ... Thromboembolism and Hypovitaminosis D(74)	D,P,C,T,S 6 pages	D explains high male mortality & thrombosis
Lanham- New/	Vitamin D and SARS-CoV-2 virus/COVID-19 disease(75)	D,P,R, 5 pages	D is important, but risks are great

USA, UK			RDA or max 4000IU
Lawton/ USA	Will warmer spring weather slow down the rate of spread?(76)	G,R 1 page	D helps immunity
Lee /UK	Vitamin D:A rapid review of the evidence for treatment or prevention in Covid-19(77)	D,G,P,R 10 pages	No evidence found Take RDA
Manson/ USA	Does Vitamin D Protect Against COVID-19?(78)	R,P,C, 1 page	Strong evidence 1000-2000IU
Mansur/ USA	Letter: low ...mortality from COVID-19 in countries south of latitude...vitamin D ...(reply to Rhodes) (79)	R,C,S 1 page	Additional info Supports vitamin D
Martín Giménez/ Argentina	Lungs as target of COVID-19 infection: Protective ... molecular mechanisms of vitamin D and melatonin ... new potential synergistic treatment(80)	D,P,R,J,C,S 8 pages	Detailed biological plausibility data D + melatonin
Maruta/ Australia	PAK1-blockers: Potential Therapeutics against COVID-19(81)	S 6 pages	Use MART-10, a derivative with D3
McCartney / Ireland	Optimisation of Vitamin D Status for Enhanced Immuno-protection Against Covid-19(82)	D,P,R,C 4 pages	800-2000IU/day - all adults - R
McCartney / Ireland	Authors of Article 'Optimisation of Vitamin D Status ... comment on response ... by McKenna et al(83)	D,P, 5 pages	800-2000IU/day - all adults - R
McCartney / Ireland	Authors of Article 'Optimisation of Vitamin D Status ... comment on response ... by Rabbitt et al(84)	D,R, 3 pages	Biological Plausibility
McCullough h/ USA	The Essential Role of Vitamin D in the Biosynthesis ...Antimicrobial Peptides May Explain ...Deficiency Increases Mortality Risk in COVID-19 Infections(85)	G,P,R 23 pages	A plethora of data from other illness 10,000IU+/day
McKenna/ Ireland	Covid-19, Cocooning and Vitamin D Intake Requirements(86)	D,P,R 6 pages	NOT 800-2000IU!!! Goal: 10ng/ml
Meftahi/ Iran	The possible pathophysiology mechanism of cytokine storm in elderly adults with COVID-19 infection: the contribution of "inflammation-aging"(87)	P,R,F,C,S 15 pages	Deficiency is a likely cause of cytokine storm
Merow/ USA	Seasonality and uncertainty in COVID-19 growth rates(88)	R 27 pages	Increases resistance
Misra/ UK, India, Ukraine	Rheumatologists' perspective on coronavirus disease 19 (COVID-19) and potential therapeutic targets(89)	R,F,C 8 pages	Prevent & mitigate High dose to correct if <50ng/ml
Mitchell/ UK	Vitamin-D and COVID-19: do deficient risk a poorer outcome?(90)	R,C,S 1 page	Influences immune Correct deficiency
Molloy/ Ireland	Vitamin D, Covid-19 and Children(91)	D,G,P,R,C 3 pages	Influences immune Correct deficiency
Muscogiuri / Italy	Nutritional recommendations for CoVID-19 quarantine(92)	D,R,J,C 2 pages	Change diet and eat D-rich foods
Muscogiuri / Italy	Obesity: the "Achilles heel" for COVID-19?(93) (obesity research study, vitamin D in discussion)	D,P,R,C 12 pages	Obesity-related D deficiency fatal?
Musselwhite / UK	JTH editorial v17 – The importance of psychosocial factors in transport and health(94)	No mention 2 pages	Higher D with public transport
Nigro/ Italy,	Molecular mechanisms involved in the positive effects of physical activity on coping with COVID-	P,R,J,C, 32 pages	Encourage physical activity, following

China, UK, Denmark	19(95)		guidelines. This will increase D
Nikhra / India	Identifying Patterns in Covid-19: Morbidity, Recovery, and the Aftermath(96)	P,R,F 9 pages	D supplementation may help prevent
Nizami/ India	Strong Immunity- A Major Weapon to Fight against Covid-19(97)	R, 8 pages	Correct deficiency for immune health
Pal / India	Managing common endocrine disorders amid COVID-19 pandemic(98)	G,P,R,C,F,S 5 pages	Speculation; Bone health: 800-1000IU
Palmer / Italy, UK, Sweden, Finland, Spain, Switzerland, France, Greece	The potential long-term impact of the COVID-19 outbreak on patients with non-communicable diseases in Europe: consequences for healthy ageing(99)	P,R, 6 pages	D deficiency is a concern; immune
Parvin/Bangladesh	The symptoms, contagious process, prevention and post treatment of Covid-19(100)	P 25 pages	Sunlight and daily supplements
Pinnock/ UK	Vitamin D and COVID-19. The Evidence Warrants Discussion!(101)	G,R,C 5 pages	Immune benefits 1000-2000IU
Queiroz / Brazil	Management of inflammatory bowel disease patients ...COVID-19 pandemic...: a Brazilian ... (102)	R 6 pages	Immune benefits Always supplement
Quesada-Gomez/ Spain, Belgium	Vitamin D Receptor stimulation to reduce Acute Respiratory Distress Syndrome (ARDS) in patients with Coronavirus SARS-CoV-2 infections(103)	D,P,R,C,T,S, 23 pages	Prevents infection Controls immune Calcifediol is best absorbed form
Rabbitt/ Ireland	Vitamin D and Covid-19: A Note of Caution (response to McCartney, Optimisation of ... D)(104)	(none) 2 pages	D is safe but need RCTs first
Ramos/ Brazil	COVID-19, Rate of Case Factors and Nutritional Characteristics of ...Dying in Italy and Brazil: ... (105)	D,P,R,C,F, 9 pages	Immune benefits 50,000IU/week
Raymond/ UK	Mast cell stabilisers, leukotriene antagonists and antihistamines: ... evidence ... use in COVID-19(106)	R,C 6 pages	No evidence of a D Covid-19 link
Razdan / India	Vitamin D Levels and COVID-19 Susceptibility: Is there any Correlation?(107)	D,R,C 3 pages	Clear Covid-19 link 2000-4000IU/day
Rhodes/ UK	Letter: low population mortality from COVID-19 ...south of latitude 35° North supports vitamin D as a factor ...severity—authors' reply (to Mansur)(108)	S,T 2 pages	Circumstantial evidence is strong South: supplement
Ribeiro/ Brazil, UK, Australia	Does Vitamin D play a role in the management of Covid-19 in Brazil? (Building upon Isaia literature review)(109)	D,P,R, 6 pages	Enhances Immunity Get more sun. Do not take 10,000IU
Richards/ South Africa	COVID-19 and the Rationale for Pharmacotherapy: A South African Perspective(110)	S 7 pages	50,000IU stat for acute treatment 4000IU/day if mild
Richer/ USA	How to build a lifestyle and nutritional firewall against viruses like COVID 19(111)	D,P,R 5 pages	Enhances Immunity D in multivitamin

Rocha/UK, Portugal	Reply to Jakovac; Severity of COVID-19 infection in patients with phenylketonuria: is vitamin D status protective? (In support of Jakovac)(112)	P,R 2 pages	Enhances Immunity PKU supplement Supplement all
Romano / Italy	Short Report – Medical nutrition therapy for critically ill patients with COVID-19(113)	(none) 5 pages	Correct <12.5ng/ml (IV cholecalciferol)
Roy/ UK	Response to ‘Vitamin D concentrations and COVID-19 infection in UK Biobank’ (Hastie)(114)	R,F,J, 1 page	Enhances Immunity Better research!
Rusciano/ Italy	The Fight against COVID-19: The Role of Drugs and Food Supplements(115)	D,P,R,J,C 16 pages	Enhances Immunity eat well
Saul/ USA	Nutritional Treatment of Coronavirus(116)	(none) 9 pages	5000IU/day x 2 weeks then 2000IU
Sharma/ India	Vitamin D: A cheap yet effective bullet against coronavirus disease-19 – Are we convinced yet?(117)	D,G,P,R,F,C,J, S 8 pages	Evidence is strong 1000-2000IU/day
Siddiqui/ UAE	Centralized air-conditioning and transmission of novel coronavirus(118)	D,R 3 pages	Air conditioning limits outdoor time
Silberstein / Australia	Vitamin D: A simpler alternative to tocilizumab for trial in COVID-19?(119)	D,G,P,R,C 2 pages	Biological plausibility – study!
Silberstein / Australia	Premorbid IL-6 levels may predict mortality from COVID-19 (studied IL-6 levels, not vitamin D) (120)	P,C 9 pages	Correlation strong Supplement all
Siuka/ Slovenia	Vitamin D supplementation in the COVID-19 pandemic(121)	D,P,R,F,C 3 pages	Supplement high- risk, urgently
Sparavigna/ Italy	Vitamin D for Covid-19?(122)	D,R,C, 8 pages	Lists literature - no conclusion drawn
Speckaert/ Belgium	Association between low vitamin D and COVID-19: don't forget the vitamin D binding protein(123)	C,T 2 pages	Decreases ARDs Avoid deficiency
Suresh/ India	Hypovitaminosis D and COVID-19: Matter of Concern in India?(124)	D,G,P,R,C,S 2 pages	Study, and correct D deficiency
Taheri/ Qatar	Managing diabetes in Qatar during the COVID-19 pandemic(125)	R 2 pages	D is delivered to diabetic patients
Tan/ Singapore	Medications in COVID-19 patients: summarizing the current literature ... orthopaedic perspective(126)	R,C, 5 pages	Continue, but don't add, B, C, and D
Thomson/ UK	The COVID-19 Pandemic: A Global Natural Experiment(127)	(none) 6 pages	Seasons allow study of D impact
Tian/ China	Letter: Covid-19, and vitamin D. Authors' reply (to Panarese)(128)	G,R,J,C,T,S 2 pages	Theory is sound Supplement all
Tian/ China	Letter: does vitamin D have a potential role against COVID-19? Authors' reply (to Kumar)(129)	R,C,T, 4 pages	Theory is sound Moderate doses
Trinity College Dublin/ Ireland	News Release 12-May-2020 Vitamin D determines severity in COVID-19 so government advice needs to change(130)	D,G,P,F,C 3 pages	Irish government should support supplements and food fortification
Turashvili/ Georgia	Could vitamin D reduce the risk of COVID-19?(131)	G,P,R,C,S 5 pages	Biological plausibility – study!
Uçar/	Koronavirüs ve fitoterapi(132)	R,C,	Boosts immunity

Turkey		9 pages	Give supplements
Wang/ China	Review of the 2019 novel coronavirus (SARS-CoV-2) based on current evidence(133)	R 7 pages	Boosts immunity Give supplements
Weir/ USA	Does vitamin D deficiency increase the severity of COVID-19?(134)	D,P,R,C,T 2 pages	Boosts immunity Give modest doses
Wimalawansa/ USA	Global epidemic of coronavirus—Covid-19: What can we do to minimize risks(135)	D,R,C, 7 pages	Loading dose for all 200,000-300,000IU
Yong/ Malaysia	Population Studies Confirm Risk Factors for Catching Covid-19(136) and Vitamin D as an Independent Risk Factor for COVID-19 Death(137)	F 5 & 10 pages	Studies are compelling
Yousfi/ Tunisia, Italy, Poland, Canada, Qatar	The COVID-19 pandemic: how to maintain a healthy immune ... special focus on athletes.(138)	P,R,C,F 7 pages	10,000IU/day x1mo then 5000IU/day
Zabetakis/ Ireland, USA	COVID-19: The Inflammation Link and the Role of Nutrition in Potential Mitigation(139)	P,R 28 pages	Uncertain if high doses required, but supplement
Zemb/ France, Sweden, Belgium, Italy, USA, Austria, Poland, Romania	Vitamin D deficiency and COVID-19 pandemic(140)	D,P,R, 5 pages	Immune benefits for other infections are known, but not for Covid-19. No harm found with 2000-4000IU, so why not supplement?
Zhang/ Japan, China	Current status of potential therapeutic candidates for the COVID-19 crisis(141)	R,C	Studies including D are underway (not yet recommended)
Zhang/ China	Potential interventions for novel coronavirus in China: A systematic review(142)	D,G,P,R	Could work to prevent
Zicarelli/ Canada	Nutrition Therapy ... (COVID-19): Recommendations ... for Integrative Medical Treatments(143)	R,C, 9 pages	Benefits patients 2000IU/day

* Supporting Information provided by these authors:

D = vitamin D deficiency is common

G = geographical observations (not data) of relationship between low vitamin D and high Covid-19

P = deficiency is more common in populations at higher risk for severe Covid-19 complications

Biological plausibility:

R = vitamin D enhances resistance to respiratory viruses, decreasing incidence of infection

F = vitamin D decreases overall fatalities from respiratory viruses; decreases Covid-19 severity

C = vitamin D suppresses pro-inflammatory cytokines implicated in severe Covid-19

J = vitamin D tightens junctions, helping prevent viral infections from progressing to pneumonia

T = vitamin D decreases the risk of thrombosis

S = vitamin D suppresses the 'Renin-Angiotensin' System activity, which is more of a problem for males

of pages includes references, figures, and tables

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