March 1, 2022



A Collaboration

https://www.vitamindandme.org/

Council for Responsible Nutrition

1

Susan J Hewlings PhD, RD



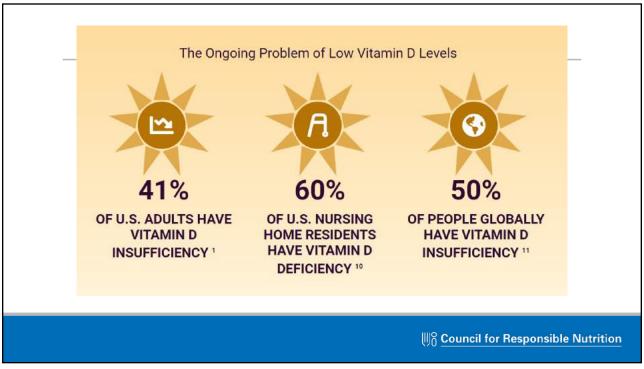
- Director of Scientific Affairs Nutrasource/GRAS Associates
 - Structure Function Claims Substantiation
- Professor Central Michigan University
- PhD Nutrition, MS Exercise Physiology, BS Nutrition
 - Florida State University
- Higher Education, over 18 years
 - Central Michigan University (Currently)
 - University of Central Florida College of Medicine
 - Stetson University (Tenured)
- · Author/ Medical Writer

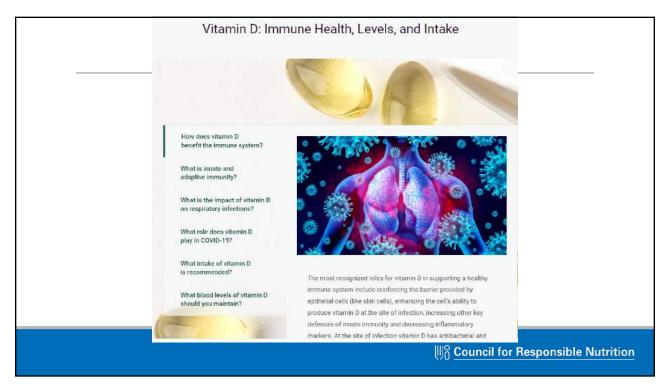


www.nutrasource.ca

nutras Jurce
Pharmaceutical and Nutraceutical Services



























 $\biguplus \bigcirc 0$ Council for Responsible Nutrition

7

Study Summaries



Does vitamin D serum level affect prognosis of COVID-19 patients?

Take Home Message: Does vitamin D serum level affect prognosis of COVID-19 patients? Take Home Message In a cross-sectional study of 329 hospitalized

COVID-19 patients in Iran from March—July



Impact of daily high dose oral vitamin D therapy on the inflammatory markers in patients with COVID 19 disease

Take Home Message: Impact of daily high dose oral vitamin D therapy on the inflammatory markers in patients with COVID 19 disease. Take Home Message In a prospective open-label



Vitamin D deficiency in critically ill COVID-19 ARDS patients

Take Home Message: Vitamin D deficiency in critically ill COVID-19 ARDS patients Take Home Message In this single-center retrospective study of 26 COVID-19 patients in Germany with acute respiratory

∭^o Council for Responsible Nutrition

Summary of 14 Meta-Analyses

12 Meta-Analyses of Blood Levels of Vitamin D and COVID-19

 In each of the meta-analyses lower blood levels of vitamin D were significantly associated with either higher incidence of COVID-19, greater disease severity, or greater mortality

2 Meta-Analyses of Vitamin D Intervention and COVID-19

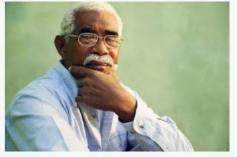
- One meta-analysis found better clinical outcomes and reduced mortality with vitamin D intervention, but only when received post-COVID-19 diagnosis
- A smaller meta-analysis had no statistically significant findings, but did note a non-significant slightly lower mortality rate in the vitamin D group

Solution Council for Responsible Nutrition

9

How Common is Vitamin D Deficiency & Insufficiency? Who is at Risk?

Low vitamin D status is becoming more common worldwide. The prevalence of vitamin D deficiency (VDD) was found to be 28,9 % and vitamin D insufficiency (VDI) 41% in a subset of 26,010 US adults surveyed as part of the ongoing National Health and Nutrition Examination Survey (NHANES) 2001-2010. Those who were African American, less educated, of lower socioeconomic status, smokers, physically inactive, obese and infrequent milk consumers demonstrated a higher prevalence of VDD and VDI. ¹ Worldwide, many countries report a high prevalence of low vitamin D status. The percentage of individuals with VDD or serum 25(OH)D <30 nmol/L (or 12 ng/ml) is estimated to be 7.4% in Canada, ² 13% in Europe³ and as high as >20% of the population in India, Tunisia, Pakistan and Afghanistan. ^{3,4} However, certain populations are more at risk for becoming deficient than others. For



example, individuals with chronic diseases especially of the liver, kidney and heart, anyone with diseases that lead to malabsorption such as Crohn's disease, hospitalized patients, and anyone with reduced exposure to sunlight. ^{5,6} Older adults, individuals with existing conditions, obese individuals, diabetics and those taking certain medications are particularly at risk. Older adults, especially those that are institutionalized, are at increased risk due to decreased sun exposure, decreased ability to synthesize vitamin D in the aging skin, ⁷ decreased intake and possibly a greater number of medications. Medications such as antiseizure medications, glucocorticoids, rifampin and supplements such as St. John's Wort may increase the risk of vitamin D deficience. ⁸

Council for Responsible Nutrition

