

# Optimum Nutrition Recommendations

Written By [Michael Greger M.D. FACLM](#) on September 12, 2011



*Image Credit: [Kristina DeMuth](#)*

## ***Updated 2019***

I go into specifics of the Daily Dozen foods I recommend in my video, [Dr. Greger's Daily Dozen](#). And for a more thorough dive into the science on these foods, check out my NYT best selling book, [How Not to Die](#). The [balance of scientific evidence](#) suggests that the healthiest way to eat is a vitamin [B12](#)-fortified diet of whole plant foods. For optimum nutrition, we should be sure to include in our daily diet not

only an array of whole [grains](#), [beans](#), [nuts](#), [seeds](#), [fruit](#), and as many [vegetables](#) as we can eat, but also specifically [dark green leafy](#) vegetables, [berries](#), and [white](#) (or [green](#)) tea.

Attention should also be paid to these nutrients:

### [Vitamin B12](#) (see also *[Which type of vitamin B12 is best](#)*)

- At least 2,000 mcg (µg) cyanocobalamin once each week, ideally as a chewable, sublingual, or liquid supplement taken on an empty stomach
  - or at least 50 mcg daily of supplemental cyanocobalamin (you needn't worry about taking too much)
  - or servings of B12-fortified foods three times a day (at each meal), each containing at least 190% of the Daily Value listed on the nutrition facts label (based on the new labeling mandated to start January 1, 2020—the target is 4.5 mcg three times a day).
- Those over 65 years of age should take at least 1,000 mcg (µg) cyanocobalamin every day.
- Tip: If experiencing deficiency symptoms, the best test is a urine MMA (*not* serum B12 level)
- For more B12 info including doses for children, check out our [infographic](#)

### [Omega-3 Fatty Acids](#)

- 250 mg daily of pollutant free (yeast- or algae-derived) long-chain omega-3's (EPA/DHA)

### [Vitamin D](#) (*daily recommendations for those in the Northern Hemisphere; D3 from animal or plant sources may be preferable to the D2 sourced from fungi*)

- Below approximately **30°**latitude (south of Los Angeles/Dallas/Atlanta/Cairo)
  - 15-30 minutes of midday sun (15 for those with lighter skin; 30 for those with darker skin)
  - or 2,000 IU supplemental vitamin D

- Between **30°** latitude (sample cities above) & **40°**latitude (Chicago/Boston/Rome/Beijing)
  - From February through November
    - 15-30 minutes of midday sun (15 for those with lighter skin; 30 for those with darker skin)
    - *or* 2,000 IU supplemental vitamin D
  - From December through January
    - 2,000 IU supplemental vitamin D
- Between **40°** latitude (sample cities above) & **50°**latitude (Winnipeg/London/Berlin/Prague)
  - From March through October
    - 15-30 minutes of midday sun (15 for those with lighter skin; 30 for those with darker skin)
    - *or* 2,000 IU supplemental vitamin D
  - From November through February
    - 2,000 IU supplemental vitamin D
- Above approximately **50°**latitude (north of Winnipeg/London/Berlin/Prague)
  - From April through September (or even briefer above **60°**latitude (Anchorage/Stockholm))
    - 15-30 minutes of midday sun (15 for those with lighter skin; 30 for those with darker skin)
    - *or* 2,000 IU supplemental vitamin D
  - From October through March (or even longer above **60°**latitude (Anchorage/Stockholm))
    - 2,000 IU supplemental vitamin D

## Calcium

- At least 600 mg daily via calcium-rich plant foods—preferably low-oxalate dark green leafy vegetables, which includes all **greens** except **spinach**, chard, and beet greens (all very healthy foods, but not good calcium sources due to their oxalate content).

## Iodine

- For those who don't eat [seaweed](#) or use iodized salt, a 150 mcg daily supplement
  - The sea vegetable [hijiki](#) (hiziki) should *not* be eaten due to high arsenic levels
  - [Kelp](#) should be avoided as it tends to have too much iodine

## Iron

- All menstruating women should increase their absorption by combining foods rich in iron and [vitamin C](#) at meals and should get checked for iron-deficiency [anemia](#) every few years
- Men should be checked for an iron overload disease before any attempt to increase intake

## Selenium

- Northern Europeans may need to take a supplement or eat a daily [Brazil nut](#)

**-Michael Greger, M.D.**



Discuss

# Michael Greger M.D. FACLM

Michael Greger, M.D. FACLM, is a physician, New York Times bestselling author, and internationally recognized professional speaker on a number of important public health issues. Dr. Greger has lectured at the Conference on World Affairs, the National Institutes of Health, and the International Bird Flu Summit, testified



and The Colbert Report, and was on Oprah Winfrey at the infamous "meat

defamation" trial.



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Name

**Michael Greger M.D.**

11 years ago

Please leave any questions you may have about these recommendations and I'd be happy to try and answer them.

⌵ Reply

^ Reply



**Nice's health** → Michael Greger M.D.

7 years ago



Hello! Flax seeds have 2338 mg per tablespoon. Isn't that enough in a day instead of the supplement? Or the difference is in the absorption of the fatty acids? I'm a medical doctor from Portugal. Would like to hear your opinion about it as here is difficult to find this supplements. Thank you so much!

^ Reply



**Gwen Oatman** → Nice's health

7 years ago



Here's a video that answers the flax question pretty well... <http://nutritionfacts.org/v...>

^ Reply



**Eric Gates** → Gwen Oatman

2 years ago



Thanks for this. I am curious as to the reason DHA supplementation is not part of Dr. Greger's daily dozen. But after watching that video, I am convinced that the potential rewards of EPA/ DHA supplementation outweigh the financial risk of getting ripped off by smarmy supplement purveyors.

^ Reply



**Osakapapa** → Nice's health

5 years ago



where do u get the flax seeds nutrition data? on the USDA database, it states flaxseed does not contain Vitamin D.

^ Reply



**L. B. Dahle** → Nice's health

2 years ago



Best source for this information is in writings of Johanna Budwig, doctorate in physics and chemistry, whose entire life was devoted to this topic. Some of her works are in English and the website for the Budwig Foundation is translated into multiple languages.

^ Reply



**Jack Bloom** → Michael Greger M.D.

6 years ago



Hello Dr Greger: Your good friend, Dr. Mercola, has just posted (Sept 17, 2016) an article entitled:

The Case Against Veganism — Carefully Researched Book Spills the Beans -- I respectfully

think that you need to address this post as soon as possible, as many of your viewers are also viewers of Dr Mercola. Thanks. J. Bloom  
You can find it here: <http://articles.mercola.com...>

^ Reply



**Gregory** → Jack Bloom  
4 years ago



Dr, Mercola is correct in what he posted

^ Reply



**Diane** → Gregory  
4 years ago



I'm confused, doesn't this article by Dr Mercola say vegans can not thrive on this diet.he seems anti plant based to me, but Dr. Greger just replied he agrees with the article? am I missing something

^ Reply



**Gregory** → Diane  
4 years ago



Dr Mercola is not anti plant based. If you listen to him he tell you that you should get your nutrition from food, mostly raw vegetables. He is just not against grass fed beef. So yes, that is what you are missing. I hope I was able to help.

^ Reply



**Jane** → Diane  
4 years ago



Someone named Gregory replied, not Dr. Greger. I doubt that Dr. Greger's views on nutrition align with those of Dr. Mercola. I really and sincerely doubt that Dr. Greger would support the consumption of any beef, grass fed or otherwise.

^ Reply



**Rebecca** → Diane  
3 years ago



"Gregory" is not Dr. Michael Gregor.

^ Reply



**jazzBass** → Diane  
2 years ago



thats a guy named Gregory... not Dr. Greger.

^ Reply



**Alexandra Gomes** → Michael Greger M.D.







Alexandra Gomez → Michael Greger M.D.  
5 years ago



Hi, Dr. Greger!

I know you recommend 250mg of DHA + EPA, but I was wondering... I have IBS and I'm also on the pill (a very strong one). Since I have poor circulation to begin with, what dosage would you recommend? I'm scared of taking too much.

Also, if it's an algae-derived supplement, does it contain iodine?

Thank you!

^ Reply



D → Michael Greger M.D.  
5 years ago



Hello and thank you for specifically outlining the supplements that should be taken when following a WFPBNO diet. I would like to ask about zinc and vitamin K2. I read that those are recommended as well. ( Zinc 15-30 mg and Vitamin K2 25-50 ug or mcg). Could you please clarify? Also, how much iodized salt consumption is equivalent to the recommended daily intake of iodine?

^ Reply



Georgan → Michael Greger M.D.  
5 years ago



Thank you for this evidence-based nutrition information!

Regarding Vitamine B12, can you comment on cyanocobalamin versus methylcobalamin?

Thanks again.

^ Reply



Dr. Jon → Georgan  
5 years ago



Hello Georgan,

Thank you for your question. I'm a family physician with a private practice in lifestyle medicine, and also a volunteer moderator for this website. Dr. Greger has done several videos on vitamin B-12.

Here are two that discuss why it's important to take B12 supplements, and also where in nature Vitamin B12 occurs:

<https://nutritionfacts.org/...>

<https://nutritionfacts.org/...>

Here is the specific answer to your question, as to which type is best, by Dr. Greger, back in 11/2012:

<https://nutritionfacts.org/...>



<https://nutritionfacts.org/...>

I hope this helps.

^ Reply



**nimesha** → Michael Greger M.D.

5 years ago



hello ... i was wondering if cyanocobalamin as you recommend is a more unnatural source of b12... compared to methylcobalamin ... this is because cyanocobalamin often tends to leech us of methyl donors that our body produces in contrast to methylcobalmin that supplies us with more methyl donors... as we understand methyl donors are necessary for methylation... please let me know if you recommend cyanocobalamin for a specific reason...

^ Reply



**Moderator - Dr Renae Thomas** → nimesha

5 years ago



Hi Nimesha,

My name is Dr Renae Thomas and I am one of the moderators. To the best of my knowledge, Dr Greger supports supplementation with cyanocobalamin as that is the type the majority of the research into B12 has used (with no adverse side effects documented) and it's much cheaper and more readily available than other forms.

For more from Dr Greger on B12, see his five-part series here-

<https://nutritionfacts.org/...>

^ Reply



**Laura** → Moderator - Dr Renae Thomas

8 months ago



I thought, perhaps mistakenly, that Dr Greger does NOT recommend B12 cyanocobalamin for those we other kidney issues. Am I mistaken?

^ Reply

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### Speaking Tour Update

Due to the pandemic, my speaking tour has been postponed until the release of my next book in 2023.

The events listed on the calendar are currently up to date!

MARCH 2022						
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