

# vitamins



## Teaching:

**Let's get some perspective. Typical Deficiencies in the US:**

Vit D - 95% some, 49% significant

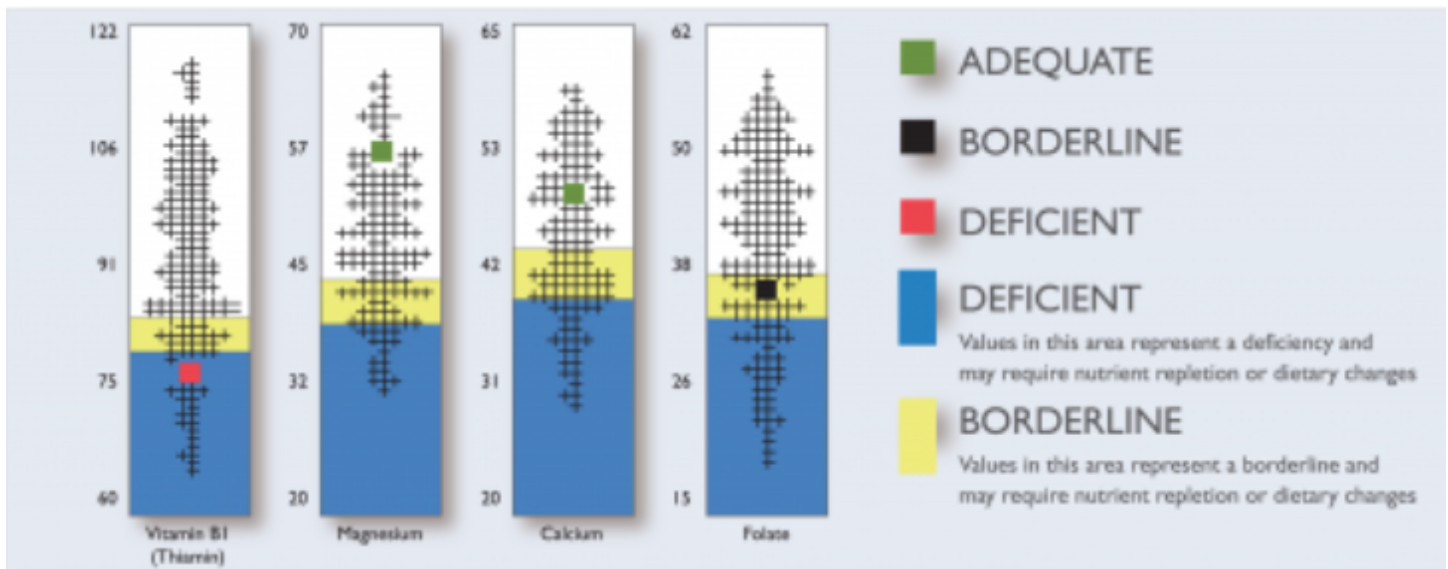
Vit E - 94%

Magnesium - 61% (68% of Americans struggle with sleep) \*correlation

Vit A - 51%

Vit C - 43%

Calcium - 38%



## Blood Panel:

**Wait a minute, you had your physical and were told your numbers were "FINE"...** so they were checked at your check up, right?! Well, your doctor is not checking your nutrient status when they check your blood, they are checking your blood to see if you are sick. They are looking for signs of illness, not wellness. Now keep in mind, that is a good thing that they are checking your blood for markers that may indicate you have problems with your kidneys, or liver, immune system, and more! You absolutely want your doctor to take care of you in that manner.

Asking for a full vitamin and mineral blood panel is a wonderful thing. Actually seeing what you're deficient in is helpful. Then you can take a season to try to battle that with food. Retest and go from there with either continuing the regimen or adding a specific vitamin/mineral supplement.

If you do not have a primary care physician, we have connection with plenty in the City of Charlotte. Another option is visiting this website to go through your own journey of testing: <https://www.wellnessfx.com/>

## What are vitamins?

Vitamins have three characteristics:

- They're natural components of foods; usually present in very small amounts.
- They're essential for normal physiologic function (e.g., growth, reproduction, etc).
- When absent from the diet, they will cause a specific deficiency.

Vitamins are generally categorized as either fat soluble or water soluble depending on whether they dissolve best in either lipids or water.

Vitamins and their derivatives often serve a variety of roles in the body – one of the most important being their roles as cofactors for enzymes – called coenzymes. (See figure below for an example.)

## **What are minerals?**

Most minerals are considered essential and comprise a vast set of micronutrients. There are both macrominerals (required in amounts of 100 mg/day or more) and microminerals (required in amounts less than 15 mg/day).

## **Why do I need Vitamins & Minerals?**

Vitamins, minerals, and other nutrients are essential for the human body. Vitamin deficiencies can create or exacerbate chronic health conditions.

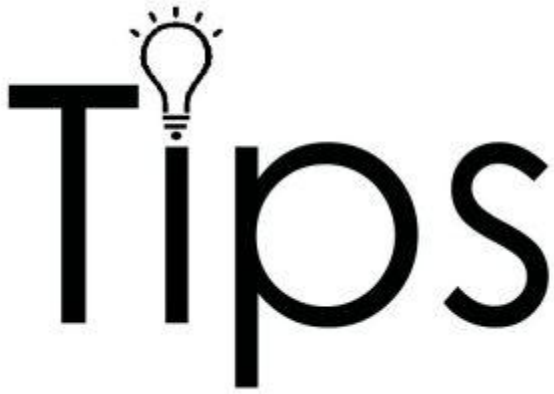
There's only so much we can get through food these days. We're highly likely to be missing some essential nutrients and almost certain to have less than the optimal amounts of many others. It's still important to eat right first but then supplement with vitamins.

## **What happens when I'm missing some of these vitamins and minerals?**

If we find deficiencies with specific vitamins and minerals, we can potentially prevent disease, rather than finding it once it has hit you at full force.

**Here are just a few examples of nutrients and how they affect your body:**

- Deficiencies in vitamin D, iron, vitamin A, and selenium, just to name a few can cause hypothyroidism, even if you are taking hypothyroid medication.
- Vitamin D deficiencies can affect athletic performance by decreasing strength and velocity.
- Vitamin B6 deficiencies can cause problems with depression, sleep, anxiety and fatigue.
- CoQ10 deficiencies can cause problems with blood pressure, mitral valve prolapse, and mental fatigue.
- Vitamin A deficiencies can cause problems with fertility and conceiving, acne, healing from wounds
- Vitamin C is needed for the health and repair of various tissues in your body, including skin, bone, teeth and cartilage. Over time, a lack of vitamin C means that new collagen cannot be formed. This causes various tissues in your body to start to break down and the health and repair of your body become affected. Persistent (chronic) vitamin C deficiency, usually over a period of around three months or more, can lead to an illness known as scurvy.



**A deeper look into Magnesium. Which one is for me?**

<https://missionfitlife.com/a-primer-on-magnesium/>

**A deeper look into Collagen. Which one should I take:**

<https://missionfitlife.com/collagen-the-fountain-of-youth/>

## **Vitamin/Mineral Absorption:**

Our bodies and the foods we eat contain minerals; we actually absorb them in a charged state (i.e., ionic state). Minerals will be in either a positive or negative state and reside inside or outside of cells.

Molecules found in food can alter our ability to absorb minerals. This includes things like phytates (found in grains), oxalate (found in foods like spinach and rhubarb), both of which inhibit mineral absorption, and acids. Even gastric acidity and stress can influence absorption.

## **Vitamin Tips:**

- If you take a large dose of a mineral, it will compete with other minerals to reduce their absorption.
- Some vitamins can actually enhance the absorption of other nutrients.
- Coffee and Tea can decrease the absorption of some vitamins and minerals.
- Fish Oil should be stopped 2 weeks prior to any surgery. Fish oil should not be taken in large doses for those in law enforcement or military that are in the line of fire.

## Enhancing Vitamins:

- One caveat to fat soluble vitamins is **Vitamin A and K** - absorption may actually be better absorbed when taken together.
- **Magnesium** absorption increases when combined with **Vitamin D**.
- **Iron** absorption increases when combined with **Vitamin D**.
- **Folic Acid** absorption increases when combined with **Vitamin C**.
- **Vitamin C** can enhance **iron** absorption.
- **Vitamin D** facilitates the absorption of **calcium**. It is therefore important to meet the daily intake of 15 micrograms of vitamin D to ensure your body can absorb the recommended 1,000 milligrams of calcium it needs per day.
- **Calcium** and **magnesium** are the most often minerals taken in large doses and should, ideally, be taken apart from other minerals.

## Clashing Vitamins:

- Magnesium and calcium
- Zinc and copper
- Iron and green tea
- Fish oil and ginkgo biloba
- Melatonin and other sedating herbs
- Red yeast rice and niacin
- Vitamins A, D, E, and K
- Potassium and calcium
- St. John's wort and antidepressants
- CoQ10 and your diabetes meds
- Garlic and OTC or Rx blood thinners
- Vitamin K and blood thinners
- Antibiotics and iron

## Where can I get these vitamins and minerals?



**FOOD!** Food is the number 1 best place to get these vitamins from. Should you have a blood panel done and see you are deficient in an area, google what foods are highest for that vitamin or mineral and start eating! However, if you still find you're struggling to get your numbers up, supplementation is the next avenue.

**CHECK OUT OUR ATTACHED LIST OF VITAMINS AND MINERALS AND THE BEST PLACES TO GET THEM VIA FOOD.**

# What brands do we recommend?

## Daily Supplements Focused on Immune Function

\*Dose suggestions per Dr. Rhonda Patrick. Remember to always check with your doctor before adding something new if you're on medications already.

- Multivitamin – [Pure Encapsulations O.N.E.](#) , [Doterra](#) – 1 capsule/daily
- Vitamin D3 – [Thorne Research – D3](#) , [Pure](#), [OrthoMolecular Products](#) (1,000iu) – 3,000iu/daily
- Probiotics – [Visbiome Probiotic sachets](#) , [Metagenix](#), [Garden of Life](#) – 1 sachet/daily
- Vitamin C – [Pure Encapsulations – Ascorbic Acid](#) , [Pure](#) – 1-2 grams, 4x per day
- Quercetin – [Pure Encapsulations – Quercetin](#) – 250mg/daily
- N-acetyl L-cysteine – [Life Extension – N-acetyl-L-cysteine](#) , [Pure](#) – 1200mg/daily
- Glutathione – [Pure Encapsulations – Liposomal Glutathione](#) , [Readisorb](#) – 500mg/daily
- Zinc – [Thorne Research – Zinc Picolinate](#) , [Pure](#) – 15mg/daily
- Sulforaphane – via Prostaphane and Moringa

## Additional Daily Supplements

- Fish Oil – [Norwegian PURE-3 DHA](#) , [NOW Brand](#), [Nordic Naturals](#), [Barleans pills or Swirl Liquid](#) – 6 capsules/daily
- Magnesium – [Pure](#), [Thorne's Magnesium Bisglycinate](#)
- Vitamin K2 – [Life Extension Low-Dose Vitamin K2 \(MK-7\)](#) – 1 capsule/2-3 times per week
- PQQ (Pyrroloquinoline Quinone) – [Life Extension – PQQ 20mg](#) – 2 capsules/daily
- Curcumin - [Integrative Therapeutics](#)
- Cocoa Extract – [CocoaVia](#) – 2 capsules/daily
- Sulforaphane – [Prostaphane](#) – 1 capsule/daily
- Melatonin – [Life Extension 300mcg](#) , [Readisorb](#) – 1 capsule/nightly
- Hydrolyzed Collagen – [Great Lakes](#) – For improved joint and skin health
- Omega-3 Phospholipids – [Wild Salmon Roe Caviar](#)

## Extras for specific populations:

- L-Glutamine - [Pure](#)
- Glucosamine - [Pure](#), [Thorne](#)
- DHist - [Orthomolecular Products](#) - for those with sinus and allergy
- Beet Powder – [Activz Organic](#) – those with high blood pressure
- Methylated B Vitamins – [Swanson's B Complex](#) , [Readisorb](#) those with trouble converting energy
- Choline – [NOW – Alpha GPC](#) – Taken before public speaking events to increase mental acuity
- Sulforaphane – via home grown broccoli sprouts

## **Furthered Learning Articles:**

<https://fastlife hacks.com/dr-rhonda-patricks-supplements-list/>

<https://podcastnotes.org/podcast-notes-summaries/rhonda-patricks-top-11-supplements-brands-and-doses/>