# Will Mega-Dosing Vitamins/Minerals Help My Immunity?



How frightened are you of cold and flu season?! I know I am! So listen...it's normal to be a tad kooky about avoiding illness. Whether it's obsessively squirting antibacterial gel on your hands or overdosing on Emergen-C, it's important to know the facts. I watch my mom downing chewable tablets of C and daily dosing herself with Emergen-C packets- she swears by them. Being a dietitian, I know better. (However, I do take my fair share of supplements and I will share at the end of the article!) Let's talk about Emergen-C. By delivering a megadose of vitamin C and other key nutrients such as vitamin A, vitamin E, Zinc, and Selenium, these supplements claim to boost your immune system. Just one dose of Emergen-C or Airborne packs 1000mg of vitamin C, which is over 1000% of your recommended daily intake. That's over ten times the recommended amount, given that adults need only 75mg to 90mg of vitamin C per day. Is a megadose of vitamin C really necessary? And, better yet, can it cure a cold?

The truth is, dietary supplements are not meant to treat, cure, or prevent illness. If taken in high doses for longer periods of time, supplements may lead to adverse health effects and even vitamin toxicity. And because some supplements may be harmful when combined with other drugs, it's always best to talk to your doctor before taking them. Be a wise consumer.

So, what does taking too many vitamins look like? What are the potential health risks? The <u>Institute of Medicine</u> determines Tolerable Upper Level Intakes (ULs), or the maximum amounts, of vitamins you can safely take per day. Let's see the key vitamins found in Airborne and Emergen-C with their associated ULs. It is much easier to see just how big of a dose these supplements provide.



NUTRIENT	UPPER LIMITS FOR ADULTS	AIRBORNE (1 TABLET)	
Vitamin C	2000 mg	1000 mg (1167% DV)	1000 mg (1167% DV)
Vitamin A	10,000 mg	2000 mg (40% DV)	n/a
Vitamin B6	100 mg	n/a	10 mg (500% DV)
Zinc	4 mg	8 mg (53% DV)	2 mg (13% DV)
Selenium	400 mcg	15 mcg (21% DV)	n/a

Airborne recommends taking no more than three tablets per day, but this is still over 3000% more vitamin C than you actually need. Emergen-C also cautions against using more than two packets. To find what can happen if you surpass daily limits, here is a reference of each vitamin in the National Institutes of Health's Office of Dietary Supplements.

#### **Vitamin C**

The NIH reports that most people who consume <u>too much vitamin C</u> from supplements experience gastrointestinal issues such as diarrhea, nausea, and stomach pain. While the recommended daily amount of vitamin C supports your body's immune system health, an excess amount will most likely be flushed out through your urine.

#### VItamin A

One Airborne tablet packs nearly half a day's worth Vitamin A (Emergen-C does not contain this nutrient). Specifically, Airborne contains retinyl acetate, a type of preformed Vitamin A often used in dietary supplements. In food, preformed vitamin A is found in meat, poultry, and dairy products. NIH links <u>excessive amounts of preformed Vitamin A</u> to dizziness, nausea, and headache.

#### Vitamin B6

According to the NIH, excessive vitamin B6 intake from supplements for a year or more can temporarily cause nerve damage, increased sensitivity to sunlight, irritated skin, nausea, and heartburn. One Emergen-C packet delivers more than enough vitamin B6—over seven times the recommended amount of 1.3 mg per day for adults.

#### **Zinc**

In healthy doses, Zinc is associated with a strong immune system. Consuming too much zinc on a regular basis, however, can cause nausea, vomiting, appetite loss, stomach pain, headache, diarrhea and anemia. One Airborne tablet packs over half of your daily recommended amount of zinc (between 8 and 11mg for adults)

#### **Selenium**

Like vitamin C, selenium boasts immune-boosting benefits when consumed in recommended amounts (55 mcg per day for adults). Excessive intake of selenium can lead to adverse effects such as brittle nails and teeth, a metallic taste in your mouth, nausea, diarrhea, irritability, nervous system problems, and more.

**The Bottom Line**: Staving off your cold or preventing the flu with a supercharged dose of vitamins is simply not a reliable remedy.

And while you can certainly use Airborne tablets to jazz up your water every once in a while, do not do this daily. One large dose of vitamins isn't going to hurt you, but taking excessive amounts over a longer period of time could.



What works:

If you're looking to boost immunity, I suggest doing it the non-fast fix way with your food and lifestyle habits. I know I know, SO not American.;)

- Increase omega 3 fatty acids found in salmon, walnuts, and chia seeds.
- **Increase intake of vitamin C and zinc** levels from foods first if you can. Foods high in vitamin C and beta-carotene are cabbage, broccoli, pumpkin, sweet potato, and spinach. Foods high in zinc are fish, oysters, poultry, eggs, milk, unprocessed grains, and cereals.
- **Increase probiotics** from food first if possible. Fermented dairy such as kefir, yogurt, and sauerkraut. I also recommend taking a probiotic supplement especially during winter months and always after antibiotic use.
- **Drink more green tea** as the polyphenols, especially catechins, may stimulate the production and activity of specific cells associated with combating viruses
- Add seasonings and spices. Specifically, garlic and onions!
- **Throat Coat Tea.** This is my favorite herbal tea of all time when I have a sore throat. My dietitian friend Britany got me on the stuff. The slippery elm is soothing for the throat.
- **Try not to under or overconsume** (use the hunger/satiety scale to help yourself not get above an 8 or below a 3). Research has shown that very low-calorie or very high-calorie diets can decrease our immune function.
- Very high-fat diets can adversely affect our immune function and impact rates of infection and illness. I typically encourage a moderate fat intake of no more than 30% of the total daily energy needs and the incorporation of healthy fats (monounsaturated and polyunsaturated)
- *Incorporate a daily multivitamin mineral supplement* (Kirkland supplements are some of the best).
- Washing your hands!
- NOT touching your face with your hands. The eyes, nose, and mouth are portals
  of pathogen entry. Eeeeek!
- **Getting enough sleep**. At least 7 hours. Watch that blue light from your phone! It can really mess with your circadian rhythm. Turn down the blue light or wear blue light blocking glasses. I have some. Not so attractive but it's for my health so who cares.
- Mindful practices for stress reduction
- **Exercising regularly** (most days of the week)
- Drinking plenty of water

I'm really not a labor intensive cook but I wanted to include some recipes for those who are. I usually would get Amy's chili or soups out of the can which are perfectly healthy



Healthy, Hearty Immune Boosting Soups

## Pinto Bean Soup

Serves 6

*Ingredients:* 

2 qts spring water

1 lb pinto beans

4 cloves garlic, chopped

1/2 yellow onion, chopped

1/2 green bell pepper, diced

1/2 bunch fresh cilantro (coriander), finely chopped

#### Directions:

Simmer all ingredients in a covered pot until beans are tender. Smash or blend about half of the beans to thicken. Add spices of choice, but limit salt and pepper.

Nutrient Analysis:

Calories: 271

Protein: 17 g

Carbs: 49 g Total Fat: 1 g

Sat Fat: 0 g

Cholesterol: 0 mg Sodium: 10 mg

Fiber: 12 g **Trinity Soup** 

Serves 8

## Ingredients:

- 1 cup pinto beans
- 6 cups spring water
- 5 cloves garlic, chopped
- 1/2 red onion, chopped
- 11/2 cups fresh corn kernels
- 2 cups fresh string beans
- 4 cups zucchini (thick slices)
- 1/2 sprig cilantro or parsley

### Directions:

Cook beans in water until tender; add garlic and onion during the last 15 minutes of cooking. Add all other ingredients and simmer slowly until the string beans are tender. Refrigerates well and can be frozen.

## **Nutrient Analysis:**

Calories: 303
Protein: 19 g
Carbs: 56 g
Total Fat: 1 g

Sat Fat: 0 g

Cholesterol: 0 mg Sodium: 21 mg

Fiber: 14 g

## Green Pea Soup

Serves 10

## Ingredients:

- 2 cups split green peas
- 10 cups stock
- 1 large onion, diced
- 1 clove garlic, chopped
- 2 stalks celery, sliced
- 2 carrots, sliced
- 2 potatoes, cubed
- 1 bay leaf
- 1/4 tsp thyme
- 1/4 tsp basil
- 1 tsp salt

#### Directions:

Cook peas in stock with bay leaf until they are tender and mushy, about 6 hours. Add seasonings and vegetables and cook about 20 minutes, until vegetables are tender. Turn heat down and simmer for a half hour or so to let the flavors blend.

**Nutrient Analysis:** 

Calories: 292
Protein: 18 g
Carbs: 49 g
Total Fat: 3 g
Sat Fat: 1 g

Cholesterol: 7 mg Sodium: 605 mg

Fiber: 12 g

I mentioned I take supplements. I know they are not all backed by significant research but I believe in them and that's ok for me for now. Vitamin D, Fish Oil, Multivitamin, Probiotics ( 2 kinds), and Immune System Support. I maintain that it's food first. You cannot get your immune system strong from supplements. They are only an adjunct. K? Also, NO ONE SINGLE FOOD OR FOOD COMPONENT HAS BEEN FOUND TO AFFECT THE SYSTEM AS A WHOLE. So make sure you get that variety.

I wish you all well!

Miriam Jirari Turner

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Resources: <a href="https://www.cookinglight.com/news/can-you-take-too-many-vitamins">https://www.cookinglight.com/news/can-you-take-too-many-vitamins</a>, Recipes (excluding nutrient analyses) provided by and used with permission from Debora A. Robinett, MA, RD, CD, An article from Harvard Health Publications provides an excellent overview about what is currently known about the <a href="link between immunity">link between immunity and lifestyle factors</a>.