



# Understanding Supplement and Drug Interactions

Dietary supplements, such as multi-vitamins and minerals, are consumable products that contain a dietary ingredient intended to supplement the diet.<sup>1</sup> They are not meant to replace healthy eating.<sup>1</sup> You should always seek to meet your nutritional needs with food first. However, some individuals who are not able to meet their needs through food alone may require supplements.<sup>1</sup> If you suspect that you are in need of additional vitamins or minerals beyond what your current diet can provide, you should be aware that some supplements may interact with your prescription medications.<sup>2</sup> That's why it is important to consult a health care provider before taking any dietary supplement.

## Supplements and Prescription Drugs

Nutrient deficiencies are rare in the United States.<sup>3</sup> Most individuals are able to meet their vitamin and mineral needs by eating a variety of nutrient-dense foods, such as whole grains, lean protein, fruits, vegetables, and low-fat or fat-free dairy products.<sup>3</sup> There are exceptions. For example, vegetarians and vegans may need to take a vitamin B<sub>12</sub> supplement to compensate for the lack of animal products in their diet.<sup>3</sup> Likewise, calcium supplementation may be needed by growing children to help them with the formation of new bone or the elderly to slow their rate of bone loss.<sup>4</sup> These and other dietary supplements may help you maintain a healthy lifestyle, but could become harmful when combined with prescription medications.

The health concerns associated with dietary supplements are every bit as real as the foods they attempt to replace. Some supplements have been found to cause irregular heartbeat, stroke, headaches, or other unfavorable reactions.<sup>5</sup> They may increase or decrease the effectiveness of prescription or over-the-counter medications.<sup>2</sup> For example, a vitamin E supplement or aspirin taken with a prescribed blood thinner could increase the potency of the prescribed medication, thereby increasing the risk for internal bleeding or stroke.<sup>6</sup> While this type of interaction can result in harmful consequences, it can also be avoided. Below are tips on how to safely use prescription medications.

## Tips for Safe Drug Use

- 1. Inform your doctor of all medications and supplements (including vitamins, minerals, and herbals) you take.** At least once a year, bring all of your medications (prescription



and over-the-counter) and supplements to your health care provider. Patients who do this during every health care visit reduce the risk of experiencing a negative drug interaction.<sup>7</sup>

2. **Read the drug label.** The drug label will include information on what the drug is used for, how to take the drug, and how to avoid unwanted side effects.<sup>8</sup> The drug label will provide you with information in the below sections<sup>8</sup>:
  - a. “Active Ingredients” and “Purpose”: Identifies the name, amount, and purpose of each active ingredient.
  - b. “Uses”: Describes the symptoms that the drug is intended to address.
  - c. “Warnings”: Information about when to speak with a doctor or pharmacist when using the drug, any conditions that may make the drug less effective or not safe, when the drug should not be used, and when to stop taking the drug.
  - d. “Directions”: Period of time and frequency of when the drug should be taken, amount of the drug per dose, and any other special instructions (e.g. take with food).
  - e. “Other Information”: Information on certain ingredients (often for people with dietary restrictions or allergies).
  - f. “Inactive Ingredients”: Lists each inactive ingredient (e.g. coloring)
  - g. “Questions?” or “Questions and Comments”: Contact information for any questions or comments on the drug.
3. **Ask your doctor and/or pharmacist questions.** Before taking any prescription medication, ask your doctor the following questions about mixing with supplements<sup>8</sup>:
  - a. I am currently taking (list any medications or supplements you take regularly). Can this medicine be mixed with any of those?
  - b. Should I avoid any other medications, supplements, foods, beverages, or other products when taking this medication?
  - c. What signs or symptoms should I look for to indicate a drug interaction?
  - d. What kind of effect should this drug have on my body?
  - e. Where can I find more information on this drug?

Get in the habit of regularly checking the expiration dates on your medication bottle and dispose of the drug if it is outdated. The U.S. Environmental Protection Agency offers guidance on the proper disposal of prescription drugs<sup>9</sup>:

- Follow the disposal instructions on the bottle or accompanying patient information
- Take advantage of drug take-back programs in your area or visit [National Drug Take Back Day](#) for more information
- Contact your state and local waste management authorities with any questions



## Resources

For additional information about dietary supplements, consult these Navy and Marine Corps Public Health Center resources:

- [How Healthy are Dietary Supplements](#)
- [How Safe are Dietary Supplements](#)
- [HPW Healthy Eating: Dietary Supplements](#)

## References

<sup>1</sup> Dietary Supplement Health and Education Act (DSHEA) 1994. S.784. 103<sup>rd</sup> Congress (1993-1994).

<sup>2</sup> U. S. Food and Drug Administration. Q&A on Dietary Supplements.

[http://www.fda.gov/food/dietarysupplements/qadietarysupplements/default.htm#what\\_is](http://www.fda.gov/food/dietarysupplements/qadietarysupplements/default.htm#what_is)

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<sup>3</sup> Denny, S and Kohn, J. Vitamins, Minerals and Supplements: Do You Need to Take Them? Academy of Nutrition

and Dietetics. <http://www.eatright.org/Public/content.aspx?id=6442481768&terms=vitamins%20and%20minerals>

1995-2015. Accessed August 2015.

<sup>4</sup> Calcium Fact Sheet for Consumers. National Institutes of Health Office of Dietary Supplements.

<http://ods.od.nih.gov/factsheets/Calcium-Consumer/>. Reviewed 19 March 2013. Accessed August 2015.

<sup>5</sup> Human Performance Resource Center. Operation Supplement Safety (OPSS). <http://hprc-online.org/dietary-supplements/opss/operation-supplement-safety-OPSS/opss-frequently-asked-questions-faqs-1/general-faqs>.

Accessed August 2015.

<sup>6</sup> Federal Drug Administration. Mixing Medications and Dietary Supplements can Endanger Your Health.

<http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/UCM420449.pdf>. Published October 2014.

Accessed August 2015.

<sup>7</sup> Federal Drug Administration. 6 Tips to Avoid Medication Mistakes.

<http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm096403.htm>. Published July 2015. Accessed August

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<sup>8</sup> Federal Drug Administration. Drug Interactions: What you should know.

<http://www.fda.gov/downloads/Drugs/ResourcesForYou/UCM163355.pdf>. Published March 2004. Accessed

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<sup>9</sup> Pharmaceuticals and Personal Care Products. Frequent Questions. U.S. Environmental Protection Agency.

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