



How Safe are Dietary Supplements?

What You Don't Know Could Hurt You

As service members, you know that maintaining a healthy weight is critical for the military mission. You know that exceeding body composition assessment (BCA) standards can negatively impact your career and impede your readiness. You also know that failing to meet minimum BCA standards can reduce your performance and decrease your resilience. But do you know the safest way to make weight? Hint: it's not by taking a dietary supplement.

The most effective way to lose weight or gain muscle is by eating a balanced diet and engaging in regular physical activity. Even though supplements contain a dietary ingredient intended to supplement the diet,¹ they are not replacements for healthy eating and exercise. There is no quick fix. Achieving a permanent healthy weight takes time and commitment. Consider all the facts and talk to your health care provider before you take a dietary supplement.

The Safety Factor

There is no way to fully verify if a dietary supplement is safe before you purchase the product. Some supplements have been found to contain banned substances or prescription medications that could be potentially harmful. Additionally, there are no limits on serving sizes or amount of an ingredient in any form of a dietary supplement.^{2,3}

Unlike prescription drugs and over-the-counter medications, the U. S. Food and Drug Administration (FDA) does not review and approve supplements based on safety or effectiveness prior to being made available to the public.² Manufacturers are entrusted with ensuring that their products are safe; however, they are not required to disclose the information or evidence that supports their claim.² Once a supplement is on the market, the FDA has the burden of showing that the product is unsafe before it can initiate a product recall.² In other words, instead of preventing illness and injury caused by adulterated dietary supplements, the FDA is tasked with reacting to these health emergencies after they occur.

Dietary Ingredients

- Vitamins
- Minerals
- Herbs/Botanicals
- Amino Acids
- Enzymes
- Metabolites

Supplement Forms

- Tablets
- Capsules
- Gels
- Liquids
- Powders



Considerations for Taking a Supplement

Think about the following considerations if you still feel you need to take a supplement:

1. Look for Third Party Certification: Verifies that the manufacturing is utilizing Good Manufacturing Practices, the contents listed on the container are actually in the container and in the amount indicated on the label. Third Party Certification does NOT validate the structure/function claim (i.e. helps with weight loss, improved performance, etc.).

2. Who are Third Party Certification Agencies?

- United States Pharmacopeia (USP)



- NSF International



- Informed-Choice



- Banned Substances Control Group



- ConsumerLab.com



3. Ask yourself these questions:⁴

- Does the label contain third party certification seal?
- Are there more than five ingredients on the label? Are there any ingredients for which no amount is shown (i.e. proprietary blend)?
- Are the ingredient names hard to pronounce?
- If product contains caffeine, is there more than 200 mg per serving?
- Does your product promise a “quick fix”?
- Are all the Daily Values (DV) on the label less than 200% (except Fish Oil/glucosamine)?

If you answered “No” to four or more of these questions the supplement should be safe, less than four “No’s” then it may be an unsafe product. Remember, check with your healthcare provider before taking a dietary supplement.



Identifying Fraud

Manufacturers are prohibited from marketing dietary supplements as a treatment, prevention, or cure for diseases or medical conditions, such as obesity. Although a supplement facts label is required and product promotions must be accurate, many manufacturers engage in misleading tactics. Here are some advertising claims that should cause you concern:⁵

- Satisfaction guaranteed: Promises of a money back guarantee, but when you go to collect, the company is nonresponsive.
- Quick and easy fixes: Claims of excessive weight loss in a short period of time are unfounded. Safe and effective long-term weight loss takes time.
- All natural: Natural is not always safer. Many plants found in nature are poisonous.
- Personal testimonials or celebrity endorsements: First-hand accounts of weight loss are often made up and should not replace independent, scientific research.
- One product does it all: Any product that promises to build muscle and burn fat at the same time is fraudulent.
- Conspiracy theories: Statements claiming that the government is trying to keep a supplement away from the public are meant to distract consumers from the lack of scientific support for the product.

DoD Position on Dietary Supplements

The Department of Defense (DoD) encourages service members to eat nutrient-dense foods and participate in regular physical activity as a means of achieving permanent weight loss. Temporary fixes, such as dietary supplements, are not recommended; however, there is no formal policy on their use.⁶ DoD does not have lists of banned or permissible supplements for military personnel.⁶ Dietary supplements are available at Military Exchanges unless deemed unsafe or illegal by the FDA. It is imperative that every service member do their own research, talk to a health care provider, and thoughtfully weigh the pros and cons of taking a dietary supplement.

Additional Resources

For more information on specific supplements, dietary ingredients, tips on how to manage your weight safely and effectively, adverse events, and DoD policies go to:

- [Tools for the Warfighter](#): Human Performance Resource Center, Operation Supplement Safety (OPSS)
- [Dietary Supplements for Consumers](#): U. S. Food and Drug Administration
- [HP Toolbox](#): Navy and Marine Corps Public Health Center (NMCPHC) Health and Wellness Department (HPW)



References

- ¹ Dietary Supplement Health and Education Act (DSHEA) 1994. S.784. 103rd Congress (1993-1994).
- ² U. S. Food and Drug Administration. Q&A on Dietary Supplements. http://www.fda.gov/food/dietarysupplements/qadietarysupplements/default.htm#what_is Updated 20 March 2014. Accessed 19 November 2014.
- ³ U. S. Department of Health and Human Services. National Institutes of Health. National Center for Complementary and Alternative Medicine (NCCAM). Time to Talk About Dietary Supplements: 5 Things Consumers Need to Know. <http://nccam.nih.gov/health/tips/supplements>. Updated 17 September 2012. Accessed 19 November 2014.
- ⁴ Human Performance Resource Center. Dietary Supplements: Check the Label First. <http://hprc-online.org/dietary-supplements/files/HPRCDietarySupplements052714.pdf>. Accessed 16 December 2014.
- ⁵ U. S. Food and Drug Administration. 6 Tip-offs to Rip-offs: Don't Fall for Health Fraud Scams. <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm341344.htm> Updated 30 September 2014. Accessed 19 November 2014.
- ⁶ 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 19 November 2014.