

# DIETARY SUPPLEMENTS AND OPERATION SUPPLEMENT SAFETY

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In support of The Consortium for Health and Military Performance  
Department of Military & Emergency Medicine, School of Medicine  
Uniformed Services University of the Health Sciences  
Contractor, Henry M. Jackson Foundation (HJF)



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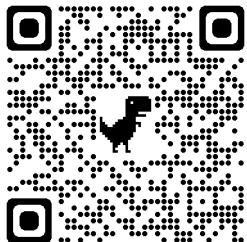
# Objectives

- Show why dietary supplements pose a threat to military readiness
- Utilize Operation Supplement Safety (OPSS) resources to be an evidence informed user of dietary supplements

# **Operation Supplement Safety (OPSS)**

# Operation Supplement Safety (OPSS)

OPSS is the military's go-to program and DoD-wide effort, including partnerships with other government and professional organizations, to provide evidence-based, up-to-date information on dietary supplements



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SUPPLEMENT  
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 Prohibited List

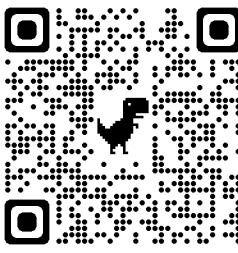
 Check Your Supplement

 A-Z Index

 Ask the Expert

 **USU**  
Uniformed Services University

 **CHAMP**  
Consortium for Health and Military Performance



## DoD INSTRUCTION 6130.06

### USE OF DIETARY SUPPLEMENTS IN THE DoD

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**Originating Component:** Office of the Under Secretary of Defense for Personnel and Readiness

**Effective:** March 9, 2022

**Releasability:** Cleared for public release. Available on the Directives Division Website at <https://www.esd.whs.mil/DD/>.

**Approved by:** Gilbert R. Cisneros, Jr., Under Secretary of Defense for Personnel and Readiness

# DoD Instruction 6130.06

- Use of Dietary Supplements in the DoD
  - Formalizes OPSS as the DoD program for dietary supplements
  - Requires education for Service Members and healthcare providers
  - Mandates adverse event reporting by healthcare providers
  - Establishes OPSS website as host for *DoD Prohibited Dietary Supplement Ingredients list*



# OPERATION SUPPLEMENT SAFETY

Department of Defense dietary supplement program for the military community, leaders, healthcare providers and DoD civilians



## DoD Prohibited List

DoD Prohibited Dietary Supplement Ingredients list



## [DoDI 6130.06](#)

[Use of Dietary Supplements in the DoD](#)



## A-Z Index

A-Z list of supplement ingredients, including Quick Facts



## Report Side Effects

Report an Adverse Event, a side effect of supplement use



## Check Your Supplement

Supplement scorecard to check your supplement



## Ask the Expert

Ask an expert about a supplement or effect

## FEATURED ARTICLES







THE DEPARTMENT OF DEFENSE DIETARY SUPPLEMENT RESOURCE

# OPERATION SUPPLEMENT SAFETY

[Info & Risk](#)[Ingredients](#)[A-Z Index](#)[Resources](#)[Ask the Expert](#)[About Us](#)

## DOD PROHIBITED DIETARY SUPPLEMENT INGREDIENTS

**Service Members** are **prohibited** from using the following **substances as ingredients in dietary supplements**. In addition, controlled substances\* and drugs (prescription, over-the-counter, and unapproved) are all prohibited for use in dietary supplements. This web page is provided to help Service Members know what to avoid when considering dietary supplement products. The DoD Prohibited list has been prepared in compliance with DoDI 6130.06.

\*For the most recent list of controlled substances, please visit the [Drug Enforcement Administration](#) website.

This list was last updated on **28 September, 2022**. We continue to work on improving the search function. Please let us know if you have any feedback to help us improve the search process.

Type your ingredient in the search bar above. 

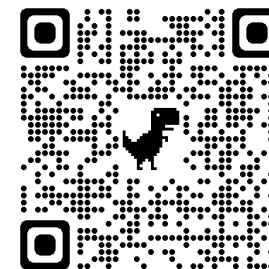
- Ensure you're spelling the ingredient exactly as it appears on the product label.
- Search for one ingredient at a time.
- Do not search for a brand name.

### Additional Resources



#### Ask the Expert

Don't see what you're looking for? A brand-name product? A different ingredient? More details? Ask us!



# DOD PROHIBITED DIETARY SUPPLEMENT INGREDIENTS

**Service Members** are **prohibited** from using the following **substances as ingredients in dietary supplements**. In addition, controlled substances\* and drugs (prescription, over-the-counter, and unapproved) are all prohibited for use in dietary supplements. This web page is provided to help Service Members know what to avoid when considering dietary supplement products. The DoD Prohibited list has been prepared in compliance with DoDI 6130.06.

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This list was last updated on **28 September, 2022**. We continue to work on improving the search function. Please let us know if you have any feedback to help us improve the search process.

## ! The ingredient you entered is on the DoD Prohibited List

OPSS cannot be held responsible for search results arising from the misspelling of any ingredient name.

- If you still have a question, you can use the OPSS [Ask the Expert](#) feature.

isopropylorsynephrine	
Primary Name:	isopropylorsynephrine
Other Names:	Betaphrine Deterenol isopropylloctopamine N-isopropylorsynephrine N-isopropylloctopamine
Prohibited Status:	<b>Prohibited:</b> FDA statement: Synthetic substance that currently does not meet the definition of a dietary ingredient Unapproved drug
Reference Link:	<a href="#">FDA: New dietary ingredient response letter</a> <a href="#">NIH NCATS Inxight Drugs entry: Deterenol</a>



Be sure to review the additional information provided with your search results for important warnings.

## Additional Resources







### Ask the Expert

Don't see what you're looking for? A brand-name product? A different ingredient? More details? Ask us!



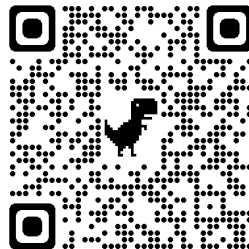
**Screen your supplement for safety. Read the label on your supplement and mark 1 for “yes” and 0 for “no.”**

Key questions you can answer:	Yes=1	No=0
Is any one of these <b>third-party certification</b> seals on the product label?    		
Are there <b>less than six ingredients</b> on the Supplement Facts label?		
Is the label free of the words <b>proprietary, blend, matrix, or complex</b> ?		
Can you <b>easily pronounce the name</b> of each ingredient on the Supplement Facts label?		
Is the amount of caffeine listed on the label <b>200 mg or less</b> per serving? (If caffeine is not listed, mark “1.”)		
Is the label free of <b>questionable claims</b> or <b>statements</b> ?		
Are all the % Daily Values (% DV) on the Supplement Facts label <b>less than 200%</b> ? (If % DV is not listed, mark “0.”)		
<b>Total: Add up the “1s.” 4 or more is okay. Less than 4 is a “no-go.”</b>		

Questions  
about dietary  
supplements?

Ask the  
OPSS experts at  
[OPSS.org/ask-the-expert](https://www.opss.org/ask-the-expert)

**OPERATION  
SUPPLEMENT  
SAFETY (OPSS)**



# SCREEN YOUR SUPPLEMENT FOR SAFETY. READ THE LABEL ON YOUR SUPPLEMENT AND ANSWER THESE QUESTIONS

Is any one of these **third-party certification seals** on the product label?



Yes



No

Are there **less than six ingredients** on the Supplement Facts label?



Yes



No

Is the label free of the words **proprietary, blend, matrix, or complex**?



Yes



No

Can you **easily pronounce the name** of each ingredient on the Supplement Facts label?



Yes



No

Is the amount of caffeine listed on the label **200 mg or less** per serving? (If caffeine is not listed, mark "Yes")



Yes



No

Is the label free of **questionable claims or statements**?



Yes



No

Are all the % Daily Values (% DV) on the Supplement Facts label **less than 200%**? (If % DV is not listed, mark "No")



Yes



No

## SUPPLEMENT SCORE

4 or more is okay. Less than 4 is a "no-go." It's also a "no-go" if it contains any ingredients on the Prohibited List. Use the button below to check.

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# Ask the Expert

THE DEPARTMENT OF DEFENSE DIETARY SUPPLEMENT RESOURCE

**OPERATION SUPPLEMENT SAFETY**



## ASK THE EXPERT

All information is treated as confidential. It can take us 5 to 7 business days or more to prepare an answer to each question.

If this is an emergency, please call 911, the [Military Crisis Line](#) at 800-273-8255, or Military OneSource at 800-342-9647.

What is your current role?

Select Role

Status

- Active Duty
- Reserve
- Veteran
- N/A

Are you a healthcare provider?

- Yes
- No

Subject line of the email

Enter your subject here

**\*Select *Email Us* to open your default email and ask your question.**

Email Us

*If the Email Us button above does not work correctly, you can email us directly at [supplements@usuhs.edu](mailto:supplements@usuhs.edu). Please include the information requested by our form above.*

## Additional Resources



**Prohibited List**

A list of Ingredients prohibited in the DoD



# Dietary Supplements Research and Scholarship



journal homepage: [www.elsevier.com/locate/NTR](http://www.elsevier.com/locate/NTR)

THE JOURNAL OF ALTERNATIVE AND COMPLEMENTARY MEDICINE

# JACM

Original Research

**Prioritized research recommendations for potential solutions: address dietary supplement ingredients and health and optimizing cognitive**

**This Issue**

Views **15,093** | Citations **0** | Altmetric **229** | Comments **3**



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CLINICAL TOXICOLOGY  
<https://doi.org/10.1080/15563650.2020.1713337>

CLINICAL RESEARCH

The scoop on brain health dietary supplement products containing

Cindy Crawford<sup>a,b</sup>, Yan-Hong Wang<sup>c</sup>, Bharathi Avula<sup>c</sup>, Ji-Yeong Bae<sup>c</sup>, Ikhlas A. Khan<sup>c,d</sup> and Pat

**Original Investigation** | Public Health

August 10, 2022

## Analysis of Select Dietary Supplement Products Marketed to Support or Boost the Immune System

Cindy Crawford, BA<sup>1,2</sup>; Bharathi Avula, PhD<sup>3</sup>; Andrea T. Lindsey, MS<sup>1,2</sup>; et al

» [Author Affiliations](#) | [Article Information](#)

*JAMA Netw Open.* 2022;5(8):e2226040. doi:10.1001/jamanetworkopen.2022.26040

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dults:



HEALTH  
**GUIDE**

2021

FEBRUARY 25, 2021 | 2 PM EDT

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HEALTH SERIES:  
DIETARY SUPPLEMENTS  
AND BRAIN HEALTH



# Educational Materials



**CREATINE** is a compound made by your body and found naturally in some foods, mainly meat and fish. It's also a popular ingredient found in dietary supplements.

## CREATINE JUST THE FACTS

- 1** CREATINE is only effective for explosive, high-intensity activities (such as lifting, jumping, and sprinting).
- 2** NOT EVERYONE will experience an improvement in performance. Some people respond better than others to creatine supplements.
- 3** CREATINE MONOHYDRATE, the most common form of creatine in supplements, is generally safe and effective when used appropriately (~3 g/day—more is not better).
- 4** CREATINE MONOHYDRATE is generally well-tolerated short-term, but less is known about its long-term safety.
- 5** MORE THAN 10 FORMS of creatine are available in supplements. There isn't enough evidence to support claims that any other form of creatine is better than creatine monohydrate.

**BOTTOM LINE: IF YOU CHOOSE TO USE CREATINE,**

- ✓ Look for “creatine monohydrate” as the only ingredient on the Supplement Facts panel.
- ✓ Choose a third-party certified/verified product. Look for any of these seals on the product label:
- ✓ Inform your healthcare provider of any supplements you use and discuss how to use them safely.



Supplement Facts		
Serving size: 1 scoop (3 g)		
Servings per container: 100		
	Amount per serving	%Daily Value
Creatine monohydrate	3g	*
*Daily Value not established		
Other ingredients: None		

Boost your immunity from

# REAL FOODS

**Are you looking for more vitamins and minerals to boost your immune health? Consider these food sources!**

**VITAMIN C**

...is a natural antioxidant and anti-viral.  
...can help protect your body from disease.

**Foods high in vitamin C:**

- Oranges
- Grapefruit
- Red and green peppers
- Broccoli
- Strawberries

**MAGNESIUM**

...is an important part of your body's immune response.  
...helps protect cells from viral invasion.

**Foods high in magnesium:**

- Legumes
- Nuts
- Seeds
- Whole grains
- Green leafy vegetables

**MULTIVITAMINS AND MINERALS**

Fill your plate with whole foods to get all the vitamins, minerals, and other nutrients you need to boost your health!

**DIETARY SUPPLEMENTS**

...can be useful when you can't eat a well-balanced diet.

**VITAMIN D**

...can strengthen your immune system.  
...can help reduce rates of respiratory infections.

**Foods high in vitamin D:**

- Fatty fish (such as trout, salmon, and tuna)
- Fortified milk
- Fortified plant-based milk alternatives
- Fortified breakfast cereals
- Some mushrooms

**ZINC**

...is an essential mineral for optimum immune function.  
...can help fight off invading bacteria and viruses.

**Foods high in zinc:**

- Red meat
- Poultry
- Shellfish
- Beans
- Nuts

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# Educational Materials



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## WHAT'S IN YOUR ENERGY DRINK (OR SHOT)?

- Most **energy drinks** contain **one serving**. The amount of calories, sugar, caffeine, or other ingredients listed is what's in the entire can.
- **Taurine, L-carnitine, glucuronolactone, inositol, and Panax ginseng** are common ingredients in energy drinks, but they haven't been proven to provide additional benefit for physical or mental performance compared to caffeine alone.
- Some energy drinks contain **other stimulants** in addition to caffeine.
- This energy drink contains **caffeine**, as well as guarana, which is another source of caffeine.
- Look at the **total caffeine content** from all sources.
- **Energy shots** are small, but they can be a more concentrated source of caffeine. Be aware of your total caffeine intake in a 24-hour period.
- You can't always tell how much of each ingredient is in a "blend."
- The ingredients in energy shots can vary. Some products contain other ingredients that have stimulant-like effects, such as yohimbe.



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## CBD AND HEMP

BEFORE YOU USE A PRODUCT THAT CONTAINS CBD OR HEMP, HERE'S WHAT YOU SHOULD KNOW:



• The 2018 Farm Bill defines hemp as...  
*"the plant Cannabis sativa L. and any part of that plant, including the seeds thereof and all derivatives... with a delta-9 tetrahydrocannabinol concentration of not more than 0.3% on a dry weight basis."*

- Delta-9 tetrahydrocannabinol, or **THC**, is the psychoactive substance in marijuana.
- Hemp plants naturally contain THC, but the amount in a plant can vary widely.
- Use of a product with THC could result in a positive drug test.
- **All products containing hemp are prohibited for use by Military Service Members**, regardless of THC concentration. (This does not apply to durable goods such as rope or clothing.)



• Cannabidiol (CBD) is a chemical compound in the class of plant chemicals called "**cannabinoids**."

- CBD occurs naturally in the plant *Cannabis sativa L.* (marijuana and hemp).
- **All products with CBD are prohibited for use by Military Service Members**. This includes topical, inhaled (vaping), and oral products.
- Without laboratory testing, there is no way to know for certain whether a CBD product contains a significant amount of THC.

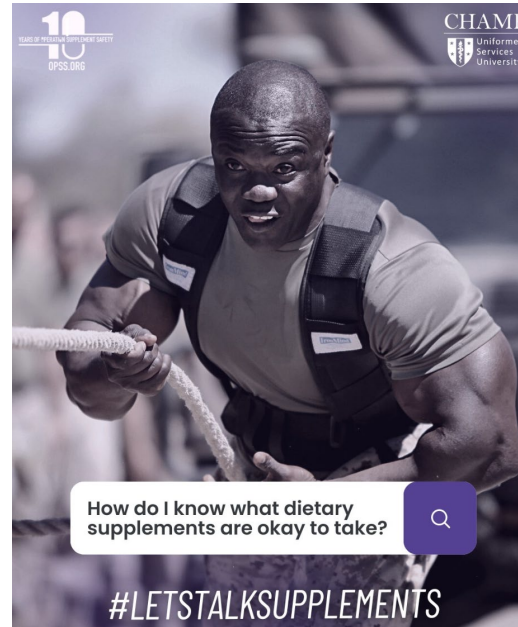
### DoD POLICY

Hemp products, including those with CBD, are prohibited for use by Military Service Members. For more information, please read the articles about CBD and hemp on [opss.org](http://opss.org).



# OPSS on Social Media

- Social media presence and campaigns
- Videos
- Monthly newsletters
- Presentations and webinars



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**What's Next?**

# Health Professional Module

**PRE-WORKOUT** **RISK** **HEALTH** **DoD** **WELL-BEING** **IMMUNITY** **OPERATION SUPPLEMENT SAFETY**

# DIETARY SUPPLEMENTS

**PROHIBITED** **MILITARY** **OPSS.ORG** **SAFETY** **PERFORMANCE ENHANCEMENT** **TAINED**

**Raise Your Dietary Supplement IQ**  
Dietary Supplement Education

**START** →

# For Further Information

Visit the Operation Supplement Safety website at [OPSS.org](https://OPSS.org)

OR

Contact:

Andrea Lindsey, MS

Director, Operation Supplement Safety

[Andrea.lindsey.ctr@usuhs.edu](mailto:Andrea.lindsey.ctr@usuhs.edu)

# Questions?

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YEARS OF OPERATION SUPPLEMENT SAFETY

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