

Sports Supplements

Jor-El Isaac

Kaplan University

HW 499-01 Bachelors Capstone In Health and
Wellness



Your Logo

Agenda

1 What is a supplement?

2 Why do Athletes take supplements?

3 FDA's policy on regulating supplements

4 Common supplements and their effects



Agenda

5 Things to consider
before using
supplements

6 References



What is a supplement?

- A supplement is something added to the diet, typically to make up for a nutritional deficiency
- Supplement include:
 - Vitamins
 - Amino Acids
 - Minerals
 - Herbs
 - Other Botanicals



Why do Athletes take supplements?

- The sports supplement industry makes millions of dollars annually from consumers looking to improve their performance
- Athletes want to enhance their performance and turn to alternate sources of nutrition to attain the desired results



FDA's policy on regulating supplements

- Dietary supplements and dietary ingredients are regulated under the Dietary Supplement Health and Education Act of 1994 (DSHEA):
- According to the FDA, Manufacturers and distributors of dietary supplements and dietary ingredients are responsible for evaluating the safety and labeling of their products before marketing
- The FDA is responsible for taking action against any adulterated or misbranded dietary supplement product after it reaches the market



Your Logo

Dietary Supplement Health and Education Act of 1994 (DSHEA):

- Under DSHEA supplements are **NOT** :
- Required to meet the same safety requirements as over-the-counter or prescription drugs or food ingredients
- Held to specific manufacturing standards
- Guaranteed to meet product potency or purity ratings
- Required to prove the effectiveness of any health claim they make
- Required to meet safety or efficacy testing prior to going to the market (Quinn, 2016).



Your Logo

Commonly used supplements

B- Vitamins

- Essential for proper body function and performance

Caffeine

- Increases alertness and endurance

Creatine

- improves repeated bouts of high-intensity exercise

Glucosamine

- Supports joint function, mobility, and flexibility,



Your Logo

Commonly used supplements

Glutamine

- Enhances exercise performance

Protein

- Nutrient required for proper function

Ribose

- Boost muscle energy



Your Logo

B- Vitamins

- Use- energy production and the proper functioning of the body — including memory.
- Side effects- dizziness, frequent urination, change in the color of the urine, black stools, constipation, diarrhea, abdominal pain, nausea, vomiting, redness of the skin and itching. (Signs of overdose)



Caffeine

- Use- Athletic performance. Taking caffeine seems to increase physical strength and endurance and might delay exhaustion
- One of the most commonly used stimulants among athletes
- Side effects- insomnia, nervousness and restlessness, stomach irritation, nausea and vomiting, increased heart rate and respiration



Creatine

- Use- improve exercise performance and increasing muscle strength.
- made by your body and is found mostly in the muscles. It helps to provide energy to the muscles
- Side effects (severe) -muscle cramps, reduced ability to tolerate heat, symptoms of dehydration (e.g., unusual decreased urination, unusual dry mouth/thirst, fast heartbeat, dizziness/lightheadedness).



Your Logo

Glucosamine

- Use- helps keep up the health of your cartilage -- the rubbery tissue that cushions bones at your joints
- natural chemical compound in your body
- Side effects - •Upset stomach, heartburn, drowsiness, and headache



Your Logo

Glutamine

- Use- Enhance exercise performance
- Glutamine is an amino acid (a building block for proteins), found naturally in the body.
- Side Effects- Blood in urine, chills, dizziness, fainting, fast heartbeat, and frequent and painful urination



Your Logo

Protein

- Use – Performance enhancer for proper body function
- Found in meat, fish, chicken, and dairy products.
- Side effects- kidney damage, weight gain, irritability, depression, heart disease, bloating, gas, and constipation.



Your Logo

Ribose

- Use - improve athletic performance and the ability to exercise by boosting muscle energy
- Ribose is a sugar that is produced by the body
- Side effects- diarrhea, stomach discomfort, nausea, headache, and low blood sugar.



Things to consider before using supplements

- Talking to your doctor prior to taking supplements
- Will the supplement interact with my medications
- Do I need them?
- Do I know what is in them and what they do?



Your Logo

References

- Dietary Supplements (2016, April 4). In FDA.gov. Retrieved April 17, 2017, from <https://www.fda.gov/Food/DietarySupplements/default.htm>
- Quinn, E. (2016, February 25). Do Sports Supplements Improve Athletic Performance?. In verywell.com. Retrieved April 17, 2017, from <https://www.verywell.com/sports-supplements-and-athletic-performance-3119362>
- Reviews of Supplements and Health Products: (2017). In ConsumerLabs.com. Retrieved April 17, 2017, from <http://www.consumerlab.com/results/index.asp>



Your Logo