Eat to Compete: What You Should Know About Dietary Supplements...

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What you should know about dietary supplements...

- Dietary supplements include vitamins and minerals; herbs and botanicals; amino acids; and protein supplements.
- Except for vitamins and minerals, many dietary supplements have not scientifically been proven to provide any health benefits.
- Dietary supplements on the market are not regulated; could contain illegal substances; may be costly; and can be harmful.

Protein supplements...
- One of the most popular supplements taken by athletes
- Claims: supports muscle growth, increases muscle strength and size, improves recovery
- Problems: stresses the kidneys, causes dehydration, reduces intake of other nutrients, increases calcium excretion, and are costly

Advocare supplements...
- Line of over-the-counter supplements that are intended to provide health and wellness for individuals of all ages
- Claims: weight management, energy, wellness, enhanced sports performance, better skin
- Problems: contain more than the recommended amount of caffeine for youth, which can lead to negative side effects, such as increased heart rate and elevated blood pressure

Conclusions...
- Dietary supplements, unlike medicines and other drugs, are not tested or screened by the FDA for efficacy and safety.
- A well-balanced diet that includes a variety of foods can provide all the nutrients needed by the teen athlete and average individual.
- Many supplements contain contaminants and/or illegal supplements, and are unsafe to consume. Athletes who consider taking supplements should first visit with a healthcare professional.

Calcium

- Why needed—promotes optimal bone growth and strength; needed for muscle contraction
- Recommended amount—
  - Age 9 to 18: 1,300 milligrams/day
  - Age 19+: 1,000 milligrams/day
- Sources—Each cup of milk and yogurt has approximately 300 mg of calcium, thus an athlete would need 3 to 4 cups per day to meet the recommended intake.
- Concerns—If an individual does not tolerate or like milk, a calcium supplement may be needed.

Iron

- Why needed—helps blood carry oxygen to the exercising muscles
- Recommended amount—
  - Age 14 to 18: 11 milligrams/day (males)
  - 15 milligrams/day (females)
  - Age 19+: 8 milligrams/day (males)
  - 18 milligrams/day (females)
- Sources—Lean beef, dried beans, spinach, and peas, fortified cereals and bread
- Concerns—Iron deficiency anemia is common among adolescents, especially females. Iron supplementation to achieve recommended amounts will improve performance and possibly memory and learning.
How to evaluate a dietary supplement label:

1) Does it have a USP and/or Consumer Lab seal of approval?

These labels indicate that it has been tested and . . .

- contains all the listed ingredients,
- has no harmful levels of contaminants,
- can be broken down by the body, and
- has been made under good manufacturing practices

2) Does the label contain inaccurate or inappropriate claims?

- Promises of a quick fix
- Sounds too good to be true
- Simple conclusions from a complex study
- Purpose of the claim is mainly to sell the product rather than to promote health
- Wording is too complex for the average consumer to understand

* There are no inaccurate or inappropriate claims on this label.

3) Does the label state any side-effects or warnings?

* The warning on this label is for overdose and not for side-effects of any ingredient in the dietary supplement.

4) Does the supplement contain any illegal and/or banned substance and any/or unknown or unusual ingredients?

* There are no listed illegal or banned substances in this supplement.

For more information visit these Web sites—

ISU Extension Sports Nutrition:
www.extension.iastate.edu/nutrition/sport

Food and Drug Administration:
http://www.fda.gov/Food/DietarySupplements/default.htm

ISU Extension: What are dietary supplements?
http://www.extension.iastate.edu/nutrition/sport/supplements.html

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