Healthful Nutrition & Performance Enhancing Drugs and Supplements  p 37-73

What are essential nutrients?

Definition:

Name them:

Some foods contain all six classes of nutrients

Some foods contain only one class

 Relationship between nutrient consumption and health status

Recommended Nutrient Intakes

Dietary Reference Intakes (DRIs)

Major Nutrients in the MyPlate Food Guide

Food Exchange System

Developed by the Academy of Nutrition and Dietetics and American Diabetes Association

Foods in an exchange contain similar nutrient and caloric value

Six food exchanges

Milk exchange

Meat and meat alternatives exchange

Starch exchange

Fruit exchange

Vegetable exchange

Fat exchange

Food choices based on **nutrient density**

Foods that contain a significant amount of nutrients compared to calories

6 oz tuna vs. 6 strips of bacon

220 calories

Consumer Nutrition: Dietary Supplements and Health

Dietary Supplements Heath and Education Act (DSHEA) 1994

Contains at least one of the following ingredients:

Vitamin

Mineral

Herb or other plant product

Amino acid

Metabolite

Constituent

Extract

Combination of any of these ingredients

 Dietary Supplement Facts Label

Help or harm?

Best nutritional advice is to obtain nutrients through natural, wholesome foods.

Restore a deficiency

Example: Vitamins for elderly, women of childbearing age

Most supps not adequately researched

Products often are mislabeled

Supplements may carry structure/function claims

Supports testosterone production

Strengthens the immune system

Helps maintain healthy cholesterol levels

Burden of proof is on the FDA

Help or harm?

Possibly. Users of dietary supplements may

disregard other very important lifestyle behaviors.

have a false sense of security

take excessive dosages

may use supplements as alternative medicine, and not seek proper medical advice.

take supplements that are contaminated.

take potentially harmful supplements

General safeguards: by Consumers Union

Before trying a supplement to improve your health, try changing your diet and lifestyle first

Check with your doctor, especially with herbals.

Buy standardized products; USP rating is helpful

Use only single ingredient supplements

Be alert to positive and negative effects

Stop taking the supplement if you experience problems; report problems to physician or local health authorities.

Cool Website (NIH database)

www.dsld.nlm.nih.gov/dsld/

The National Institutes of Health database of dietary supplements contains thousands of supplements. Use the search box to obtain product information.

Sports Supplements: Efficacy, Safety, and Permissibility

Four categories of sports supplements are proposed in a joint position statement of the American College of Sports Medicine, the Academy of Nutrition and Dietetics (formerly the American Dietetic Association), and the Dietitians of Canada. The Australian Institute of Sports propose a similar system.

Group A: Those that are safe, effective, and permissible

Group B: Those that may be effective, are safe, and are permissible; deserving of additional research

Group C: Those that are not effective

Group D: Those that should not be used because they are not safe nor are they permissible by the WADA

Sports Supplements: Australian Institute of Sport Classification System

Group A Sports supplements:  Safe, effective, and permissible

Group A supplements are supported and permitted for use in specific situations. In the case of vitamin/mineral supplementation, supplementation is generally effective if the athlete is deficient (e.g., iron supplementation to correct anemia).

Group B Sports supplements:  May be effective, safe, and permissible

Group B supplements are deserving of additional research and at the current time are permitted for use subject to clinical and/or research monitoring.

Group C Sports supplements:  Little proof of efficacy

Group D Sports supplements: Do not use; not safe and not permissible