Nutrition Basics
for Culinary Arts Educators

Culinary Arts Endorsement Program
Course #1/Unit 2

Learning Outcomes:

- List the six major classes of nutrients.

- Define the following terms: serving size, portion control, recommended serving size, and balanced diet.

- Explain how knowledge of nutrition fits into healthy meal preparation and menu planning.

Key Question

Why do culinary arts educators need to have at least a basic knowledge of nutrition?

Let's Begin at the Beginning
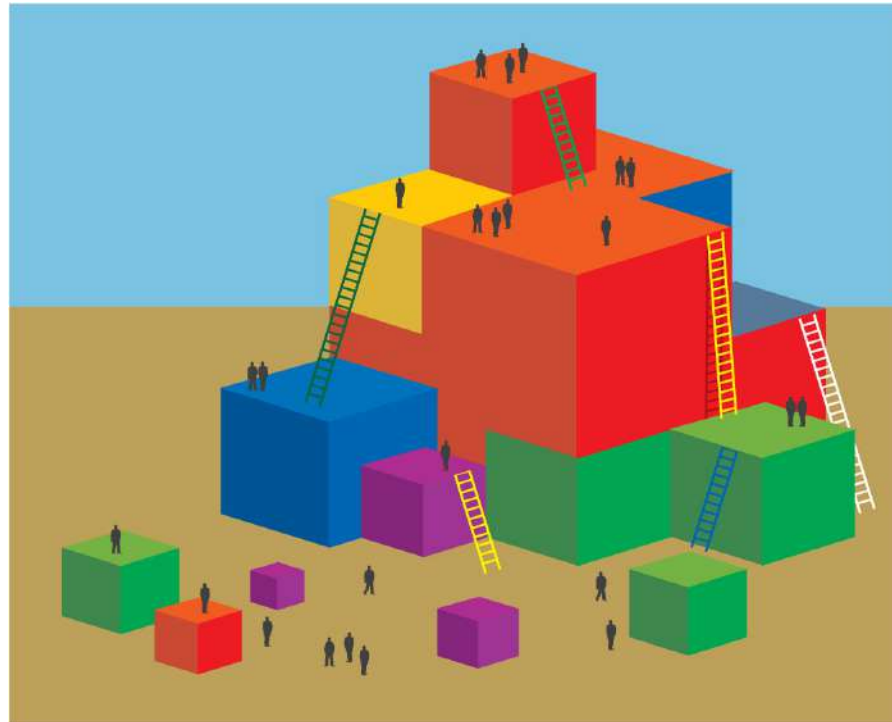
Let's begin with nutrients

Nutrients are certain chemical compounds that are present in foods that:

- Supply energy for body functions

- Build and replace cells that makeup body tissues

- Regulate body processes

The Essential Nutrients are:

- The six categories of nutrients are:
  - Carbohydrates
  - Lipids (fats)
  - Proteins
  - Vitamins
  - Minerals
  - Water

Carbohydrates

- Consist of carbon, hydrogen, and oxygen

- <u>Simple carbohydrates:</u>
  - Naturally in fruits, vegetables, and milk
  - Sweeteners such as honey, corn syrup, and table sugar

- <u>Complex carbohydrates:</u>
  - Fiber: from seeds and cell walls of fruits, vegetables and cereal grains

Lipids (fats)

- Fats are found in animal and plant foods and, in small amounts, in fruits

- Fats provide calories, help carry fat-soluble vitamins, and give a creamy pleasant mouth feel to foods

- Supply energy to the body in concentrated form

3 Types of Lipids or Fats

◦ **Saturated**: mainly found in animal products like milk, eggs, and meat

◦ **Monounsaturated**: examples are: vegetable oils like grapeseed (canola) oil and olive oil

◦ **Polyunsaturated**: examples are fats from plants (soy and corn) and fish

Proteins

- Proteins are the building blocks of the body

- Proteins are found in animal and plant foods

- Proteins are necessary for manufacturing, maintaining, and repairing body tissue

- Proteins regulate the balance of water, acids, and bases and move nutrients in and out of cells

Vitamins

Vitamins are vital dietary substances needed to regulate metabolism and for normal growth and body functions.

2 Categories of Vitamins

◦ **Water soluble --**not stored in the body (examples: Vitamins B and C)

◦ **Fat soluble--** stored in the body (Vitamins A,D,E, and K)

Minerals

Minerals have to be obtained either from plant food sources that have drawn minerals from the ground

OR

from the flesh of animals that have eaten plants.

Water

Water plays a role in all body functions including:

- Metabolism
- Cell functions
- Digestion
- Delivery of nutrients
- Removal of waste
- Temperature regulation
- Lubrication of the joints

The Balanced Diet

What does it mean to have a balanced diet?

- Getting adequate nutrients within calorie needs

- Managing weight

- Engaging in physical activity

- Selecting from the right food groups

Cont'd.

- Manage consumption of fats

- Manage consumption of carbohydrates

- Manage consumption of sodium and potassium
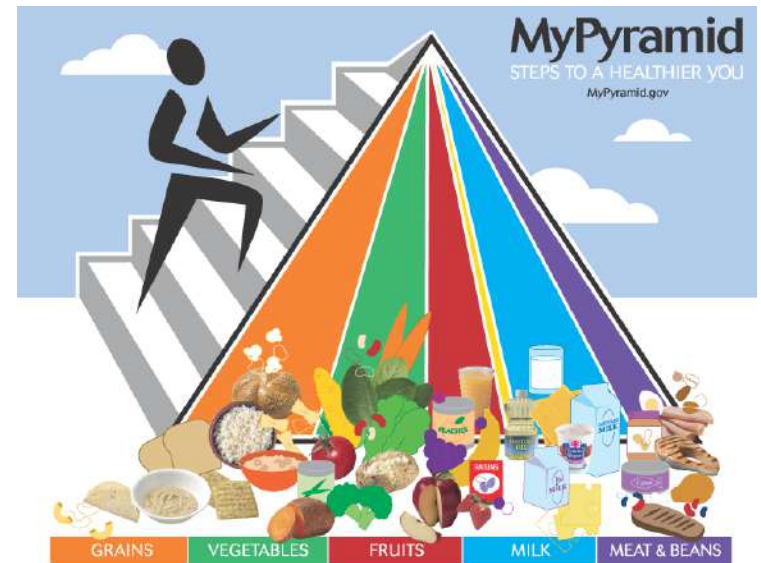
- Manage consumption of alcoholic beverages

Key Question

How will you teach your students about healthy cooking, nutritious menu planning, and maintaining a balanced diet?

The Food Pyramid

- The food pyramid was designed to guide food consumption for a more healthful life. It presents a plan for a balanced diet

Courtesy of US Department of Agriculture

Nutritional Labeling

- The Foods and Drug Administration (FDA) requires that food products be clearly labeled

- The FDA regulates the language used in labeling

- The FDA monitors health claims on food labels

Tips for Cooking Healthful Meals

- Use less fat
- Use unsaturated fats
- Emphasize flavor
- Use freshest, highest-quality ingredients
- Store foods properly
- Modify Portion size
- Give customer a healthful choice
- Train the dining room staff
- Use nutritional information

Wrap Up and Review

- List the six essential nutrients?

- What are the two types of carbohydrates?

- List the 3 types of lipids.

- What are the two categories of vitamins?

- Why is water so vital to the body?