Life Cycle

• Five stages:
  – Pregnancy
  – Infants
  – Children
  – Teenagers
  – Adults

Nutritional needs change throughout the life cycle.

Each stage brings its own growth and nutrition needs and challenges.
The fetus depends on the mother for its nourishment. Maintaining good nutrition and health habits and getting proper medical care, are the most important responsibilities of the pregnant mother.
Folate or folic acid help the body make new cells and may prevent birth defects.

Foods from the Dairy group provide calcium, potassium, vitamin D, and protein. Foods from the Protein group provide iron as well as protein. Fruits, vegetables, dry beans and grains are essential for folate and other nutrients such as fiber, vitamins, and minerals.

300 calories per day should be added to diet from nutrient rich foods. Pre-natal vitamins and mineral supplements may be prescribed by obstetrician. Refrain from drinking any alcoholic beverages during pregnancy.
A baby may grow 50 percent longer and triple in weight in the first year.

A baby needs the right nourishment which may be mother’s milk or infant formula.
Birth to 6 Months: Babies get all the nutrients they need from breast milk for the first six months. Infant formula is an acceptable alternative when mothers decide to decrease or discontinue breast feeding. You should not give your baby cow’s milk until after age 1.

By 4 to 6 Months: While most babies are ready to eat solid foods now, they will continue to get most of their calories, protein, vitamins and minerals from breast milk or infant formula. Introduce iron-fortified infant cereal like rice and barley or pureed meats to help replenish iron reserves.

By 6 to 8 Months: This is an appropriate time to begin pureed or mashed fruits and vegetables. Gradually introduce single-item foods one at a time. Watch your child carefully for any reactions such as diarrhea, vomiting or unusual rashes.

By 7 to 10 Months: Babies are usually ready to begin feeding themselves with finger foods, such as dry cereal or teething biscuits. They also can begin to use a cup for water.

By 8 to 12 Months: At this stage, most infants are ready for soft or cooked table foods.

From 1 to 2 Years: Babies continue developing eating skills. They feed themselves and enjoy the same foods as the rest of the family. Choking on firm, round foods is a risk, so cut these foods into smaller, ¼-inch squares.
Active, growing children need a regular meal schedule. Their stomachs are small and their energy levels are high so they need healthy snacks in between meals.
Most 2- to 3-year-old children need to consume about 1,000 calories per day. Here’s how to distribute those calories in a healthy eating plan:

Grain Group: About 3 ounces of grains per day, preferably half of them whole grains. That is about three regular slices of bread or one slice of bread plus 1/3 cup cold cereal and ¼ cup cooked rice or pasta.

Vegetable Group: 1 cup raw and/or cooked vegetables per day. Like adults, young kids need variety: mashed sweet potatoes, broccoli with low-fat dip or tomato sauce for pasta.

Fruit Group: 1 cup fresh, frozen, canned, dried and/or 100% percent juice per day. Emphasize whole fruits rather than juice. Kids love melon balls, Mandarin oranges (fresh or canned in juice) and frozen berries.

Milk Group: 2 cups per day. Whole milk is recommended for children younger than 2. Older children can have lower-fat, calcium-rich choices such as fat-free or low-fat milk, yogurt and cheese.

Meat and Beans Group: 2 ounces total per day. Options include one ounce of lean meat or chicken plus one egg or 1 ounce of fish plus ¼ cup of cooked beans (black, pinto, etc.).

Oils: 3 teaspoons or less per day of liquid oil or margarine.
Physical changes occur rapidly and nutritional needs increase. Iron and calcium are especially important for building muscle and bones.
Nutritional Needs for Teenagers

- Follow ChooseMyPlate guidelines
- Choose drinks wisely
- Eat more fruits and vegetables
- Add lean protein
- Include whole grains
- Don’t forget low-fat dairy
- Be active!

Teens may need more of some foods for a healthful, physically active lifestyle. Eat a small amount of high-fat foods and choose plenty of nutrient-dense foods.
Older adults want to stay independent for as long as possible but may need a little help.
Nutritional Needs for Adults

- Nutrition needs rise
- Calorie needs drop
- Balance calories eaten with calories used
- Healthful low-calorie foods are good choices
- Add physical activity

Adult bodies have stopped growing so energy needs are lower.

Different adults have different food needs. Some may have health problems that require a special diet and limit foods they can eat.
References and Resources

Images:
- Microsoft Office Clip Art: Used with permission from Microsoft.

Textbooks:

Websites:
- Academy of Nutrition an Dietetics
  The worlds largest organization of food and nutrition professionals
  www.eatright.org
- U.S. Department of Agriculture
  ChooseMyPlate.gov Website. Washington, DC.
  http://www.choosemyplate.gov