

As We Age: Nutrition for Senior Adults

As We Age, we realize that aging started the day we were born. Our society is living longer than ever before. In the United States, the older population--persons 65 years or older--numbered 35.9 million in 2003 (the latest year for which data is available). Throughout our entire life course our minds and our bodies constantly undergo changes. When we consider aging as affecting us on many levels, we are exploring aging using a **biopsychosocial** lens.

For example, on a **biological** level, our major organs - heart, lungs, eyes, ears, and brain - lose a portion of their functioning ability as we grow older. On a **psychological** level, changes in our short-term memory may decrease our ability to recall information that we have just heard. Aging also affects our **social** environment. Upon retirement, friends may elect to move to a warmer climate or nearer to family or friends. Friendship patterns may change from those centered around a work life to those centered around religion, travel, clubs or organizations, or volunteer activities.

Not only does aging affect our bodies, our minds, and our relationships, it also affects our nutritional status. This publication highlights nutrition and wellness practices to help you maintain a healthy, productive lifestyle - lifelong goals for everyone.

Remember that most age-related changes are gradual, and there is considerable variation in how older adults are affected by them. As a rule, we are well equipped to handle our age-related changes.

Aging Facts

- ***The young-old are between the ages of 65-80.***
- ***The oldest-old are ages 81 and older.***
- ***In 2030, the U.S. Census Bureau projects that the number of older adults will exceed the number of children.***
- ***In 2030, 21% of the population will be made up of people 65 and older.***

Eat The Food Guide Pyramid Way

The Food Guide Pyramid is a general guideline to help children, youth, and adults eat a well-balanced diet. It is based on the Dietary Guidelines for Americans. Everyone should eat at least the minimum servings from each group of the Food Guide Pyramid. This gives you a variety of daily vitamins, minerals, protein, and fiber. Also, research shows that a variety of foods have other naturally occurring ingredients, such as antioxidants and phytochemicals. These ingredients may decrease the risk of cancer and heart disease.

As you age, your lifestyle may be less active; you may sit more and perform less vigorous exercises or physical labor. Also, your body's metabolism may be less efficient or slower. These lifestyle and metabolism changes may cause weight gain and less efficient absorption of nutrients. Select more nutrient-dense foods with lower amounts of fat and sugar (empty calories). If you are having

problems losing weight, limit your fat or sugar intake. Eat a variety of foods that are good sources of protein, vitamins, minerals, and fiber.

The New Food Guide Pyramid

Recently, researchers from Tufts University developed a Food Guide Pyramid to more accurately represent the calorie and special nutrient needs for healthy persons over the age of 70. The new Modified Food Guide Pyramid for 70+ Adults includes the following changes:

1. Eat at least the minimum number of servings for each food group in the Food Guide Pyramid. Eat a variety of foods that are good sources of protein, vitamins, minerals, and fiber. It is important to eat nutrient dense foods with calories. Eating fewer foods or calories may be due to poor appetite, less activity, or medical conditions, which may result in weight loss.
2. Eat at least three servings of calcium-rich foods. Calcium and vitamin D are important to maintain bone health.
3. Drink eight cups of water as the base of the 70+ Pyramid. This is needed because of higher intake of medications and to prevent dehydration and constipation.
4. Eat fiber-rich foods from grains, fruits, vegetables, dried beans, and nuts.
5. Eat fortified foods with vitamin B12, calcium, and vitamin D. Consult a doctor or dietitian, if you need a dietary supplement.

Eat A Fiber-Rich Diet

Fiber (**F**) or roughage is important to have a healthy digestive system and proper bowel function. Constipation is a problem for many aging adults. Choose a variety of high-fiber foods - vegetables, fruits, beans, nuts, and whole-grain products - drink plenty of water and be physically active to stay regular. Eat at least one high fiber food (pears, dried beans and peas, corn, dates, 100% bran cereals, or potatoes with skins) every day to help you get 20-35 grams of fiber each day.

Drink Enough Fluids. Water or other liquids are needed to avoid and prevent constipation and dehydration. Drink six to eight (8-ounce) glasses of fluid every day - water or other liquids (100% juices, soy, almond or rice milk, beverages, or soup). Limit the amount of caffeinated drinks (coffee, tea, and soda). If you are taking medications, you need more water. Throughout the day take water breaks, or in the morning, fill up a glass to remind you to drink water.

Eat Calcium-Rich Foods

Calcium and Vitamin D are essential to maintain strong bones and teeth. After age 50, more calcium or 1,200 milligrams are needed to prevent a disease called osteoporosis. As you age, minerals in your bones are lost and bones may get thinner. Protect your bones by choosing calcium-rich foods, such as milk, cheese, yogurt, greens, broccoli, sardines, canned salmon with bones, dried beans and peas, tofu, and calcium-fortified foods. If you have problems digesting milk,

- Eat green leafy vegetables.
- Eat yogurt or cheese, where the lactose has been broken down,
- Eliminate cows milk and substitute for the healthier soy, almond or rice milk
- Eat other calcium-rich foods that are not milk-based.

Vitamin D helps the absorption of calcium. It is found in soy, almond and rice milk, as well as fortified cereals. Your body can make its own Vitamin D when your skin is exposed to the sunshine.

Several times a week try to take a walk or sit in the sun for 20-30 minutes. This is especially important in the winter when there is less sunlight. Remember to use sunscreen.

Eat Protein-Rich Foods

Body proteins are constantly being made and used during your lifetime to maintain cell and organ functions. Adequate protein intake and protein reserves are important for older adults, especially during periods of emotional and physical stresses. Protein helps to prevent muscle loss. Eat protein-rich foods such as meats, fish, dried beans and peas, or tofu. Also, these foods are good sources of iron and zinc.

As you age, blood levels of vitamin B-12 usually decrease. Vitamin B-12 is needed to make red blood cells and maintain the central nervous system. Animal foods are good sources.

Eat a Plant-Based Diet

Research reveals that a variety of nutrient-dense fruits, vegetables, and whole-grain foods may protect cells against free radicals (unstable compounds). They also may help protect you against the adverse effects of everyday cancer causing agents such as pollution, dietary factors, tobacco smoke, and viruses.

Phytochemicals are chemicals or ingredients naturally found in all plant foods. Some phytochemicals help to protect a healthy, normal cell from turning into a cancerous cell. Also, phytochemicals may slow down the growth of tumor cells.

Eat colorful meals and snacks by choosing lots of fruits, vegetables, dried beans, nuts and whole-grain foods. It is the easiest way to get all of these important nutrients.

- Vitamins - A, C, E, D, & niacin, riboflavin, thiamin, folate, B-6 & B-12
- Minerals - calcium, iron, & zinc
- Fiber - soluble & insoluble
- Proteins, Carbohydrates, & Fats

Antioxidants

Antioxidants are compounds, such as vitamins A, C, and E, which are found in foods. They protect us from cell damage and may reduce the risk of cancer and heart disease, and may slow down the aging process.

Fruits and vegetables supply antioxidants other than those you can get from pills, say researchers at the USDA's Jean Mayer Human Nutrition Research Center on Aging at Tufts University in Boston.

Ron Prior and co-workers fed 36 men and women aged 20 to 40 or 60 to 80 a diet containing ten servings of fruits and vegetables a day. Then they measured the "antioxidant capacity" of the participants' blood samples by seeing how well the blood deactivated damaging oxidized free radicals in a test tube.

After two weeks, the antioxidant capacity of the participants' blood rose in both groups, though more consistently in the older people.

"Based on this and other studies, it appears that compounds other than vitamins C and E and carotenoids contribute a major portion of the increase in antioxidant capacity," says Prior. Among the foods with the highest antioxidant capacity were oranges, cauliflower, and peas.

Should I Take Supplements?

Every day in the media we see ads for dietary supplements that promise to prevent aging changes or improve physical, mental, and nutritional health. Although we know that vitamins, minerals, antioxidants, and possibly particular herbs are beneficial to health, it is important that we don't use supplements in place of food or in extremely high amounts. Some herbal remedies or high potency vitamin or mineral supplements can interfere with the action of certain prescription and over the counter medications. Be sure to check with your doctor before starting any dietary supplements.

Vitamin B-12 can be a problem nutrient for older people. In nature, vitamin B-12 is found only in animal foods. Acid normally found in the stomach releases vitamin B-12 from the animal proteins where it is found. Unfortunately, the amount of stomach acid decreases as we age, resulting in lower body levels of vitamin B-12. Vitamin B-12 found in fortified foods can be absorbed by older people despite lower stomach acid. Regular use of a breakfast cereal fortified with vitamin B-12 helps supply this vitamin.

Some older people have a poor appetite as a result of their health conditions, lack of exercise, or as a side effect of certain medications. Older people with low food intake who rely on a nutritional supplement to help provide needed amounts of protein, vitamins and minerals should seek the advice of a health professional when selecting a supplement. Well-meaning family or friends do not have the educational background to help you avoid

dangerous drug interactions. Store clerks may be more interested in selling products than providing reliable information. Liquid nutritional supplements are very expensive and don't always contain other important dietary components such as phytochemicals or fiber. Your doctor, if trained in nutrition, or a nutritionist is the best source of information.

Osteoporosis

Osteoporosis is an age-related bone disorder characterized by thinning of the bones where bones become fragile and prone to fractures. This chronic, progressive disease affects more than 28 million Americans, about 80% of whom are women.

Osteoporosis offers unique challenges to older adults. Most persons in the early stages of osteoporosis experience few or no signs or symptoms. If the disease progresses and multiple fractures occur, many people have pain, particularly after standing for a long time, bending and reaching, and riding in a car. This often makes it hard to perform daily activities. Unable to do them alone, older adults with osteoporosis often rely on their spouses or adult children for help. Older women and men with osteoporosis may experience stress and depression. These problems often result in withdrawal from social relationships and activities and in increased feelings of isolation and loneliness.

Successful strategies used by older persons to cope with osteoporosis include these:
Physical Strategies: do weight-bearing exercises; eat a balanced diet rich in calcium and vitamin D; limit lifting, pushing, and pulling; rest and take breaks during the day; say "no" to activities that cause pain.

Psychological Strategies: seek information; read or watch television as a distraction; try biofeedback or relaxation techniques; talk to a friend or family member; join a support group.

Medical Strategies: ask your doctor about approved medication; see a doctor of chiropractic or physical therapist; talk to a nutritionist.

Social Strategies: keep in contact with and accept help from family members and friends; modify social and recreational activities; develop new interests and skills.

Nutrition and social quiz

Check the statements that apply to you.

- The food I eat doesn't taste as good to me as it did.
- Most of the time I eat by myself.
- I eat fewer than two meals a day.
- It is hard for me to prepare meals.

- I have tooth pain or mouth pain that makes it difficult for me to eat.
- I take more than three prescribed or over-the-counter drugs daily.
- Without trying, I have lost ten pounds or more in the last six months.
- I don't have enough money to buy food throughout the month.
- I have a health-related illness or disease that makes it hard for me to eat properly.

If you have checked more than two of these statements, you may be at nutritional risk. Always consult your doctor or other health care professional when you have specific health problems, changes or concerns.

This quiz was adapted from

Nutrition Screening Initiative (1992). Nutrition Interventions Manual for Professionals Caring for Older Americans. Washington, DC: Greer, Margolis, Mitchell, Grunwald, and Associates, Inc.

The American Dietetic Association (1998). Staying Healthy-A Guide for Older Adults. Chicago, IL: The American Dietetic Association.

Nutrition Publications

Choosing Foods for Good Health (348-710)

Heart Healthy Eating - Cholesterol, Fat, Fiber, & Sodium (348-898)

Are You Fiber Friendly? (348-050)

The Diet and Cancer Connection (348-141)

Calcium Checklist (348-019)

Iron Checklist (348-371)

Making Ends Meet: Food & Money (348-051)

C/O Your Health (Newsletter Series to decrease the risk of cancer)

Change of Heart (Newsletter Series to decrease the risk of heart disease)