

The Oklahoma Cooperative Extension Service Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education

for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.

- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.



Food Intake in Later Years

EXTENSION

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Most individuals are able to lead healthy, active lives long into their later years. A good diet and adequate exercise can help to maintain a healthy and active lifestyle. However, there are some normal physical changes that occur with aging that may affect dietary intake.

Physical Changes that Occur with Aging and Affect Nutrition

Physical changes are different from person to person. Some physical functions change little with aging while others may be affected greatly. Most people are in good nutritional health, well into old age, but sometimes factors can affect food intake as one ages. The following are physical changes that may affect dietary intake as one grows older; however, most of these changes are slight.

Taste and smell. The senses of taste and smell tend to decline in later years. Foods may not taste like they did when a person was younger. This is because during childhood, one has more taste buds than at any other time in life and as one ages there is a decrease in the number of taste buds. Also, food may smell different as one grows older because the number of olfactory cells, the functional unit in smelling, decrease with aging. These changes in taste and smell may decrease one's appetite for foods to such an extent that the diet becomes unbalanced. In addition, some medications can affect how foods taste.

Vision. Eyesight generally becomes poorer with age. As a result, shopping, cooking, and eating may become more difficult. Problems reading recipes in small print or reading oven temperatures may result in decreased meal preparation.

Saliva. Less saliva may be produced with aging. Saliva moistens food and makes swallowing easier. Thus, as some individuals age they find that foods are dry and more difficult to swallow.

Teeth. Many individuals begin to lose their teeth as they grow older. The loss of teeth makes it difficult to eat and chew foods properly. Many older adults are unable to adjust to dentures or have dentures that do not fit. This often leads to eating softer foods which restricts food intake and can lead to an unbalanced diet.

Muscular tone and coordination. Muscular tone and coordination often decreases with aging. This may make swallowing difficult and causes food to move slower through the intestine. Older adults are primary targets for laxative advertisements. A well-balanced diet with a variety of foods, adequate fiber, liquids, and physical activity often help to combat constipation.

Oklahoma Cooperative Extension Fact Sheets are also available on our website at: extension.okstate.edu

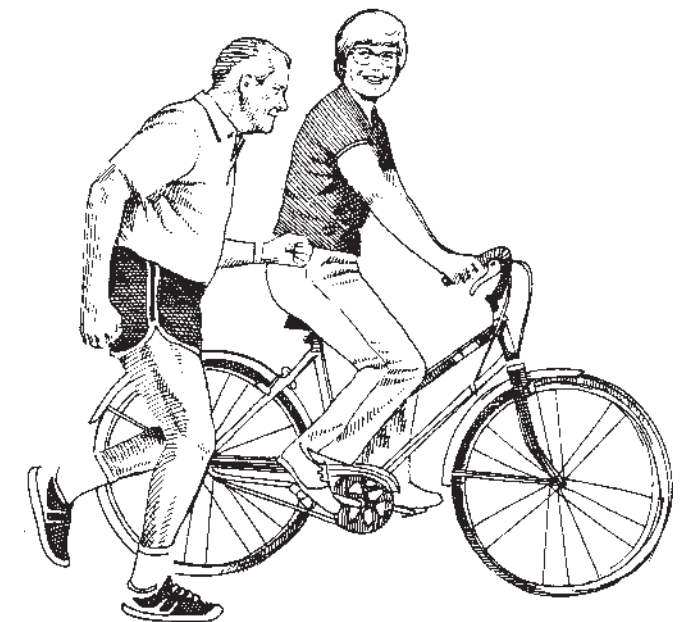
Stomach acid content. A decrease in the amount of acid in the stomach gastric juice may occur with aging. This causes decreased digestion and a feeling of indigestion. Older adults may be tempted to take baking soda which can further decrease the stomach acid content. Resist taking baking soda and instead seek medical advice from your physician for proper help.

Digestive enzymes. Many adults experience a decrease in the amount of intestinal digestive enzymes with aging. A decrease in the amount of digestive enzymes may decrease tolerance of milk or foods high in fat.

Strength and energy. A decrease in strength and energy may occur with increasing age. As a result, food purchasing, carrying heavy groceries, choosing from a wide variety of foods and preparing meals may become difficult. The disappearance of the corner grocery store may make getting to the store difficult for many older adults. Therefore, keeping a reserve supply of food on hand for sick days or when the weather is bad is helpful for many older persons. The following are some of the foods to keep on hand:

Protein Foods: tuna in water, canned meats, canned beans, peanut butter, lentil soup, split pea and ham soup.

Fruits: canned fruits, dried fruits.



Vegetables: canned vegetables, frozen vegetables.

Dairy: nonfat dried milk and cheese.

Grains: ready to eat cereals, hot cooked cereals, crackers, rice, and pasta.

Convenience Foods: macaroni and cheese mixes, low-sodium canned soups, pudding mixes, dry soup mixes, and jelly.

Emotional and Social Changes in Aging that Affect Nutrition

Loneliness is a major problem for many older persons, especially for those who live and eat alone. When one is lonely, there is little incentive to prepare and eat a well-balanced and attractive meal. Loneliness can decrease one's appetite and lead to monotonous meals, snacking, and eating easily prepared, less expensive and softer high carbohydrate foods, such as bakery items, snack foods, crackers, toast, or plain cereals. Such dietary patterns can become a habit and eventually lead to malnutrition.

Eating is more than a source of essential nutrients. Meals also have emotional and social meaning including a time for sharing information, family gatherings, and meeting with friends. Social occasions such as birthdays, holidays and picnics are associated with food. When the social element is lost, regular mealtimes can lose their significance.

There are community nutrition programs at senior citizens centers, churches and other community organizations which provide nutritious meals, fellowship and transportation.

Income, transportation, and housing. Many older adults have to cope with less income. This often means less money for food which may lead to poorer diets. Some older adults have to move to less expensive living quarters which may have inadequate facilities for storing and preparing foods. There may be little money for transportation to grocery stores. These limitations can dramatically decrease the quality of a person's diet and affect his or her attitude toward eating.

Tips to Deal with Factors which Affect Nutrition

Many of the physical, emotional and social changes that occur with aging can cause many people to lose their appetite. Not all of these problems can be corrected, but interest in eating a well-balanced nutritious diet must be maintained. Nutritional needs do not decrease as individuals grow older, except for a reduction in the amount of calories needed. A well-balanced nutritious diet can be the best defense an individual has for staying healthy and preventing illness. The following suggestions may help increase interest and food intake for older persons who have a decreased appetite.

Tips to Help Maintain Adequate Nutritional Intake

- Follow the recommended amount of food from the USDA MyPlate food groups. Recommended amounts from each USDA MyPlate food group each day for a reference 2,000 calorie diet are:
 - 6 oz. of grains
 - 2 1/2 cups of vegetables

- 2 cups of fruit
- 3 cups of dairy
- 5 1/2 oz. of protein foods
- 6 teaspoons of oil

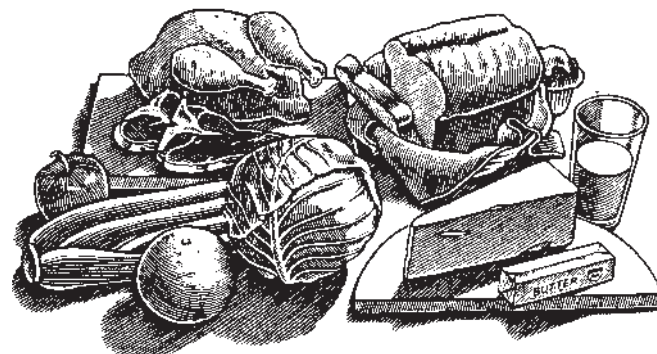
- Include essential foods first. Limit intake of foods such as desserts, sweets, and fats that provide few nutrients for the calories.
- Use fresh fruits for dessert.
- Use snacks to increase food intake. Try fruits, crackers, and cheese or peanut butter.
- Drink ample fluid each day to prevent constipation and dehydration. Recommended fluid intake is 13 cups a day for males and 9 cups for females. Adequate fiber from whole grain breads and cereals, fruits, and vegetables can also help with constipation.
- Eat slowly and chew thoroughly.
- Adjust food selections to individual tolerances: Limit sulfur containing vegetables, such as cabbage, broccoli, and brussels sprouts, if these cause problems. Avoid spices that are not well tolerated. Avoid fatty foods or fried foods if fat is not well tolerated. If milk causes intestinal distress, try fermented cheeses, yogurt, buttermilk, or acidophilus milk. Milk and milk products where the enzyme lactase has been added may be easier for people to handle.

Tips to Increase Appetite

- Eat meals at regular times.
- Have the big meal of the day at breakfast or lunch when appetite is larger and keep dinner small.
- Plan 5 or 6 smaller meals.
- Walk daily to increase activity and appetite.

Tips to Increase Food Intake if Taste and Smell Declines

- Use foods that vary in texture and temperature.
- Use herbs and spices, unless they are not tolerated. Taste decreases with age and using herbs, spices and lemon juice can increase the flavor of foods. You may even want to try growing fresh herbs, either in your garden or in a pot on a sunny windowsill.



Tips to Increase Food Intake if Chewing and Swallowing are Problems

- Use gravy or sauces if swallowing is a problem.
- Drink a beverage with the meal to help with swallowing.
- Eat slowly and chew food thoroughly.
- Be sure dentures fit properly.
- Avoid using baby foods or ground foods if possible. Ground meats are dry and difficult to swallow. Using baby foods makes an individual feel like they are not in control of their food. Try to maintain as normal a diet as possible. Try pre-cutting foods and putting the smaller bite size pieces into casseroles and soups. This way foods are easier to eat but the individual still feels like they are eating regular foods.
- Use soft high protein foods to keep protein intake adequate. Try moist meat loaf, deviled eggs, egg salad, soft meat salads, soups, puddings, and custards. These softer meats or meat alternatives are easier to chew and swallow, but avoid baby meats or ground meats.
- Try mashing if that is an acceptable food form such as mashed potatoes or mashed baked squash. Try shredding raw vegetables or fruits and using the shredded vegetables and fruits in salads, gelatins or stir-fry dishes.

Tips to Increase Food Intake Considering Emotional and Social Factors

- Serve food attractively. Food tastes better if it looks good to eat.
- Use a tray that is colorful and attractive, or a centerpiece to improve the appearance of the meal.
- Serve foods with a variety of temperatures, colors and textures to make meals more appealing.
- Avoid serving the same foods day after day.
- Make the surroundings pleasant. Try setting up a tray next to a window with a view.
- Try turning on the TV or radio if the individual has to eat alone.



- Invite friends or relatives over to share a meal from time to time.
- Eat out occasionally, go to a meal at a senior citizens center or a restaurant which features senior citizen discounts.

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