



## Better Eating for Better Aging

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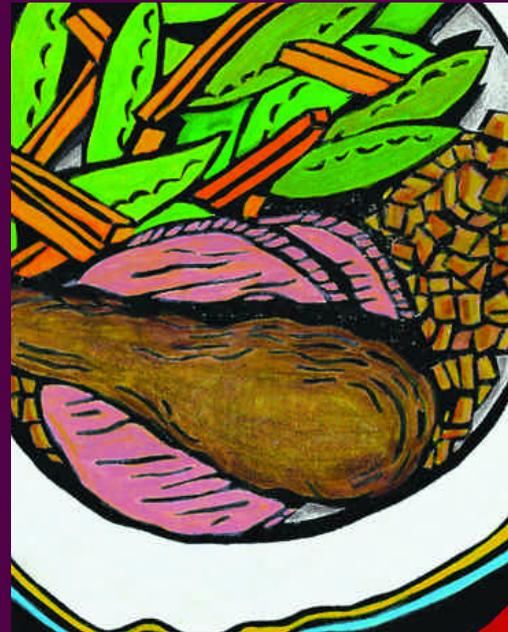
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## Good nutritional habits never get old.



It is important to continue eating a variety of foods to get necessary nutrients throughout the golden years. Eating well helps keep you strong and enables your body to fight diseases better.

Persons aged 65 or older are the fastest growing segment of the U.S. population. By the year 2030, the 65 and older set will number one in five. With the increasing median age of the population, a heightened awareness of the needs of this group is important.

Unfortunately, some older Americans are not getting enough nutrients to stay healthy, and may suffer from malnutrition. Malnutrition in older people is a complex condition caused by a combination of factors in their lives. This is a serious health problem for the nation's older adults. Nutrition screening programs in a wide variety of institutional and community settings have reported elder malnutrition risk rates ranging from 25% to 85%.

### What causes poor nutrition in older Americans?

Older Americans may not get proper nutrients because of a variety of conditions. This can happen for many reasons.

Many older people live alone and are unable to get around as easily as they used to. One in five elders have trouble walking, grocery shopping, and preparing food as they age. This can restrict access to adequate amounts and variety of food.

Also, depression sometimes affects older adults and can impact nutritional status by contributing to a lack of desire to eat or prepare food. Declining oral health, lack of teeth or poor-fitting dentures can also affect food intake. A healthy mouth, teeth and gums are needed to eat and poor-fitting dentures can interfere with eating. In addition, some medications and medical procedures and treatments may cause loss of appetite.

Another reason many older Americans may not get proper nutrition is because of a loss or decline in the senses of taste and smell. A large proportion of the population older than 65 years has age-related sensory losses that impair overall health, self-sufficiency, and quality of life.

All of these factors – physical, mental, economic and social factors – can interfere with eating, causing weight loss, poor nutritional status and decreased immunity to fight diseases. Understanding and addressing these problems can help improve overall health and quality of life. Given the importance of taste to health, improving the flavors of foods can lead to better nutritional status.



#### ■ How do we taste?

The sense of taste has many components. We taste food when chemicals in foods and beverages come in contact with taste buds. Taste buds are scattered on the surface of the tongue, cheek, soft palate, the first part of the esophagus and other parts of the mouth and throat. The components in food stimulate taste buds during chewing and swallowing, and tongue movements enhance flavor sensations. Complex interactions take place within and among the taste buds – which are filled with nerves – to evaluate the major flavors or tastes.



There are four most common tastes that we usually think of – sweet, sour, salty and bitter. But, studies show that there is much more to taste than these four components. Other taste qualities may include metallic (from iron components in medicines) and chalky (from calcium salts). There is also a taste called umami or savory that is used to describe the taste and mouth-feel of glutamate, an amino

acid found in protein foods and the flavor enhancer, MSG. In addition to adding flavor to foods, we also get taste sensations, such as richness and mouth-feel from fat.

Another player in the sense of taste is the trigeminal system, or ‘free nerve endings’ in the mouth and nose that connect with the brain. These nerves detect irritants such as hot chilies and black pepper, cool sensations such as mint, and carbonation.

#### Ways to Enhance the Flavors of Your Food

##### ■ Flavor Enhancers & Concentrated Flavors

You can add flavor enhancers or concentrated flavors to food to amplify taste and smell. They are concentrated mixtures of flavor and odorous molecules that are taken from natural products or are made by a chemical process. You can buy both concentrated flavors (e.g., jellies or sauces) or flavor enhancers in the form of bouillon cubes (e.g., chicken or beef bouillon) in the supermarket. Adding flavor to food amplifies taste and aroma of food. This can help make food more palatable for someone with impaired taste and smell.

##### ■ Monosodium Glutamate

When you buy MSG in the supermarket, you will find suggested uses on the container label. MSG is generally added to foods before or during cooking, much like table salt. As a general guideline, about half a teaspoon of MSG per pound of meat or four to six servings of vegetables should be sufficient. Once the proper amount is used, adding more contributes little to food flavors. A little enhancement goes a long way.

#### ■ How do we smell?

Smell occurs when nerve receptors in your nose send messages to your brain. The sense of smell plays an important role in perception of foods. The interaction of the oral and nasal senses blend together to give us the impression of a certain food, or increase the sensory perceptions we receive. Smells can also create emotional responses to food. This is because emotions and smell sensations overlap in your brain. Smells can create both positive and negative emotional responses to food. A positive response can improve the desire to eat, while a negative response may decrease the desire to eat.



#### ■ What causes changes in taste and smell?

Declining taste and smell is a normal part of the aging process for many people. Age-related impairment of the senses can be caused by many factors including environmental pollutants. As a result, taste buds and smell receptors do not function as well as in earlier years, causing a decline in the senses of taste and smell. These changes can decrease the desire for food.

In addition to normal aging processes, chronic diseases and conditions can affect the senses of taste and smell, including Parkinson’s disease, diabetes mellitus, Alzheimers disease and others. Some of the medications people take can also interfere with these senses and decrease appetite as well.

#### ■ Can anything help to improve the eating habits for older Americans with impaired taste and smell?

Yes. Enhancing the flavors of foods can help improve eating and, subsequently, health for older Americans. Adding table salt or flavor enhancers such as monosodium glutamate (MSG); spices and herbs; or other concentrated essences and extracts to food can improve

the taste and aroma of foods. These enhancements can improve food enjoyment and increase food intake, which is important for maintaining a healthy weight, a strong immune system and overall health.

It is important to remember other dietary concerns, such as hypertension (high blood pressure) when enhancing food flavors. Adding table salt may not be the best choice to enhance flavors if a low-salt (or low-sodium) diet is recommended because of high blood pressure. MSG may be a better option because it contains only one third the sodium of table salt. When small quantities of MSG are used in combination with a reduced amount of table salt during food preparation, the flavor-enhancing properties of MSG allow for far less salt to be used during and after cooking. MSG brings out the best natural flavors in food and can reduce total sodium by 30 – 40 percent without reducing palatability.

When considering flavor enhancement for older adults, keep individual food preferences, allergies or sensitivities in mind. With an abundance of alternative combinations of spices, herbs and food ingredients, it is possible to enhance flavor while addressing individual choices and preferences.

The senses of taste and smell play an important role in eating habits. Loss of these senses can impact your health by reducing the desire to eat.

Tastes and smells are important because they bring pleasure and enjoyment to eating, which can improve the desire to eat. This, in turn, can help maintain a healthy weight and immune system, which will improve overall health.

Without the simple pleasures of taste and smell, the overall quality of life is greatly reduced.