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BY LORIE EBER, CERTIFIED WELLNESS COACH, NUTRITIONIST, PERSONAL TRAINER



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s we age, we notice the inevitable physical changes like wrinkles, aches, and pains. Less obvious, but just as profound, are the transitions that occur in our bodies that impact our nutritional needs. It's critical that we educate ourselves about how the aging process affects absorption of vital vitamins and minerals and the dietary alterations which are an essential component of aging healthfully. Doing so will ensure that we don't unknowingly create nutritional deficiencies that can impact the quality of our everyday lives and put us at risk of poor health. With a little more diligent attention to food selection and portions, we can keep our body healthy, our energy level high, and continue to do the things we love.

Physical Changes that Affect Nutrition Needs

A variety of changes happen in our bodies with normal aging that put us at risk of nutritional deficiencies.

- Muscle loss. The average adult loses 3 to 8
 percent of his or her muscle mass each year after
 the age of thirty. This condition is known as
 sarcopenia and can lead to fractures and limited
 mobility. Research demonstrates that one way for
 older adults to replace lost muscle is to eat more
 protein (Raman, 2017).
- Decreased stomach acid production. Low stomach acid can affect the absorption of nutrients from foods. Additionally, approximately 20 percent of older adults suffer from atrophic gastritis, a condition caused by chronic inflammation that results in permanent damage to the cells that produce stomach acid. Low stomach acid means less efficient absorption of vitamin B12, calcium, iron, and magnesium (Raman, 2017).

- Decreased ability to recognize hunger and thirst. The ability to recognize hunger and thirst signals becomes less acute with age. This decreased sensitivity can lead to dehydration and unintentional weight loss (Raman, 2017). It is important to recognize the warning signs of inadequate fluid intake because, if left untreated, dehydration can be fatal. The early symptoms of dehydration are dark urine, dry mouth, lethargy, and dizziness. If you notice any of those symptoms, replenish fluids immediately.
- Sense of smell and taste decline. Eating may become less appealing as people age due to a diminished sense of smell and taste. The reason is that it takes more time and energy for an older body to trigger a stimulus. The result may be that food tastes unappealingly bland (Raman, 2017).
- P Decreased sensitivity to alcohol. Aging lowers alcohol tolerance, making excess intake very dangerous to older adults. More than one in ten seniors reported binge drinking (more than four or five drinks in two hours) in the last month. Lower tolerance makes drinking a serious health risk for older adults, who also feel the effects faster because they have less lean muscle mass to absorb the drug. This faster intoxication can result in dehydration, diabetes, high blood pressure, memory problems, and falls (American Addiction Centers, 2020).
- Medication side effects. Eighty percent of adults fifty and over take at least two medications daily.
 Some drugs cause nausea, reduce appetite, or change the way food tastes (Raman, 2017).
- Poor dental health. Medicare does not cover dental care unless it's performed in a hospital. Missing teeth, untreated cavities, and receding



gums can lead to pain and the inability to chew properly, which may circumscribe healthy food choices (Raman, 2017).

 Poor vision care. Since Medicare does not cover routine eye exams, contact lenses or glasses, many seniors neglect this aspect of their health.

Mental Health Issues Can Affect Nutrition

Mental health challenges can also adversely impact healthy eating habits. Two common types that are likely to affect nutritional choices are depression and cognitive impairment.

Depression affects more than 6.5 million of the 35 million Americans aged sixty-five or older. Despite its prevalence, this condition often goes undiagnosed by physicians, who consider it a normal reaction to the many losses that accompany aging. Depressed seniors often exhibit a decreased interest in eating or may eat an unbalanced diet of fast food or subsist on calorically dense snacks (Aging.com, n.d.).

After the age of sixty-five, a person's risk of developing Alzheimer's disease or vascular dementia doubles roughly every five years. The Alzheimer's Association estimates that as many as a third of all adults over eighty-five years of age suffer from some form of dementia or cognitive impairment. People caring for someone with dementia should be on the lookout for erratic eating patterns, unhealthy diets, and a sudden change in food preferences. Dementia sufferers may lose interest in food or even refuse to eat. Sometimes they become angry or agitated, or behave in challenging ways during mealtimes. The end result may be weight loss and decreased muscle strength, making the person more susceptible to infections or viruses.

Social Changes Affect Nutrition Intake

In addition to the physical alterations in the body, social circumstances change as people age and these circumstances can impact an older adult's eating habits. Some of the more prevalent environmental influences include the following:

- Limited financial resources. Inadequate retirement income can lead to cutting back on the grocery budget, selecting foods based on cost rather than nutrition (aging.com, n.d.).
- Lack of transportation. Many older adults give up their car keys voluntarily or have them taken away, making getting to the grocery store or farmers market a real challenge (Raman, 2017). Uber and Lyft now provide convenient, but sometimes pricey, alternative sources of transportation.
- **Limited mobility.** Using a wheelchair or suffering the effects of arthritis or joint replacement surgery can limit the ability to shop for healthy food (Raman, 2017).

Older Adults Need Fewer Calories

We all want to avoid gaining excess weight as we age when the tendency is to become more sedentary and lose lean muscle. It's a national problem; 74 percent of U.S. adults are overweight or obese, and most of us find it increasingly difficult to keep extra pounds at bay as the years tick off. People who are determined to maintain a healthy weight as they gain seniority in life must apply consistent diligence to food and beverage choices. The unfortunate reality is that people generally burn off fewer calories as they age. There are a variety of reasons for this diminished need. Think of it as an unwelcome perfect storm.

In order to avoid gaining weight and risking developing chronic illnesses such as diabetes, high blood pressure, and other cardiovascular diseases, we need to recognize that our bodies need less nourishment. But keeping the extra pounds away isn't just about eating less. Refocus on choosing more nutrient-dense, and less calorically dense, food. What is required for a healthy diet is both the elimination of empty calories from fast food, snacks, and treats and a selection of more nutritious foods like fruits, vegetables, and lean proteins.

My eating habits have changed quite a bit as I've aged. In my younger years, I was able to indulge my sweet tooth and pizza cravings without repercussions. But as I've gotten older, I've had to steadily adjust my eating patterns to maintain a healthy weight. At age sixty-five, my dinner plate is filled mostly with vegetables and a protein like fish or chicken. I don't eat nearly as many carb-heavy foods as I used to and have drastically cut back on sweet treats. But I still make tasty meals that I look forward to eating and that fill up my plate.

Another effect of aging is that body composition becomes higher in fat and lower in muscle. Lean muscle mass burns more calories all day, which is also one of the reasons that men (who have a naturally higher percentage of muscle) can eat more than women without gaining weight. Don't make the mistake of thinking of exercise as only cardiovascular workouts that get the heart rate pumping. Making resistance training, which helps maintain or increase muscle mass, part of a workout routine is just as essential to health.

Economics affect food choices, particularly among the cost-conscious elderly. Since the Great Depression, the U.S. government has been subsidizing the growing of corn, wheat, and soybeans. This financial support, originally intended to provide struggling families with an affordable food supply, has resulted in the unintended consequence of discouraging the cultivation of healthy crops such as fruits, vegetables, and other grains. Instead, the market is flooded with inexpensive highly processed foods such as high-fat and high-sodium prepackaged snacks and soft drinks containing high fructose corn syrup (Fields, 2004). About 23.5 million people live in food deserts where healthy alternatives to these products are either not available or prohibitively expensive (Correll, 2019).

Common Nutrient Deficiencies and How to Remedy Them

In general, older bodies are less efficient at processing certain nutrients. Therefore, older adults need to

be aware of these changed dietary requirements and make appropriate adjustments. Here's a list of the nutrients that may be in short supply, as well as guidelines on how to remedy the deficits (Raman, 2017).

Protein

Research demonstrates that that older adults need more protein as they age, and most older adults are not getting enough (Sandoiu, 2019). Eating more protein can help your body maintain muscle and fight sarcopenia. One study that followed 2,066 older adults over three years found those who ate the most protein lost 40 percent less muscle mass than people who ate the least. A meta-analysis of twenty recent studies of older adults concluded that eating more protein or taking protein supplements may not just slow the rate of muscle loss, but even increase muscle mass.

The standard recommended protein intake for all adults is .8 grams per kilogram of body weight. This translates to about 55 grams of daily protein for a 150 lb. adult. For older adults, many experts now suggest between and 1 and 1.5 grams, which equates to about 69 to 81 grams for a 150 lb. older adult. Good sources of protein include fish and seafood, poultry, dairy products, beans, nuts and seeds, and tofu and soy products (Raman, 2017). An easy way to gauge a serving size is to equate it to the size of your palm or visualize a deck of cards.

Fiber

Constipation is prevalent in older adults, especially women, who are twice as likely to suffer from this condition as men. The primary culprits are the side effects of medications, a low-fiber diet, and sedentary behavior. Adopting a diet high in fiber also helps prevent diverticular disease, which affects over half of adults over fifty. Fiber intake can be increased by eating more whole grains, beans, legumes, fruits, and vegetables (Klemm, 2020).

Calcium and Vitamin D

Another side effect of normal aging is that our bodies become less efficient at absorbing calcium-rich foods that help build strong bones, thus preventing falls, which often result in placement in a care facility. Calcium and vitamin D are the most important nutrients for bone health and they work in tandem. Calcium helps to build strong bones, while vitamin D assists in calcium absorption (Klemm, 2020). Many cereals are fortified with calcium and vitamin D. Natural

sources of calcium include green leafy vegetables and dairy products. Vitamin D can also be found in fatty fish such as salmon, red meat, and egg yolks (Klemm, 2020). Another good source of vitamin D is sunshine. Go outside midday for fifteen to thirty minutes, without sunscreen, a few times per week to increase your vitamin D levels (Raman, 2018).

Vitamin B-12

Vitamin B-12 is essential for making red blood cells and maintaining healthy brain function. Studies show that 10 to 30 percent of adults over fifty years old have a reduced ability to absorb vitamin B-12 from their diets. Vegetarians and vegans are the most susceptible to B-12 deficiencies because a plant-based diet has many fewer sources of this vitamin. The best sources of this vitamin are meat, fish, eggs, and dairy. Another alternative is fortified cereals (Klemm, 2020).

Iron

Iron deficiencies are common in older adults and can lead to anemia, a condition which results in an insufficient supply of healthy red blood cells to carry adequate oxygen to the body's tissues. Having anemia can make people feel tired and weak. Iron-rich foods include green leafy vegetables, beans and legumes, tofu, nuts, red meat, liver, and tofu (Raman, 2017).

Magnesium

Magnesium is crucial to proper body function and plays a role in over 300 physiological functions. It helps maintain nerve and muscle function, supports a healthy immune system, keeps the heartbeat steady, keeps glucose levels steady, and helps maintain strong bones. Medications can decrease its absorption and an aging body becomes less efficient in absorbing this mineral. Magnesium is present in green leafy vegetables, legumes, nuts, seeds, fruit, and whole grains (Raman, 2017).

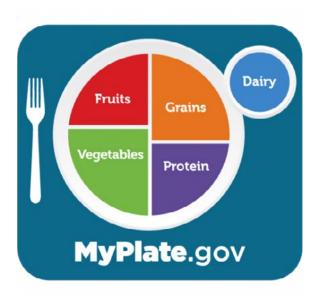
How to Change Your Eating Habits

Most of us can improve our diets in ways that will help us get all the nutrition we need from eating healthy foods, thereby avoiding having to take supplements. Quick weight loss diets, while tempting, don't work and can create health risks. Low carbohydrate diets, especially the keto diet, have become very popular in recent years. This diet replaces carbohydrates with a regimen that promotes a very high intake of fats, making no distinction between the healthy fats contained

in salmon and avocados and harmful saturated fats found in comfort foods like bacon, butter, coconut oil, and cheese. Another tenet of keto is to exclude many nutrient-dense foods like whole grains, starchy vegetables, legumes, and fruit. While studies have reached conflicting results as to its short-term effectiveness, it comes with serious health risks, including deficiencies in many critical vitamins and minerals, as well as kidney and liver problems (Harvard Health Publishing, 2020).

The only long-term method that will sustain a healthy diet is to slowly make changes to your behavior. In other words, the prescription is to change your lifestyle in ways that allow you to enjoy healthy food, keep your portion sizes reasonable, and avoid empty calories from snacking. The National Institute on Aging (n.d.b) provides a handy framework for making the necessary changes and the National Council on Aging (2021) provides practical advice about how to achieve those goals:

- 1. Adopt a healthy eating pattern that is sustainable. Pay attention to all food and drink choices and eat the number of calories that your body needs given your activity level and metabolism. An easy guide to visualize a healthy eating pattern is the USDA's My Plate graphic (see below).
- 2. Focus on variety, nutrient density, and quantity. Consume nutrient-dense foods while avoiding calorically dense treats. One simple way to ensure adequate variety is to aim for a food plate with all the colors of the rainbow and to focus on brightly colored foods, like fruits and vegetables. A food's color is an indication of the particular vitamins and antioxidants it contains.
- 3. Limit calories from added sugars and saturated



fats, and reduce sodium. Read the nutrition fact label before you buy packaged foods. Most Americans consume 3,400 mg. of sodium per day, far in excess of the RDA of 2,300 mg. or less. In practical terms, that translates to a single teaspoon of salt per day. Consuming excessive amounts of sodium is linked to high blood pressure, heart disease, and stroke. Be aware that because sodium is a flavor enhancer, restaurant offerings are very high in sodium. Many canned soups contain as much as 800 mg. of sodium in a one-cup serving. But don't focus on having to give up your favorite foods. The best mindset is to get out of your comfort zone and go on a food adventure to discover new, healthier alternatives.

4. Slowly shift to healthier food and drink options. Juice and coffee shop drinks contain a lot of sugar and, if you drink them frequently, you will see the effects in added weight gain. There are better alternatives. Instead of a glass of orange juice, for example, eat two oranges. It will be more satisfying, supply fiber to keep your digestive system moving, and keep you feeling full while the nutrients are being extracted. Drink plain water or a no-calorie flavored sparkling water beverage as a healthier alternative to fruit juice. Skip the fancy barista drinks and opt for plain coffee with a splash of nut or oat milk.

The Keys to Healthy Aging

An important aspect of aging healthfully is understanding changing nutritional needs. Older bodies are less effective in extracting and absorbing vitamins and minerals from food, which makes it more important than ever to focus on eating healthy foods like fruits, vegetables, whole grains, legumes, and lean protein. Highly processed packaged foods are inexpensive and convenient, but they fall short of providing the nutrients that our bodies require to stay healthy and ward off chronic illness. Aging is inevitable but diligently following a healthy diet can make it an enjoyable, active time of life. •CSA



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ors, she was a corporate litigator for twenty-three years and worked in elder care for six years. She teaches Gerontology at Coastline Community College. Lorie has published six books:

- Why I'm Not a Fat Old Lady
- How to Ditch Your Fat Clothes for Good

- 40 Ways to Leave Your Lover, That Would be Junk Food
- How to Stay Healthy in a World Designed to Make Us Fat and Lazv
- Boomers: Aging Beats the Alternative and a Sense of Humor Helps
- How I Escaped Legal Practice and Got Myself a Life

REFERENCES

Aging.com. (n.d.). *Elderly nutrition 101: Ten foods to keep you healthy*. Retrieved from https://aging.com/elderly-nutrition-101-10-foods-to-keep-you-healthy/

American Addiction Centers. (2020, February 4). *The invisible epidemic: Senior citizens and alcoholism.* Retrieved from https://americanaddictioncenters.org/alcoholism-treatment/elderly

Correll, R. (2019). *Food deserts*. Retrieved from https://www.verywellhealth.com/what-are-food-deserts-4165971

Fields, S. (2004, October). The fat of the land: Do agricultural subsidies foster poor health? Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1247588/

Harvard Health Publishing. (2014, September). Successful aging: Who stays healthy? Retrieved from https://www.health.harvard.edu/staying-healthy/successful-aging-who-stays-healthy

Harvard Health Publishing. (2020, August 31). Should you try the keto diet? Retrieved from https://www.health.harvard.edu/staving-healthy/should-you-try-the-keto-diet

Klemm, S. (2020, May 21). Special nutrient needs of older adults. Retrieved from https://www.eatright.org/health/wellness/healthy-aging/special-nutrient-needs-of-older-adults.

Medline Plus. (n.d.). *Nutrition for older adults*. Retrieved from https://medlineplus.gov/nutritionforolderadults.html

National Council on Aging. (2021, February 23). *Healthy eating tips for seniors*. Retrieved from https://www.ncoa.org/article/healthy-eating-tips-for-seniors

National Institute on Aging. (n.d.a). Overcoming roadblocks to healthy eating. Retrieved from https://www.nia.nih.gov/health/ overcoming-roadblocks-healthy-eating

National Institute on Aging. (n.d.b). Smart food choices for healthy aging. Retrieved from https://www.nia.nih.gov/health/smart-food-choices-healthy-aging

Pronk, N.P., Katz, A.S., Lowry, M., & Payfer, J.R. (2012, October 11).

Reducing occupational sitting time and improving worker health:

The take-a-stand project. Retrieved from https://www.ncbi.nlm.
nih.gov/pmc/articles/PMC3477898/

Raman, R. (2017, September 5). *How your nutritional needs change* as you age. Retrieved from https://www.healthline.com/nutrition/nutritional-needs-and-aging#1

Raman, R. (2018, April 28). *How to safely get vitamin D from sunlight*. Retrieved from https://www.healthline.com/nutrition/vitamin-d-from-sun%23bottom-line

Sandoiu, A. (2019, February 25). U.S. adults do not consume enough protein, study warns. *Medical News Today*. Retrieved from https://www.medicalnewstoday.com/articles/324533

Ways to Eat Well **As You Get Older**





Know what a healthy plate looks like

See how to build a healthy plate at ChooseMyPlate.gov





Look for important nutrients

Eat enough protein, fruits and vegetables, whole grains, low-fat dairy, and Vitamin D.





Stay hydrated

Water is an important nutrient too! Drink fluids consistently throughout the day.







Read nutrition labels

Be a smart shopper! Find items that are lower in fat, added sugars, and sodium.



Stretch your food budget

Get help paying for healthy food at

BenefitsCheckUp.org/getSNAP



Use recommended

servings

Learn the recommended

daily servings for adults

aged 60+ at

heart.org

