

KEEP YOUR GUT HEALTHY: A QUICK GOOD GUT HEALTH GUIDE FOR OLDER ADULTS

The human digestive system is resilient. It is protected by muscles, fats, bones, and our immune system (Conaway, 2012). However, aging can influence the functions of the digestive system. Aging may lead to various digestive discomforts such as decreased appetite, dry mouth, constipation, reflux, and ulcers (Britton & McLaughlin, 2013; Conaway, 2012). These disorders can highly impact our overall nutrition and can lead to malnutrition and deficiencies (Britton & McLaughlin, 2013). Learning about digestive health, noticing digestive habits, and recognizing symptoms can help prevent or manage some digestive disorders and maintain overall digestive health (Britton & McLaughlin, 2013).

Changes in the Digestive System with Age

MOUTH:

Digestion starts from the mouth. With age, we experience several changes within the mouth such as teeth loss, decrease in saliva, loss in intensity of taste and smell, and compromised jaw strength to bite and chew certain solid foods (Britton & McLaughlin, 2013; Dumic et al., 2019).

ESOPHAGUS (FOOD PIPE):

The food pipe is made of muscles that gently contract to move food toward the stomach (Britton & McLaughlin, 2013).



These muscles also help to prevent reflux (food rising into the mouth). With age, these muscles lose some of their strength and can cause gastroesophageal reflux. About 23% of older adults experience Gastroesophageal Reflux Disease (GERD) (Britton & McLaughlin, 2013; Conaway, 2012; Dumic et al., 2019).

STOMACH:

The stomach secretes gastric juices to digest food further. This gastric juice is highly acidic. With age, this acidity decreases, resulting in indigestion or food staying in our stomach for a longer period, making us feel full for a longer than usual amount of time. This leads to reduced appetite and malnutrition (Conaway, 2012; Dumic et al., 2019).

SMALL INTESTINES:

Lactase is a chemical produced in the small intestine. It helps digest lactose from milk. As we age, lactase may start to reduce in the body, which can lead to difficulty digesting milk-based products (Shaw et al., 2018). Researchers also suggest that we may lose beneficial gut bacteria as we age (Britton & McLaughlin, 2013; Conaway, 2012). The small intestine too may experience lesser peristaltic (wavelike) movement resulting in bloating and a decline in the absorption of calcium, folic acid, and iron within the body (Dumic et al., 2019).

LARGE INTESTINES:

Like the esophagus and small intestines, the large intestine may develop peristaltic movement-related issues slowing the passage of food to travel further. This can cause bloating, constipation, and prolong the time of digestion (Britton & McLaughlin, 2013; Dumic et al., 2019). However, changes in the large intestine due to age are rarely observed in many people. The issues with large intestines are largely related to other gastrointestinal disorders or other chronic diseases such as colon cancer, and irritable bowel syndrome (Britton & McLaughlin, 2013; Dumic et al., 2019).

Ways To Improve Your Digestive Health

Age-related digestive changes can most likely be improved, and gut health can be managed with good nutrition, lifestyle, supplementation, medication, and relaxation.



IMPROVE GUT BACTERIA HEALTH:

Gut bacteria are crucial for digesting foods and protecting the body against harmful pathogens (Britton & McLaughlin, 2013). Two ways to maintain good gut bacteria health are:

- 1. Consuming Prebiotics. Eating foods that support gut bacteria (Prebiotics), such as whole grains, legumes, beans, vegetables, and fruits (Harvard University T. H. Chan School of Public Health., n.d).
- **2.** Consuming Probiotics. Several fermented products contain beneficial probiotic bacteria. Consume foods such as yogurt, kimchi, fermented pickles, sauerkraut, tempeh, kombucha, and kefir (Harvard University T. H. Chan School of Public Health., n.d).

If you are consuming or considering taking probiotic supplements, talk with healthcare and nutrition professionals.

MAINTAIN A HEALTHY DIET:

Eat more fruits and vegetables (fresh, canned, and frozen with no salt or sugar added). Consume wholesome foods that are less processed and higher in fiber. Eat a variety of lean proteins such as poultry, fish, beans, lentils, and low-fat Greek yogurt (Conaway, 2012; Harvard University T. H. Chan School of Public Health., n.d). Avoid foods that contribute to heartburn. Identify heartburn triggers such as food ingredients, medications, alcohol, smoking, and meal timing (Conaway, 2012).





DRINK ADEQUATE WATER:

Adequate amounts of water and fluids are essential for maintaining good digestive health. They help you to swallow foods, prevent dehydration, and prevents constipation (Conaway, 2012). If taking diuretic medication, talk to a healthcare professional about water consumption (Conaway, 2012).

MANAGE STRESS:

Stress can affect gut health. It can cause constipation, diarrhea, pain, bloating, reduced appetite, gut discomfort, and a decreased number of beneficial gut bacteria. Stress can especially affect individuals with inflammatory bowel disease and irritable bowel syndrome (Shaw et al., 2018; Moore et al., 2012).

- Engage in activities that bring you joy
- Find time to interact with loved ones and social connections
- Learn something new and explore new places
- Practice relaxation techniques to destress such as tai chi, meditation, and breathing exercises
- Talk to professionals to support your mental well-being

In Summary

The digestive system naturally changes with age progression. These functional changes impact digestionrelated organs such as the mouth, esophagus, stomach, and small and large intestines. Digestive disorders, chronic disease, and lifestyle are big contributors to our digestive health.

To maintain good digestive health, try the following strategies:

- improve the gut bacteria health
- drink an adequate amount of water
- maintain a healthy lifestyle
- manage stress

REFERENCES

Britton, E., McLaughlin, J. (2013). *Ageing and the Gut*. Proceedings of the Nutrition Society. https://www.cambridge.org/core/journals/ proceedings-of-the-nutrition-society/article/ageing-and-the-gut/ A85D096755F5F7652C262495ABF302A0

Conaway, B. (2012). *Aging and Digestive Health*. WebMD. https://www. webmd.com/digestive-disorders/features/digestive-health-aging

Dumic, I., Nordin, T., Jecmenica, M., Lalosevic, M., Milosavljevic, T., Milovanovic, T. (2019). *Gastrointestinal Tract Disorders in Older Age*. Canadian Journal of Gastroenterology and Hepatology. Retrieved from: https://pubmed.ncbi.nlm.nih.gov/30792972/

Harvard University T. H. Chan School of Public Health (n.d.). *The Microbiome*. https://www.hsph.harvard.edu/nutritionsource/microbiome/

Moore, K., Boscrdin, J., Steinman, M., Schwartz, J. (2012). Age and Sex Variation In Prevalence Of Chronic Medical Conditions In Older Residents of U.S. Nursing Homes. *Journal of American Geriatric Society*. 60(4): 756-764. https://doi.org/10.1111/j.1532-5415.2012.03909.x

Shaw, W, Labott-Smith, S., Burg, M., Hostinar, C., Hostinar, C., Alen, N., Tilbug, M., Bertson, G., Tovian, S., Spirito, M. (2018). Stress affects on the body. *American Psychological Association*. https://www.apa.org/topics/stress/body

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