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journal homepage: www.archives-pmr.org Archives of Physical Medicine and Rehabilitation 2021;102: 1865–8



ORGANIZATION NEWS

Information/Education Page

Ten Simple Dietary Steps to Strengthen Your Immune System – A Guide for Older Individuals at Risk of COVID-19



Older adults are at risk for poor immune response to infections, including coronavirus disease 2019 (COVID-19). Although no diet can prevent COVID-19, eating healthily protects your health and strengthens your immune system. Healthy eating is very important for older individuals, especially those with chronic diseases such as diabetes, hypertension, obesity, or cancer.

Figure 1 provides 10 dietary recommendations to help you choose healthy foods and get the nutrients you need for overall good health and a strong immune system.^{1,2} These recommendations are based on advice provided by the Food and Agriculture Organization of the United Nations³ and the World Health Organization.⁴

Talk to your health care provider or a registered dietitian about your diet and lifestyle habits. They will help you develop a healthy diet plan that meets your needs, tastes, and budget. The plan should consider your lifestyle, health status, living arrangements and economic situation.

Additional resources:

- The Center for Disease Control and Prevention (CDC) Adult BMI Calculator website: https:// www.cdc.gov/healthyweight/assessing/bmi/ adult_bmi/english_bmi_calculator/bmi_calcu lator.html
- Additional United States Department of Agriculture (USDA) website resources: https:// www.usda.gov/coronavirus
- The National Institute of Ageing's website contains sample menus for older adults that can be

found here: https://www.nia.nih.gov/health/
sample-menus-healthy-eating-older-adults

• Dr Elena Philippou has produced a video titled "Eat to boost your immune system" with scientific information. This can be found on her YouTube channel: https://youtu.be/FEdUw7XZt3E

Authorship

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Acknowledgment

We thank Susan Carollo, BS, for her contribution and input as a consumer in the content of this page.

STEP 1 - Maintain a healthy body weight

Being either underweight or overweight weakens your immune system.



Being underweight puts you at greater risk for infections. Infections are invasions of an area of the body that causes you to become sick. For example, viral pneumonia is an infection that can be caused by the COVID-19 virus.

Being overweight or obese weakens your immune system and can increase your risk of diseases. Talk to your doctor or registered dietitian about what is your healthy weight and what you should do to reach this weight.

You can use the Center for Disease Control and Prevention (CDC) free website to calculate your BMI. You will find the website information in the "Additional Resources" at the end of this page.

For adults, the World Health Organization² defines underweight, overweight, and obesity as follows:

Body Mass Index (BMI) Category	BMI (kg/m ²)
Underweight	<18.5
Normal weight	18.5-24.9
Overweight	25.0-29.9
Obese	≥30.0

Step 2 - Eat a balanced diet



A balanced diet includes a variety of foods to promote good health and a strong immune system. Foods and nutrients work together to lead to the best health results.

The best way to get all your nutrients is by eating a range of healthy foods.

It is recommended to eat:

- 3-5 portions of different fresh or frozen fruits and 3-5 portions of different vegetables daily.
- Try to include fruits and vegetables of different colors, such as oranges, carrots, spinach, tomatoes, and bananas. There are so many choiceswhen it comes to fruits and vegetables that you should be able to find a combination that fits your tastes and budget.
- Include whole grain foods, such as whole wheat bread, oats, pasta, and brown rice with most of your meals.
- · Consume legumes, such as beans and lentils, 2-3 times per week.
- Prefer low-fat dairy products and lean meats, such as chicken and turkey.
- Choose healthy fats, such as olive oil, avocado, and unsalted nuts.

 Step 3 - Avoid ultra-processed foods, fats, sugars, salt, and alcohol

 A diet high in sugar, fat, and salt increases your risk of being overweight and developing heart disease, diabetes, and certain types of cancer.

 Avoid ultra-processed foods which contain a lot of refined sugar, salt, and fat

and are low in fiber.

Ultra-processed foods include:

 soft drinks, chips, chocolate, candy, ice-cream, sweetened breakfast cereals, packaged soups, breaded meats, hotdogs, and fries.

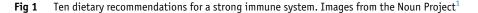
Avoid consuming alcohol in excess. If you drink alcohol, limit yourself to one drink at a time and try to drink it with your meal. Step 3 – Drink plenty of fluids

Keeping your body well hydrated is important for overall good health and a good immune system response.

Drink about 8 glasses of water a day.

Keep things interesting by changing what you drink. Beverages like water, herbal non-caffeinated tea, and milk are good options.

Avoid sugary drinks, which can increase your body weight and your risk of disease. Essential Micronutrients, such as vitamins, are extremely important for our health. Below we describe the role of key micronutrients and how to include them in your daily diet:



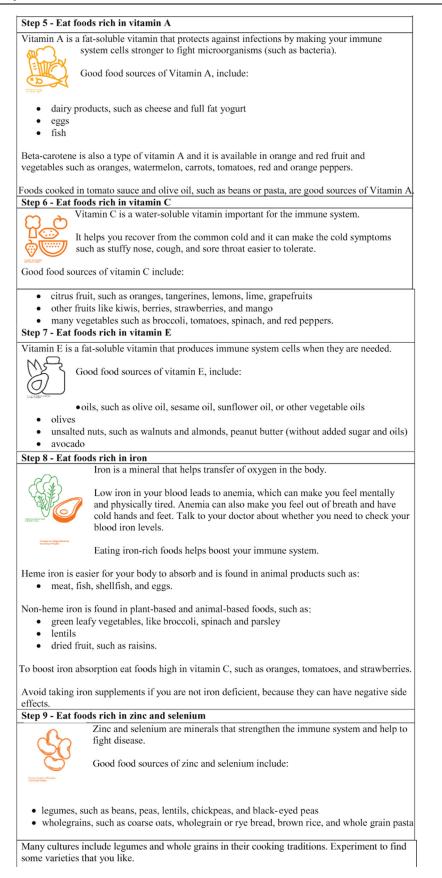
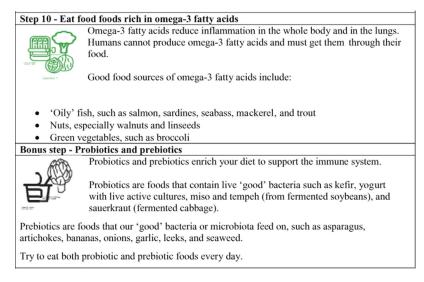


Fig 1 Continued





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