

Over half of Americans have too-low omega-3 fatty acid levels

Background

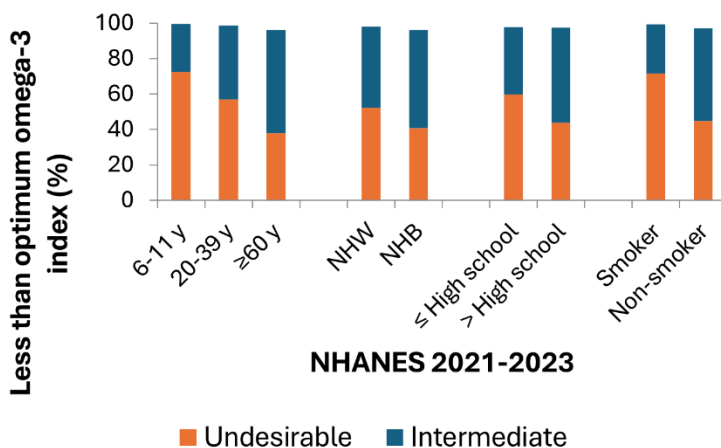
Fatty acids are the building blocks of fats. Among polyunsaturated fatty acids, omega-3's (n-3) are vital to good health. People get omega-3 fatty acids from food, supplements, and plant oils. They can help protect the heart and the vascular system. Omega-3's can also help lower triglycerides and inflammation in the body. Previous studies have shown that the omega-3 index strongly relates to a person's risk of sudden death from heart problems.

The omega-3 index is the sum of eicosapentaenoic and docosahexaenoic acid levels in red blood cells. The omega-3 index uses the categories undesirable (<4%), intermediate (4–8%), and optimal (>8%).

Intake recommendations

The American Heart Association recommends that patients with no history of heart disease have at least two servings of fish per week (particularly fatty fish). Patients with coronary heart disease are encouraged to consume about 1 gram of omega-3 fatty acids per day, preferably from oily fish. In addition, the American Heart Association recommends the general population consume vegetable oils (for example, olive, soybean, walnut, and flaxseed) and foods that are high in alpha-linolenic acid, like walnuts and flaxseeds.

The U.S. population falls short of dietary recommendations to achieve optimal omega-3 index



Other key findings

98% of the U.S. population had an omega-3 index below optimal levels.

Those with a more favorable omega-3 index included older persons, non-Hispanic Black persons, persons with higher education, and nonsmokers.

Legend: NHW, non-Hispanic White (≥20 y); NHB, non-Hispanic Black (≥20 y); education level (≤high school and >high school) (≥20 y); recent tobacco use (past 5 days) (yes/no) (≥20 y).

Source: National Health and Nutrition Examination Survey (NHANES) August 2021–August 2023.

Over half of the U.S. population have an undesirably low omega-3 index (<4%) and 98% have values less than optimal (\leq 8%).

The 2026 Nutrition Report provides:

- Nutritional biomarker information for dietary supplement users and non-users
- Reference information for physicians and scientists to detect high or low nutrient levels in people
- A look at nutrient levels over time to see trends in nutrition status
- Numbers that can be used to compare the effectiveness of nutrition interventions