



HEART HEALTH BENEFITS FROM EATING FISH

It is now well established that eating fish regularly helps protect against developing heart disease and dying suddenly from a heart attack. This is because the oils in fish are unique—they have omega-3s, fatty acids not found in any other foods. The omega-3s in fish improve the way the heart works and make other conditions that contribute to heart disease less dangerous. For these reasons, the American Heart Association urges everyone to consume fish—especially fatty species such as salmon, herring, black cod, mackerel, and sardines—at least twice a week. For people who already have heart disease, the oils in fish may be especially important, as they may improve the condition. Here are some ways omega-3s from fish help our hearts:

♥ **Maintain normal heart rhythms**—When the rhythmic beating of the heart gets out of order, a dangerous pattern of rapid heartbeats can develop, and these can be fatal. Omega-3s from fish help maintain a healthy pattern of regular heartbeats and make it more difficult for abnormal rhythms to develop.

♥ **Reduce the chance of sudden death**—Nearly half of all cardiac deaths occur suddenly, before a person can seek help. Omega-3s from fish help prevent this type of fatality. One of the ways they do this is by maintaining stable heartbeats, making it more difficult for rapid uncontrolled rhythms to develop.

♥ **Reduce the chance of stroke**—Blood clots that develop in the brain or are carried to the brain from elsewhere cause strokes and serious disability. They can be fatal. People who eat fish regularly are less likely to develop strokes.

♥ **Lower chance of having a first heart attack**—People at high risk of having a heart attack may be less likely to develop one if they consume the omega-3s from fish on a regular basis. Omega-3s help the heart by slowing the development of atherosclerosis (clogged blood vessels) and improving heart function.



♥ **Reduce inflammation**—As heart disease develops, blood vessels become mildly inflamed and this makes heart failure more likely. This inflammation is greatly reduced in people who regularly consume fatty fish or the omega-3s from fish.

♥ **Improve the pattern of lipids in the blood**—Different types of lipids (fat-like substances) are carried in the blood. The omega-3s found in fish can dramatically lower the amount of blood fats (triglycerides) in blood and this reduces the chance of a heart attack. People with type 2 diabetes and certain types of heart disease can have very high levels of blood triglycerides and eating fatty fish or the omega-3s found in fish is one of the best ways of lowering the amounts of these fats.

♥ **Improve “good” cholesterol or HDL levels**—People who have higher levels of HDL or “good” cholesterol in their blood have a lower chance of heart failure. HDL helps remove cholesterol from the blood vessels where it can be harmful. Regularly eating fish or the omega-3s from them helps boost blood levels of HDL or “good” cholesterol.

♥ **Lower blood pressure**—High blood pressure or hypertension increases the chance of heart disease and stroke, but can usually be well controlled by medications. High blood pressure is sneaky because it can develop without a person knowing it. People who eat fish regularly have slightly but consistently lower blood pressure than those who do not. Achieving and keeping a healthy body weight is especially important for lowering blood pressure.

♥ **Lower chance of blood clots**—We need some blood clotting to heal injuries, but if blood clots too readily, it can block a blood vessel in the heart or brain. When this happens it can be fatal. The omega-3s from fish reduce the tendency to form blood clots and improve blood flow. Omega-3s also make red blood cells more flexible so that circulation through small blood vessels is improved.

♥ **Better blood vessel function**—Our arteries do more than send blood around the body. Their cells are miniature chemical factories making substances that affect blood flow and the flexibility of the artery wall. With the omega-3s from fish, arteries are more elastic and less likely to promote the formation of blood clots. As a result, blood flow and blood pressure are improved.



♥ **Improved heart rate adaptability**—A person's pattern of heartbeats normally has small beat-to-beat changes. These small changes reflect the heart's ability to adapt to changes in its environment. When fish oil omega-3s are present, the heart rate shows greater flexibility compared to its variability without omega-3s. Having greater variability in heart rate is linked to lower heart disease and less likelihood of dying from heart disease.

♥ **More stable arterial plaques**—One of the riskiest aspects of heart disease is the build-up of deposits or plaques in the blood vessels close to and in the heart. These plaques begin a chain of events that can lead to heart failure. There is growing evidence that the omega-3s from fish in childhood and adolescence indicate atherosclerosis. As the plaques grow larger they are more likely to break apart, starting the process of heart disease. Omega-3s help make these plaques more stable and less likely to rupture.

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