

## TRENDS IN NEW GENERATION FOODS

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Fortification is the  
perfect yacht to drive  
out malnutrition



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# Omega-3 FA & Blood thinner in CVD

Omega-3 fatty acids found in fish oil are known to reduce inflammation and decrease the risk of chronic degenerative diseases. Omega-3 fatty acids also influence the ability to form blood clots and may have a natural blood-thinning effect.

**O**mega-3 fatty acids are a type of fatty acid that can only be found in foods, and are not naturally made by our body. This type of acid can be found in fish, such as salmon and tuna, as well as in other seafood, plants and nuts. The benefits of omega-3 fatty acids are apparent as early as birth, as infants not getting sufficient levels of this fatty acid are at increased risk for vision and nerve problems. While omega-3 fatty acids are crucial to brain function as well as growth and development, research has

shown that they may also have numerous cardiovascular benefits by reducing risk for heart disease and reducing inflammation.

It is well known that omega-3 fatty acids can help prevent heart disease and improve the heart health of those with cardiovascular disease, but what is their effect on particular patients, such as those on blood-thinning medications after receiving a stent? Researchers in Poland investigated this question, as the effects of omega-3 fatty acids have not been investigated in this specific population before.

Stents have become increasingly common in heart disease patients, compressing built up plaque and opening the coronary artery to increase the flow of blood and oxygen to the heart. However, by placing this foreign object in the body, it can increase likelihood of blood clots, which can cause serious complications such as a heart attack or stroke. Accordingly, patients receiving stents are commonly treated with blood-thinning medications to help prevent clots and help blood to flow properly

**Omega-3 may increase the risk of bleeding when taken with drugs that increase the risk of bleeding.**

**Some examples include aspirin, anticoagulants (blood thinners) such as warfarin (Coumadin) or heparin, antiplatelet drugs such as clopidogrel (Plavix), and nonsteroidal anti-inflammatory drugs such as ibuprofen (Motrin, Advil) or naproxen (Naprosyn, Aleve).**



**Omega-3 fatty acids had only positive effects on patients with stents and did not take away from the body's natural ability to form clots. While it's important to note that the use of omega-3 fatty acid is by no means a replacement for blood-thinners and other treatments, it can help significantly improve outcomes in patients with stents when used in combination with other medications.**

throughout the body. But clots can still form, even with the use of blood-thinners, and patients often rely on physicians to help break them up with medication or a medical procedure.

So what more can be done to help prevent blood clots in stent patients? Based on study findings, combining omega-3 fatty acids with blood-thinning drugs can help reduce risk of heart attacks by decreasing clot formation and improving clot properties. In this study, patients taking 1,000 milligrams of fish oil capsules daily experienced less blood clot than those not receiving the treatment, and when blood clots did form, they were easier to break up, taking nearly 15% less time to destruct.

While this study was small with less than 60 patients, findings are encouraging. Omega-3 fatty acids had only positive effects on patients with stents and did not take away from the body's natural ability to form clots. While it's important to note that the use of omega-3 fatty acid is by no means a replacement for blood-thinners and other treatments, it can help significantly improve outcomes in patients with stents when used in combination with other medications.

Fish oil supplements have become a common item at pharmacies and natural foods stores across the nation. The growing use of this supplement is a reflection of the ongoing battle to fight cardiovascular disease in the United States. Omega-3 fatty acids found in fish oil are known to reduce inflammation and decrease your risk of chronic degenerative diseases. Omega-3 fatty acids also influence your ability to form blood clots and may have a natural blood-thinning effect.

### OMEGA FATTY ACIDS

Two of the omega fatty acids commonly found in supplements is essential fatty acids, meaning that your body doesn't manufacture them. You must consume them in your diet. Omega-6 fatty acid is ubiquitous in the American diet, as it is found in all animal-based foods such as meat, eggs, poultry and dairy products. Omega-3 fatty acids are not as common in the American diet. They are primarily found in fish and nuts, which are less plentiful in the American diet. This disparity between omega-6 and omega-3 may be partially to blame for the epidemic levels of

heart disease in the U.S.

Omega-6 increases inflammation, whereas omega-3

decreases it. Omega-3 also decreases platelet aggregation, thus discouraging the formation of blood clots and acting as a natural blood thinner.

### BLOOD THINNING ADVANTAGES

In some cases, fish oil's ability to decrease clot formation can be considered an asset. Fish oil's blood-thinning effect may help decrease your risk of thrombosis, a condition in which a blood clot breaks free and circulates in your bloodstream, finally landing in your heart, where it can cause myocardial infarction. A thrombosis that reaches your brain can cause stroke. The Linus Pauling Institute states that in some cases fish oil has been found to decrease the risk of ischemic stroke, which occurs when a blood clot blocks an artery to your brain.

### INTERACTIONS WITH DRUGS

Omega-3 may increase the risk of bleeding when taken with drugs that increase the risk of bleeding. Some examples include aspirin, anticoagulants (blood thinners) such as warfarin (Coumadin®) or heparin, antiplatelet drugs such as clopidogrel (Plavix®), and nonsteroidal anti-inflammatory drugs such as ibuprofen (Motrin®, Advil®) or naproxen (Naprosyn®, Aleve®).

Omega-3 may affect blood sugar levels. Caution is advised when using medications that may also affect blood sugar. People taking drugs for diabetes by mouth or insulin should be monitored closely by a qualified healthcare professional, including a pharmacist. Medication adjustments may be necessary. Omega-3 may cause low blood pressure. Caution is advised in people taking drugs that lower blood pressure. **INS**

