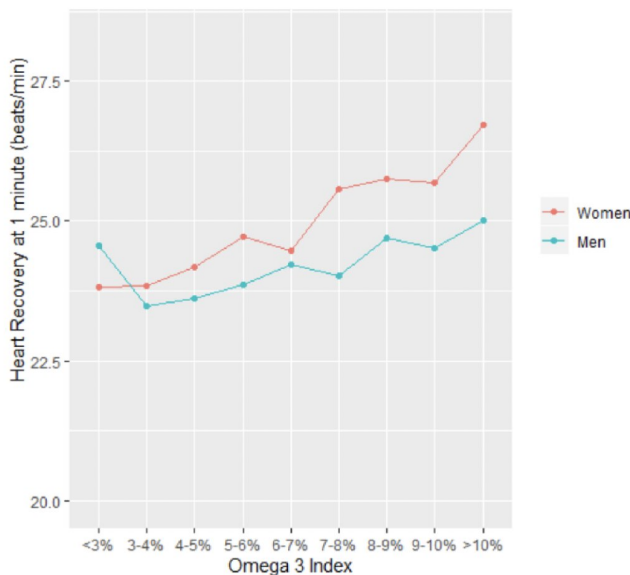


New research on omega-3s and heart rate recovery

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Comparing each patient's heart rate recovery with their Omega-3 Index, the researchers found a significant relationship between these two variables such that the higher the Index, the faster the heart rate dropped down. The effect was more marked in women than men, but statistically significant in both. This is summarized in Figure 1 (right) where the Omega-3 Index is plotted on the x-axis, and the drop in heart rate one minute after stopping the treadmill test (measured in beats per minute, bpm) is shown as a positive number on the y-axis. Credit: Fatty Acid Research Institute

The Fatty Acid Research Institute (FARI) has published a new research paper in conjunction with The Cooper Institute on omega-3s and heart rate recovery.

Omega-3 fatty acids have a long history of being [heart](#) healthy, but exactly why and how has been less clear. They are known to lower serum triglyceride levels, but the effect is relatively small and it's not clear how much of a risk factor high

triglyceride levels is in the first place. So how do the omega-3 fatty acids EPA and DHA work?

A recent study from the Cooper Center Longitudinal Study (CCLS) and FARI sheds new light on this question.

The investigators utilized data from 13,912 healthy men and women who had preventive medical examinations at Cooper Clinic in Dallas over a 10-year period. These examinations routinely included both treadmill exercise testing and measurement of the Omega-3 Index (i.e., red blood cell EPA+DHA levels from OmegaQuant Analytics).

One component of the exercise test is called 'heart rate recovery' and it refers to how quickly the heartbeat slows down after maximal exercise. The faster it drops, the healthier the heart.

Comparing each patient's heart rate recovery with their Omega-3 Index, the researchers found a [significant relationship](#) between these two variables such that the higher the Index, the faster the heart rate dropped down. The effect was more marked in women than men, but statistically significant in both. This is summarized in the Figure 1 (right) where the Omega-3 Index is plotted on the x-axis, and the drop in heart rate one minute after stopping the treadmill test (measured in beats per minute, bpm) is shown as a positive number on the y-axis. These are the unadjusted values. (For example, 25 bpm on the y-axis means that 1 minute after stopping exercising—i.e., the maximal heart rate—the person's heart rate dropped by 25 bpm).

When adjusted for age, maximal METS (a measure of cardiorespiratory fitness), BMI and smoking status, a 2-percentage point higher Omega-3 Index was associated with a 0.35 and 0.69 bpm greater heart rate recovery in men and women, respectively (p

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