

# Study finds routine periodic fasting is good for your health, and your heart

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Fasting has long been associated with religious rituals, diets, and political protests. Now new evidence from cardiac researchers at the Intermountain Medical Center Heart Institute demonstrates that routine periodic fasting is also good for your health, and your heart.

Today, research cardiologists at the Intermountain Medical Center Heart Institute are reporting that [fasting](#) not only lowers one's risk of [coronary artery disease](#) and diabetes, but also causes significant changes in a person's blood cholesterol levels. Both diabetes and elevated cholesterol are known risk factors for coronary heart disease.

The discovery expands upon a 2007 Intermountain Healthcare study that revealed an association between fasting and reduced risk of coronary heart disease, the leading cause of death among men and women in America. In the new research, fasting was also found to reduce other cardiac risk factors, such as triglycerides, weight, and [blood sugar levels](#).

The findings were presented Sunday, April 3, at the annual scientific sessions of the American College of Cardiology in New Orleans.

"These new findings demonstrate that our original discovery was not a chance event," says Dr. Benjamin D. Horne, PhD, MPH, director of cardiovascular and genetic epidemiology at the Intermountain Medical Center Heart Institute, and the study's principal investigator. "The confirmation among a new set of patients that fasting is associated with lower risk of these common diseases raises new questions about how

fasting itself reduces risk or if it simply indicates a healthy lifestyle."

Unlike the earlier research by the team, this new research recorded reactions in the body's biological mechanisms during the fasting period. The participants' low-density lipoprotein cholesterol (LDL-C, the "bad" cholesterol) and high-density lipoprotein cholesterol (HDL-C, the "good" cholesterol) both increased (by 14 percent and 6 percent, respectively) raising their total cholesterol – and catching the researchers by surprise.

"Fasting causes hunger or stress. In response, the body releases more cholesterol, allowing it to utilize fat as a source of fuel, instead of glucose. This decreases the number of fat cells in the body," says Dr. Horne. "This is important because the fewer fat cells a body has, the less likely it will experience insulin resistance, or diabetes."

This recent study also confirmed earlier findings about the effects of fasting on human growth hormone (HGH), a metabolic protein. HGH works to protect lean muscle and metabolic balance, a response triggered and accelerated by fasting. During the 24-hour fasting periods, HGH increased an average of 1,300 percent in women, and nearly 2,000 percent in men.

In this most recent trial, researchers conducted two fasting studies of over 200 individuals — both patients and healthy volunteers — who were recruited at Intermountain Medical Center. A second 2011 clinical trial followed another 30 patients who drank only water and ate nothing else for 24 hours. They were also monitored while eating a normal diet during an additional 24-hour period. Blood tests and physical measurements were taken from all to evaluate cardiac risk factors, markers of metabolic risk, and other general health parameters.

While the results were surprising to researchers, it's not time to start a fasting diet just yet. It will take more studies like these to fully

determine the body's reaction to fasting and its effect on human health. Dr. Horne believes that fasting could one day be prescribed as a treatment for preventing diabetes and coronary heart disease.

To help achieve the goal of expanded research, the Deseret Foundation (which funded the previous fasting studies) recently approved a new grant to evaluate many more metabolic factors in the blood using stored samples from the recent fasting clinical trial. The researchers will also include an additional clinical trial of fasting among patients who have been diagnosed with [coronary heart disease](#).

"We are very grateful for the financial support from the Deseret Foundation. The organization and its donors have made these groundbreaking studies of fasting possible," added Dr. Horne.

Provided by Intermountain Medical Center

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