

## Long-term intermittent fasting reduces COVID-19 heart failure issues and death in heart disease patients

March 6 2023



Intermittent fasting, especially when done over the course of decades, can have positive effects on metabolic and cardiovascular health. Now, a new study by researchers at Intermountain Health in Salt Lake City finds that it may also add an extra layer of protection from heart-related COVID-19 complications in people who had already sought cardiac care. Credit: Intermountain Health



Intermittent fasting, especially when done over the course of decades, can have positive effects on metabolic and cardiovascular health. Now, a new study by researchers at Intermountain Health in Salt Lake City finds that it may also add an extra layer of protection from heart-related COVID-19 complications in people who had already sought cardiac care.

"We already know that regular fasting over long periods of time can lead to overall <u>health</u> improvements. Here we found that it may also lead to better outcomes in COVID-19 patients who required a <u>cardiac</u> <u>catheterization</u>," said Benjamin Horne, Ph.D., director of cardiovascular and genetic epidemiology at the Intermountain Health. "Fasting won't necessarily stop a cardiac event from happening, but it may prevent someone from developing <u>heart</u> failure after."

In the study, Intermountain researchers examined patients who enrolled in the INSPIRE registry, a voluntary registry at Intermountain Health, who were also undergoing cardiac catheterization from February 2013 to March 2020.

Of that group, 464 patients had been diagnosed with COVID-19 between March 6, 2020, and April 8, 2022. Of those, 135 reported that they fasted routinely—on average for 42.7 years.

Researchers found that those who practiced regular fasting had a lower rate of heart failure-related hospitalization, complications, and death than COVID-19 positive patients in the study who did not fast.

Researchers presented results of the study at the American College of Cardiology / World Heart Federation national conference in New Orleans on March 6.

"These results show that long-term, low-frequency fasting can help



prevent <u>heart failure</u>, even in patients who have both COVID-19 and <u>heart problems</u> already," Dr. Horne said.

Intermountain Health heart and vascular clinicians have had the opportunity to closely study this specific cohort of long-time fasters because a large portion of its patients fast regularly for religious reasons.

Nearly 62 percent of Utah's population belongs to the Church of Jesus Christ of Latter-day Saints, whose members typically fast the first Sunday of the month by going without food or drink for two consecutive meals.

As such, Dr. Horne stressed that study participants aren't patients who are fasting as part of a fad diet. The shortest period of time a participant had been fasting was seven years; the longest, 82.

Dr. Horne said that more research is needed to understand why <u>intermittent fasting</u> is associated with better COVID-19 outcomes in patients already being treated for heart conditions, but said it's most likely due to a host of ways that it affects the body.

For example, fasting reduces inflammation, especially since hyperinflammation is associated with poor COVID-19 outcomes. In addition, after 12 to 14 hours of fasting, the body switches from using glucose in the blood to ketones, which can improve heart function.

Another potential benefit is that intermittent fasting promotes autophagy, which is "the body's recycling system that helps your body destroy and recycle damaged and infected cells," he said.

Dr. Horne stressed that anyone who wants to consider starting a new <u>fasting</u> practice should consult their doctors first, especially if they are elderly, pregnant, or have conditions like diabetes, heart or kidney



disease.

## Provided by Intermountain Healthcare

Citation: Long-term intermittent fasting reduces COVID-19 heart failure issues and death in heart disease patients (2023, March 6) retrieved 3 May 2024 from <u>https://medicalxpress.com/news/2023-03-long-term-intermittent-fasting-covid-heart.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.