

Constipation increases your risk of a heart attack, new study finds—and not just on the toilet

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If you Google the terms "constipation" and "heart attack" it's not long before the name Elvis Presley crops up. Elvis had a longstanding history of chronic constipation and [it's believed](#) he was straining very hard to poo, which then led to a fatal heart attack.

We don't know what really happened to the so-called King of Rock-n-Roll back in 1977. There were likely several contributing factors to his death, and this theory is one of many.

But after this famous case, researchers took a strong interest in the link between constipation and the risk of a heart attack.

This includes a recent [study](#) led by Australian researchers involving data from thousands of people.

Are constipation and heart attacks linked?

Large [population studies](#) show constipation is linked to an increased risk of heart attacks.

For example, an [Australian study](#) involved more than 540,000 people over 60 in hospital for a range of conditions. It found constipated patients had a higher risk of [high blood pressure](#), heart attacks and strokes compared to non-constipated patients of the same age.

A [Danish study](#) of more than 900,000 people from hospitals and hospital outpatient clinics also found that people who were constipated had an increased risk of heart attacks and strokes.

It was unclear, however, if this relationship between constipation and an increased risk of heart attacks and strokes would hold true for healthy

people outside hospital.

These Australian and Danish studies also did not factor in the effects of drugs used to treat high blood pressure (hypertension), which can make you constipated.

How about this new study?

The recent [international study](#) led by Monash University researchers found a connection between constipation and an increased risk of heart attacks, strokes and heart failure in a general population.

The researchers analyzed data from the [UK Biobank](#), a database of health-related information from about half a million people in the United Kingdom.

The researchers identified more than 23,000 cases of constipation and accounted for the effect of drugs to treat high blood pressure, which can lead to constipation.

People with constipation (identified through [medical records](#) or via a questionnaire) were twice as likely to have a heart attack, stroke or heart failure as those without constipation.

The researchers found a strong link between high blood pressure and constipation. Individuals with hypertension who were also constipated had a 34% increased risk of a major heart event compared to those with just hypertension.

The study only looked at the data from people of European ancestry. However, there is good reason to believe the link between constipation and heart attacks applies to other populations.

A [Japanese study](#) looked at more than 45,000 men and women in the general population. It found people passing a bowel motion once every two to three days had a higher risk of dying from heart disease compared with ones who passed at least one bowel motion a day.

How might constipation cause a heart attack?

Chronic constipation can lead to straining when passing a stool. This can result in [labored breathing](#) and can lead to a rise in blood pressure.

In [one Japanese study](#) including ten elderly people, blood pressure was high just before passing a bowel motion and continued to rise during the bowel motion. This increase in blood pressure lasted for an hour afterwards, a pattern not seen in younger Japanese people.

[One theory](#) is that older people have stiffer blood vessels due to atherosclerosis (thickening or hardening of the arteries caused by a build-up of plaque) and other age-related changes. So their high blood pressure can persist for some time after straining. But the blood pressure of younger people returns quickly to normal as they have more elastic blood vessels.

As blood pressure rises, the risk of heart disease increases. The risk of developing heart disease [doubles](#) when [systolic blood pressure](#) (the top number in your blood pressure reading) rises permanently by 20 mmHg (millimeters of mercury, a standard measure of blood pressure).

The systolic blood pressure rise with straining in passing a stool has been [reported to be](#) as high as 70 mmHg. This rise is only temporary but with persistent straining in chronic constipation this could lead to an increased risk of heart attacks.

[Some people](#) with chronic constipation may have an impaired function

of their vagus nerve, which controls various bodily functions, including digestion, heart rate and breathing.

This impaired function can result in abnormalities of heart rate and over-activation of the flight-fight response. This can, in turn, lead to elevated blood pressure.

Another intriguing avenue of [research](#) examines the imbalance in gut bacteria in people with [constipation](#).

This imbalance, known as dysbiosis, can result in microbes and other substances leaking through the gut barrier into the bloodstream and triggering an immune response. This, in turn, can lead to low-grade inflammation in the blood circulation and arteries becoming stiffer, increasing the risk of a [heart attack](#).

This latest study also explored genetic links between constipation and heart disease. The researchers found shared genetic factors that underlie both constipation and heart disease.

What can we do about this?

Constipation affects around [19% of the global population](#) aged 60 and older. So there is a substantial portion of the population at an increased risk of heart disease due to their bowel health.

Managing chronic [constipation](#) through dietary changes (particularly increased dietary fiber), increased [physical activity](#), ensuring adequate hydration and using medications, if necessary, are all important ways to help improve bowel function and reduce the risk of [heart disease](#).

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