

Swap red meat for Quorn protein to improve heart health and reduce waist circumference, study finds

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People looking to reduce their cholesterol and trim fat from around their waist could try swapping meat for Quorn protein, according to the

findings from a new study by Northumbria University, Newcastle, published in the [European Journal of Nutrition](#), which saw positive effects in both areas in just two weeks.

Researchers from the University found that participants who ate Quorn products—the popular mycoprotein-based meat substitute—over just a two-week period, saw a significant 12% drop in "bad" LDL [cholesterol](#) and a 7% fall in total cholesterol, compared to those who ate similar products made from red and processed meat. In addition, they also reduced their [waist circumference](#) by close to 1cm (0.95cm) on average over the 14 days.

Such a drop in total cholesterol levels could, according to [medical research](#), reduce a person's risk of dying from a [cardiovascular disease](#), such as a stroke or [coronary heart disease](#), by as much as 9% . Waist circumference is a good measure of abdominal fat and a key marker of cardiovascular health, with a near 1cm reduction in the mycoprotein group, achieved within a short period, suggesting [potential benefits](#) for heart health and body composition.

The investigator-blind trial—which involved 20 healthy male adults who were randomly assigned to consume 240 grams per day of red and processed meat or an equivalent amount of Quorn over two 14-day periods—also revealed further heart health benefits from consuming mycoprotein, the unique ingredient in all Quorn products. Researchers identified a clinically meaningful trend toward lower systolic and [diastolic blood pressure](#) in the mycoprotein group, potentially contributing to improved cardiovascular health.

The findings come after the latest annual Health Survey for England estimated that well over half (59%) of adults suffer from raised cholesterol , almost two-thirds (64%) are overweight or living with obesity and almost a third (30%) have high blood pressure . All three are

known to cause cardiovascular disease—meaning millions of people could be at risk of a potentially fatal heart attack or stroke.

High cholesterol is mainly caused by diets high in saturated fat, carrying excess fat around your waist and not exercising enough, and is described, alongside high blood pressure, as one of the "silent killers" that are often symptomless and only identified through a medical emergency.

Elevated levels of low-density lipoprotein (LDL) cholesterol, often referred to as bad cholesterol, can lead to the build-up of fatty plaques in a person's arteries, which restrict blood flow and increase their risk of a heart attack or stroke. Currently, high LDL cholesterol is associated with a quarter (115) of the 460 heart and circulatory disease deaths recorded in the U.K. every day.

Almost 8 million people in the U.K. rely on statins to lower their cholesterol, but there is growing concern, following shortages, about the affordability of these drugs, with the most prescribed statin, atorvastatin, recently increasing in price from 49p to £5.30 over a six-week period .

Maintaining a healthy waist circumference is also known to be important for preventing future heart attacks and strokes. A larger waist typically indicates that there's excess fat around and inside organs and when this happens in the liver, for example, it pushes out too much fat and sugar into the blood, increasing the risk of coronary heart disease and type 2 diabetes. This is a particular risk when [excess fat](#) is carried around the lower torso in the abdominal area.

Commenting on the study findings, lead researcher Dr. Daniel Commane, Associate Professor in Nutritional Sciences at Northumbria University, said, "At a time when millions of people have high cholesterol and excess tummy fat, this study is the latest of several human dietary intervention trials where mycoprotein has demonstrated

significant cardiovascular benefits.

"It's important as it highlights how making a simple dietary change to consume mycoprotein can deliver impressive heart health benefits in a very short period of time, cutting the risk of a person dying from cardiovascular disease by as much as nine percent according to some models. It also demonstrates how mycoprotein could play a key role in supporting [weight loss](#) and long-term weight management—which is hugely important when we consider the health risks of obesity and that almost two in three people in England are clinically overweight.

"This latest study builds on previous research we conducted, which revealed that Quorn mycoprotein significantly reduces the presence of cancer biomarkers and improves gut health."

Fungi-based proteins like Quorn's mycoprotein are a separate kingdom of food, distinct from plant-based foods, and they are increasingly being recognized for their distinct nutritional attributes. Cultivated via the age-old process of fermentation, mycoprotein is a "complete protein" that's low in saturated fat, contains no cholesterol, and is recognized as a healthy source of protein and fiber. Quorn mycoprotein forms part of a healthy and sustainable diet, with mycoprotein included in the Eatwell Guide, the U.K. Government's healthy eating guidelines.

Tim Finnigan, Scientific Advisor for Quorn Foods and Visiting Professor at Northumbria University, said, "While many millions of people have been diagnosed with raised cholesterol or [high blood pressure](#), there are millions more who remain undiagnosed, and tackling these silent killers should remain an absolute priority.

"There's a myriad of solutions to these challenges, some costing more than others, but what is clear from this research and other recent studies, is that people can make a huge difference to their [heart](#) health just by

adding mycoprotein to their diet.

"Made by fermenting a naturally occurring fungus, it replicates the taste and texture of meat incredibly well and is supported by a rich evidence base of more than 20 published studies showing its health benefits as a quality protein."

More information: Dominic N. Farsi et al, The effects of substituting red and processed meat for mycoprotein on biomarkers of cardiovascular risk in healthy volunteers: an analysis of secondary endpoints from Mycomeat, *European Journal of Nutrition* (2023). [DOI: 10.1007/s00394-023-03238-1](https://doi.org/10.1007/s00394-023-03238-1)

Provided by Northumbria University

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