

# Mycoprotein products build muscle better than milk protein

May 22 2020

---



These results show that mycoprotein can be used as a good source of protein in a flexible diet, to suit each individual needs and goals. Credit: Quorn

A study from the University of Exeter has found that mycoprotein, the protein-rich food source that is unique to Quorn products, stimulates post-exercise muscle building to a greater extent than milk protein.

The results, published in the *American Journal of Clinical Nutrition*

showed that while those who ingested [milk protein](#) increased their muscle growth rates by an average of 60%, those who had mycoprotein increased their muscle growth rates by more than double this—showing that mycoprotein, the main ingredient in all Quorn products, may be a more effective source of [protein](#) to promote muscle growth.

The study evaluated the digestion of protein, which allows amino acids (the building blocks of protein) to increase in the bloodstream and then become available for muscle protein building.

This process was measured in 20 healthy, trained young men at rest and following a bout of strenuous resistance exercise.

The young men performed the exercise and were then given either milk protein or mycoprotein.

Their muscle building rates were then measured using "tracers" in the hours following protein consumption. Animal proteins like milk are an excellent source for muscle growth, so they provide a useful comparison for testing other protein sources.

"These results are very encouraging when we consider the desire of some individuals to choose non-animal derived sources of protein to support muscle mass maintenance or adaptations with training," said Benjamin Wall, Associate Professor of Nutritional Physiology at the University of Exeter.

"Our data show that mycoprotein can stimulate muscles to grow faster in the hours following exercise compared with a typical animal comparator protein (milk protein) – we look forward to seeing whether these mechanistic findings translate to longer term training studies in various populations."

Tim Finnigan, Chief Scientific Adviser for Quorn Foods, said: "We're excited to see this data being published by the University of Exeter in the AJCN.

"In a world where many people are trying to cut back on their [meat consumption](#), either for environmental or health reasons, we're happy to be able to offer an alternative protein that can provide exceptional nutrition and [muscle](#) growth, all while being meat-free."

A recent YouGov report analysing the dietary habits of the UK population shows that 14% of people now identify as Flexitarian.

These results show that Quorn can be used as a good source of protein in a flexible diet, to suit each individual needs and goals.

The British Nutrition Foundation already recommends mycoprotein as a good source of dietary protein, both for everyday life and for sport and exercise.

However, in the UK roughly a third of total protein consumption comes from meat products—and increasing meat intake may have serious consequences for public health and for the environment.

Quorn's mycoprotein represents a good "alternative" source of protein.

For more information about Quorn Food's research into the impact of mycoprotein on health, please visit our nutrition website, [www.quornnutrition.com](http://www.quornnutrition.com).

**More information:** Alistair J Monteyne et al. Mycoprotein ingestion stimulates protein synthesis rates to a greater extent than milk protein in rested and exercised skeletal muscle of healthy young men: a randomized controlled trial, *The American Journal of Clinical Nutrition*

(2020). [DOI: 10.1093/ajcn/nqaa092](https://doi.org/10.1093/ajcn/nqaa092)

Provided by University of Exeter

Citation: Mycoprotein products build muscle better than milk protein (2020, May 22) retrieved 6 May 2023 from <https://medicalxpress.com/news/2020-05-mycoprotein-products-muscle-protein.html>

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.