

Health benefits of oat protein (2022 Summary)

Oats have many components that promote good health including their well-known soluble fibre content with proven cholesterol lowering properties. What consumers may not know is that oats can also be used as a source of high quality plant protein. To date, most health research on oats has focused on the dietary fibre, but new studies are investigating what health benefits and disease fighting oat protein has to offer.

A POGA funded nutrition research study conducted by Dr. Sijo Joseph Thandapilly, a research scientist with Agriculture and Agri-Food Canada, in collaboration with Drs. Lovemore Malunga and Thomas Netticadan investigated the health attributes of oat protein using an obese rat model. In this study, researchers incorporated oat protein into a high fat, high sugar rat diet to determine whether it is capable of improving the levels of blood cholesterol and sugar in these experimental rats. The findings from this study show that in obese rats oat protein is effective in lowering bad cholesterol, a risk factor for heart disease. In addition, through ultrasound imaging of the heart, researchers were able to establish that oat protein consumption could improve the cardiac function of the heart in these rats. This is the first study of its kind showing the health benefits of oat derived proteins for cardiovascular health. These positive results will justify pursuing a future human feeding study, which will be needed to validate if the effects observed in animals will also be seen in humans. Researchers are planning to publish the findings from this study in a leading scientific journal and present the outcomes at scientific conferences.

Establishing additional nutritional benefits will enhance the recognition of oats as a healthy food and strengthen consumer demand. Research demonstrating the cardiovascular risk lowering properties of oat protein will help establish oats as a plant-based protein source of choice for consumers. Additionally, as Canada is one of the leading exporters of oats in the world, it will benefit Canada's oat producers and farmers by increasing the marketability of oats as a sustainable plant-based protein and allow oat ingredients to remain competitive in the health food market.

