

## Study shows health benefits of whole grains in children

A new study shows several health benefits for children with a high BMI when they consume whole grain oats and rye products, compared to sifted grain products.

In previous large population studies, whole grains have been shown to have positive effects on health and well-being, including a reduced risk of type 2 diabetes and cardiovascular disease. Now, a new clinical study shows clear results on improved blood lipids and gut health in young people who have eaten whole grain oats and rye products.

"I hope that more people choose whole grains for the sake of health and taste in the future, preferably from an early age, as good habits at an early age tend to be maintained even later in life," says Lovisa Martin Marais, Nutrition Manager, Lantmännen R&D.

For eight weeks, 55 healthy, slightly overweight children aged eight to 13 were allowed to eat whole grain oats and rye products, in line with the highest recommendations for Danish children. Products made from sifted grain were used as controls.

High consumption of whole grains from oats and rye reduced some risk of cardiovascular diseases, such as lipids: LDL cholesterol and triacylglycerol. The proportion of certain beneficial gut bacteria increased, as did the levels of beneficial short-chain fatty acids in both stool and blood. The children also reported reduced fatigue and a tendency to increase the frequency of bowel movements.

"The most remarkable outcome of the study is the significant reduction in LDL cholesterol. This is particularly surprising given that the participants were both healthy and young. In addition, our results suggest that the improvement in blood cholesterol levels from the intake of whole grains seems to be linked to certain gut bacteria, which is something that needs to be explored more," says one of the researchers behind the study, Marie Terese Barlebo Madsen, Clinical Trial Manager at Copenhagen University Hospital.

The results strengthen the recommendations to replace sifted cereal products with whole grain products from oats and rye in children to reduce future disease risk.

"I am convinced that it is of great importance to ensure a significant consumption of whole grains during childhood," concludes Marie Terese Barlebo Madsen.

Read more about whole grains and their health effects on the [Swedish National Food Agency](#) and [Lantmännen's websites](#). The agency's dietary guidelines with regard to whole grain intake for the very youngest can be found [here](#).

### Facts about the study

- [The study](#) was conducted at Institut for Idræt og Ernæring at the University of Copenhagen.
- A randomized crossover study with 55 children with a BMI z-score of  $1.5 \pm 0.6$ .
- The children consumed  $108 \pm 38$  grams of whole grains per day during the period of and  $3 \pm 2$  grams of refined grains per day.

- Wholegrain intake resulted in lower blood cholesterol levels, and increased amount of beneficial short-chain fatty acids.
- Lantmännen contributed products to the study.

**For more information, please contact us**

Lantmännens press office

**Tel:** 010 556 88 00

**E-post:** [press@lantmannen.com](mailto:press@lantmannen.com)

**About Lantmännen**

Lantmännen is an agricultural cooperative and Northern Europe's leader in agriculture, machinery, bioenergy and food products. Owned by 18,000 Swedish farmers, we have 12,000 employees, operations in over 20 countries and an annual turnover of approximately SEK 70 billion. With grain at the heart of our operations, we refine arable land resources to make farming thrive. Some of our best-known food brands are AXA, Kungsörnen, Scan, GoGreen, FINN CRISP, Schulstad and Vaasan. Our company is founded on the knowledge and values acquired through generations of farmers. With research, development and operations throughout the value chain, together we take responsibility from field to fork. For more information: [www.lantmannen.com](http://www.lantmannen.com)