

Call text – Food and health 2026

Lantmännen Research Foundation supports research which can contribute to achieving sustainable, robust and lucrative food systems. The aim of this research area is to generate new knowledge that can be used in the development of future foods and ingredients from cereals, legumes or meat. The scope of the research area extends through the entire chain from raw materials to consumption. If you have an idea for a project, we would invite you to contact us before you submit your application. We are also open to discuss the possibility of using Lantmännen's raw materials, products or other resources in the project.

Nutrition and health – cereals, legumes and meat

Cereals, legumes and meat are important components in Nordic diets. Health effects of a Nordic diet, as well as developing new knowledge that can support the development of healthy and innovative products, are included here.

Current research areas:

- Health effects of intake of products based on cereals, legumes and meat as part of a healthy Nordic diet.
- Whole grains and individual components, such as dietary fibre, effects on the metabolic syndrome, blood sugar and insulin regulation, gut health, cognition and weight loss. The importance of diet in treatment with GLP-1 analogues, as well as the role of the meat factor in health, are other areas of interest.
- Precision nutrition. How the diet can be adapted to individuals or groups of individuals for optimal health effects, with particular focus on diet-microbiota interaction.
- Sustainable nutrition. Focus on whole grains, public health and the nutritional content of the diet linked to climate and environmental aspects.

Baking quality

Bread and other baked goods make up a large portion of our diets. In order to develop the area for the future, in-depth knowledge about flour and baking chemistry is needed. This research area includes knowledge of raw materials, ingredients and processing techniques with respect to taste, right texture and sustained shelf life. The focus is on bread and pastries made from wheat, oats and rye.

Current research areas:

- The influence of wheat flour and its constituent components on baking properties and final product. The influence of gluten quality is of particular interest. How can the functionality of flour and vital gluten be evaluated, and controlled via choice of raw materials and product parameters? How starch quality is analysed, and how it affects different bakery products, is another area of focus.
- Improved taste, texture and shelf life of bread with a high content of whole grains and fibre.
- Water distribution and redistribution in dough and bread during freezing, storage and thawing. How can this be controlled with processes and raw materials to maintain taste, volume and texture in the bread?
- Evaluation of raw materials and ingredients for clean label solutions and better function, sensory and sustained shelf life. One example is the use of sourdough and yeast cultures; another is the use of butter and margarine in laminated products.
- Improved functionality in flour, whole grain flour and bran through for example milling, classification and pre-treatment. Can the functionality of flour be stabilised with ingredients or enzymes?
- Evaluation of new sustainable baking technology, as well as packaging solutions for maintaining taste, texture and crispiness.

Ingredients of cereals and legumes in foods

The demand for different plant-based ingredients for new innovative foods is great. In order to cover the need, today's technology for milling, wet fractionation and further processing of cereals and legumes needs to be developed and made more efficient. Focus on protein, starch and fibre from oats, wheat, yellow peas and faba beans.

Current research areas:

- Knowledge about the structure and chemical composition, of both raw materials and fractions, and their correlation to functional properties such as usability, taste, texture, nutritional content.
- The effect of process technologies on the quality of the end product, as well as how the functionality of ingredients can be controlled using different process steps, such as enzyme treatment, filtration and extrusion.
- New process methods for the production of ingredients and end products based on cereals and legumes. Innovative whole grain products are of particular interest.
- Deeper understanding of how different food applications are influenced by starch, protein and fibre ingredients from cereals and legumes. Examples of applications include pasta, breakfast products, dairy and meat analogues and sports products.
- Upgrading of side streams for use as food ingredients.

Applications should, where relevant, include a description of scale-up and techno-economic analysis of the process methods used.