

ANIMALIA: NORWEGIAN MEAT AND POULTRY RESEARCH CENTRE





**BUILDING THE FUTURE OF
NORWEGIAN FARMERS AND
THE NORWEGIAN MEAT AND
POULTRY INDUSTRY**



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GIVING THE MEAT AND POULTRY INDUSTRY A COMPETITIVE EDGE

Animalia's mission is to add value, reduce cost and create trust in the Norwegian meat and poultry industry. To achieve this we believe in international cooperation. Collaboration with others contributes to finding "best practise" solutions for our customers, and challenges the Norwegian industry to benchmark itself against international companies. Animalia's strengths are to provide new knowledge and targeted actions throughout the whole production chain, from animal husbandry via slaughtering and cutting, to processing and finally the meat or poultry product.

Animalia's vision is to strengthen Norwegian meat and poultry production throughout the value chain. Cooperation with other companies and research centres is a key to increase our industry's competitive edge. We always welcome potential partners to contact us to explore possibilities and establish innovative projects.



RESEARCH, DEVELOPMENT AND eLEARNING AT ANIMALIA

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Animalia is involved in a wide variety of research, educational and development projects. Animalia can act as both project owner and co-partner in larger projects. Our eLearning products in hygiene, stunning and slaughtering and bi-products are used by most employees in the Norwegian industry.

eLEARNING

Almost 14 000 users from large abattoirs to smaller food companies are using Animalia's eLearning program in hygiene. It is a computer based eLearning system which gives insight in food production. The program is based on EU-regulations and comes in Norwegian, English, Polish and German. It covers both the meat and poultry sector and combines practical tasks using video and animation, text and written tests.

Animalia is among the first companies in the world to offer eLearning in stunning and slaughtering. This eLearning system will give operators both the skills and knowledge needed to perform at a high level. It also gives the abattoirs a unique tool for ensuring a highly trained staff in regard to animal welfare.

IMPROVING DRY CURED HAM PRODUCTION

The Enzympig project investigates the effect race and age have on the enzymatic activity in pork meat and dry-cured ham. This research project focuses on three genetic pig types, Landrace, Duroc and Hampshire, and studies them at 6, 7.5 and 9 months of age. This is a project funded by The Norwegian Research Council, and Norwegian and Spanish dry cured meat producers. Two PhD scholarships are connected to the project. Animalia is the project owner and coordinator.

For our Norwegian industry partners the main goal of the research project is to produce a high quality Norwegian cured ham. For our international partners the goal is to generate new knowledge.



ANIMALIA SEEKS INTERNATIONAL PARTNERS IN OUR MAIN AREAS - FOOD SAFETY, ANIMAL HEALTH, ANIMAL WELFARE, QUALITY AND PROCESSING AND eLEARNING.

IMPROVING THE PREDICTION OF LAMB CARCASS VALUE

This PhD-study assesses the state of the art of grading & classification methods in Norway. Applied methods are computer tomography of single slices, anatomical scanning, sequential scanning and spiral scanning. The study assesses different methods to estimate carcass value including:

- Commercial dissection of lamb
- Sensory assessment according to EUROP scale
- Image analysis
- X-ray computer tomography (CT)
- Handheld probes based on visible light reflectance

The main goal is to improve the predictions for lamb carcass value and composition by validating and studying current and future grading systems.

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ANIMALIA'S AREAS OF EXPERTISE



Our employees combine outstanding theoretical knowledge with practical experience and always emphasize applicability. We offer in-depth knowledge and experience in our core areas.

FOOD SAFETY

In cooperation with the industry, Animalia has developed practical solutions and systems to promote food safety. The Hygiene Audit system is a thorough assessment of factors that influence hygienic quality and helps staff and management in the abattoirs to produce maximum hygienic effectiveness.

In addition, Animalia has developed an eLearning program on food hygiene for the meat and poultry industry.

MEAT AND POULTRY QUALITY

Dry Cured Meat: Animalia is the leading knowledge centre for dry cured meat in Northern Europe and has an extensive international

CORE AREAS

- Food safety
- Meat and poultry quality
- Animal welfare
- Animal health
- Livestock and breeding



Gathering of sheeps in the North of Norway

network. We initiate and manage several projects improving Norwegian long-term dry cured meat from pork and lamb, all based on domestic raw materials and traditions.

Processing and cutting: Animalia has advanced competence in meat technology and processing. Our research and activities aim at optimising processes, improving yield and increasing quality of pork, poultry, beef, mutton and lamb throughout the entire value chain. Our innovative meat cutting department develops new cutting patterns to meet consumer trends and industry needs. Furthermore, Animalia offers unique know-how on slaughter techniques and hygiene in Norway.

Carcass Classification: Animalia is the official administrator of the carcass classification system in Norway. Hence, Animalia oversees that classification is practised equally all over the country in accordance with official regulations.

ANIMAL WELFARE

Animalia has developed methods to assess and enhance animal welfare for the entire value chain; at the farm, in the transport collection

process and at the abattoir. Animalia's Ethical Audit is an assessment of vital factors which can influence animal welfare, helping the slaughterhouse management and staff to maximise animal welfare. Our eLearning system in stunning and slaughtering gives the abattoirs a unique tool in ensuring a highly trained staff in regard to animal welfare.

ANIMAL HEALTH

The Pig Health Service, the Poultry Health Service and the Sheep Health Service at Animalia coordinate and promote preventative measures, herd diagnostics, organised disease control and animal welfare in production.

LIVESTOCK AND BREEDING

The Livestock Recording System develops and operates central databases and software for systematic documentation and analysis of farm animal production. The databases are also used as a "best practice tool" to improve livestock performance and to select breeding animals. The three web-based systems in the Livestock Recording System are:

- The Beef Cattle Recording System
- The Sheep Recording System
- The Pig Recording System

THE INDUSTRY'S PRIMARY RESOURCE FOR PRACTICAL SOLUTIONS BASED ON SCIENTIFIC KNOWLEDGE



Carcass classification by Animalia's staff



Dry cured leg of lamb: "Fenalår"

ANIMALIA IN BRIEF:

- **State of the art competence in meat and poultry production and processing**
- **Offer the meat and poultry industry new insight and knowledge**
- **International research cooperation**
- **Unique combination of research and practical skills throughout the whole value chain**
- **Among the leading in eLearning programs for the industry**

Animalia is among Norway's leading research and development institutions within meat and poultry production. Animalia has a holistic value chain approach from primary production to industry.

Our staff is highly competent and has skills within the sector. In addition to working closely with meat and poultry organisations, abattoirs and industry, we have a broad network of national and international R&D institutions.

Animalia is a non-profit organisation, funded by the Norwegian farmers, owned by the meat and poultry industry and operating under the supervision of the Norwegian Agricultural Authority.