

# DOKTORANTŪROS STUDIJOS

#### **IRFAN HAMIDIOGLU**

### Dissertation topic

• Application of functional active substances and modelling of nutritional value for improving the quality of animal fats and oils.

## Stages of doctoral dissertation preparation:

- Study of functional active ingredients, suitable for improvement of quality parameters of animal fats and oils: vegetal antioxidants, peptides, fiber.
- Study of properties and application of functional active ingredients for fats and oils technologies

#### Theroretical studies:

- Study of technologies, nutritional value and quality parameters modelling in animal fats and oils. Study of the composition of different types of animal fats and oils and evaluating their conformity to the WHO recommendations for ratio of omega 6 and omega 3 fatty acids and amount of trans fatty acids.
- Development of a model for improving the fats nutritional value and quality using the most appropriate functional active substances, their mixtures or sources, and / or optimizing the ratio of omega 6 and omega 3 fatty acids.

## **Experimental studies:**

- Investigation of the properties (antioxidantive, antimicrobial, functional, thermal stability) of selected functional active substances and assess their suitability for improving the quality of animal fats and oils.
- Creation of compositions of the selected active ingredients and aplication them in animal fats and oils for the effect on quality assays during production and storage.
- Evaluation of optimal research-based solutions for the use of functional active substances in animal fats and oils and preparation of recommendations for manufacturers.

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