



Topic/Title

Lipidernæring i laks

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Lipid Nutrition in Atlantic salmon

Summary

The master student will use tissue samples from feeding trials to investigate physiological effects of different lipids in diets. Methods: - Gene expression - Lipid and fatty acid analysis - Microscopy

Background: The Nutrition group at Ås has worked with different aspects of lipid nutrition in fish for more than 25 years. We are working within topics such as alternative feed ingredients, omega-3 requirement, lipid metabolism, fat deposition, pigmentation and muscle quality. A main focus of our research is related to the influence of dietary lipids, including new feed ingredients, on fish health and interactions between nutrition and metabolic consequences. The lipid research group consists for the moment of four scientists, one PhD student and one engineer securing a good teaching environment for the master candidates. Lipids are important components of cells and organs of the salmon body. Changes in fatty acid composition of salmon diets and interaction with other nutrients may impact the health and robustness of salmon. The master student will in collaboration with our research team improve the biological understanding of responses to dietary lipids and interactions with other nutrients, and study regulation of fat metabolism in salmon.

The topic of this thesis: Investigating the impact of omega-3 fatty acids on tissue composition and health of Atlantic salmon

Type of work: The student will be involved in laboratory work, primarily focusing on lipid analyses, gene expression and microscopy analyses. Techniques include processing of tissue, variety of chemical analyses and microscope techniques, and isolation of RNA for transcriptional analysis. The student will learn basic laboratory techniques and acquire knowledge in the area of lipid nutrition.

Subject area

Nutrition, lipids, omega-3, health,

Language thesis

Norwegian or English

Bachelor or Master thesis

Master

Credits

60

Bachelor or Master thesis BIOVIT 2021/22



Project/company

Nofima

Please contact

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