

# Computation of Maximal Dietary Burden for Fish Metabolism

J. Klein<sup>1</sup>, C. Schlechtriem<sup>2</sup> and R. Schultz<sup>3</sup>

**Abstract:** Over the past years feed components based on agricultural products became more and more important for fish feed. However, these products usually contain pesticide residues. Clearly, the uptake of pesticides by fish is critical because of the resulting presence in fish products and water. In general fish feed consists of several crops and fish meal. An efficient methodology to calculate the maximum burden in fish feed which considers all basic needs of fish feed with regard to protein and fat content can be designed by linear programming.

In the talk a dietary burden calculator for fish metabolism studies is presented. The method offers substantial advantages in interpreting and predicting dietary burden in fish feed. It is useful for interpreting residues in feed when considering the different nutrition preferences of fish species. Furthermore, the impact of random fluctuation is quantified by Monte Carlo simulation.

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<sup>1,3</sup> Department of Mathematics, University Duisburg-Essen  
Thea-Leymann-Straße 9, 45127 Essen, Germany  
*judith.klein@uni-due.de, ruediger.schultz@uni-due.de*

<sup>2</sup> Fraunhofer Institute for Molecular Biology and Applied Ecology (IME)  
Auf dem Aberg 1, 57392 Schmallenberg, Germany  
*christian.schlechtriem@ime.fraunhofer.de*