

## **Abstract**

### **Ready to eat seafood enriched with omega 3 fatty acids**

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### **Background and aims**

In Europe omega-3 enriched foods are fast growing food product categories. Consumers increasingly search for food products with known bioactivity as means to improve their health or prevent diseases. Studies have shown that consumers are positive towards enrichment of seafood products with omega-3.

The aim of this project was product development of products enriched with omega-3 and to evaluate the quality and shelf life of the products. A part of the product development was to study consumer liking of the meals after repeated consumption for four weeks.

### **Methods**

Three experiments in developing dishes with addition of omega-3 were conducted. Sensory evaluation and chemical analysis were used to test the quality of the prototypes after 0, 3 and 6 months of storage. Seventy-seven consumers, 50 years and older received six meals every week over a four week period and answered detailed questions regarding feelings before, during and after consumption and liking of the meals.

### **Results**

The results showed that enriched dishes had higher fat content compared to the conventional dishes and sensory evaluation showed that the products had a shelf life of at least six months. Generally, the meals were well liked. Some differences were noticed between the conventional and enriched meals. The liking of the meals was not reduced with repeated consumption with one exception. Desire to consume the meals was similar in week one and four.

### **Conclusions**

The results indicated that enrichment with omega-3/6 is a realistic option, but the enrichment is more appropriate in some meals, depending on other ingredients in the recipe.