

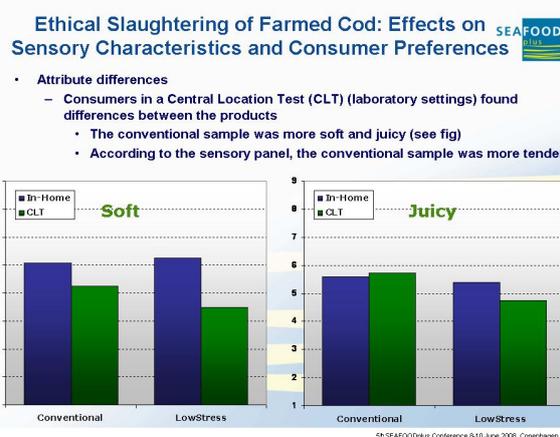
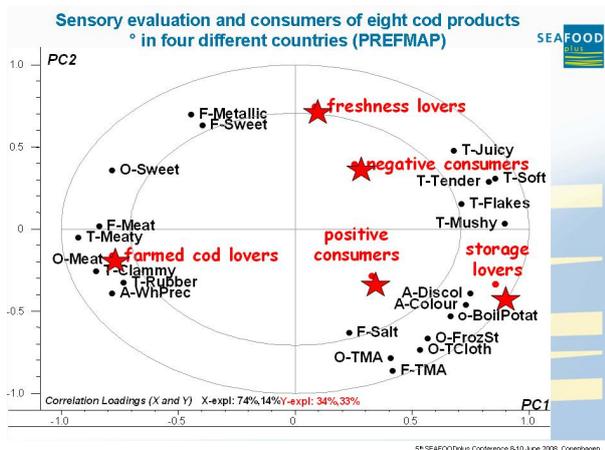
Improved seafood sensory quality for the consumer

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The main objective of SEAFOODSENSE was to develop and apply consumer oriented Seafood Sensory Quality Models that will enable the seafood industry to improve the eating quality of seafood available to consumers, will encourage increased seafood consumption. The project was led by Matis, Iceland and the other partners were DTU AQUA, Denmark and Wageningen IMARES, the Netherlands.

By simultaneous consumer test of sixteen different cod and salmon products in four countries and sensory analysis by a trained sensory panel it was found how sensory quality corresponded to consumers liking. The farmed cod products were considerably different from wild cod, with more light and even colour, meaty texture, odour and flavour and the storage time and handling also had an effect. Country differences were considerable with regard to fish consumption, attitudes and preferences of products. However, it was demonstrated that for each country, similar segments of consumers existed with different preferences, motives/barriers to seafood and demographic background.

Key decision makers determine quality at each stage in the seafood handling chain. By studying two different supply chains it was shown that there was a large variation in the way the information on sensory quality was structured and documented in each of the individual companies throughout the European fishery production chain. Almost all companies assessed the products by appearance and described general quality criteria, often related to freshness or other product specifications. For companies using defined methods it is relatively easy to describe norms and tolerances to evaluate the sensory quality on attributes. However, information on results of the sensory evaluation is not always communicated between companies in the chain. In collaboration with other SEAFOODplus projects it was studied if farmed cod produced with special animal friendly methods and conventional methods had different sensory qualities and to observe whether consumers had different likings for those groups and how different levels of information on farming practices influenced consumer liking. Sensory differences between the samples were observed, especially in texture attributes like tenderness, flakiness and meatiness. Even though some of the consumers did not differentiate between the samples ethical information had positive effect on product perception.

Using guidelines on sensory fish quality and handling for consumers showed that information and education of quality parameters, freshness evaluation and fish handling could result in more confidence in assessing quality of fish, enjoyment of fish meals and more frequent buying of fish. The results of the SEAFOODSENSE project indicated various marketing potential to increase fish consumption. Furthermore the results of the sensory evaluation performed in the different steps of the fish processing chain can be used in a seafood sensory quality model to improve the eating quality of seafood available to consumers.