

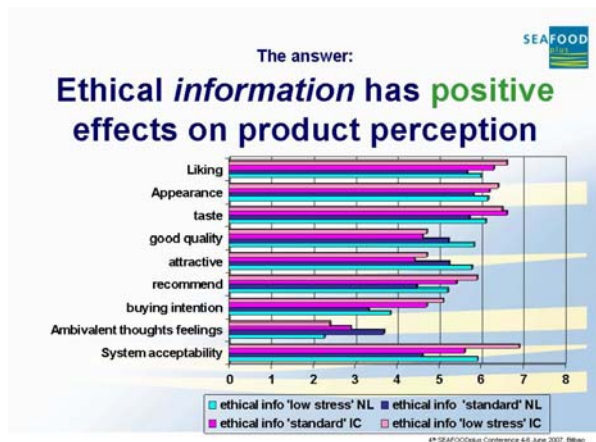
Do consumers like unstressed farmed cod better than stressed cod?

Presenting author: Rian Schelvis ⁽¹⁾ co-authors: Adriaan Kole ⁽²⁾ Kolbrun Sveinsdottir ⁽³⁾ and Emilia Martinsdottir ⁽³⁾

⁽¹⁾ IMARES, The Netherlands

⁽²⁾ Centre for Innovative Consumer Studies (CICS), The Netherlands

⁽³⁾ MATIS, Iceland



In the ETHICOD project, we address ethical concerns, asking if good fish welfare lead to better quality of farmed fish. The project includes full scale value chain experiments with Atlantic farmed cod following the development of the fish all the way from small juveniles to slaughter and up to the consumer's fork.

The objectives of the consumer study were

- To analyse sensory differences between farmed cod produced following standard pre-slaughter practises versus low-stress pre-slaughter practises.
- To analyse the effect of ethical information and individual factors on consumer preferences for farmed cod
- People's attitudes towards fish farming, farming practices and information about farming practices.

Results will be presented from the sensory Quantitative Descriptive Analyses performed at MATIS, (Iceland) and the consumer in-home tests performed in Iceland and the Netherlands.

Sensory characteristics of Norwegian (ETHIQUAL) farmed cod and Icelandic (Commercial) farmed cod. US = slaughtered with ethical methods (UnStressed), S = slaughtered with traditional slaughtering methods (Stressed) and CO = Commercial farmed cod. PCA analyses show that the sensory characteristics were different for the three samples: CO was more unlike the two other samples, had a less juicy and soft texture but more meaty odour, flakier and discoloured appearance. Comparing S and US, S had sweeter odour but more sour flavour, soft, tender and mushy texture.

In an in-home situation n = 156 subjects from Iceland and n = 202 subjects from The Netherlands tested once a week the 4 -6 samples with either no-ethical information, low-stressed ethical information and standard practises ethical information. The information was presented on the package label as well as in the paper questionnaire in a more extensive form. The consumers were given a questionnaire covering pre-consumption and post consumption evaluation of sensory attributes, usefulness of the information, intention to buy and willingness to pay. After testing the samples the consumers filled out the general questionnaire about fish consumption behaviour, attitudes towards fish farming, farming practices and information about farming practices.

The results show that the consumers in Iceland and in the Netherlands have similar high preference for the cod products (score 7 on a 1-9 scale) In Iceland information about slaughtering method influenced the in home consumers, as they preferred the cod with low-stress ethical information. The results from the Dutch consumers show no significant difference between cod from the ETHIQUAL project and Commercial Icelandic cod. The Dutch have the same preference for farmed cod with no ethical information and with low-stress ethical information, but decrease their preference when information about the standard slaughter practices was provided.