

Consumer perception of cell-cultured fish

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1 Motivation & Method

The overfishing of the oceans has led to the search for alternatives to conventional fish. One of these is cell-cultured fish, for which cells are obtained from the muscle tissue and develop into muscle fibers in the laboratory. However, consumer acceptance of this new food technology appears to be relatively low. An online survey was conducted among 160 Swiss consumers to investigate attitudes towards cell-cultured fish regarding different measures of acceptability in comparison to plant-based and conventional salmon.

Figure 1
Wild-caught salmon



Figure 3
Plant-based salmon



Figure 2
Aquaculture salmon



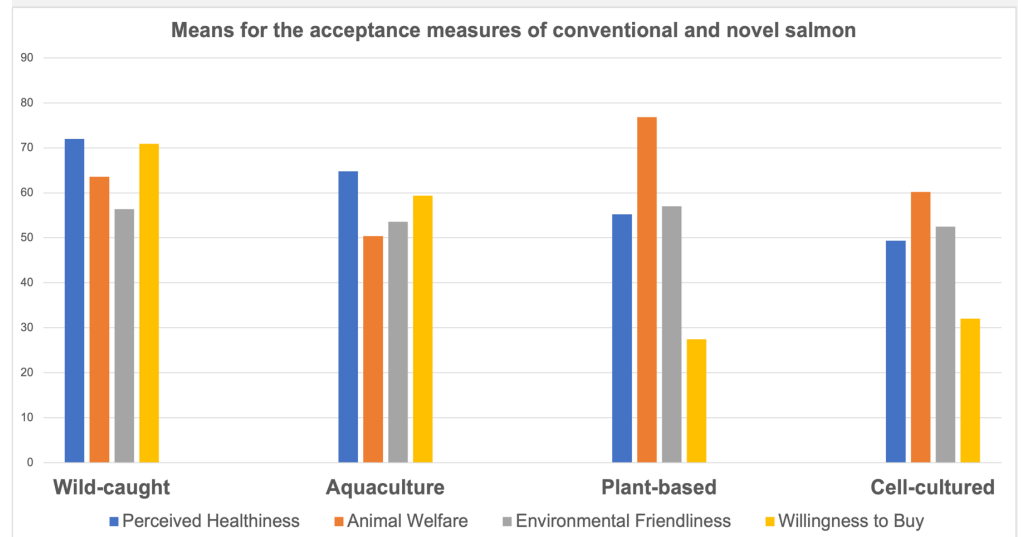
Figure 4
Cell-cultured salmon



Participants were given descriptions for each type of salmon accompanied by a picture and rated each on all acceptance measures.

2 Results

- Differences were found in the perceived healthiness, animal welfare, and willingness to buy between the salmon categories
- No differences were found in the perceived environmental friendliness
- Conventional salmon was rated better than the alternatives produced by new food technologies



3 Conclusion

The animal friendliness of cell-cultured salmon was rated good, but the willingness to buy was rather low. Various challenges are awaiting, such as consumer acceptance, product development, market approval and product labeling.

4 Contribution to Sustainable Food Systems

Consumers' increased acceptance of cell-cultured fish technology could potentially alleviate the environmental impact of conventional fish production and contribute to rising protein demands across the globe.

