

Is Organically Farmed Seafood a Better Quality?

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The market share and variety of aquaculture fish and products thereof is increasing each year in Germany. Salmon from Norway, pangasius from Vietnam and rainbow trout and carp from German farms are the main species, but also sea bass and sea bream from Mediterranean countries or tilapia and prawns from Asia gain more importance. Most fish and crustaceans originate from conventional farms but there is an increasing demand for organically raised species.

The consumer expects organically produced food to be healthier and to have a better taste and less contaminants. However, comparative scientific investigations in the aquaculture field are rare.

During the last years we compared the quality of various conventionally and organically produced seafood available on the German market. Studies included chemical, physical, instrumental and sensory assessment.

Results will be presented for Atlantic salmon, rainbow trout, pangasius, tilapia and prawns. No differences were observed in the proximate

composition, contaminant levels and sensory assessment of organically and conventionally farmed salmon. Rainbow trout of both rearing conditions and products thereof were of high quality but again no significant differences were observed.

For pangasius fillets large differences in the proximate composition were found due to addition of water during processing of conventional products. Low protein content and pH > 7.5 are reliable indicators

for the use of water and water binding additives. Sensory assessment yield divergent results. Organically farmed tilapia fillets had a high quality whereas conventionally farmed Tilapia fillets varied considerably from excellent up to bad. The quality of prawns on the German market ranged widely but organic prawns achieved high scores.

In conclusion, organically and conventionally produced seafood were mostly of high quality but conventionally produced seafood did not always assure the clean label.

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