

in transition


FISHING NEWS
International
FISHING NEWS
International
fish farming
international
Seafood
International
Seafood
PROCESSOR
Fiskeribladet
Fiskaren

Is farmed salmon greener than beef or pork?

Published - May 11, 2009

Salmon products have a lower impact on the climate than either pork or beef, according to a Life Cycle Assessment study carried out by the Swedish Institute for Food and Biotechnology (SIK).



The Life Cycle Assessment (LCA) was commissioned by fish feed producer Skretting and encompassed the entire life cycle of a salmon dinner.

The study involved salmon farmed in Norway and shipped to Stockholm for consumption.

It began with the raw materials used in the feed (both agricultural and from fisheries), feed production and transport, fish farming and processing, transport to the wholesaler and retailer and then to the consumer, ending with preparation of a salmon fillet in the consumer's home.

Through this sequence, the study quantified all emissions that contribute to global warming, acidification and eutrophication and all electricity and fuels consumed.

Better than pork and beef, similar to chicken

SIK is an independent research institution that is a world leader in Life Cycle Assessment. Through previous studies, the institute has collected comparable data from chicken, pork and beef production.

"This study shows that salmon produced in Norway have almost the same volume of CO2 emissions per kilo meat as chicken, which is half of the CO2 emissions from pork meat production and less than a seventh of those from beef production," said Trygve Berg Lea, international product manager in Skretting.

The comparisons are based on the food's GWP (Global Warming Potential).

GWP is measured in actual CO2 output plus CO2-equivalents in which the climate impact of other greenhouse gases, for example methane, is expressed as the amount of CO2 that would cause the same impact.

The study revealed that salmon's GWP was 2 kilos CO2-equivalent per kilo salmon fillet.

The figure shows GWP measured in CO2-equivalents for pork, salmon, chicken and beef.

Low emissions from fish farming

The study also shows that salmon feed production contributes 80 percent of the total emissions.

"On the one hand, this shows us that if we want to improve the salmon's GWP, then the feed would be the right place to start," said Berg Lea.

"However, we must not allow ourselves to be blinded by figures either. The reason why the percentage of greenhouse gases is so high for feed production is because the fish farming phase and the activities that come after feed in the value chain produce very little greenhouse gases."

Another interesting finding in the study is that the GWP accounts were not noticeably affected by using a feed with a low fishmeal content compared with a feed with a fishmeal content equivalent to a normal Skretting diet.

"We were aware that the marine raw ingredients in the feed contribute significantly to the salmon's GWP, but the study also shows that use of vegetable raw ingredients results in greenhouse gas emissions.

"This shows just how complex it can be to decide whether a product is "eco-friendly. A sustainable feed with a low content of marine raw ingredients does not necessarily need to be a greener feed," Berg Lea said.

Important knowledge

Skretting commissioned the Swedish Institute to acquire more knowledge about the carbon footprint left by the aquaculture industry and the impact

Read also

- [Climate change](#)
- [Buyers hunt for Norway salmon](#)
- [Scottish salmon sector enjoys €100 million investments](#)

of fish feed.

As consumers become more environmentally conscious, this knowledge will be important in the future.

"Even though, for the time being, we do not have to declare CO2 emissions for Skretting's feed, we now have more knowledge about this and can have a method ready for use, if the need should arise," Berg Lea said.

[<< | Back to today's headlines](#)

[Print](#)

[Tip a friend](#)



Legal notices - Copyright © 2005 IntraFish Media AS - All rights reserved.