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## Salmon health alert

By SEAN POULTER



Health scare: farmed salmon contains various toxins

Scientists Issued a devastating new warning last night about the safety of Scottish farmed salmon.

They said the fish is so contaminated with toxic chemicals it should be eaten no more than three times a year.

The chemicals, which have been linked to cancer and birth defects, come from the feed used in fish farms. The findings could have a shattering impact on the £700million-a-year Scottish salmon farming industry, which supports some 6,500 jobs.

Sales of salmon soared as farming brought prices down and the health benefits of oily fish emerged. It has overtaken cod as the best-selling fresh fish in Britain - and 98 per cent comes from Scottish farms.

Salmon farmers there branded the latest study "deliberately misleading" last night while the Food Standards Agency said the levels of pollutants were within safety limits used by Britain, the EU and the World Health Organisation.

Its chairman Sir John Krebs said the health benefits of eating oily fish outweighed any risk.

But Dr Jeffery Foran, an American toxicologist involved in the study, said neither he nor his family would eat farmed salmon again after what he discovered.

## **Poullutants**

The project - based at the University of Albany in New York state - looked at pollutant levels in farmed and wild salmon bought in Britain, Europe and North America.

Previous small-scale studies had identified a contamination risk, but this is by far the biggest and most comprehensive study.

Researchers measured the levels of industrial pollutants - PCBs and dioxins - and agricultural pesticides such as toxaphene and dieldrin.

They examined 700 fish, some bought in London supermarkets and some direct from Scottish farms. The highest concentrations were found in fish from Scotland and the Faroe Islands.

Dr Foran said this may be because their feed contains oil recovered from the ground-up bodies of tiny sea life harvested in the North Atlantic - a dumping ground for decades for manmade toxins. Fish from Norway also performed badly.

The study, published in the respected U.S. journal Science, concluded: "The consumption advice is that no more than one meal every four months should be consumed in order to avoid an increased risk of cancer." Even smaller amounts, it suggested, could trigger harmful effects to brain function and the immune system.

Dr Foran said: "All the compounds we were looking for are classified as probable carcinogens. The evidence from comprehensive animal studies points to a range of cancers including liver, breast, lymphatic and thyroid.

"There are a variety of other health effects, particularly in relation to PCBs.

"They include reproductive and developmental effects. There are also neurological, brain function effects and immune system effects."

All the fish tested was in fillets, but the findings apply equally to smoked salmon. Almost all tinned salmon, however, is produced from wild fish which have only low levels of pollution.

## "Benefits outweigh risks"

Despite the startling results of the survey, the FSA said it was sticking by its advice to consumers. Sir John Krebs said: "People should consume at least two portions of fish a week - one of which should be oily like salmon.

"There is good evidence that eating oily fish reduces the risk of death from heart attacks. We advise that the known benefits outweigh any possible risks."

Scottish Quality Salmon, which represents farmers, said the researchers had been wrong to use strict guidelines drawn up by the U.S. Environment Protection Agency rather than those used elsewhere in the world.

Technical consultant Dr John Webster said: "PCB and dioxin levels in Scottish salmon are significantly lower than the thresholds set by international watchdogs".

The organisation said its members apply "the most stringent independently inspected quality assurance standards in the world".

It said feed suppliers had taken steps to minimise PCB and dioxin levels, including sourcing fish meal and oils from seas which are less polluted and switching to plant oils.

But Don Staniford of the Salmon Farm Protest Group said: "This scientific study blows out of the water the myth that farmed salmon is safe, nutritious and healthy.

"It's official - salmon is now the most contaminated foodstuff on the supermarket shelf."

Dr Dan Barlow, head of research for Friends of the Earth, said: "We have long known that farmed salmon were more heavily contaminated with toxic pollutants than their wild relatives.

"We now know Scottish-raised salmon are among the most contaminated and that the levels of contaminants may be so high as to possibly detract from the health benefits of eating fish."

Pollutants are not the only problem facing salmon farmers. Recent studies have found contamination with radioactive waste from the Sellafield nuclear plant, while there are concerns about the use of malachite green to kill parasites and infections.

There are also health fears over feeding the fish chemicals which colour their flesh pink.

Scotland's estimated 300 salmon farms produce some 160,000 tonnes of salmon a year.

Almost three-quarters of the jobs in the industry are in remote rural areas with fragile economies.

These are boosted by an estimated £1million a week in wages alone.

Read more: <a href="http://www.dailymail.co.uk/health/article-205547/Salmon-health-alert.html#ixzz1s445UIDk">http://www.dailymail.co.uk/health/article-205547/Salmon-health-alert.html#ixzz1s445UIDk</a>