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Finland

Fishery Products

Baltic Seafood – Safe to Eat?

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Report Highlights:

Certain Baltic Sea species - primarily herring, pike, and salmon - exceed the EU's dioxin threshold. However, Finnish and Swedish authorities continue to recommend seafood consumption because of its overall health benefits.

Includes PSD Changes: No
Includes Trade Matrix: No
Unscheduled Report
Stockholm [SW1]
[FI]

EU Chemical Thresholds for Seafood not Enforced in Sweden and Finland

In recent years, greater attention has been paid to the levels of harmful chemicals found throughout the animal and human food chains. Of specific concern within the European Union (EU) are the levels of concentration of non-readily biodegradable environmental organic contaminants, such as dioxins, furans and dioxin-like PCBs, found in feedstuffs and foodstuffs.

In 2001, the European Commission implemented Council Regulation (EC) 2375/2001 which established thresholds for dioxin in fish. Seafood exceeding the threshold cannot be sold for human consumption in any EU Member State, except Finland and Sweden. The EU made an exception for Finland and Sweden under the condition that fish products are not sold to other EU countries and based on arguments made by the respective National authorities that the health benefits of lower thresholds did not exceed the lost benefits of fish consumption. This exception remains in effect until December 31, 2006 when the limits set for dioxin and other related chemical compounds will be revisited.

Improved Data Collection

The availability of time series data for the levels of dioxin and other chemicals in fish products from the EU, including the Baltic region, has been rather limited. Based on recommendations to normalize the testing of fish and shellfish for chemical residues, several agencies have begun to gather improved data. According to the Finnish National Food Agency (FNFA), fish from the Baltic region is now being tested in order to establish a database on contamination levels. This information will be used for future control programs as well as in the upcoming EU discussions on threshold values for dioxins and furans.

As a result of dioxin testing, the FNFA now allows the export of various species such as cod, eel, perch, pike, and sprat from the Baltic Sea. The FNFA recommends that fish should be consumed at least twice a week and the diet should include a variety of fish species. However, certain exceptions do apply as a result of heightened levels of harmful chemical compounds found in some Baltic Sea fish.

Baltic Salmon and Baltic Herring High in Residue Levels

Salmon and herring caught in the Baltic Sea, particularly in the Gulf of Bothnia and Gulf of Finland, may potentially subject consumers to higher than normal levels of dioxins and PCB compounds found to be harmful to human health. According to the FNFA, higher than normal levels of methyl mercury are found in predatory fish caught in inland waters and the sea, with pike being of particular concern. The European Food Safety Authority reports that levels of dioxin and related compounds in Baltic herring is approximately 3.5 times higher than in non-Baltic herring, while wild Baltic salmon is about five times higher than non-Baltic salmon.

The FNFA advises consumers that large herring, more than 17 cm in length, can be eaten once or twice a month. As an alternative to large herring, salmon caught in the Baltic Sea can be eaten at the same rate. Similarly, pike caught in inland waters or the sea can be eaten once or twice per month. These diet recommendations are based on a serving size of 100g. Individuals may consume higher levels of fish during certain seasons as long as total annual consumption does not exceed the recommended amount.

In addition, the FNFA recommends that consumers who regularly eat fish from inland waters should make attempts to reduce their consumption of large perch, pike perch, and burbot as these species accumulate mercury. Pregnant women, nursing mothers, and women who have the potential to or are attempting to conceive should not eat pike due to the mercury risk. These women should also avoid any other fish that may have heightened levels of mercury.

Species	Average Total Dioxin*
Non-Baltic Herring	3.2
Baltic Herring	11.46
Baltic Processed Herring	15.96
Baltic Pike Perch	2.34
Baltic Salmon	16.47
Baltic Other Fish	3.77
EU Limit	4

Based on data in EFSA Journal (2005) 236, 1-118

*Total dioxin, measured as pg WHO-PCDD/F-TEQ/g, is the sum of polychlorinated dibenzo-para-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) expressed in World Health Organization (WHO) toxin equivalents, using the WHO-TEFs (toxin equivalency factors, 1997) per EC No 2375/2001.

While there remains a potential risk from consuming fish from the Baltic region—primarily herring, pike, and salmon – seafood continues to be a recommended food source with proven health benefits.