HEILSUFRØÐILIGA STARVSSTOVAN

Faroese Food- veterinary and environmental agency, www.hfs.fo

Tórshavn, 22. desember 2005
Jnr.: 460-200501010-3
Resp.: ED/ON/BE/MPM/MD

Dioxin and dioxin-like PCBs in Faroese Farmed Salmon.

The production of farmed salmon on the Faroe Islands is subjected to regularly control by the Faroese Food Veterinary and Environmental Agency (Heilsufrøðiliga Starvsstovan, www.hfs.fo) for residues of veterinary drugs and environmental contaminants according to the rule laid down in Directive 96/23/EC[1].

Results of analyses[2] for dioxin, dioxin-like PCBs and dioxin+dioxin-like PCBs in samples from Atlantic salmon (*Salmo salar*) and rainbow trout (*Onchorynchus mykiss*) are shown in table 1.

Table 1.

Dioxin (PCDD/PCDF) and dioxin-like PCBs in farmed Faroese Atlantic salmon and rainbow trout, 2001-2005.

Year	Species	Number	Dioxin	Dioxin-like PCBs	Dioxin+dioxin-like PCBs
			WHO-TEQ pg/g fresh weight		
2001	Atlantic salmon	5	1.06 (0.84-1.38) *)		
2002	Rainbow trout	4	0.42 (0.39-0.44)	1.7 (1.5-1.9)	2.1 (1.9-2.3)
2002	Atlantic salmon	6	0.47 (0.33-0.53)	1.9 (1.3-2.4)	2.4 (1.7-2.9)
2003	Rainbow trout	1	0,43	0,64	1,07
2003	Atlantic salmon	12	0,54 (0,3-0,84)	0,68 (0,39-1,10)	1,22
2004	Rainbow trout	6	0,45 (0,23-0,67)	1,89 (0,97-2,93)	2,33
2004	Atlantic salmon	6	0,54 (0,33-0,69)	2,53 (1,47-3,43)	3,07
2005	Rainbow trout	6	0,47 (039-0,57)	1,88 (1,6-2,7)	2,35
2005	Atlantic salmon	7	0,59 (027-0,86)	2,41 (1,7-3,1)	3,00

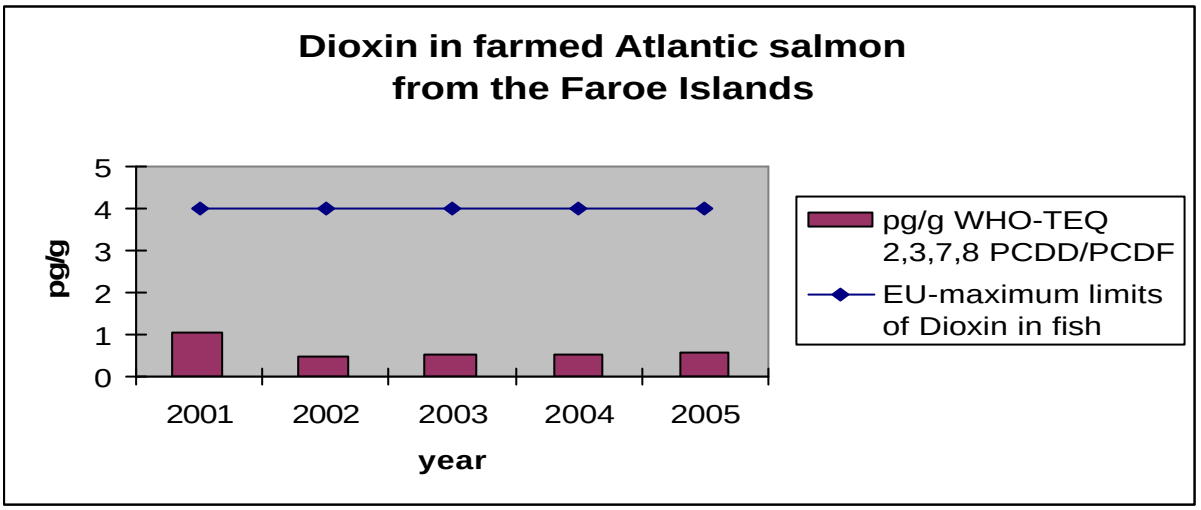
*) Figures are mean concentration (minimum – maximum).

[1] COUNCIL DIRECTIVE 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC

[2] The analyses were performed by high resolution gas chromatography/high resolution mass spectroscopy (HRGC/HRMS) at ERGO Forschungsgesellschaft mbH, Geierstrasse 1, 22305 Hamburg, Germany.

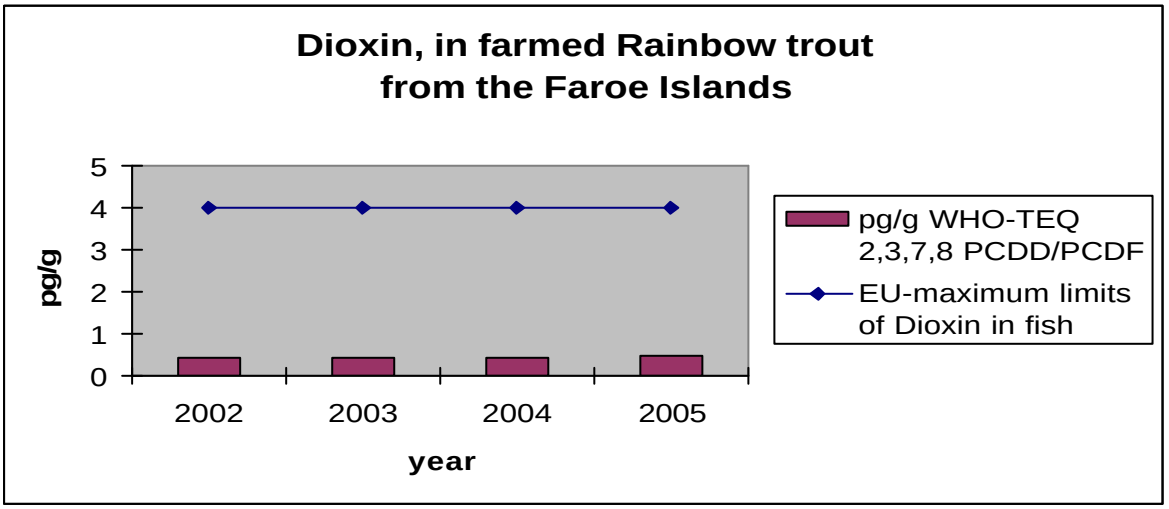
Results of analyses[3] for dioxin in samples from Atlantic salmon (*Salmo salar*), are shown in figur 1.

Figure 1



Results of analyses[4] for dioxin in Rainbow trout (*Onchorynchus mykiss*), are shown in figure 2

Figur 2



[3] The analyses were performed by high resolution gas chromatography/high resolution mass spectroscopy (HRGC/HRMS) at ERGO Forschungsgesellschaft mbH, Geierstrasse 1, 22305 Hamburg, Germany.

[4] The analyses were performed by high resolution gas chromatography/high resolution mass spectroscopy (HRGC/HRMS) at ERGO Forschungsgesellschaft mbH, Geierstrasse 1, 22305 Hamburg, Germany.

According to EU rules[5] the maximum level of dioxin in muscle meat of fish and fishery products and products thereof shall be lesser than 4 pg WHO-PCDD/F-TEQ/g fresh weight. However, the maximum level shall be reviewed by the EU Commission, in particular with respect to include dioxin-like PCBs. The maximum level of dioxin-like PCBs is still not fixed.
A maximum level of 8 pg/g dioxin-like PCBs has been discussed.

The concentrations of dioxin in Faroese farmed Atlantic salmon and Rainbow trout correspond to 10-27% respectively, of the EU maximum level of dioxin (table 1).

Based on the recommendations of WHO, Codex Alimentarius, US FDA and EU the Faroese food- veterinary- and environmental agency consider farmed salmon as a healthy product rich in omega-3 fatty acids that can be consumed without risk for the consumers. However the level of dioxin and dioxin-like PCBs are under continuous assessment by the Faroese food- veterinary and environmanetal agency.

5 COUNCIL REGULATION (EC) No 2375/2001 of 29 November 2001 amending Commission Regulation (EC) No 466/2001 setting maximum levels for certain contaminants in foodstuffs.