

Considerable Damage from Cosmetic substances

The Nordic countries have co-operated in screening the levels of synthetic musks in the environment. The screenings indicated that the use of polycyclic musks have increased. Our study has shown that the levels in sewage sludge is considerable and that these substances also are found in biological samples.

Synthetic musks are artificial, industrially produced fragrances. They are widely used as ingredients in washing and cleaning agents, fabric softeners, air fresheners, shampoos, perfumes etc. From the use of these products, synthetic musks are released to the atmosphere and waste water.

Synthetic musks are quite persistent and likely to accumulate in fat rich living tissues. They have been identified in the aquatic environment, in air samples, in animals and in human milk. Musks were also found in samples from pristine areas like Spitsbergen (polar fox) and remote places of Iceland (rain water).

The results of the screening project will be useful in further evaluation of the risks related to the use of synthetic musks and discussions on the need for restricting the use of any of the compounds. The project was financed by the Nordic council of ministers and the Nordic countries. National Environment Research Institute in Denmark (NERI) was responsible for the analysis and report. The map on the following page shows where the samples are taken.

Musk substances included in the study:

Nitromusks: Musk xylene, musk ketone, musk ambrette
Polycyclic musks: Galaxolide(HHCB), Tonalide (AHTN), Celestolide (ADBI), Phantolide (AHMI), Trasolide (AITI), Cashmeran (DPMI)

Contact persons in each of the participating countries:

Danmark: Betty Bügel Mogensen, Danmarks miljøundersøgelser

Finland: Juha-Pekka Hirvi, Finnish Environmental Institute

Island: Albert S. Sigurdsson, Umhverfisstofnun

Norge: Ola Glesne, Statens forurensningstilsyn

Sverige: Britta Hedlund, Naturvårdsverket

Contact persons in Nordic Council of Ministers: Birgitte Skjoldager Wøhlk

bws@norden.org

tel +45 33 96 02 82

Contact person at NERI: Betty Bügel Mogensen

tel +45 46 30 12 00