



**COUNCIL OF
THE EUROPEAN UNION**

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NOTE

from : General Secretariat
to : Delegations

Subject : Combination Effects of Chemicals - children exposed to multiple endocrine
disrupters
– Information from the Danish delegation

Delegations will find annexed a note from the Danish delegation on the above subject, which will be dealt with under "other business" at the meeting of the Council (Environment) on 21 October 2009.

Combination Effects of Chemicals - children exposed to multiple endocrine disruptors

1. At the last Environment Council Meeting in June 2009 Denmark raised the issue of including the risk of combination effects in the risk assessment of chemicals. The potential adverse effects to human health and the environment of combined exposure to endocrine disruptors have caused particular concern. A number of new studies highlight this concern, in particular a study that includes a new method of risk assessment of combination effects.
2. The issue was raised with reference to the conclusions of an international expert workshop, which stated that the predominant chemical-by-chemical approach in risk assessment is regarded as providing insufficient protection against the possibility of mixture effects/effects of combined exposure to endocrine disruptors. The conclusions further recommended that serious consideration should be given to including the risk of combination effects in all relevant European legislation and guidelines dealing with chemical safety assessment and the establishment of safe emissions and exposure levels.
3. A number of new studies have been published over the last few months indicating that exposure to multiple endocrine disruptors is linked to serious health effects later in life. For example, one study reported that combined exposure to four anti-androgenic compounds caused malformation of external sex organs in experimental animals, and the responses observed were greater than would have been predicted on the basis of the toxicities of the individual chemicals.
4. Another study of breast milk samples showed that the levels of endocrine-disrupting chemicals, including some dioxins, PCBs and some pesticides, were significantly higher in Denmark than in Finland. As these classes of endocrine-disrupting substances have been implicated in testicular cancer or in adversely affecting development of the foetal testis in humans and animals, these findings may help explain the high prevalence of testicular cancer and other male reproductive disorders in Denmark in contrast to Finland.

5. A Danish survey of 2-year-old children's daily combined exposure to chemicals, in particular endocrine disrupters, will be published on 23 October 2009. Exposure scenarios reflecting a toddler's daily life have been used for risk assessment of the combined exposure to selected endocrine disrupters. A new method using the concept recommended by the international experts has been used for the risk assessment of combination effects. The survey raises concern about the combined exposure to commonly used endocrine disrupters via food, the indoor environment and some personal care products. This survey indicates that combination effects of chemicals – in particular endocrine disrupters – may occur from the current exposure via the environment and consumer products and is of concern in relation to the health of European citizens. It should be emphasised that this survey does not cover all exposure and all endocrine-disrupting chemicals, a point which may further add to the concerns.

6. This new documentation emphasises the importance of prompt action at European level.

By raising this issue again, Denmark wishes to draw attention to the fact that the current combined exposures to high numbers of chemical substances via the environment and consumer products are of serious concern in relation to European public health. Furthermore, Denmark reiterates its invitation to the Presidency to bring this issue forward by putting it on the agenda for the Environment Council in December as a substantive item for possible Council conclusions with a view to urging the Commission to consider the issues and, if necessary, to take appropriate action.