

ENDOCRINE DISRUPTORS

Endocrine Disruptors are chemicals widespread in the environment that interfere with the hormone system affecting human health and wildlife.

BACKGROUND

Endocrine disruptors can cause cancerous tumours, birth defects and other developmental disorders including learning disabilities, brain development problems, deformations of the body, sexual development problems. These substances may be naturally-occurring or man-made. Various tests on animals and in vitro methods are used to screen substances for interactions with hormones and those which affect the reproduction process. The tests on animals cannot be relied upon to accurately predict effects on people as the chemical effects on the endocrine system can differ dramatically between species.

CURRENT SITUATION

The Commission is presently working on reviewing their strategy which addresses the potential environment and health impacts of endocrine disruption. Based on the outcome of the review a new strategy will be developed, and parallel to this, a proposal for criteria for the determination of endocrine disrupting properties and definitions will be adopted. Eurogroup supports the protection of humans, wildlife, and the environment from the effects of endocrine disruptors, but this should not lead to the addition of an abundance of new tests to what is already an already overloaded testing strategy, but to include further endpoints into already established, and by this, from the point of view of animal welfare, we refer in vitro tests making use of metabolomics and toxicogenomics to recognize the broad spectrum of Endocrine Disruptors via adverse outcome pathways, etc.

OUR OBJECTIVES

The development and use of non-animal test methods should be promoted in order to produce safety data relevant to humans and to replace animal studies currently in use. Animal testing should be minimised and tests on vertebrates should be undertaken as a last resort. The EU needs to lay down rules to avoid duplicative testing. Development of a risk assessment must be derived from evidence-based toxicology and state-of-the-art science aimed at replacing and reducing redundant testing on animals. Substitution of dangerous chemicals by less toxic alternatives is important

RELATED LINKS

- [Roadmap: Revision of the EU Strategy on Endocrine Disruptors](#)
- [Joint Research Centre](#)
- [DG Research](#)
- [DG Environment](#)
- [Current Activities in the OECD Test Guidelines programme on endocrine disruptors](#)
- [USA: Endocrine Disruptor Screening Program \(EDSP\)](#)
- [Japan: Endocrine Disrupting Effects of Substances](#)

Related downloads

- [Commission staff working paper – 4th report on the implementation of the ‘Community strategy for Endocrine Disruptors’ \(11 August 2011, 13461/11\)](#)
- [Major study: State of the art assessment of endocrine disruptors \(23/12/2011 – Project Contract Number 070307/2009/55068/SER/D3\) \(Kortenkamp et al, 2011\)](#)
- [WHO report: Global assessment of the state-of-the-science of endocrine disruptors \(2013\)](#)
- [EFSA Scientific Opinion on the hazard assessment of endocrine disruptors, 2013](#)
- [European Parliament resolution on the protection of public health from endocrine disruptors, 2013](#)