Endocrine Disruptors: A Cause for Obesity and Diabetes?

EDCMET annual meeting and BfR Stakeholder Workshop on new test methods for the the evaluation of endocrine disruptors

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Plastic drinking bottles, food cans, toys - endocrine disruptors can enter the body via numerous pathways and disrupt the hormone system. In order to research these substances - both artificially produced and naturally occurring - the German Federal Institute for Risk Assessment (BfR), together with eleven partners from eight countries, has launched the EU project "Metabolic effects of Endocrine Disrupting Chemicals: novel testing METhods and adverse outcome pathways" (EDCMET) in 2019. On 17 November 2021, the public EDCMET stakeholder workshop will be held to accompany the internal annual meeting. Representatives from science, authorities, industry and politics are invited. The cooperation partners will present the results of the first project phase at the online event. In order to shed light on the topic from different perspectives, presentations by the aforementioned stakeholders are also planned. How can the results so far be incorporated into the further development of the project strategy? What are the next steps? These and other questions will be the starting point for the concluding discussion.

EDCMET-Stakeholder-Workshop:

When: Wednesday, 17 November 2021, 12:00-17:00

Participation link (no separate registration required):
https://sites.uef.fi/edcmet/home/news/

Programme:
https://sites.uef.fi/edcmet/wp-content/uploads/sites/57/2021/11/EDCMET-Stakeholder-workshop-17Nov2021-programme-final.pdf

Endocrine disruptors are chemicals that disrupt the functions of hormones and can thus be harmful to health. The hormone-active substances are suspected of being involved in the development of the metabolic syndrome. The metabolic syndrome is characterised by obesity, high blood pressure, disturbed fat metabolism and insulin insensitivity of the body cells. Whether and how endocrine disruptors influence the underlying metabolic processes has hardly been researched so far. Thus, there are currently also no suitable test methods that could prove how the substances affect the metabolism.

The aim of the EDCMET project is to develop novel methods and models for the evaluation of endocrine disruptors. The international research team concentrates on uncovering biochemical mechanisms by which endocrine disruptors can disturb the hormone system. The focus is on research into metabolic syndrome: using cell culture systems and animal models, they are investigating how chemicals affect the fat and energy metabolism in liver cells. The new test systems are to be optimised to such an extent that they can be used in future for routine testing of chemicals for risk assessment and risk evaluation. To this end, experts from different fields are working together - including system toxicology, experimental biology and epidemiology.

EDCMET is funded within the framework of the EU's Horizon 2020 research programme. It is one of eight projects in the EURION cluster working in the field of "New testing and screening methods for the identification of endocrine disrupting chemicals". The project is coordinated by the A.I. Virtanen Institute of the University of Eastern Finland. In addition to the experimental work, BfR is also responsible for public relations, including the communication of results, the involvement of stakeholders and the organisation of workshops.

More Informationen on EDCMET:

BfR press release "Do chemicals make you fat?":
https://www.bfr.bund.de/en/press_information/2019/05/do_chemicals_make_you_fat_-239665.html

EDCMET project website:
https://uef.fi/edcmet/

Overview EURION clusters:
https://eurion-cluster.eu/

Further information on endocrine disruptors:

Frequently Asked Questions on endocrine disruptors
https://www.bfr.bund.de/en/frequently_asked_questions_on_endocrine_disruptors-50804.html

BfR 'Opinions' app

About the BfR
The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL) in Germany. The BfR advises the Federal Government and the States ('Laender') on questions of food, chemical and product safety. The BfR conducts its own research on topics that are closely linked to its assessment tasks.

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