Stronger regulations needed on common obesity-promoting chemicals

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Everyday exposure to obesity-promoting chemicals (obesogens) represents a significant risk to public health, and needs stronger regulation to minimize exposure and protect people's health, according

to evidence presented today at the 59th Annual European Society for Paediatric Endocrinology Meeting. Dr. Leonardo Trasande is an internationally renowned leader in environmental health, who will draw together the amassing evidence for the serious impact of these chemicals on childhood and adult obesity, as well as the global economy. He will make recommendations for simple policies that safely reduce people's exposure, whilst having economic benefit.

The long-held mindset that diet and physical activity are the sole determinants of body weight has now been overturned, and it is understood that genetics and environmental factors also have an important role. However, the damaging influence of hormone-disrupting chemicals on the increasing incidence of obesity has been greatly underappreciated. A rapidly growing body of evidence indicates that these chemicals can scramble our normal metabolism and undermine our natural processes for using calories, predisposing us to weight gain.

Dr. Trasande and colleagues have published a number of studies on the adverse effects of human exposure to these chemicals, investigating the long-term effects, from pre-birth into adulthood, of a large, well-characterized Dutch population. In his presentation, he will present compelling evidence from these and other studies on the seriousness of exposure to obesogens, including the dangers of three very common chemicals that we often encounter in our everyday lives.

- Bisphenols, found in aluminum can lining and thermal receipts, make fat cells larger and predispose us to store fat.
- Phthalates, found in personal care products and food packaging, can reprogramme how our bodies metabolize protein, pushing it to store fat, regardless of our physical activity level or diet.
- PFOS, found on non-stick cookware and water-resistant clothing, have been shown to misprogramme the body to store fat, even when external conditions indicate you should burn fat calories,

such as in cold temperatures. In adults that lost weight following a healthy diet with physical activity, higher PFOS levels were associated with more regain of weight later.

Dr. Trasande comments that "The old 'calories in, calories out' mantra for obesity prevention neglects the crucial role of chemical exposures as a third leg of the stool. In contrast to diet and physical activity interventions, which can hard to be implement, let alone, sustain, levels of obesogens in food packaging and other materials can be modified through regulation."

It is estimated that endocrine-disrupting chemicals cost Europe €163 billion a year, around 1.2% of its gross domestic product, obesogens are a large part of that. Dr. Trasande will also present an overview of safe and simple strategies to minimize our exposure at the individual level as well as suggesting policy-level interventions for governing bodies, with a focus on the economic benefits of limiting public exposure, as well as improved health.

"Increased obesity caused by these chemicals has a substantial economic cost to society and exposure needs to be minimized for health benefits and to avoid the economic costs of inaction, it is clear that improved regulations are essential", explains Dr. Trasande.

More information: Conference: www.eurospe.org/meetings/2021/ …21-online/programme/

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common-obesity-promoting-chemicals.html