

WHAT NEEDS TO HAPPEN?

New science linking chemicals to obesity and diabetes underlines the need for action. Hormone disrupting chemicals, also called endocrine disrupting chemicals (EDCs), are amongst the suspected culprits. So our exposures to EDCs must be swiftly reduced.

URGENT GOVERNMENT ACTION

National governments and the EU should use existing legislation to control the use of those EDCs suspected of playing a role in obesity and diabetes.

More effort is urgently needed to test chemicals so that those which can cause harm don't reach the market place, or if they have already done so, are substituted with safer alternatives.

All relevant EU legislation should be revised to address EDCs.

Gwynne Lyons, Director of CHEM Trust says *"With childhood obesity at alarming levels and rates of diabetes doubling in the last 15 years in the UK, government action is urgently needed to identify and reduce our exposure to the man-made chemicals implicated in these disorders."*

WHAT YOU CAN DO YOURSELF

Nowadays many consumer products can give off harmful chemicals including new furniture, electronic equipment and even cash register receipts.

AVOID HARMFUL CHEMICALS

- Where possible, favour organic food and avoid canned & packaged food
- Eat fewer animal fats, which contain higher levels of some persistent toxic chemicals
- Avoid polluted air both outdoors and indoors. Although traffic fumes, agricultural spraying and industrial emissions can be a big problem in some areas, typically indoor air is now more polluted than outdoor air. So if you can, open your windows regularly and let in the fresh air.

DIET AND EXERCISE

- Take care to have a good diet
- Maintain a healthy weight
- Take regular exercise

CALL FOR CHANGE

- Ask manufacturers & retailers not to use EDCs in their products
- Contact your political representatives to ask for better regulation of EDCs
- Support public interest organisations calling for stronger & swifter regulation of EDCs



FOR MORE INFORMATION, see the CHEM Trust report:

"Review of the science linking chemical exposures to human risk of obesity and diabetes" by Professor Miquel Porta and Professor Duk-Hee Lee.

The report is available to download from CHEM Trust's website: www.chemtrust.org.uk.

This leaflet is also available for download from CHEM Trust's website (above) and from the Health and Environment Alliance (HEAL) Chemicals Health Monitor website: (www.chemicalshealthmonitor.org.)



CHEM Trust (Chemicals, Health and Environment Monitoring Trust) is a UK charity which aims to protect humans and wildlife from harmful chemicals so that they play no part

in causing impaired reproduction deformities, disease or deficits in neurological function.

CHEM Trust

The Old Vicarage, Old Vicarage Lane, Bishops Lydeard, Somerset, TA4 3DJ, UK
E-mail: gwynne.lyons@chemtrust.org.uk
Website: www.chemtrust.org.uk



Health and Environment Alliance (HEAL) is an international non-governmental organisation representing more than 70 groups and networks. Its aim is to improve health through public policy that promotes a cleaner and safer environment.

Health and Environment Alliance (HEAL)

28 Boulevard Charlemagne, 1000 Brussels, Belgium
E-mail: info@env-health.org
Website: www.env-health.org

CHEM Trust gratefully acknowledges the support of the Oak Foundation.

HEAL gratefully acknowledges the financial support of the European Commission.



CHEMICALS IN OUR FOOD AND CONSUMER PRODUCTS — A MISSING LINK IN THE EPIDEMICS OF OBESITY AND DIABETES?

New research indicates contaminants play a role



The rapid increase in obesity and diabetes cannot be explained by bad diet and lack of exercise alone.



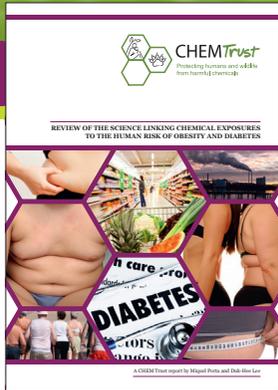
CHEM Trust
Protecting humans and wildlife from harmful chemicals



"Given the current epidemics of obesity and diabetes, and the emergence of this new line of scientific evidence linking chemical pollutants to these disorders, more energetic policies to reduce human contamination by such chemicals are needed."

Professor Miquel Porta, School of Medicine, Universitat Autònoma de Barcelona

CAN WE PREVENT OBESITY AND DIABETES?



THE MISSING LINK?

The evidence in a recent report, "Review of the science linking chemical exposures to human risk of obesity and diabetes" published by CHEM Trust connects exposure to certain common chemicals with the increasing incidence of obesity and diabetes.

The report shows that some chemicals promote weight gain, and that an association exists between our contamination with persistent pollutants and diabetes. Persistent pollutants don't break down - they linger in us, the environment and the food chain.

Eating too much and not getting enough exercise can certainly cause obesity and increase the risk of diabetes. But new research shows that our exposure to certain man-made chemicals may also play a role.

“The rise in the incidence in obesity matches the rise in the use and distribution of industrial chemicals that may be playing a role in generation of obesity, suggesting that endocrine disrupting chemicals may be linked to this epidemic.”

The Endocrine Society, founded in 1916, is the world's oldest, largest, and most active organization devoted to research on hormones and the clinical practice of endocrinology. (2009)

Some researchers now believe that **if governments act to reduce our exposure to certain chemicals, it will be easier to reduce the incidence of obesity and diabetes.**

Two sources of evidence, covered in the CHEM Trust report, support this new thinking.

1. Laboratory tests

Mice exposed to low doses of some EDCs produce offspring that are obese in adulthood, whereas non exposed mothers on the same diet did not produce such offspring.

2. Community studies

Evidence linking people's levels of contaminants with their increased risk of diabetes comes from several studies of the population at large. Tests on bodily fluids show most of us are exposed to dozens of chemicals, some of which our bodies cannot eliminate easily. These chemicals may disrupt our hormone systems and metabolism.

Diet and level of exercise are clearly important in the development of obesity, and obesity is a known risk factor for diabetes.



Rates of obesity and diabetes are still rising in Europe. Research now suggests that chemical exposures may play a part.

Obesity rates have more than doubled since 1990 in most countries, such that now 1 in 6 adults in the EU are obese. Alarmingly, on average 1 in 4 children aged 6-9 years are also overweight or obese, with rates of overweight primary school children being particularly high in Italy, Portugal and the Czech Republic.

Diabetes is also rapidly increasing in the EU. In the UK, 1 in every 20 adults suffers; in Spain and France it is 1 in every 15; in Germany and Cyprus almost 1 in every 10.

Genon Jensen, Director of the Health and Environment Alliance (HEAL) says, "The number of people with diabetes in the EU is estimated to rise from approximately 33 million in 2010 to 37 million in 2025. We therefore need a much greater focus on prevention at every level. If chemical exposures play even a small part in diabetes, the benefits of better chemicals regulation will be significant, both in terms of better quality of life and cost-savings for health services."

BABIES AND ANIMALS WEIGHING MORE

“Six-month-old babies are heavier than they used to be. Laboratory animals with the same diet and exercise as always are heavier than they used to be. ...Widespread exposure to environmental chemicals is a likely contributor.”

Practice Prevention, Obesogens from the Collaborative on Health and Environment, 2011

WHICH CHEMICALS ARE IMPLICATED?

The chemicals suspected in causing weight gain and diabetes include persistent chemicals found as contaminants in food, such as pesticides and industrial products, and some chemicals which can leach from plastics in our home, as well as some metals and nicotine. However, it is likely that there are other chemicals in our food and consumer products that increase the risk of these disorders, which have not yet been recognised.