Obesogens: What They Are & Where to Find Them

Obesogens are chemicals that disrupt the endocrine system and are linked to obesity. They disrupt normal metabolic processes, increase chances of weight gain and make it easy for our bodies to hang on to fat. Making matters worse, obesogens are all over the place in our environment and food supply, so clients need to know how to spot them and avoid them. Here's what you need to know so that you can help clients steer clear of obesogens.

How Do Obesogens Work?

The basic idea of obesogens is that they interfere with hormones in the body. Some obesogenic chemicals might activate estrogen receptors, others may interfere with thyroid hormones. They may change how a person's fat cells develop and increase the cell's ability to store fat, or they may disrupt hunger and fullness hormones throwing appetites out of whack. Some obesogenic chemicals have also been linked to other chronic diseases and may be a factor in cases of premature puberty, demasculinization in men or birth defects in babies, since these chemicals can wind up in breastmilk. There are so many obesogens out there and each of them works in different ways, and the big picture here is that these chemicals are undoubtedly bad for health.

Common Obesogenic Chemicals

Here's a short list of some common obesogens in our environment and where you're likely to find them.

- Cigarette smoke, which was one of the first chemicals recognized as an obesogen
- Air pollution
- Parabens, which are used as antimicrobial agents in hygiene and beauty products, foods, drugs and paper products and have estrogenic properties
- Tributyltin (used as a fungicide on boats and a heat stabilizer in PVC piping and can contaminate lakes and coastal water)
- Flame retardants such as polybrominated diphenyl ethers (PBDEs) and polybrominated biphenyls. These chemicals are used in things like furniture and carpeting and have been shown to disrupt thyroid hormones
- Phthalates (also known as plasticizers because they're added to many plastic consumer products to make them softer and flexible). You'll find these in toys, food containers, beauty products, detergents, lubricating oils, pharmaceuticals, shower curtains and paint. Phthalates

are super widespread and CDC researchers have found measurable levels of many phthalate metabolites in the general population

- Bisphenol A (BPA), which we know is found in plastic (water bottles, baby bottles) and the linings of some plastic food containers and cans. CDC scientists found BPA in the urine of nearly all people, showing how widespread exposure to BPA in the U.S.
- Pesticides including DDT, atrazine, neonicotinoids and organochloride have been shown to disrupt the endocrine system
- Polychlorinated biphenyls (PCBs), which are chemicals often used in electrical equipment and plasticizers, but food is the main source of exposure for most people. PCBs get into our food chain in a variety of ways. For example, PCBs can contaminate animal feed and then they get into the animal and then the meat and dairy that we eat

How to Prevent Exposure and Decrease Risk

Our society is laden with obesogens, but not all hope is lost. Educate your clients on how to make tweaks to their environments to reduce their exposure to obesogenic chemicals.

- Eat organic fruits and vegetables and always wash produce before eating it
- Cut down on plastic. Kick the habit of buying single use water bottles by carrying around a reusable glass bottle, and swap out plastic food storage containers for glass. Ditch plastic baby bottles too
- Choose fragrance free and paraben free cleaning and beauty products
- Use organic fertilizers on your lawn
- Limit consumption of packaged processed foods
- Choose local food whenever possible so you can check out the farm yourself
- Be aware of pollution, especially if you live in a big city. Check air quality indexes and refrain from outdoor exercise on more polluted days
- Don't smoke. Period. And keep a distance (a *big* distance) from anyone smoking around you