

## ***Process Contaminants: You Are What You Eat***

In food circles these days, there's a fair amount of buzz around the term "minimally processed." The conventional wisdom – which, in this case, is spot on – is that the less processing, the better. According to one popular meme, "if you don't recognize an ingredient, your body won't, either." It's a sound way to define our relationship to the food we eat.

The fact is, however, that "minimally processed" remains aspirational for a substantial portion of the food industry. Far too much of our food supply is anything but. Many of the vegetable oils we consume are, indeed, "maximally processed" – to our detriment.

The culprits are "process contaminants" – those chemical compounds added to increase shelf life, texture, appearance and marketability. What these various additives have in common is toxicity. The European Food Safety Authority (EFSA), which is responsible for conducting risk analysis on the safety of food in the European Union, recently released its findings concerning the risks to public health from intake of glycidyl fatty acid esters (GE), 3-monochloropropanediol (3-MCPD), and 2-monochloropropanediol (2-MCPD) esters. These substances form during food processing -- in particular, when refining vegetable oils at high temperatures.

Here's what they found:

- "There is sufficient evidence that glycidol is genotoxic and carcinogenic, therefore the CONTAM Panel did not set a safe level for GE."
- Exposure to 3-MCPD exceeds the "safe" level (for some), and insufficient data exists on 2-MCPD
- The highest levels of GE, as well as 3-MCPD and 2-MCPD (including esters), were found in palm oils and palm fats, followed by other oils and fats.
- Intake in children under 18 and particularly infants were characterized as a potential health concern

The EFSA opinion will soon be reviewed by risk managers in the European Commission and member states who regulate EU food safety. They will use EFSA's scientific advice to consider how to manage the potential risks for consumers from exposure to these substances in food. (For the full text of the opinion, see: <http://www.efsa.europa.eu/en/efsajournal/pub/4426>.)

Contrast this to animal fats, as packaged in products like lard and beef tallow:

- Animal fats are minimally processed, unlike vegetable oils
- Animal fats contain zero artificial trans fats
- Animal fats are stable; when heated, they do not release free radicals, which have been linked to cancer, as vegetable oils do
- Animal fats provide optimum nutrition for healthy growth and reproduction
- Animal fats help the body absorb important nutrients

The science is increasingly clear. With toxic additives and carcinogenic compounds putting popular vegetable oils at risk, embracing "minimally processed" animal fats isn't a fad. Given the unsavory alternative, "minimally processed" needs to be how we live.