

Health risk of chemicals in food packaging

Concerns about the contamination of food and drink by synthetic chemicals in packaging and plastic bottles has again come to the fore with calls for greater monitoring of the long-term effect on human health.

In a commentary in the *Journal of Epidemiology and Community Health*, Dr Jane Muncke, of the Food Packaging Forum Foundation in Zurich, Switzerland, and colleagues from the US and Spain argue that long-term exposure to such chemicals is a cause for concern. Muncke, along with scientists John Peterson Myers, Martin Scheringer and Miguel Porta are calling for "population-based assessment and biomonitoring" to try to figure out whether the packaging is doing any harm. According to Muncke and colleagues, food contact materials "are a significant source of chemical food contamination, although legally they are not considered as contaminants". Further, they maintain that they are "a new exposure source in the sense that they have received little attention so far in studies concerned with human health effects." The scientists noted that chemicals such as formaldehyde, which they said can cause cancer, were used in many materials, such as plastics used for soft-drink bottles and melamine tableware. These substances could leach into food, the researchers said. "Whereas the science for some of these substances is being debated and policymakers struggle to satisfy the needs of stakeholders, consumers remain exposed to these chemicals daily, mostly unknowingly," they added. Their call for research has nevertheless attracted criticism and been dubbed alarmist. Dr Ian Musgrave, senior lecturer in pharmacology at the University of Adelaide, said it was "very hard to take seriously" the claims that formaldehyde in plastic (PET) bottles could cause cancer. Musgrave said it was present in many foods naturally, and to consume as much formaldehyde as that in an apple someone would have to drink "at least" 20 litres of plastic-bottled water. While conceding that "more research is always welcome from a scientist's point of view," Dr Oliver Jones, lecturer at the RMIT University in Melbourne, said that he would hazard a guess that "the high levels of fat, sugar and salt in a lot of today's processed food are more of a health concern than any migration of chemicals from the packaging." Concerns about some chemicals in food packaging have nevertheless been taken seriously in recent years. Bisphenol A, an industrial chemical used to make hard, clear plastic, and present in many bottles and metal food and drink cans where it is used as a lining, is to be banned from food packaging in France from 2015. Its use in the manufacture of baby feeding bottles is already prohibited across Europe and the United States.