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Recently, media attention on Bisphenol A (BPA) has been triggered by a newly published study on BPA from Stahlhut et al. (University of Rochester Medical Center). Via this statement we would like to put the study hypothesis into the context of the existing wealth of scientific data on Bisphenol A: The weight of the scientific evidence shows that there is no basis for health concerns over human exposure to BPA. This has been confirmed by the responsible European authorities.

### **The Stahlhut et al study - a statistical evaluation of epidemiological data with strong limitations due to inconsistent data base**

The study published online in Environmental Health Perspectives, Jan 28, 2009, investigates the relationship between urine BPA concentration and fasting times. It builds on the existing NHANES (US National Health and Nutrition Examination Survey) database and applies statistical models to see whether there is a correlation between eating/fasting and related BPA levels measured.

It should be noted that the levels of BPA measured and recorded in the NHANES databank are extremely low (mean value 2.6 parts per billion; Calafat et al., 2008), far below any level of concern to human health as defined by the authorities (LaKind et al., 2008). From these data examined, the authors conclude that BPA levels do not decline rapidly with fasting time. However, a main limitation of this hypothesis is that the conclusion is based on comparisons of BPA-levels in *groups* of individuals, some of which reported to have fasted for various lengths of time. In addition, BPA levels were not measured in the same individuals after fasting and non-fasting. Therefore, the key assumption of the authors, that all individuals had the same level of BPA and the only difference between the groups was that some fasted and some not, is unproven.

The information presented by this study must also be placed in context with the large body of existing robust scientific evidence on bisphenol A. For example, three major studies showed the rapid elimination and excretion of BPA from the body within hours (Völkel et al., 2002, Tsukioka *et al.*, 2003; Völkel *et al.*, 2005). Bisphenol A is one of the most widely studied compounds in the world, and existing scientific evidence from many studies does not “match” the hypothesis presented in the Rochester work.

In addition, the authors themselves noted several methodological limitations that need to be considered with respect to the conclusions suggested:

- “Fasting time is an important variable in this analysis, but is self-reported. Intentional exaggeration of fasting time could be a problem because subjects were given incentives of \$ 100 for adequate fasting and \$ 70 otherwise.”
- fasting was defined as “no eat or drink anything except than water”; however, in fact the consumption of diet soda, black coffee or tea with cream/sugar, alcohol, gum, mints, cough drops, laxatives etc. by those who reported fasting was also recorded
- non-use of complex survey variables and the question of BPA contamination or measurement error

## **Bisphenol A is safe in its intended uses**

BPA has been the subject of extensive scientific testing and government reviews worldwide. International responsible authorities such as the European Commission, the European Food Safety Authority (EFSA), the U.S. Food and Drug Administration (FDA) and the Japanese Ministry of Health, Labour and Welfare have all assessed the comprehensive database on BPA. Based on a weight-of-evidence approach, these assessments have consistently concluded that human exposure levels to BPA are low and within the safe limits set by government authorities. Just recently the EU Commission (June 2008), EFSA (July 2008), and the US FDA (August 2008) re-confirmed their long-standing conclusions that products made from BPA are safe for their intended uses. Over 50 years of research and extensive use throughout the world provide convincing evidence that products made from materials based on BPA are safe for their intended uses.

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\* *Richard W. Stahlhut, Wade W. Welshons, Shanna H. Swan: "Bisphenol A data in NHANES suggest longer than expected half-life, substantial non-food exposure, or both." Published online in Environmental Health Perspectives, Jan 28, 2009*

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