There's Plenty of Science to Listen to in South Korea

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Just about everyone has heard of bisphenol A (BPA.) What most of us want to know is whether we are exposed to BPA and, if so, whether those exposure levels are safe. Exposure levels do matter, as succinctly stated by a basic principle of toxicology – "the dose makes the poison."

Consistent with this principle, we're exposed to trace levels of many things in our daily lives without being harmed. But too much of just about anything – from prescription drugs to alcoholic beverages – could be harmful.

We rely on our public health authorities to measure exposure levels and assess the safety of substances that we contact through use of consumer products. Perhaps the best way to measure exposure levels is with a scientific technique known as biomonitoring, which involves analysis of biological samples (e.g. urine, blood) for substances of interest.

In the case of BPA, analysis of urine samples is most commonly done, since our bodies quickly eliminate any BPA to which we are exposed through urine. Measuring how much BPA comes out in urine is an easy and accurate way to measure BPA exposure levels.

As reported in a recent scientific paper, the South Korean public health authorities have been particularly active in conducting biomonitoring studies. The most recent study was conducted by the National Institute of Food and Drug Safety Evaluation for the purpose of analyzing potentially hazardous substances associated with foods and cooking. The study included more than 2,000 participants and measured levels of 69 substances, one of which

was BPA.

Based on the results of this study, typical exposure to BPA in the South Korean population is more than 500 times *below* the safe intake level previously established by the South Korean Ministry of Food and Drug Safety (MFDS).

These new results are particularly reassuring since they are consistent with and confirm the results of three other large-scale biomonitoring studies on BPA from South Korean authorities. Two of the studies were conducted by the National Institute of Environmental Research and the third was conducted by MFDS.

Similar BPA exposure levels were found in each of the biomonitoring studies and all support the MFDS conclusion that "*there are **no health concerns** for the general Korean population from dietary exposure or from aggregated exposure [to BPA]*."

All of this is great news for the South Korean population, but what does it mean for the rest of us? It turns out that the South Korean authorities aren't the only ones who have conducted biomonitoring studies on BPA.

Large-scale biomonitoring studies have been conducted in the U.S. and Canada in recent years, with results similar to those reported in South Korea. In addition, well over 100 smaller scale biomonitoring studies have been conducted around the world. Based on the large amount of data from all of these studies, there are no health concerns from exposure to BPA, just like MFDS said in South Korea.