# Listening to the science on BPA from Austria

BY STEVEN HENTGES, PH.D ON DECEMBER 6, 2016 IN INDUSTRY, POLICY

If you live in Austria, should you be concerned about exposure to bisphenol A (BPA)? Not according to the results of a new study from Austrian government researchers that was just published in the peer-reviewed scientific literature.
The title of the new study (*Human biomonitoring of bisphenol A exposure in an Austrian population*) may not sound so interesting, but the results are very important. Biomonitoring refers to a scientific technique for measuring exposure to chemicals by measuring their levels in biological samples, such as urine or blood. The results of biomonitoring studies provide critical information to evaluate whether exposure to a chemical is safe or not.

What the Austrian researchers did was measure the level of BPA in urine samples from a large group of Austrians, ranging in age from 6-81 years. Measuring BPA in urine is considered the most scientifically reliable way to evaluate exposure because BPA is quickly eliminated from the body in urine after exposure. In other words, what goes in (i.e., exposure) comes out in urine where it's easy to measure.

If you're interested in safety though, measuring exposure is only half of the safety equation. How do we know what the data means? What levels are safe and, more importantly, what levels are unsafe? Fortunately there's quite a bit of information on the other half of the equation that readily allows us to interpret biomonitoring data in the context of safety.

Of particular value for interpreting biomonitoring data, a group of researchers in Greece reported a "biomonitoring equivalent" (BE) value for BPA in another recent study. The BE value is based on the conservative safe intake level recently established for BPA by the European Food Safety Authority, and the BE value represents the estimated concentration of BPA in urine corresponding to intake of BPA at the safe intake level.

The median BPA level measured in the Austrian study population is more than 250 times below the BE level. This indicates that the actual Austrian exposure levels are not only safe, but they're safe with a wide margin of safety. So if you do live in Austria, there's no need to be concerned about exposure to BPA.

But what if you don't live in Austria? As it turns out, the Austrian researchers aren't the only ones who have conducted biomonitoring studies on BPA. Large-scale studies from several other countries report BPA levels in urine that are similar to the levels found in the Austrian population.

For example, recent studies on pregnant women in France and Canada confirmed low exposure levels that are particularly noteworthy, since pregnant women might generally be considered one of the most vulnerable subpopulations for exposure to chemicals. Similarly, the results from large-scale biomonitoring studies on the general populations of the United States and Canada further demonstrate low BPA exposure levels. Government bodies around the world support the safety of BPA based on their review of extensive scientific information, including biomonitoring data that consistently demonstrates very low exposure. For example, the U.S. Food and Drug Administration answers the question “Is BPA safe?” with a crystal clear answer – “Yes.”