Listening to the Science on BPA with Belgium



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A good way to find out if we're exposed to a safe or unsafe level of a chemical is through the science known as biomonitoring. After all, if we're not exposed to something then we can't be harmed by it. Conversely, if we're exposed to a high level of almost anything we could be harmed. Biomonitoring can tell us where we are on that spectrum.

The place to look for BPA in a biomonitoring study is in urine. The reason is that after exposure occurs, BPA is converted to a biologically inactive metabolite that is very quickly eliminated from the body in urine. Measurement of the metabolite in urine is considered to be the best way to evaluate exposure to BPA, particularly if exposure could be at potentially harmful levels.

All of that is no secret and numerous biomonitoring studies on BPA have been conducted around the world. Several years ago a group of researchers compiled available studies and compared the results with safe intake levels set by government bodies.

As they <u>reported</u>, "[i]n total, we obtained over 140 peer-reviewed publications, which contained over 85,000 data [points] for urinary BPA concentration derived from 30 countries." What they found is that actual exposure to BPA is hundreds to thousands of times below established safe intake limits.

Now we can add to that list a <u>new biomonitoring study</u> on adolescents conducted by a group of Belgian researchers. What the researchers did was collect urine samples from 423 male and female adolescents (14-15 years old) from all five Flemish provinces (northern Belgium), making the study population representative of the Flemish population.

The samples were analyzed for BPA concentration using a procedure previously validated by the same researchers. The level of BPA exposure was then compared to the safe intake limit for BPA established by government bodies in Europe.

The results are very reassuring. As concluded by the authors: "even in a high-exposure scenario ... there are no expected health concerns for this population." The typical BPA exposure level was approximately 180 times **below** the established safe intake limit in Europe.

This conclusion is similar to the one reached by the European Food Safety Authority (EFSA) after its comprehensive review of BPA. As stated by EFSA, "BPA poses no health risk to consumers of any age group (including unborn children, infants and adolescents) at current exposure levels."

How these results compare to safe intake limits in other countries is even more reassuring. For example, typical BPA exposure levels among the Flemish adolescents are approximately one to two thousand times below the safe intake limits in the U.S. and Canada. In the U.S., the Food and Drug Administration gets right to the point on the safety of BPA with a Q&A on its website: Is BPA Safe? Yes.

Based on the results of this new study, we can be confident that Flemish adolescents are not at risk from exposure to BPA. And based on the results of many biomonitoring studies conducted worldwide, exposure to BPA is not a health concern anywhere in the world it has been studied.