Listening to the Science in Taiwan



<u>Steven Hentges, Ph.D</u> Monday, May 6, 2019 <u>SAFETY</u>

The safety of any substance is dependent on the amount to which we are exposed. Just about any substance could be harmful at high exposure levels, including things we commonly accept as safe. For example, your doctor may tell you to "take two aspirin and call me in the morning" if you're feeling under the weather, but a whole bottle of aspirin could act as a poison and kill you.

That principle was recognized in the 16th century by the Swiss physician <u>Paracelsus</u>, known as the father of toxicology, and is commonly stated today as "the dose makes the poison." To understand the safety of anything, whether a prescription drug or a contaminant in the environment, it is critically important to understand the "dose" or exposure level.

A <u>recent study</u> from researchers in Taiwan describes how they estimated exposure to BPA in the Taiwanese population. As noted by the authors, this is the "first study to present comprehensive and current data on estimations of dietary exposure ... both for the general population and for infants in Taiwan."

With the understanding that most exposure to BPA is through the diet, the researchers measured levels of BPA in 278 food samples that were representative of foods eaten by people in Taiwan. You could think of that dataset as a sort of menu of foods that are generally available.

What the population actually eats was based on the large-scale <u>Nutrition and Health Survey</u> <u>in Taiwan</u>, which is separately conducted by a branch of the Taiwanese Ministry of Health and Welfare. The researchers calculated BPA intake by summing up the levels of BPA in the foods actually eaten by the Taiwanese population. Intakes were separately calculated for age groups ranging from infants to those over age 65.

The safety of BPA in the Taiwanese population was then determined by comparison of the BPA intakes with a recent <u>safe intake limit</u> from the European Food Safety Authority (EFSA). As concluded by the researchers, even 95% percentile BPA exposures (i.e., high exposures) in each of the age groups "posed no risks through dietary exposure."

That conclusion is especially reassuring since the safe intake level for BPA was established by EFSA in 2015 when the results of the <u>CLARITY Core Study</u> were not yet available. The results of that study, which is of unprecedented size and scope for BPA research, indicate that BPA has very little potential to cause health effects even when people are exposed to it throughout their lives. In a <u>statement</u> released in conjunction with the study report, Dr. Stephen Ostroff, Deputy Commissioner for Foods and Veterinary Medicine at the U.S. Food and Drug Administration noted: "our initial review supports our determination that currently authorized uses of BPA continue to be safe for consumers."

If you go to Taiwan, feel free to sample the local cuisine without concern for exposure to BPA. But even if you don't go to Taiwan, you don't need to be concerned about dietary exposure to BPA since these new results from Taiwan are comparable to those reported in many other countries in recent years. Wherever you go in the world, you'll be safe from BPA.