

## Should Kiwis Be Concerned About Exposure To BPA?



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An important piece of information to answer that question is the level of exposure to BPA for people in New Zealand. Somewhat surprisingly, considering how thoroughly BPA has been studied, no one has apparently measured BPA exposure levels in Kiwis. That data gap makes a [new report](#) from New Zealand both novel and important.

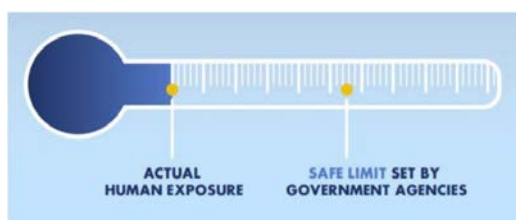
It's often considered that the "gold standard" method for measuring human exposure to BPA is through an analytical method called biomonitoring – measuring the level of a BPA metabolite in urine. The reason is that BPA entering the body is efficiently converted to a biologically inactive metabolite, which is then quickly eliminated from the body in urine. In other words, what goes into the body (i.e., exposure) quickly comes out where it can be easily measured.

Large-scale urine biomonitoring studies on BPA are periodically conducted in the [U.S.](#), [Canada](#) and [South Korea](#). In addition, well over 100 smaller scale studies have been conducted [around the world](#). Now New Zealand joins that club with its first large-scale urine biomonitoring study.

The [study](#) was sponsored by the New Zealand Ministry of Health and conducted by Massey University's Centre for Public Health Research. Approximately 300 adults (ages 19-64) and 300 children (ages 5-18) with demographic characteristics to represent the New Zealand population participated in the study by providing urine samples. Not surprisingly, BPA was detected at low levels in most of the urine samples. As noted in the report, the levels "*are comparable to those that have been reported for the U.S. and Canada.*"

Getting back to where we started though, should Kiwis be concerned about these biomonitoring results? The study was aimed only at generating data and the report does not provide any interpretation or guidance to answer that question. Fortunately, we have plenty of additional information that helps to provide an answer.

For consumers, it's relatively easy to interpret the data with respect to health. Based on an extensive scientific record, Health Canada, among other government bodies, determined a safe intake level for BPA. Based on that value, Health Canada researchers also determined the amount of BPA that would be measured in urine if exposure occurred at the safe intake level. That value is known as the [Biomonitoring Equivalent](#) (BE).



Comparison of the typical level of BPA found in the urine of Kiwis with the BE reveals that exposure to BPA in New Zealand is about 500 times below the safe intake level set by Health Canada. The report also defined a “reference

level,” which essentially is the maximum level of BPA that would be expected to be found in Kiwis. That maximum reference level is about 40 times below the safe intake level. With that large margin of safety, the question of whether Kiwis should be concerned about typical BPA exposure is answered resoundingly by the science – No!

Notably, Health Canada set the safe intake level before the results of the U.S. Food and Drug Administration [CLARITY study](#) were available. The results of that study, which was conducted by senior FDA scientists and is of unprecedented scope and magnitude for BPA, were released earlier this year and provide additional strong support for the safety of BPA exposure levels.

As noted by [FSANZ](#) (Food Safety Australia New Zealand) in regard to the CLARITY study, “our initial consideration is that the findings are consistent with previous conclusions that there are **no public health and safety concerns** at the levels of BPA people are exposed to in food.” (emphasis added) Combined with the new biomonitoring results, there can be little doubt that Kiwis need not be concerned about typical exposure to BPA.

BPA was included in the biomonitoring study as a “Substance of Concern,” although no definition of that term was provided in the report. In light of the FSANZ opinion and the large margins of safety demonstrated in the biomonitoring study, it might be appropriate to

re-designate BPA as a “Substance of Very Low Concern (SVLC),” defined here as a substance with ample scientific data to support its safety. That definition fits BPA quite well.