

## Don't Confuse Me With The Facts... About BPA



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Whether you're interested in BPA or not, you might at least want to know what are the facts about BPA safety. For some time, BPA has been a popular topic in the media, often with stories that suggest that exposure to BPA is harmful. Is this true?

Doing a Google search on BPA could help to find some facts, but it's not that easy. Searching on bisphenol A (a more precise term than BPA) resulted in 5,190,000 results. There must be some facts in there, but who's got the time or patience to sort out the facts from the opinions, myths and falsehoods. And how would you tell the difference anyway since you can't believe everything you read on the internet.

A more scientific approach might be to search [PubMed](#), a biomedical literature database operated by the U.S. National Institutes of Health. A search on bisphenol A resulted in 11,184 citations for scientific studies on BPA. At least that's a smaller number, but still way too much information to sift through to find the facts that matter.

The information overload on BPA is nothing if not confusing. What we need is a sort of cheat sheet with curated facts from reliable sources. Included in those many studies on PubMed are a smaller number of important studies that were conducted by U.S. government scientists for the express purpose of filling scientific gaps and resolving uncertainties about the safety of BPA.

Coming from impartial scientific experts, these studies provide facts that you can trust. The key studies can be sorted into three categories that together define whether exposure to BPA is safe or not.

## 1. Pharmacokinetics

Pharmacokinetic studies tell us what happens to BPA when it enters the body. In particular, where does it go once it enters the body, what form is it in, how is it eliminated, and how long does it stay in the body. From a series of [studies](#) conducted by scientists with the U.S. Food and Drug Administration (FDA) and the U.S. National Toxicology Program, we know that BPA is efficiently converted to an inactive metabolite and quickly eliminated from the body in urine after oral exposure.

Together, the pharmacokinetic studies in rodents, non-human primates and, most importantly [human volunteers](#), indicate that BPA is not likely to be harmful at the very low levels of dietary exposure that are experienced by consumers.

## 2. Exposure

Measuring the level of the inactive metabolite in urine is the best way to monitor exposure to BPA. That's exactly what scientists at the U.S Centers for Disease Control and Prevention (CDC) do in a biennial program that monitors exposure to a variety of chemicals across the U.S. population.

From the [CDC studies](#) we know that typical human exposure to BPA in the U.S. population is very low. Similar results have been found in more than [140 published studies](#) from 30 countries, which together indicate that actual exposure to BPA worldwide is hundreds to thousands of times below safe intake limits set by government bodies.

## 3. Toxicity

In contrast to pharmacokinetic and exposure studies, which can directly evaluate human volunteers, toxicity studies are conducted on laboratory animals. In early 2014, FDA researchers published the results of what may be the largest-scale toxicity study ever conducted on BPA.

Notably, no significant health effects were found at any of the low doses tested in this subchronic study (i.e., less than a full lifetime). Overall, the study results confirm the prediction from pharmacokinetic studies that BPA is very unlikely to cause health effects at real-life human exposure levels.

Taken together, the results from these government sponsored pharmacokinetic, exposure and toxicity studies provide strong support for the perspectives of government bodies worldwide on the safety of BPA. Getting right to the point, FDA answers the question “[Is BPA safe?](#)” with the unequivocal answer “Yes,” and they’ve got the facts to back it up.

The scientific basis for the safety of BPA is already quite strong, but there’s more to come. In the coming months, FDA researchers are expected to release results from a full lifetime study of the toxicity of BPA in laboratory animals. Based on the extensive data already available, we can predict that this study may provide further support for the safety of BPA. Stay tuned!