Comments on Proposed SB 16

AN ACT REQUIRING THE LABELING OF FOOD AND DRINK PRODUCTS THAT ARE PACKAGED IN MATERIALS THAT CONTAIN BISPHENOL-A

Julie E. Goodman, Ph.D., DABT
Gradient/Harvard School of Public Health
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Thank you for the opportunity to speak today. I am Dr. Julie Goodman, an epidemiologist and board certified toxicologist at Gradient, an environmental consulting firm, and I teach at the Harvard School of Public Health. I am here representing the Can Manufacturers Institute.

SB 16's statement of purpose is "[t]o provide information to consumers that will allow consumers to avoid the purchase and consumption of products that contain harmful toxins." BPA in food packaging is not a harmful toxicant, so this bill will not achieve its intended purpose and may mislead consumers.

Thousands of studies have been conducted on BPA in humans, laboratory animals, and other laboratory settings. Leading regulatory bodies around the world, including the US EPA, the US FDA, Health Canada, and the European Food Safety Authority, have evaluated these studies (Table 1). These leading agencies have all concluded that, to quote US FDA, "the scientific evidence at this time does not suggest that the very low levels of human exposure to BPA through the diet are unsafe."

There are two reasons for this. First, BPA is not toxic in laboratory animals unless they are exposed to extremely high doses. Second, humans are exposed to BPA at levels thousands of times lower than this.

To put this in perspective, I evaluated how many servings of several different canned foods a child or adult would have to eat to exceed safe levels in animals (Table 2). A child would have to consume 214,286 servings of tuna, and an adult would have to consume 1,000,000 servings of tuna, every day to exceed the safe level in animals. Even in canned foods with higher levels of BPA, like some chicken soups, a child would have to consume 527 servings every single day to exceed this safe level. Clearly, this is beyond the realm of possibility.

Ongoing studies funded by or being conducted at the US EPA and US FDA are underway to address the BPA controversy. Thus far, these studies have indicated that there is little to no exposure to the fetus after its mother has ingested BPA, and that newborns are able to metabolize BPA just like adults. In addition, many studies have been specifically designed to address what others have claimed are methodological deficiencies in previous studies showing no effects. These newer studies confirm the lack-of-effect findings from previous studies, indicating there are no reproductive or developmental effects caused by low doses of BPA (Table 3). Furthermore, as discussed in the Wall Street Journal last week, based on a review of studies of 30,000 people in 19 countries, including women and infants, Dr. Justin Teeguarden, at the Department of Energy, recently reported that human blood levels of BPA are thousands of times lower than the levels you see in animals that cause biological effects.

Labeling food packaging will not give consumers any information regarding harmful toxicants, and may have the unintended consequences of leading them to make unhealthy food choices. The weight of scientific evidence does not support SB 16.

Table 1 Regulatory Agencies that Conclude No Risk from BPA Exposure

Regulatory Agency	Year
Food Standards Australia New Zealand	2012
United States Food and Drug Administration	2012
Japanese Research Institute of Science for Safety and Sustainability (RISS)	2011
European Food Safety Authority	2011, 2008, 2006
Health Canada	2012, 2010, 2009, 2008
World Health Organization (WHO)/Food and Agriculture Organization of the United Nations (FAO) BPA Review	2010
California Developmental and Reproductive Toxicant Identification Committee	2009
German Federal Institute for Risk Assessment (BfR)	2008

Table 2 Cans In Perspective: Servings Needed to Exceed Safe Level in Animals (5 mg/kg-day)

Product	Adults (70kg)	Children (15 kg)
Healthy Choice Old Fashioned Chicken Noodle Soup	2,461	527
Great Value Sweet Peas	8,503	1,822
Goya Coconut Milk	76,419	16,376
Muir Glen Organic Fire Roasted Diced Tomatoes	448,718	96,154
Star-Kist Tuna	1,000,000	214,286
Diet Coke	1,400,000	300,000

National Workgroup for Safe Markets. May 2010. "No Silver Lining: An Investigation into Bisphenol A in Canned Foods."

Table 3 Weight-of-Evidence Example: Prostrate Weight in Rats and Mice Dosed with BPA

Exposure	Dose (mg/kg-day) order of magnitude					
	10^{-5}	10^{-4}	10^{-3}	10^{-2}	10^{-1}	1
Oral	00	000+	00+0000 00+0 000	00000000+ 0+00-0 0000	0+00000 000 0000	00 0000 000
Non-oral			0	000000 00	0000 0	+0 +

Each dose in each study is represented by a "0" if the treated animals were not statistically significantly different from the control animals (*i.e.*, prostate weights were the same), by a "-" if prostate weights in treated animals were significantly lower, and by a "+" if prostate weights in treated animals were significantly higher. Results reported up to 5 mg/kg-day. Source: Goodman *et al*. (2009).