2011 HOUSE HUMAN SERVICES

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HB 1332

2011 HOUSE STANDING COMMITTEE MINUTES

House Human Services Committee

Fort Union Room, State Capitol

HB 1332 January 25, 2011 Job #13339

Conference Committee

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Committee Clerk Signature

Explanation or reason for introduction of bill/resolution:

Prohibit the use of bisphenol-A in products for young children.

Minutes:

See attached Testimonies #1-3

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Chairman Weisz: Opened the hearing on HB 1332.

Rep. Rick Holman: From District 20 sponsored and testified in support of the bill. (See Testimony #1.)

OPPOSITION

Joe Oehlke: Representing the ND Chamber of Commerce testified in opposition of the bill. (See Testimony #2.)

Handed in Testimony

Kevin Fisk: Director of State Affairs (See Testimony #3.)





2011 HOUSE STANDING COMMITTEE MINUTES

House Human Services Committee

Fort Union Room, State Capitol

HB 1332 January 25, 2011 Job #13384

Conference Committee

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Committee Clerk Signature

Minutes:

Chairman Weisz: Called the meeting to order on HB 1332. That is the bisphenol product.

Rep. Porter: I would move a Do Not Pass.

Rep. Hofstad: Second.



Rep. Porter: I think that the information that was presented by the ND Chamber pretty well summed it up. There isn't total consensus on prohibition and it seems like the retail industry is dealing with this situation a lot faster than the government is. When things like that happens it just reassures myself that capitalism does work and the business community does respond when they think there is a problem.

Rep. Paur: I don't care for the idea that we would end up like California with "for sale except in ND" etc. on some of the products.

VOTE: 11 y 2 n DO NOT PASS CARRIED

Bill Carrier: Rep. Porter

Date:	1-2	15	-//
Roll Call	√ote #	/	

2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. _/332

ouse HUMAN SERVICES			Committee
Check here for Conference	Committee		
egislative Council Amendment N	lumber		
Action Taken: 📈 Do Pass [Do Not Pass	Amended 🗌 Ado	pt Amendment
Rerefer to	Appropriations	Reconsider	
Motion Made By <u>Rep.</u> F	orter s	econded By	lofstad
Representatives	Yes No	Representatives	Yes No
CHAIRMAN WEISZ	V	REP. CONKLIN	
VICE-CHAIR PIETSCH	V	REP. HOLMAN	
REP. ANDERSON		REP. KILICHOWSKI	
REP. DAMSCHEN			
REP. DEVLIN	V		
REP. HOFSTAD			
REP. LOUSER			
REP. PAUR	VX		
REP. PORTER			
REP. SCHMIDT			
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Total (Yes)	/1	No2	
Absent	<u></u>	-	
Floor Assignment	b. Por	ter	

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

HB 1332: Human Services Committee (Rep. Weisz, Chairman) recommends DO NOT PASS (11 YEAS, 2 NAYS, 0 ABSENT AND NOT VOTING). HB 1332 was placed on the Eleventh order on the calendar.

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2011 TESTIMONY

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HB 1332



Testimony on HB 1332 Restrictions on Sale of Products Containing Bisphenol-A Rep. Rick Holman, ND District 20.

Good Morning members of the House Human Services Committee. My name is Rep. Rick Holman, of District 20,

The purpose of this bill is to restrict the use of a product that research has indicated can cause health problems in children. Several states have reacted to this with legislation to limit the sale of products containing Bisphenol-A in products for young children.

The bill has dates that allow wholesalers time for reducing or eliminating inventory by setting the implementation date for them at the end of 2011. Retailers have an additional year to sell or eliminate their inventory of restricted products.

The attached list gives more complete information about Bisphenol-A.



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Bisphenol-A (BPA) is a chemical building block that is used primarily to make polycarbonate plastic and epoxy resins. Polycarbonate plastic is a lightweight, high-performance plastic that possesses a unique balance of toughness, optical clarity, high heat resistance, and excellent electrical resistance. Because of these attributes, polycarbonate is used in a wide variety of common products including digital media (e.g., CDs, DVDs), electrical and electronic equipment, automobiles, sports safety equipment, reusable food and drink containers, and many other products.

I've also included a list of states actions on restricting the sale or use of Bisphenol-A. Specifically this bill is similar to recent legislation,

in Minnesota.

Senate Bill 247 (2009)

Enacted in May 2009, Minnesota S.B. 247 prohibits the sale of any bottle or cup that is designed or intended for use by a child under three years of age and contains BPA. The ban applies to manufacturers and wholesalers beginning on January 1, 2010 and to retailers on January 1, 2011.

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Numerous studies have shown that Bisphenol-A leaches from plastics and resins when they are exposed to hard use or high temperatures (as in microwave ovens and dishwashers). Because Bisphenol-A is used in so many common products that we use every day—such as baby bottles,



reusable water bottles, microwaveable containers, and the protective coating inside most food and beverage cans—most people in developed countries are exposed almost continuously to some level of Bisphenol-A.

On the table in front of you are examples of containers from Wall-Mart. Look for the indicator. Wall Mart no longer sells children's products containing Bisphenol-A.

In a 2004 study, the Centers for Disease Control and Prevention (CDC) found BPA present in the urine of 93 percent of those tested, and also concluded that many Americans are exposed to Bisphenol-A at levels above the safety threshold set by the EPA. The CDC data also revealed that children are more heavily exposed to BPA than adolescents who, in turn, had higher concentrations than adults.

Isn't the evidence on low-dose exposures conflicting?

While it may appear that the science is conflicting, a critical look at both the funding behind the studies as well as the testing protocols used draws clear conclusions. Among independent and government-funded studies, the evidence of harm from low doses of BPA is overwhelming. As of September 2008, 202 of 206 government-funded, low-dose studies using appropriate animal models found harm from bisphenol A. Of the 14 low-dose BPA studies funded by chemical corporations as of September 2008, none found evidence of harm. *vivom Saal FS. (2009). Bisphenol A. http://endocrinedisruptors.missouri.edu/vomsaal/vomsaal.html*

. Numerous retailers including Safeway, CVS, Whole Foods, Wal-Mart, Kroger, Target and Babies R Us have announced that they will no longer sell children's products containing BPA. Leading sport water bottle manufacturers CamelBak and Nalgene have reformulated and are no longer using BPA in their products. Six leading baby bottle manufacturers announced that they will no longer use BPA in their baby bottles.

This legislation is about children. I ask you to consider this bill to protect the children of our state.

I'd be happy to answer any questions. Thank You.





Frequently Asked Questions about Bisphenol A

What is bisphenol A?

Bisphenol A (BPA) is one of the most pervasive chemicals in modern life. More than 2 billion pounds of BPA are produced in the United States each yearⁱ. As the building block of polycarbonate plastic and a component of epoxy resins, BPA is used in thousands of consumer products, including food packaging.

BPA was developed in the 1930s as a synthetic estrogen (also called a xenoestrogen) so it's not surprising that it acts like an estrogen in humans, increasing the risk of breast cancer and other hormonally sensitive diseases.

Haven't we safely been using BPA for decades?

Just because BPA has been around for a long time doesn't mean it's safe. Scientists have known that BPA acts like estrogen since the 1930s. Without any independent safety testing or government oversight, BPA began being used to make plastic products in the 1940s, and became a common component of the epoxy resins that line food cans during the 1970s. In the 1990s, scientists started seeing that BPA acted like estrogen in very small amounts.[#] Despite the overwhelming evidence showing that BPA is toxic, it is still on the market.

Doesn't the dose make the poison? Why would small amounts of BPA matter?

Until recently, toxicologists thought that the "dose makes the poison." In fact, many people still believe that a little bit of a toxic chemical won't result in harmful health effects. This theory assumes that exposure to one chemical through a single route of exposure – in this case, the foods we eat – is a person's only exposure. The theory also assumes that all people have the same genetic responses to toxicants, and that children and infants have immune and endocrine systems as sophisticated as those of adults.

Recent science has shown that with endocrine-disrupting chemicals like BPA, these assumptions are false. In fact, low doses of BPA often have more devastating effects than higher doses of the same chemical. ⁱⁱⁱ The human endocrine system is designed to be triggered by exquisitely small doses of naturally occurring hormones; likewise, hormone receptors respond to very low doses of estrogenic chemicals like BPA. A larger dose of BPA, on the other hand, has very different effects on cellular activity.^{IV}

When it comes to chemicals like BPA, the timing of exposure also matters. Fetuses, infants and children are not just smaller adults. During development, their endocrine systems exchange signals with the brain to direct growth.^v Bisphenol A interrupts this biochemical conversation and may set children on a path toward diseases much later in life.







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Are humans exposed to these same low doses used in studies?

Yes. According to the U.S. Centers for Disease Control and Prevention, BPA is found in 93 percent of Americans over the age of 6, and children are exposed to levels that have been shown to cause harm in laboratory studies.^{vii} This statistic would likely be higher if young children were included, since they carry the highest levels of BPA of any age group.^{viii} Environmentally relevant levels of BPA have also been reported in fetal serum and amniotic fluid^{ix}, as well as in placental tissue.^x

Are the levels of BPA that children are exposed to really harmful?

Children are exposed to BPA at levels that cause harm in laboratory studies.^{xi} The National Toxicology Program has expressed concern about brain, behavior and prostate effects at current exposure levels.

Are there any human studies showing the toxicity of BPA?

Human studies have been limited because it would be unethical and impossible to intentionally test for toxicity in humans. Of the existing human data, recent studies have shown that BPA exposure is associated with increases in miscarriages,^{xii}diabetes and cardiovascular disease^{xiii} in adult humans.

Use of animal and in-vitro models are scientifically accepted methods for determining the potential harmful effects of chemicals on human health.

Is the estrogenic potential of a chemical eliminated through oral ingestion?

No. The National Toxicology Program concluded in 2008 that the route of exposure to BPA was irrelevant. A study published in 2008 on newborn mice showed that it made absolutely no difference whether BPA was administered via injection or orally.^{xiv} Moreover, many peer-reviewed studies show that oral administration of BPA has toxic effects.

Doesn't the U.S. Food and Drug Administration (FDA) say bisphenol A is safe?

A 2008 House Energy and Commerce Committee investigation revealed that the FDA used only two industry-funded studies out of the hundreds of available studies to determine BPA's safety. Only one of the two studies had undergone peer-review and publication. In fact, the FDA's own science board – assembled by the FDA to review its BPA safety assessment – found that the agency excluded numerous adequate studies that link the chemical to adverse health outcomes. This panel recommended the agency abandon its earlier findings that BPA is safe. In January 2010, the U.S. Food and Drug Administration announced that it has "some concern" about the effects of bisphenol A on children's health, embracing an earlier conclusion reached by the National Toxicology Program.





What are other governments doing?

Canada

In 2008, Canada became the first national government to conclude BPA is hazardous to human health, and announced plans to ban BPA in baby bottles. While many in the chemical industry claim that Canada does not believe BPA poses a problem for the general public, statements from Canada's governmental officials directly contradict this statement. In fact, Canada's Health Minister Tony Clement declared in 2008, "We have immediately taken action on bisphenol A, because we believe it is our responsibility to ensure families, Canada's Environment Minister John Baird announced, "Not only are we finding out about the health impacts of bisphenol A, but the environmental impacts as well. That's why our Government will be moving forward and will work with the provinces and stakeholders to keep bisphenol A out of our environment, and take the necessary measures to ensure its safe use and disposal."^{xv}

Canada's actions aren't limited to baby bottles. In October, Canada announced a proposal to develop stringent BPA standards for infant formula cans and will "explore the option of establishing stringent migration targets for bisphenol A in canned foods in general."^{xvi}

Europe



The European risk assessment of BPA suffers from the same blind spots as the U.S. FDA assessment because it relied on the same industry-funded studies. While the European Food Safety Authority has issued an opinion declaring BPA safe,^{xvii} it is clear that this finding is deeply flawed. The latest opinion was based largely on a single, industry-funded study that had not yet undergone peer review and was unpublished at the time; was assessed by a panel composed of food toxicologists and food chemists, most of whom had at one point worked for or consulted for industries with a financial stake in BPA; and did not invite input from experts on BPA or endocrine disruption. Members of the European Union Parliament are demanding the risk assessment be conducted again. It is likely that pressure from Parliament and BPA scientists will convince the Authority to re-assess BPA, but it remains to be seen if independent, low-dose studies will be included.

Japan

In 1998, the Japan Canners Association set for its member companies a voluntary limit on the amount of BPA that could leach from cans to food. The limit was set at 5 μ g of BPA per liter of food or drink, regarded as the lowest detection limit at the time. Current levels of BPA migration from beverage cans, for the most part, are less than 0.5 μ g/L, which is tenfold less than the self-imposed management criteria value.^{xviii} Japanese manufacturers are currently making additional changes to further reduce BPA levels.

Japan's risk assessment of BPA, however, is just as flawed as the European and U.S. assessments, none of which take into account studies demonstrating harmful effects of low-dose exposure to BPA. Japan declared BPA safe in 2007.



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Taiwan

In December 2008, the Taiwan Environmental Protection Agency declared BPA a potentially toxic substance and in the spring of 2009 announced plans to regulate BPA as a Class 4 Toxic Chemical (concern of pollution of environmental or the endangerment of human health).^{xix}

Why are governments consistently rejecting low-dose studies in their assessments of BPA?

Both the European Union and the U.S. Food and Drug Administration relied only on studies conducted using "Good Laboratory Practices" or GLP. While GLP sounds like it provides a baseline of reliable and valid scientific results, the truth is it provides no such guarantee.

GLP is a set of regulatory guidelines governing industry laboratories that focuses largely on care and feeding of lab animals, standards for facility maintenance, personnel requirements and collection of data. GLP does not govern, nor is it any guarantee, of the quality of research design, the skills of the technicians who work in the lab, the sensitivities of the assays used to determine an effect or whether the scientific methods used are current. An examination by independent scientists determined that the assays and protocols used to test BPA for low-dose effects by GLP labs are out of date and not sensitive enough to detect the effects reported by the more sophisticated studies conducted by academic and government laboratories. **

As a result of focusing solely on studies performed in GLP labs, the U.S. FDA and the EU based their safety assessments on studies that use outdated scientific methods and flawed research design. A better gauge would be to look at studies that are funded by the National Institutes of Health, which have far more rigorous standards guiding research. NIH-funded studies have shown time and again that exposure to low doses of BPA has detrimental health effects on the fetus and on infants.

Have any companies taken action on BPA?

Yes. Numerous retailers including Safeway, CVS, Whole Foods, Wal-Mart, Kroger, Target and Babies R Us have announced that they will no longer sell children's products containing BPA. Leading sport water bottle manufacturers CamelBak and Nalgene have reformulated and are no longer using BPA in their products. Six leading baby bottle manufacturers announced that they will no longer use BPA in their baby bottles.

Many formula manufacturers report they already have BPA-free alternatives on the market, including Gerber (a Nestlé-owned company), Enfamil and Similac.

What is happening in other states and localities?

Minnesota and Connecticut banned the use of BPA from baby bottles and sippy cups earlier this year. The Connecticut ban also included infant formula, baby food cans and jars, and reusable food containers. In addition, more than 30 states and municipalities have introduced legislation to eliminate BPA from children's products, including Oregon, Washington, Minnesota, New York, Connecticut, Hawaii, Illinois and Wisconsin. Massachusetts issued a public health advisory in August 2009 warning that pregnant and breastfeeding women, as well as children up to 2, should avoid BPA exposures.





Locally, many communities have started taking action against BPA. The city of Chicago and Suffolk County, N.Y., recently enacted bans on BPA in children's beverage containers. San Francisco passed a resolution asking retailers to voluntarily remove baby bottles containing BPA from their shelves.

What are the alternatives to BPA?

There are already safe, cost-effective alternatives to BPA on the market. For example, a package of three BPA-free plastic baby bottles can be purchased for \$2.99 at Babies R Us. Many bottle manufacturers are switching to safer plastics or are selling glass bottles. Infant formula manufacturers already have both liquid and powder products available in BPA-free packaging.

But aren't these alternatives untested?

While some alternatives may be untested for safety, there are many safe and cost-effective alternatives available, such as those mentioned above.

¹ ICIS Chemical Business. (2008). Chemical Profile: Bisphenol A.

- www.icis.com/Articles/2008/01/14/9092025/chemical-profile-bisphenol-a.html. Accessed July 25, 2009.
- ¹¹ Environmental Working Group. (2009) Bisphenol A Timeline. http://www.ewg.org/reports/bpatimeline. Accessed July 25, 2009.
- ^{III} Welshons WV, Nagel SC, and vom Saal FS (2006). Large effects from small exposures. III. Endocrine mechanisms mediating effects of bisphenol A at levels of human exposure. *Endocrinology* 147: S56-S69.
- ^W Vandenberg LN, Maffini MV, Sonneschein C, Rubin BS, and Soto AM (2009). Bisphenol A and the great divide: A review of controversies in the field of endocrine disruption. *Endocrine Reviews* 30: 75-95.
- ^v Crain DA, Janssen SJ, Edwards TM, et al. (2008). Female reproductive disorders: the roles of endocrine- disrupting compounds and developmental timing. *Fertility and Sterility* 90: 911-940.
- ^{vi}vom Saal FS. (2009). Bisphenol A. <u>http://endocrinedisruptors.missouri.edu/vomsaal/vomsaal.html</u> Accessed July 26, 2009.
- ^{vli} Calafat AM, Kuklenyik Z, Reidy JA, Caudill SP, Ekong J, Needham LL. (2005) Urinary Concentrations Of Bisphenol A And 4-Nonylphenol In A Human Reference Population. Environmental Health Perspectives, 113:391-395,

^{viii} Edginton AN and Ritter L. (2009) Predicting Plasma Concentrations of Bisphenol A in Young Children (< Two Years) Following Typical Feeding Schedules using a Physiologically-based Toxicokinetic Model. Environmental Health Perspectives 117: 645-652.

^{ix} Ikezuki Y, Tsutsumi O, Takai Y, et al. (2002). Human biological fulids reveal significant early prenatal exposure. Human Reproduction 17: 2839-2841.

^{*} Schonfelder G, Witthoht W, Hopp H, et al. (2002). Parent bisphenol A accumulation in the human maternal-fetalplacental unit. Environmental Health Perspectives 110: A703-A707.

^{xi} Calafat AM, Kuklenyik Z, Reidy JA, Caudill SP, Ekong J, Needham LL. (2005) Urinary Concentrations Of Bisphenol A And 4-Nonylphenol In A Human Reference Population. Environmental Health Perspectives, 113:391-395.

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Question: What are the Potential Health Effects of Bisphenol A? **Answer:** Bisphenol A is considered an endocrine disruptor because it mimics estrogen, a natural hormone, and may fool the body by stimulating reactions that are unnecessary and potentiall harmful.

Scientists have linked bisphenol A (BPA) to a <u>higher incidence</u> of heart disease, diabetes and liver abnormalities in adults as well as brain and hormone development problems in fetuses and young children. Other tests have shown that bisphenol A can <u>promote human breast cancer cell</u> growth, decrease sperm counts in rats, and cause <u>erectile dysfunction and other sexual problems</u> in men.

Numerous studies have shown that bisphenol A leaches from plastics and resins when they are exposed to hard use or high temperatures (as in microwave ovens and dishwashers). Because bisphenol A is used in so many common products that we use every day—such as baby bottles, reusable water bottles, microwaveable containers, and the protective coating inside most food and beverage cans—most people in developed countries are exposed almost continuously to some level of bisphenol A.

Some official government organizations such as the U.S. Food and Drug Administration, the U.S. Environmental Protection Agency and the European Food Safety Authority maintain that it is virtually impossible for most people to experience an unsafe level of BPA exposure in their daily lives.

Some of those conclusions have become controversial, however, especially in light of recent studies about the health effects of bisphenol A. The safety threshold set by the EPA was based on decades-old data, for example, and never updated. Even more troubling, the FDA finding was discredited when it was discovered that the agency had ignored the advice of its own scientists and allowed representatives of the chemical industry to write significant portions of the final document.

Amid these controversies, public concerns about the potential health effects of BPA continue to grow, and many scientists believe those concerns are justified.

In a 2004 study, the Centers for Disease Control and Prevention (CDC) found BPA present in the urine of 93 percent of those tested, and also concluded that many Americans are exposed to bisphenol A at levels above the safety threshold set by the EPA. The CDC data also revealed that children are more heavily exposed to BPA than adolescents who, in turn, had higher concentrations than adults. In addition, the National Toxicology Program of the U.S. Department of Health and Human Services has concluded that there is definitely reason to be concerned that BPA may cause developmental problems in children's brains and hormonal systems.





Information on Bisphenol-A HB 1332 Rep. Rick Holman, ND District 20

What is BPA?

Bisphenol-A (BPA) is an industrial chemical used to make polycarbonate plastic resins, epoxy resins, and other products.

How is BPA used?

Bisphenol-A (BPA) is a chemical building block that is used primarily to make polycarbonate plastic and epoxy resins. Polycarbonate plastic is a lightweight, highperformance plastic that possesses a unique balance of toughness, optical clarity, high heat resistance, and excellent electrical resistance. Because of these attributes, polycarbonate is used in a wide variety of common products including digital media (e.g., CDs, DVDs), electrical and electronic equipment, automobiles, sports safety equipment, reusable food and drink containers, and many other products.

Children's Environmental Health

During the 2009 legislative sessions, states considered bills to protect children from exposure to pesticides and other toxic substances. Lawmakers also introduced legislation prohibiting the manufacturing of children's products containing bisphenol-A. Eighteen states introduced legislation concerning the manufacturing of products containing bisphenol-A, with Connecticut adopting HB 6572 (2009 Conn. Acts, P.A. 9-103) and Minnesota adopting SB 247 (2009 Minn. Laws, Chap. 40), both banning bisphenol-A in children's products. Pennsylvania adopted HR 94 urging Congress and the Food and Drug Administration to encourage industry to reduce the use of bisphenol-A in the manufacture of plastic food containers and bottles. In California, legislators are seeking to enact the Toxin Free Infants and Toddlers Act, which would prohibit the manufacture or sale of any food or beverage container that contains bisphenol-A. Hawaii, Massachusetts, New York and Rhode Island have similar bills pending to protect children from bisphenol-A. Source: National Conference of State Legislatures (NCSL)

NCSL Policy Update: State Restrictions on Bisphenol A (BPA) in Consumer Products

Concerns about potentially negative health effects from exposure to bisphenol A in many consumer products have led to action in state legislatures. Known as BPA for short, bisphenol A serves as a hardening agent in a number of plastic products. It is commonly used in baby bottles, sippy cups, and medical and dental devices and as coatings for food and beverage cans. New research has linked BPA exposure to accelerated puberty and an increase risk for cancer, heart disease and diabetes. Although the U.S. Food and Drug Administration—which has primary responsibility for regulating the compound—has







expressed "some concern about the potential effects of BPA on the brain, behavior and prostate gland of fetuses, infants and children," the agency has not restricted its use in consumer products.

In recent years, several state legislatures have taken up the issue. In 2010, 59 measures have been proposed in 18 states that address BPA. Seven states have enacted restrictions since 2009. In addition, a number of other jurisdictions have acted. Below is a summary of these BPA laws.

Connecticut

House Bill 6572 (2009)

Enacted in June 2009, Connecticut House Bill 6572 bans the sale of reusable food or beverage containers—including baby bottles, spill-proof cups, sports bottles and thermoses—that contain BPA. The bill also bans the sale of baby food or infant formula sold in containers that contain BPA. Connecticut's restrictions take effect October 1, 2011.

Maryland

House Bill 33 (2010) and Senate Bill 213 (2010)

Enacted in April 2010, these bills prohibit the manufacture, sale, or distribution of children's bottles or cups that contain BPA after January 1, 2012. The law requires manufactures to replace BPA in these products with the least toxic alternative and prohibits them from replacing BPA with certain carcinogens or reproductive toxicants.

Minnesota

<u>Senate Bill 247 (2009)</u>

Enacted in May 2009, Minnesota S.B. 247 prohibits the sale of any bottle or cup that is designed or intended for use by a child under three years of age and contains BPA. The ban applies to manufacturers and wholesalers beginning on January 1, 2010 and to retailers on January 1, 2011.

New York

Senate Bill 3296 (2010)

Enacted in July 2010, New York S.B. 3296 prohibits the sale of pacifiers, baby bottles, sippy cups and other unfilled beverage containers for use by children under three years of age that contain BPA after December 1, 2010. The law also allows products to be labeled as BPA-free.

Vermont

Senate Bill 247 (2010)

Enacted in May 2010, Vermont S.B. 247 bans baby food and infant formula stored in containers that contain BPA. The law also prohibits the manufacture, sale or distribution of reusable food or beverage containers such as baby bottles, spill-proof cups, sports bottles, and thermoses that contain BPA. The law requires manufactures to replace BPA in these products with the least toxic alternative and prohibits them from replacing BPA with certain carcinogens or reproductive toxicants. Vermont's restrictions take effect July 1, 2012.

Washington

Senate Bill 6248 (2010)

Enacted in March 2010, Washington S.B. 6248 prohibits the manufacture, sale or distribution of empty bottles, cups or other food or beverage containers that contain BPA after July 1, 2011. Metal cans are exempted from this ban. The law also prohibits the





manufacture, sale or distribution of empty sports bottles of 64 ounces or less that contain BPA after July 1, 2012. A provision of the law requires manufacturers to recall prohibited products and reimburse the retailer or any other purchaser for the product. **Wisconsin**

Senate Bill 271 (2010)

Enacted in March 2010, Wisconsin S.B. 271 prohibits the manufacture or sale at wholesale and retail of empty baby bottles and spill-proof cups for use by children 3 years of age or younger that contain BPA after June 15, 2010. Manufacturers of these products also must conspicuously label each product as not containing BPA.

Other Jurisdictions

- Massachusetts does not regulate BPA in consumer products but the state's Department of Public Health issued a public health advisory in August 2009 warning parents of infants and young children to avoid storing infant formula or breast milk in plastic bottles containing BPA.
- Canada banned BPA in baby bottles in August 2008.
- Chicago banned the sale of baby bottles containing BPA in May 2009.
- Suffolk County, New York banned baby bottles containing BPA in April 2009.

Source: NCSL Policy on Restrictions on Bisphenol-A







Inexpensive alternatives to BPA can-linings do exist

While chemical manufacturers and the canned food industry may claim otherwise, BPA-free can-liners do exist and are not prohibitively expensive.

Case study 1: Eden Foods

- Eden Foods Inc., a US natural foods company, uses non-BPA coatings in their cans of organic bean cans. According to the company's website: "Eden Organic Beans are packed in steel cans coated with a baked on oleoresinous (a natural mixture of an oil and a resin extracted from various plants, such as pine or balsam fir) c-enamel lining, that does not contain bisphenol-A" (Eden 2008).
- Eden' website notes that the BPA-free coatings are only 14% more expensive than BPA-based coatings (Eden 2008). An industry wide shift towards these oleoresinous linings would almost certainly make the price even more competitive with BPA-containing coatings.

Case study 2: Japanese canned food manufacturers

- According to a 2003 Environmental Health Perspectives study, "BPA contamination of canned beverages and foods became a matter of concern in Japan, and in 1997 most major manufacturing companies changed the interior can coatings to eliminate or reduce the use of BPA" (Matsumoto et al. 2003).
- Japanese manufacturers changed the inner surface of the cans from BPA-containing EXR coatings to PET (polyethylene terephthalate) film lamination (RCCRM 2005). PET is a polymer resin commonly used in soda bottles. Prices for PET are considerably lower than BPA in the current Asian market. BPA prices average around \$1,850/MT while prices for PET are only \$1,375/MT (ICIS 2007).
- Efforts to reduce human exposure to BPA have paid off in Japan. A 2002 study analyzing urine samples from Japanese university students in 1992 and 1999 found that BPA levels were more than 50% lower in 1999, and the probability of detecting BPA was no longer associated with the consumption





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of warm beverages often sold in cans in Japan (Matsumoto et al. 2003).

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Testimony of Jeb Oehlke North Dakota Chamber of Commerce HB 1332 January 25, 2011

Chairman Weisz and members of the House Human Services Committee, my name is Jeb Oehlke. I represent the North Dakota Chamber of Commerce, the principal business advocacy group in North Dakota. Our organization is an economic and geographical cross section of North Dakota's private sector and also includes state associations, local chambers of commerce, economic development organizations, convention and visitors bureaus, and public sector organizations.



The business community stands in opposition to HB 1332 because we do not believe the findings of research conducted around the world supports the ban on products containing bisphenol-A (BPA) which this bill proposes. As shown by the attachments to my testimony, a number of regulatory bodies world-wide have assessed the science on BPA research, none of them have found that BPA is unsafe in its current uses.

In fact, Dr. Joshua Sharfstein of the US Food and Drug Administration stated: "If we thought it (BPA) was unsafe we would be taking strong regulatory action" and "the FDA supports the use of baby bottles with BPA."

Thank you for the opportunity to express the business community's opposition for HB 1332. We ask for a do not pass recommendation from the committee. I am happy to answer any questions at this time.

2 Attachments

The Voice of North Dakota Business

PO Box 2639 Bismarck, ND 58502 Toll-free: 800-382-1405 Local: 701-222-0929 Fax: 701-222-1611 www.ndchamber.com_ndchamber@ndchamber.com



BISPHENOL A OVERVIEW

Regulatory bodies around the world have assessed the science on bisphenol A (BPA). Not one has concluded that BPA has been proven to be unsafe in its current uses. Products made with BPA contribute to the health and safety of Americans and contribute more than 100,000 jobs totaling \$6.1 billion in wages to the US economy.

1. <u>US Food and Drug Administration and Department of Health and Human Services reaffirmed that</u> <u>"BPA is not proven to harm children or adults" (January 2010).</u>

According to FDA: "Studies employing standardized toxicity tests have thus far supported the safety of current low levels of human exposure to BPA." As further noted by Dr. Joshua Sharfstein of FDA: "If we thought it was unsafe, we would be taking strong regulatory action" and "the FDA does support the use of baby bottles with BPA."

In recognition of some concerns related to effects reported in certain recent studies, FDA is carrying out in-depth studies in conjunction with the National Toxicology Program to answer key questions and clarify uncertainties. In the interim, FDA is taking reasonable steps to reduce human exposure to BPA in the food supply and stated:

"Given that these are preliminary steps being taken as a precaution, it is important that no harmful changes be made in food packaging or consumption, whether by industry or consumers, that could jeopardize either food safety or reduce access to and intake of food needed to provide good nutrition, particularly for infants."

2. <u>Regulatory bodies around the world have assessed the science on BPA and have determined that BPA is safe for use in food contact products.</u>

- European Food Safety Authority (September 2010)
- European Commission Risk Assessment (June 2008)
- Swiss Federal Office of Public Health (February 2009)
- French Food Safety Authority (February 2010)
- Dutch Food and Consumer Product Safety Authority (November 2008)
- Danish Environmental Protection Agency (October 2008)
- German Federal Institute for Risk Assessment (January 2010)
- > Food Standards Australia and New Zealand (November 2010)
- > Japanese National Institute of Advanced Industrial Science and Technology (November 2005)
- Health Canada (October 2008, July 2009, August 2010)
- After reviewing all the latest scientific evidence on BPA, an international panel of experts organized by the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO) concluded that "initiation of public health measures would premature." The panel also concluded that BPA does not accumulate in the body, is rapidly eliminated in urine, and that it is difficult to interpret the relevance of studies claiming adverse health effects from BPA.
- Prohibition of polycarbonate baby bottles in Canada (2010) and Europe (2011) are based on precaution. The Health Canada scientific assessment concluded that exposure to BPA, including from baby bottles, is below levels that pose a risk. Similarly, the European Food Safety Authority recently reconfirmed its position that polycarbonate and epoxy food contact products, including baby bottles, are safe.
- In July 2009 a panel of independent scientific experts convened by the California EPA's Office of Environmental Health Hazard Assessment unanimously concluded that BPA should not be listed as a reproductive or developmental toxicant under California's Proposition 65 law.



January 2011

- In March 2010, the US Environmental Protection Agency (EPA) released a BPA "Action Plan" that outlines EPA's review of BPA and their plan for follow-up actions. Notably, EPA did not propose any actions, regulatory or otherwise, regarding human health but will continue to coordinate with FDA and other agencies.
 - Existing food safety programs are already precautionary they use safety factors, typically between 100 and 1000, to create a margin of safety between public exposure and levels that cause effects in laboratory animals.

For example, the European Food Safety Authority (EFSA) set a Tolerable Daily Intake (TDI) by applying a safety factor of 100 to the No-Observed-Adverse-Effect-Level from laboratory animal studies. The TDI is the amount of BPA a consumer (including infants) can safely ingest without harm over a whole lifetime.

- A consumer would have to ingest more than 500 pounds of food and beverages in contact with BPA every day for a lifetime to exceed the TDI set by EFSA
- > A 22 pound infant would have to drink more than 423 4 oz bottles per day to exceed the TDl

3. Products Made with BPA Contribute to the Health and Safety of Americans

- Epoxy resins are used as a protective coating in most metal food and beverage containers to help prevent corrosion and contamination, avoid food spoilage and provide a shelf life of two years or more.
 - Canned infant formula is provided to more than 8 million low-income women, infants and children at nutritional risk under the federal Special Nutrition Program for Women, Infants and Children (WIC)
- Shatter-resistant polycarbonate plastic can be found in many products that contribute to health and safety:
 - > Plastic bottles and cups without the risk of cuts from broken and chipped glass
 - Sports safety glasses (polycarbonate lenses are recommended by the American Academy of Ophthalmology)
 - > Helmets
 - > Sports safety equipment, such as face shields and face guards
 - > Life-saving medical devices such as incubators and kidney dialysis machines
 - Blast and bullet resistant shielding to protect government officials, police, prison officials, military personnel, as well as bank tellers and convenience store clerks
- Polycarbonate is used to make lightweight products such as automotive parts that save energy and reduce greenhouse gas emissions.

4. BPA Makes an Important Contribution to U.S. Economy (2007 data)

- Along with 9 plants that manufacture BPA, polycarbonate plastic or epoxy resins, approximately 1,400 downstream facilities in the U.S. process polycarbonate or epoxy into finished products nearly all states are represented with an investment value of \$6 billion.
- More than 39,000 workers are employed *directly* in chemical processing and plastic/resin facilities and downstream fabrication facilities.
- An additional 64,700 workers are employed *indirectly*. These individuals are employed in the wide network of supplier industries that provide goods and services (raw materials, utilities, capital goods, services) to businesses that rely on polycarbonate plastic and epoxy resins.
- \$6.1 billion in total wages (direct and indirect employment).
- Over \$1.3 billion in federal/state/local taxes, plus \$894 million in Social Security and Medicare taxes are paid in relation to the 39,000 workers directly employed in chemical processing and plastic/resin facilities and downstream fabrication facilities.



January 2011



GOVERNMENT AND INDEPENDENT SCIENTIFIC ASSESSMENTS OF BISPHENOL A

United States

• U.S. Food and Drug Administration (FDA) and Department of Health and Human Services (HHS) – In January 2010, FDA and HHS reaffirmed that "BPA is not proven to harm children or adults."

As stated by FDA: "Studies employing standardized toxicity tests have thus far supported the safety of current low levels of human exposure to BPA." As further noted by Dr. Joshua Sharfstein of FDA: "If we thought it was unsafe, we would be taking strong regulatory action" and "the FDA does support the use of baby bottles with BPA."

In recognition of some concern related to effects reported in certain recent studies, FDA is carrying out in-depth studies in conjunction with the National Toxicology Program to answer key questions and clarify uncertainties. In the interim, FDA is taking reasonable steps to reduce human exposure to BPA in the food supply and stated:

"Given that these are preliminary steps being taken as a precaution, it is important that no harmful changes be made in food packaging or consumption, whether by industry or consumers, that could jeopardize either food safety or reduce access to and intake of food needed to provide good nutrition, particularly for infants."

- U.S. Environmental Protection Agency (EPA) In March 2010, EPA released a BPA "Action Plan" that outlines EPA's review of BPA and their plans for follow-up actions. Notably, EPA did not propose any actions, regulatory or otherwise, regarding human health but will continue to coordinate closely with FDA, CDC and NIEHS.
- U.S. National Toxicology Program (NTP) The September 2008 NTP final report on the potential for BPA to affect human reproduction or development found no direct evidence for health effects in people. It also confirmed that human exposure to BPA is very low.

On a standard five-level scale ranging from 'serious concern' to 'negligible concern,' NTP reported no concerns for any age group at the top two levels and only negligible concern for adults. Based on what NTP characterized as limited and inconclusive evidence from laboratory animal studies, NTP expressed 'some concern' regarding effects on the brain, behavior, and the prostate gland but noted that additional research is needed to better understand whether these findings are of any human health significance. The NTP report is designed to serve as a resource to regulatory agencies and has specifically been considered in FDA's ongoing safety assessment.

- California Proposition 65 In July 2009 a panel of independent scientific experts convened by the California EPA's Office of Environmental Health Hazard Assessment unanimously concluded that BPA should not be listed as a reproductive or developmental toxicant under California's Proposition 65 law. That law can require warnings when listed substances are present in consumer products. The panel's decision was based on their own review of the scientific evidence on BPA, including their assessment of the NTP report.
- NSF International (a not-for-profit public health and safety organization) In February 2008, NSF published its comprehensive safety assessment of BPA and set a safe intake level for BPA in drinking water. That level is comparable to the level established by the European Food Safety Authority for BPA in food. The assessment was led by Dr. Calvin Willhite, a respected scientist with the California Department of Toxic Substances Control.
- In October 2008, an expert scientific panel, convened by Gradient Corporation, published the results of its weight-of-the-evidence evaluation of low-dose reproductive and developmental effects of BPA. This evaluation is the third in a series that began with an evaluation, published in 2004, by an independent panel of scientific experts organized by the Harvard Center for Risk Analysis. Based on its review of scientific literature available through July 2008, the panel concluded: "The weight of evidence does not support the hypothesis that low oral doses of BPA adversely affect human reproductive and developmental health."



January 2011

WHO and FAO

In November 2010, an international panel of experts organized by WHO (World Health Organization) and FAO (Food and Agriculture Organization of the United Nations) reviewed all the latest scientific evidence on BPA and concluded that "*initiation of public health measures would be premature*." The experts also concluded that BPA does not accumulate in the body, is rapidly eliminated in urine, and that it is difficult to interpret the relevance of studies claiming adverse health effects from BPA.

Canada

• Health Canada – In October 2008, the Canadian government announced the conclusion of its screening risk assessment stating: "The current research tells us the general public need not be concerned. In general, most Canadians are exposed to very low levels of bisphenol A, therefore, it does not pose a health risk."

With respect to infants under 18 months, it said "[s]cience tells us that exposure levels are below those that could cause health effects; however, due to the uncertainty raised in some studies relating to the potential effects of low levels of bisphenol A, the Government of Canada is taking action to enhance the protection of infants and young children." Based on precaution, Health Canada is working with industry to achieve the lowest reasonably achievable levels of BPA in infant formula, and has recently finalized a regulation to ban polycarbonate baby bottles. The ban applies only to baby bottles and not to other polycarbonate bottles, tableware and food containers.

In 2009-2010, Health Canada released a series of reports with new data on BPA in baby food, infant formula, canned food and beverages, and bottled water. According to Health Canada, these new data confirm Health Canada's previous conclusion that "the current dietary exposure to BPA through food packaging is not expected to pose a health risk to the general population, including infants and children."



Europe .

• European Food Safety Authority (EFSA) - In September 2010, EFSA released a comprehensive updated scientific assessment of BPA that was conducted by a panel of independent scientific experts from throughout the European Union. The panel concluded they "could not identify any new evidence which would lead them to revise the current Tolerable Daily Intake," which is a safe intake level.

In 2007, the panel <u>increased</u> by a factor of five the safe intake level established in 2002, based on the panel's view that recent data provided more certainty about the safety of BPA. With interim updates in 2008, EFSA reconfirmed its position that polycarbonate and epoxy food contact products are safe for their intended uses, stating that the TDI *"provides a sufficient margin of safety for the protection of the consumer, including fetuses and newborns."*

Similar to Canada, the European Commission has recently decided on a precautionary ban on polycarbonate baby bottles. However, the Commission has also confirmed that there is no scientific evidence to support extending the ban to any other products.

- The French Food Safety Authority (AFSSA, February 2010), the Danish Environmental Protection Agency (October 2008), the German Federal Institute for Risk Assessment (January 2010), the Dutch Food and Consumer Product Safety Agency (November 2008), and the Swiss Federal Office of Public Health (February 2009) have all re-evaluated BPA in light of recent studies and government decisions; all conclude that BPA is safe for use in food contact applications. Based on precaution, Denmark has implemented a temporary ban on food contact products for infants in Denmark; a recent Danish expert review found no clear evidence for harmful effects.
- European Union In June 2008, an updated comprehensive European Commission Risk Assessment Report
 confirmed that BPA does not pose a risk to the general public from all current sources of exposure, including use of
 polycarbonate plastic and epoxy resins in consumer products. No bans or restrictions were proposed based on this
 assessment. The update takes into account the latest scientific studies available (through 2007) and completes a
 comprehensive assessment undertaken on BPA over 10 years.



<u>Japan</u>

- Japanese National Institute of Advanced Industrial Science and Technology (affiliated with the Japanese Ministry of Economy, Trade and Industry) In November 2005, a comprehensive report confirmed no risk of BPA to human health, including infants and children, and noted that no bans or restrictions are needed.
- Japanese Ministry of Environment In 2005, based on its own comprehensive testing, the Ministry concluded that
 there were no clear endocrine disrupting effects found at low doses and that no regulatory action is required to
 manage risks.

Australia and New Zealand

- Food Standards Australia New Zealand (FSANZ an independent statutory agency responsible for setting food standards in the two countries) In November 2010, FSANZ reaffirmed the safety of BPA and stated: "FSANZ has evaluated the safety of BPA in food, including that consumed by infants and concluded that levels of intake of BPA are very low and do not pose a significant human health risk for any age group."
- Australian Competition & Consumer Commission (ACCC the Australian regulatory agency responsible for consumer product safety) ACCC recently stated: "The weight of scientific evidence currently available indicates that BPA in plastics does not present a risk to human health."





中心

January 24, 2011

The Honorable Todd Porter 4604 Borden Harbor Drive SE Mandan, ND 58554-7961

RE: BPA in food and beverage contact containers

Dear Representative Porter:

On behalf of the Grocery Manufacturers Association, I am writing in opposition to House Bill 1332 sponsored by Representative Holman, which would ban a variety of food and beverage products and their packaging that may contain bisphenol-A (BPA).

GMA is the voice of the leading food, beverage and consumer product companies that sustain and enhance the quality of life for hundreds of millions of people in the United States and around the globe.

Founded in 1908, GMA is an active, vocal advocate for its member companies and a trusted source of information about the industry and the products consumers rely on and enjoy every day. The association and its member companies are committed to meeting the needs of consumers through product innovation, responsible business practices and effective public policy solutions developed through a genuine partnership with policymakers and other stakeholders.

In keeping with its founding principles, GMA helps its members produce safe products through a strong and ongoing commitment to scientific research, testing and evaluation and to providing consumers with the products, tools and information they need to achieve a healthy diet and an active lifestyle.

The food, beverage and consumer packaged goods industry in the United States generates sales of \$2.1 trillion annually and employs 14 million workers.

BPA is an ingredient that has been used in combination with other substances in the production of certain plastics and resins for more than 40 years. Some examples are polycarbonate, a clear, rigid, lightweight plastic used for beverage bottles and cups, and protective epoxy coatings that line the inside of food and drink cans and the tops of jar lids. These protective coatings help maintain the safety and quality of canned foods and beverages by preventing the contents from reacting with the metal that forms the can. The use of protective can linings slows down the rate of these interactions so much that modern canned foods, even high acid foods like fruits and vegetables, can be counted on to retain their nutrition, quality and consumer acceptability for years under a wide range of environmental and handling conditions.

The U.S. Food & Drug Administration (FDA) and food regulators around the world (e.g. European Food Safety Authority (EFSA), Germany, Japan, UK and Canada), including the World Health Organization (WHO) have repeatedly confirmed the safety of BPA in light of new studies and the World Health Organization (WHO) have all evaluated and approved the safety of BPA. FDA approves BPA for use in food contact applications, and for more than 40 years, it has played

GROCERY MANUFACTURERS ASSOCIATION



an essential part in food preservation. Even California's Developmental and Reproductive Toxicant Identification Committee experts recently reviewed all the scientific evidence on the safety of BPA and determined that BPA should not be listed as a reproductive or developmental toxicant under Proposition 65. GMA is confident that the risk-analysis approach utilized by national and international regulatory agencies around the world to evaluate the risk associated with BPA exposure is scientifically sound and appropriate.

Extensive studies have also looked at the potential for BPA to migrate from can coatings and food containers into various kinds of foods under various conditions. After careful review of available data, and using conservative estimates of dietary exposures based on migration into food under intentionally exaggerated test conditions, experts have concluded that human exposure to these substances from food packaging is minimal and poses no risk.

In February of 2007, the European Food Safety Authority completed its review of new studies published since 2002 and finalized a Tolerable Daily Intake (TDI), or safe daily exposure level, for BPA. The new data included a reproduction study in mice that followed offspring for 2 generations. The EFSA TDI is 0.05 mg/kg bodyweight/day. EFSA found that exposure to BPA in the diet is well below the TDI. This is true for all population groups including infants and children, who have the highest potential dietary exposure relative to body weight of any population group. EFSA found that a 3-month old baby weighing 6 kg (13.2 lb) would have to consume more than 4 times the normal number of bottles of formula per day to reach the TDI.

Additionally, in July and October of 2008, the EFSA's panel that examines food contact substances concluded, in response to two requests to re-examine BPA's safety and to a recent report in the Journal of the American Medical Association, that there is no need to reestablish new TDI levels. EFSA concluded a causal link between the diseases addressed in the JAMA report and low exposures of adults to BPA cannot be established. EFSA reported that there are significant metabolic differences between humans and rodents, and the fact that people metabolize and excrete BPA far more quickly than rodents reduces the relevance of low-dose studies when considering human TDI for BPA. The EFSA also looked at the U.S. National Toxicology Program's draft brief on BPA and Canada's action on BPA when making their conclusions. Highlighting the scientific inconsistencies with Canada's decision on BPA, EFSA's former AFC panel (the panel on additives, flavorings, processing aids and materials in contact with food) reported, "The Canadian risk assessment takes a precautionary approach for these sensitive life stages, taking into account the findings in the low-dose studies, although commenting that these are limited in rigor, consistency and biological plausibility."

The Canadian actions, amplified by the Environmental Working Group and a host of nongovernmental organizations and activist groups, have sparked a tidal wave of negative news coverage that has been successful in creating consumer confusion and unnecessary alarm and policymaker activity. In response, the FDA is conducting its own research and BPA safety assessment update.

Contrary to media reports, there is no replacement for BPA that will work for all food packaging applications, because food formulations and processing requirements differ. An important benefit of modern canning technology is the availability of food that is economical and stays safe, nutritious, and wholesome for 2-3 years or more. The process to find a replacement for BPA that will work in all applications could take many years depending upon the composition of the alternative materials. An immediate ban on BPA will result in the loss of safe and necessary canned and jarred consumer products like the following:

• Infant formula, liquid and powder

- Baby food
- Yogurt
- Applesauce
- Ice cream
- Fruits
- Vegetables
- Sauces
- Olives
- Pickles
- Tuna and other seafood
- Pasta
- Beans
- Soup
- Chili
- Whipped Toppings
- Chicken
- Sausages
- Meats
- Milk, condensed and evaporated
- Juice
- Items sold in plastic or paper with a metal peelable lid, or any jar with a "pop seal" lid would also likely be impacted.

GMA supports the FDA's advice to consumers that food and beverages in packages using bisphenol A (BPA) as a food safety barrier are safe and that packaging that may contain trace amounts of BPA are safe for use with food. We agree with FDA that there is no need for consumers to change their purchasing or consumption patterns.

For these reasons, GMA strongly opposes the proposal in House Bill 1332 that would ban BPA in certain food and beverage products and asks you to reject this legislation. Thank you for considering GMA's comments.

Sincerely,

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Kevin Fisk Director, State Affairs