Phil's Forum 4/23/08 Baby Bottles and BPA

Twenty six point two miles, your rubbery legs finally collapse as you cross the line. You dreamt of this moment for the past year, but now you're too tired to raise your arms in celebration. Your heart is pounding, your chest is heaving and your mouth is too dry to spit. But you did it! And three minutes faster than your goal.

Thirst, undying thirst, you need water. Your family is there to congratulate you, they know how hard you worked for this. They supported you on the rainy days when you didn't want to go out, on the days when snow and sleet made each step precarious. And now they're here when you need them most, bringing you water, two, three, four, five bottles. You're parched and you drink quickly.

Inside your cells, the water rushes in, but something is missing – electrolytes. The imbalance causes your cells to swell, which causes that pounding heart to beat irregularly, and lets fluid into your taxed lungs and airways. Something's not right… You faint, only to wake up in a hospital room with the same family & friends around you, only now the looks on the faces are ones of relief, not congratulations.

"What happened?" you ask.

"Water Intoxication," says the nurse. "You drank too much water, too quickly."

Wait, you mean there is such a thing as too much water? Of course there is. Too much of *anything* can be deadly. And although this story is an extreme example, sometimes it takes extremes to help people see the bigger picture. You can be harmed by *anything done to excess*. Mom always told you, "…everything in moderation."

The funny thing is how quickly we forget what mom said when we hear stories about the dangers of this, that or the other thing. Take baby bottles, for example.

Polycarbonate plastics have been around since 1957, used in the food industry, for medical storage containers, and, yes, baby bottles. Why polycarbonate? It makes the bottle shatter-proof. You can knock it over, drop it, kick it across the floor. It allows the bottle to be cooled (frozen) without breaking, heated without melting, even boiled or microwaved (not that you should ever microwave breast milk or baby formula).

The problem with polycarbonate, some say, is the presence of a chemical that helps give it these properties called Bisphenol-A (BPA for short).

BPA, like all chemicals (even water), has been proven to be harmful in large quantities. Apparently it disrupts the reproductive system in laboratory animals at high dosages. Fortunately, many studies have been done to determine what levels of BPA are considered safe, and those levels have been well established throughout the world.

Still, some people believe the chemical should be banned from use. They claim that it migrates from the plastic into food or liquid stored in a polycarbonate container. The push has been for moms to go back to glass bottles; bottles that break when dropped, bottles that have been documented to have caused cuts and lacerations, bottles that potentially break in the freezer, or crack while rapidly changing temperature from frozen to warmed, bottles that often do not come with the advantages of the nipple types found on many of the current baby bottles on the market – all because of the fear of harm from BPA.

Let's go back to the initial premise – everything in moderation. Take chlorine, for example. We all know that chlorine in high levels will kill you. Just look at the warning label on your bottle of bleach in the laundry room. Yet, chlorine is used throughout the world (and here in Jackson) to purify our drinking water. Without chlorine, we would be susceptible to many water-borne diseases. Banning chlorine just because in high levels it is dangerous wouldn't make sense, would it? The benefits far outweigh the dangers – as long as proper safeguards are in place.

Yet this is the same thing that the opponents of BPA are suggesting. And so far, through fear and misinformation they have been successful. Some stores have stopped selling polycarbonate bottles. Some states have considered banning BPA. Canada is looking at the issue right now.

The problem is that the facts don't stand up to the fears being spread.

Two thoughts to consider…

First, it is well-documented by the scientific community throughout the world *(University of Athens, Harvard University, Norwegian Food Safety Authority, TNO – a prominent Dutch research organization, Official Food Control Authority of the Canton of Zurich, Switzerland, European Food Safety Authority, US National Toxicology Program, Japanese National Institute of Health Sciences among others)* that BPA cannot/does not migrate out of the bottle into the milk under any circumstances to a level even remotely approaching dangerous. Under rigorous study conditions, including microwave ovens, dishwashers with high-temp/sanitize settings, even continued exposure to high heats over a 24 hour period, BPA could only be found at levels 4,000 times lower than what is considered safe.

Second, if all of these testing agencies were wrong, if BPA did migrate out unsafely, wouldn't we have seen the effect by now? Wouldn't there be an epidemic? Polycarbonate bottles have been on the market for five decades. Polycarbonate plastic has been used in the food industry for five decades, in the medical industry for five decades. Where are the real-life results?

The truth is that there is nothing to fear from BPA in baby bottles.

To paraphrase an old saying, don't throw out the baby bottles with the bath water. And don't be swayed by fear. Look at the facts and use your common sense. Polycarbonate baby bottles are safe. Always have been.

Happy Shopping!

Phil Wrzesinski

(PS if you would like to read more about BPA, go to www.bisphenol-a.org. Yeah, I know it's a site put up by the supporters of BPA, but their site does a great job of detailing all the studies done on BPA.)