Exposure to plastics chemical BPA may raise diabetes risk

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A common plastic chemical might increase a person's risk of diabetes, a

new study warns.

People fed small doses of Bisphonol A (BPA) developed significantly worse insulin sensitivity within a four-day period, researchers found.

"We were surprised to see that reducing BPA exposure, such as using stainless steel or glass bottles and BPA-free cans, may lower diabetes risk," said researcher Todd Hagobian, chair of kinesiology and public health at California Polytechnic State University.

For the study, researchers directly tested the "safe dose" for BPA set by the U.S. Food and Drug Administration, which is 50 micrograms for every kilogram of body weight.

BPA is used to make plastics for a range of consumer products like baby bottles, food containers, pitchers and tableware. BPA is also known to disrupt hormone levels in humans, which can increase the risk of type 2 diabetes.

For decades, there have been concerns about the effects of BPA on humans. In 2012, the FDA banned the use of BPA in baby bottles and sippy cups over the effect the chemical might have on child development.

However, the FDA maintains that "the available information continues to support the safety of BPA for the currently approved uses in food containers and packaging," according to the agency's website.

In the study, the team recruited 40 healthy young adults and randomly assigned half of them to take oral BPA at the FDA's safe level for four days, or a placebo. Over the four days, body weight and blood sugar levels did not change significantly between the two groups. However, the BPA group experienced a significant decrease in insulin sensitivity

compared to the control group, results show.

"These results suggest that maybe the U.S. EPA safe dose should be reconsidered and that health care providers could suggest these changes to patients," Hagobian said.

Researchers presented these findings Friday at the American Diabetes Association's annual meeting in Orlando, FL. Such research is considered preliminary until published in a peer-reviewed journal.

"With the increase in diabetes in the U.S., it is our duty to ensure safety within our products and in our homes," Dr. Robert Gabbay, chief scientific and medical officer of the American Diabetes Association, said in a meeting news release. "This is only the beginning of highlighting the need for informed public health recommendations and policies."

Researchers next plan to see if a lower BPA dose over several weeks or months increases diabetes risk. They also want to test whether aerobic exercise can reverse or overcome the negative effects of BPA.

More information: The Environmental Protection Agency has more on BPA.

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