Trace heavy metals in plastics could lead to long-term environmental problems

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The trace amounts of toxic substances used to make plastics don't contaminate the food or beverage products they contain at a significant level and pose no immediate threat to consumers, according to recent Iowa State University research.

That's good news for anyone who buys any number of processed foods and beverages. But the bad news is that those plastic products may cause health concerns decades after they've been used and thrown in the trash bin.

The findings highlight the need to use properly sourced plastics and increase recycling efforts to reduce the overall environmental impact, said Keith Vorst, an associate professor of food science and human nutrition at Iowa State.

Vorst said toxic materials such as heavy metals leach out of the plastic as the products decay over a span of years, creating what Vorst calls "end-of-life" problems. If the plastics make their way to a landfill or a body of water, for instance, the heavy metals they contain may pollute drinking water or have other environmental repercussions, he said.

"We found that these metals are in the packaging, but they're not getting into the food or beverage products," Vorst said. "But we did turn up end-of-life issues. As the plastic breaks down, the heavy metals can be released."

Provided by Iowa State University