Foodservice Packaging and… Styrene

Foodservice packaging is made from a wide variety of materials. These products go through rigorous testing to ensure that they meet stringent regulations, ensuring the safe delivery of foodservice items to consumers.

However, there has been some confusion over the safety of polystyrene with the inclusion of “styrene” in the National Toxicology Program’s (NTP) 12th Report on Carcinogens in 2011.

Styrene is naturally present in foods such as strawberries, peaches, cinnamon, beef and coffee and is produced in the processing of foods such as beer, wine and cheese. It is also used to make polystyrene, a material used to make some foodservice packaging.

Polystyrene has been used in foodservice products like foam coffee cups, takeout containers and cutlery for more than five decades. During that time, polystyrene has been reviewed by various regulatory agencies and scientific bodies, which have deemed it safe for use in contact with food.

The NTP stated in its own report that “It is important to note that the reports do not present quantitative assessments of carcinogenic rise...Listing in the report does not establish that such substances present a risk to persons in their daily lives. Such formal risk assessments are the purview of the appropriate federal, state, and local health regulatory and research agencies.” So NTP did not conclude that styrene or plastic foodservice packaging made with styrene present any risk to human health.

Following the NTP report publication, several additional statements were released confirming the safety of polystyrene:

- The U.S. National Institutes of Environmental Health Sciences noted “Styrene should not be confused with polystyrene (styrofoam). Although styrene, a liquid, is used to make polystyrene, which is a solid plastic, we do not believe that people are at risk from using polystyrene products.”

- The toxicologist who heads NTP stated “Let me put your mind at ease right away about Styrofoam,” noting that levels of styrene from polystyrene containers “are hundreds if not thousands of times lower than have occurred in the occupational setting...In finished products, certainly styrene is not an issue.”

Furthermore, in 2013 the American Chemistry Council’s Plastics Foodservice Packaging Group provided updated styrene migration data to the Food & Drug Administration (FDA). The data show that current exposures to styrene from the use of polystyrene food contact products remain extremely low, with the estimated daily intake calculated at 6.6 micrograms per person per day. This is more than 10,000 times below the safety limit set by FDA (the FDA’s acceptable daily intake value of styrene is calculated to be 90,000 micrograms per person per day).

For more general information on styrene, please visit the Styrene Information and Research Center website at www.styrene.org and www.youknowstyrene.org.

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