The Media Fell For It Again

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According to the headline on a recent press release, exposure to common chemicals in plastics is linked to childhood obesity. The headline further states that a new study "*finds replacement chemicals for BPA aren't safe for consumers*." Not surprisingly, journalists uncritically took the bait and reported the story just as written in the press release.

Maybe they should have read beyond the headline because there's much less to the story than meets the eye. The underlying premise for the new study is that BPA (bisphenol A) has been "*identified as an obesogen*" and is being replaced with other chemically similar bisphenols, in particular bisphenol S (BPS) and bisphenol F (BPF).

The term "obesogen" was coined about 10 years ago to describe substances that can disrupt metabolic processes in the body and potentially lead to obesity. Research on the topic is at an early stage and for now there is not a clear consensus on the definition or public health implications of obesogens.

The story starts to fall apart with the reference in the headline to common chemicals in plastics. There is little or no basis in fact that BPF and BPS are being used as replacements for BPA, and certainly no basis to say that these substances are commonly present in plastics.

And it only goes downhill from there. Although the first sentence in the scientific paper claims that BPA is an obesogen, it is stated later in the same paragraph that BPA

was "*not statistically significantly associated with general obesity, abdominal obesity, or any body mass outcome.*" In other words, BPA was not associated with obesity in this study, in direct conflict with the start of the paragraph.

Most importantly though is a major limitation of the study that is highlighted in the scientific paper but without even a hint in the press release. The limitation is important enough that it is repeated in its entirety below.

"*As with the previous studies on this topic, our results should be interpreted with caution.* ***The cross-sectional design precludes our ability to infer whether exposure to bisphenols may influence weight gain or obesity, or whether obese children may have greater exposures to or excretion of bisphenol compounds.*** *The methodologic issues involved in the study of this relationship have been well described*." (emphasis added)

Put more simply, the study, by design, is incapable of identifying any substance as an obesogen. The study only examines statistical associations but with no capability whatsoever of establishing a cause-effect relationship between any substance and obesity. As important as it is, that limitation is entirely missing from the press release and media coverage of the study.

Given this significant limitation, it should go without saying that the study is also incapable of assessing the safety of BPA or the so-called replacement chemicals. Support for the bold assertion in the headline about the safety of the replacement chemicals is a complete mystery. The press release doesn't provide an explanation and the scientific paper doesn't even mention the word "safety" much less evaluate safety.

As to the safety of BPA itself, the views of the U.S. Food and Drug Administration and other regulatory authorities around the world are very clear and well documented. These authorities consistently find that BPA is safe as used. You won't find that in the press release either.