



Date: January 16, 2014

Story: More than 24,500 chemicals found in bottled water

Outlet: Fox News.com

Link:

<http://www.foxnews.com/health/2014/01/13/more-than-24500-chemicals-found-in-bottled-water/#content>

Study Abstract:

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0072472>

IBWA Comment:

Your article cites an August 2013 German study, the factual conclusions of which you significantly misrepresent. In addition, your article's title makes a thoroughly inaccurate claim that has no basis in the study's actual results.

The figure of 24,520 to which you refer is in fact the number of compounds in a mass spectral computer library against which the chemical composition of the water samples was compared. A mass spectral library takes the testing results and provides a probable assessment for identification of those chemical components in the water. The mass spectral computer library contains the profiles of 24,520 chemicals against which the water sample is evaluated. In this study, only a single chemical, DEHF, was identified by the mass spectral library with any reliable probability.

The researchers also referred to DEHF as an endocrine disrupting chemical (EDC). The study's authors claimed that other EDCs may be present in the samples, but were not actually able to identify or measure them. The study's findings show that the authors had insufficient information to indicate any connection to bottled water and drew no conclusions concerning any health effects. Martin Wagner, one of the study's authors even stated, "Based on the current knowledge, we cannot conclude on potential health risks associated with the EDCs in bottled water."

Peer reviews by other scientists yielded similar conclusions. In a commentary also published in the "Journal of Steroid Biochemistry and Molecular Biology," Dr. John Heinze states "...it should be remembered that this study, like the authors' 2009 paper, does not provide any qualitative or

quantitative analysis identifying what was in the water to help determine if it came from the packaging, the water itself, or some other source.” In fact, the data in the study appear to point to an environmental source of the EDC rather than from the container itself. It suggests some EDC activity in water packaged in various materials (PET plastic, glass, and cartons) without drawing any conclusions on the health effects of the chemical (DEHF) identified, and without any data regarding adverse effects, if any, of DEHF on the health of humans.