

Letter to the Editor

The Potential Danger of Flavoring in Health Promoting and Health Compromising Products: Implications for Children

*Corey Hannah Basch¹, Charles E Basch²

¹Department of Public Health, William Paterson University Wing 143, Wayne, NJ 07470, USA

²Department of Health and Behavior Studies, Teachers College, Columbia University, New York, NY 10027, USA

(Received: Dec 27 2014/ Accepted: Feb 19 2015/ e-published: Mar 29 2015)

Citation: Basch CH, Basch CE. The Potential Danger of Flavoring in Health Promoting and Health Compromising Products: Implications for Children. *Health Promot Perspect* 2015; 5(1): 1-2

Dear Editor-in-Chief

In making food choices, children innately gravitate to foods that have a sweet flavor.¹ Yet, flavorings no longer are confined to foods. For example, the sweet flavor present in candy is now widespread in children's vitamins, and medicinal items like cough syrup. Vitamin and mineral supplements are consumed by approximately one-third of children in the United States.² With a myriad of choices including different colors, shapes, candy flavorings, and cartoon characters, young consumers are bound to be satisfied. This, however, presents issues relevant not only to pediatricians, but public health practitioners, and, in the worst-case scenario, emergency care professionals. In 2012, there were nearly 50,000 calls to poison control centers in the United States due to children (those 5 and under) consuming excessive amounts of vitamins.³ Overconsumption of vitamins is a recognized risk, particularly with those that have such a close resemblance to candy.⁴ Similarly, cold and cough preparations accounted for 28, 837 calls regarding pediatric exposures (those 5 and under) to poison control in 2012.³ Flavor-

ings in these products as well often resemble candy, and no doubt, make this product more palatable. While these are products often thought of as health promoting, health professionals may overlook the possible harm of overdose simply because of the nature of the product. However, there is now an emerging concern with potential for children to be drawn to sweet flavoring and risk the possibility of being poisoned by liquid nicotine.

In recent years, e-cigarettes have been marketed as a safer way to smoke or as an adjunctive tool for smoking cessation. The FDA has not yet regulated this claims.⁵ Nicotine, with added flavorings and chemical components come in a liquid form referred to as e-liquid, which is inhaled as an aerosol in e-cigarettes. The amount of nicotine in e-liquid is to be decided by the consumer. It comes in varied flavors, but those of particular interest are e-vapors with flavorings, which attract children, like gummy bear, bubble gum, and cotton candy, which, similar to the children's vitamin have a taste that is not distinguishable from candy.

The Centers for Disease Control, recently reported an astonishing jump in the number of calls to poison centers due to e-cigarette exposure, which was documented as exposure to the actual e-cigarette or the nicotine liquid.⁶ A total of 51.1% of these calls pertained to children under age 5.⁶ According to this report, there was an increase in calls per month for exposure to e-cigarettes, going from one call in September 2010 to 215 in February 2014.⁶ As stated previously, research suggests that innate preference for sweets is part of a child's biology.¹ Unfortunately, discerning whether or not the sweet product is actually a harmful one is not. Greater efforts are needed to protect children from the potential danger of potentially toxic products that mirror those that are not. The Food and Drug Administration banned the sale of cigarettes flavored like candy as part of the Family Smoking Prevention and Tobacco Control Act,⁷ perhaps the logic underlying this law should be applied to other products that have already resulted in harm to children.

Acknowledgements

The author declares that there is no conflict of interests.

References

1. Ventura AK, Mennella JA. Innate and learned preferences for sweet taste during childhood. *Curr Opin Clin Nutr Metab Care* 2011;14:379-384.
2. Shaikh U, Byrd RS, Auinger P. Vitamin and mineral supplement use by children and adolescents in the 1999-2004 National Health and Nutrition Examination Survey: relationship with nutrition, food security, physical activity, and health care access. *Arch Pediatr Adolesc Med* 2009;163:150-157. doi:10.1001/archpediatrics.2008.523
3. Mowry JB, Spyker DA, Cantilena LR, Bailey JE, Ford M. 2012 annual report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 30th annual report. *Clin Toxicol* 2013;51:949-1229. doi:10.3109/15563650.2013.863906
4. Lam HS, Chow CM, Poon WT, Lai CK, Chan KC, Yeung WL, et al. Risk of vitamin A toxicity from candy-like chewable vitamin supplements for children. *Pediatrics* 2006;118:820-824. doi: 10.1542/peds.2006-0167
5. Food and Drug Administration. News and events—electronic cigarettes (e-cigarettes). Silver Spring, Maryland: US Department of Health and Human Services, Food and Drug Administration; 2014. [updated 2014 August 12 ; Accessed 2014 November 23]. Available from: <http://www.fda.gov/newsevents/publichealth-focus/ucm172906.htm>
6. Chatham-Stephens K, Law R, Taylor E, Melstrom P, Bunnell R, Wang B, et al. Notes from the Field: Calls to Poison Centers for Exposures to Electronic Cigarettes — United States, September 2010–February 2014. *Morb Mortal Wkly Rep* 2014;63:292-293. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6313a4.htm>
7. Food and Drug Administration. Candy and fruit flavored cigarettes now illegal in U.S.; step is first under new tobacco law. 2009. [updated 2011 April 27; Accessed 2014 December 8]. Available from: www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm183211.htm