



Challenging obesity relating to Barrett esophagitis

KEY WORDS

Pop, soft drinks, Barrett esophagitis, dysplasia

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In North America, the imbibing of soda pop is acknowledged as a cause of dental erosion¹. Also, consumption of sugar-rich soda in North America is increasing annually². For example, in the United States, 19-year-olds drank 44 gallons of soda on average in 1996 and 56 gallons in 1999—28 ounces daily, with 27% of beverage consumption being a type of cola. All this amounts to a total consumption of more than 14 billion gallons annually in the United States (National Soft Drink Association. 2008).

This increase in pop consumption is also putatively linked to an increase in the prevalence of obesity³. Even though obesity is associated with 100,000 cancers annually in the United States⁴, is it possible that a causal agent other than obesity is also implicated in the prevalence of cancers? Even positing the assumption that obesity somehow does predispose to cancer, could another closely associated, ubiquitous cause of obesity perhaps also contribute to the increase in the prevalence of cancers?

Consider: The number of preventable cancers **avoided** when people remain slender has been estimated. Estimates calculated for esophageal cancer place the number at ~35% of cases—about 5800 people. Others cancers **in the preventable category** include pancreatic, gallbladder, colon, breast, endometrial, and kidney cancers⁵.

In animals, consumption of acid soda pop has been implicated experimentally as a mitogenic stimulant in the esophageal mucosa⁶. Barrett esophagitis results from chronic exposure to gastric acid, is a precancerous condition, and in the United States, is

reportedly increasing in prevalence. Not all Barrett esophagus will develop into esophageal cancer, but the general incidence of this cancer has increased by a factor of 5 over the last 30 years^{7,8}.

Is it possible that prolonged exposure of the esophagus to increased consumption of acidulated soda (acknowledged to cause obesity), with increased direct exposure of the esophageal mucosa to acid pop, is causally related to esophageal carcinoma?

Sincerely,
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