

Calorie Control Council Response to Choi et al
"Fructose-rich beverages and risk of gout in women"

Choi HK, Willett W, Curhan G. Fructose-rich beverages and risk of gout in women. *JAMA*. Nov 24 2010;304(20):2270-2278

In a November 2010 paper, Choi et al.¹ concluded that consumption of fructose-rich beverages is associated with increased risk of incident gout in women. However, their reliance on decade-old sources renders their conclusion obsolete.

The authors admit that risk of gout from fructose-rich beverages is likely modest due to the low incidence rate among women. But close appraisal of the source data should go a step farther and conclude that the entire fructose-gout risk assessment is obsolete. Why? Because Choi et al. rely on outdated soft drink and fructose consumption statistics (author reference 7) and 10-year old food frequency data. The authors analyzed health records (completed every 2 years between 1984 and 2006) and food frequency questionnaires (completed every 2-4 years between 1980 and 2002) from women enrolled in the Nurses Health Study. Note that 2002 questionnaire respondents provided dietary recall for 2001.

In the intervening decade, caloric soft drink consumption and production of fructose-containing sweeteners has significantly declined, which is an important omission. For example, shipments of full-calorie Pepsi-Cola dropped precipitously from a high of 1400 million cases in 1998 to 936 million cases in 2009, a decline of nearly 35%, at a rate that shows no signs of slowing.² And per capita availability of the principal fructose-containing sweeteners (sucrose and high fructose corn syrup) has, likewise, been in decline since 1999.³

It is reasonable to expect that more current food frequency data from this cohort would reflect lower soft drink and fructose consumption, further reducing the risk of gout from modest to inconsequential. Surely the authors' reliance on outdated sources from 10-years ago renders their assessment obsolete as a predictor for present day risk of gout.

References

1. Choi HK, Willett W, Curhan G. Fructose-rich beverages and risk of gout in women. *Jama*. Nov 24 2010;304(20):2270-2278.
2. Beverage Digest. Archives. 2011; <http://www.beverage-digest.com/editorial/archive11.php>. Accessed 3 February, 2011.
3. Loss-adjusted per capita availability: Average daily added sugar and sweeteners from the U.S. food supply, adjusted for spoilage and other waste. <http://www.ers.usda.gov/Data/FoodConsumption/FoodGuideSpreadsheets.htm#sugar>; Updated 1 February, 2010. Accessed 1 February, 2011.