## Choose HEALTH CAlifornia

## The Science is Clear

Overconsumption of Sugar Sweetened Beverages is a direct contributor to DIABETES, OBESITY, STROKE, HEART DISEASE, AND DENTAL CARIES

| TOPIC                     | STUDY  | MAIN CONCLUSION   |
|---------------------------|--|---|
| Obesity & Type 2 Diabetes | Hu, FB. Resolved: there is sufficient scientific evidence that decreasing sugar-sweetened beverage consumption will reduce the prevalence of obesity and obesity-related diseases. <i>Obesity Reviews</i> . 2013;14:606–619. | A review of meta-analyses, prospective cohort studies, and randomized clinical trials. Well-powered prospective study findings consistently show a significant association between SSB consumption, weight gain, and risk of T2D.  Main conclusion: The cumulative evidence from observational studies and experimental trials is sufficient to conclude that regular consumption of SSBs causes excess weight gain and these beverages are unique dietary contributors to obesity and T2D. |
|                           | Woodward-Lopez G, Kao J, Ritchie L. To what extent have sweetened beverages contributed to the obesity epidemic? Public Health Nutrition. Public Health Nutrition. 2011;14(3):499-509.                                       | Literature review of studies showing association between SSB intake and risk of obesity.  Main conclusion: All lines of evidence consistently support the conclusion that the consumption of sweetened beverages has contributed to the obesity epidemic.   |
|                           | Malik VS, Popkin BM, Bray GA, Despres J-P, Hu FB. Sugar-sweetened beverages, Obesity, Type 2 Diabetes Mellitus, and Cardiovascular Disease Risk. <i>Circulation</i> . 2010;121:1356-1364. [Obesity, too]                     | A review of trends in SSB consumption and relationship between obesity, T2D, cardiovascular disease risk.  Conclusion: intake of SSBs should be limited and replaced by healthy alternatives such as water.   |
| Type 2<br>Diabetes        | Hu, F.B. and Malik, V.S. (2010). Sugarsweetened beverages and risk of obesity and type 2 diabetes: Epidemiologic evidence. <i>Physiol Behav</i> , 100.2, 46 – 54.  Malik, V.S., Popkin, B.M., Bray, G.A.,                    | Findings from epidemiological studies clearly indicate that regular SSB consumption can lead to weight gain and substantially increase risk of developing chronic diseases including metabolic syndrome, type 2 diabetes and chronic heart disease.  Persons who drank one to two servings of SSBs per day had  |
|                           | Despres, J.P., Willett, W.C., Hu, F.B. (2010). Sugar-sweetened beverages and the risk of metabolic syndrome and type 2 diabetes: A meta-analysis. <i>Diabetes Care</i> , 33, 2477 - 2483.                                    | a 26% greater risk for developing type 2 diabetes than those who drank no or fewer than one serving per month.  |

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| Heart<br>Disease<br>risk        | Te Morenga L, Howatson AJ, Jones RM, Mann, J. Dietary sugars and cardiometabolic risk: systematic review and meta-analyses of randomized controlled trials of the effects on blood pressure and lipids. AJCN, 2014. | Dietary sugars influence blood pressure and serum lipids.  The relation is independent of effects of sugars on body weight.  |
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| Dental<br>caries                | Moynihan P, Kelly S. Effect on Caries of Restricting Sugars Intake: Systematic Review to Inform WHO Guidelines. <i>JDR</i> . 2009. doi:10.1177/0022034513508954   | Of the studies, 42 out of 50 of those in children and 5 out of 5 in adults reported at least one positive association between sugars and caries. There is evidence of moderate quality showing that caries is lower when free-sugars intake is < 10% E. With the < 5% E cut-off, a significant relationship was observed, but the evidence was judged to be of very low quality. The findings are relevant to minimizing caries risk throughout the life course. |
|                                 |   |  |
| Health<br>(including<br>weight) | Vartanian, L. R., Schwartz, M.B., Brownell, K.D. (2007). Effects of soft drink consumption on nutrition and health: A systematic review and meta-analysis. <i>Am J Public Health</i> , 97, 667 - 675.               | Soft drink intake is clearly associated with increased calorie intake and body weight, lower intakes of milk, calcium, and other nutrients, and an increased risk of several medical problems, such as diabetes. Studies funded by the food industry reported significantly smaller effects than did non-industry-funded studies.  |

## **VOTE YES ON AB 1357!**

















