Taxes on Sugar Sweetened Beverages

Kelly D. Brownell
Agenda

Why taxes, and why SSBs?

National and world landscape

Evaluations of impact

The future
Why Focus on SSBs?

- Single greatest source of added sugar
- Completely empty calories
- Poor calorie compensation
- Sugar and the brain
- Gratuitous addition of caffeine
- Targeting of vulnerable populations
- Rock solid proof of harm
Sugary drinks cause chronic diseases

2 sodas/day for just 2 weeks:

↑ LDL cholesterol & triglycerides by 20%.

2 sodas/day for 6 months:

↑ Visceral fat, fatty liver disease.

1 soda/day:

↑ Risk of overweight/obesity by 55% (children).

↑ Risk of diabetes by 26%.

↑ Heart disease by almost 1/3.

↑ Risk of stroke by 22%.

↑ Risk of tooth decay by 30% (adults).
Ounces of Prevention — The Public Policy Case for Taxes on Sugared Beverages

Kelly D. Brownell, Ph.D., and Thomas R. Frieden, M.D., M.P.H.

Sugar, rum, and tobacco are commodities which are nowhere necessaries of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation.

Adam Smith, The Wealth of Nations, 1776

Increasing consumption increases risk for obesity and diabetes; the strongest effects are seen in studies with the best methods (e.g., longitudinal and interventional vs. correlational studies); and interventional studies show that reducing taxes for sugary beverages...
The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages

Kelly D. Brownell, Ph.D., Thomas Farley, M.D., M.P.H., Walter C. Willett, M.D., Dr.P.H., Barry M. Popkin, Ph.D., Frank J. Chaloupka, Ph.D., Joseph W. Thompson, M.D., M.P.H., and David S. Ludwig, M.D., Ph.D.

The consumption of sugar-sweetened beverages has been linked to risks for obesity, diabetes, and heart disease\(^1\)-\(^3\); therefore, a compelling case can be made for the need for reduced consumption of these beverages. Sugar-sweetened beverages are beverages that contain added, naturally derived caloric sweeteners such as sucrose (table sugar), high-fructose corn syrup, or fruit-juice concentrates, all of which have similar metabolic effects.

The relationship between the consumption of sugar-sweetened beverages and body weight has been examined in many cross-sectional and longitudinal studies and has been summarized in systematic reviews.\(^4\)-\(^5\) A meta-analysis showed positive associations between the intake of sugar-sweetened beverages and body weight — associations that were stronger in longitudinal studies than in cross-sectional studies and in studies that were not funded by the beverage industry.
Structure

Excise tax

≥ one penny per ounce

Designated revenue
Where Are There SSB Taxes?
### World Tax Picture

<table>
<thead>
<tr>
<th>Taxes Passed</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Colombia</td>
</tr>
<tr>
<td>France</td>
<td>South Africa</td>
</tr>
<tr>
<td>Chile</td>
<td>Brazil</td>
</tr>
<tr>
<td>13 Pacific Island Nations</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
</tr>
</tbody>
</table>
Local Sugary Drink Taxes across the United States

Implement
Enacted
Under consideration

Implemented

Enacted

Under consideration
How Much Revenue Can Be Generated?
REVENUE CALCULATOR FOR SUGARY DRINK TAXES

Year: 2017

State: --Select-- — or — City: --Select--

Tax Per Ounce: 1 cent(s) (0.50 to 3.00 cents)

Pass Through: 100% (50-100)
<table>
<thead>
<tr>
<th>Sugary Drink Type</th>
<th>Gallons Sold</th>
<th>Annual Tax Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonated Soft Drinks</td>
<td>363,368,167</td>
<td>$465,111,253</td>
</tr>
<tr>
<td>Fruit Drinks</td>
<td>115,952,588</td>
<td>$148,419,313</td>
</tr>
<tr>
<td>Sports Drinks</td>
<td>125,467,577</td>
<td>$160,598,499</td>
</tr>
<tr>
<td>Ready-to-Drink Tea</td>
<td>118,714,023</td>
<td>$151,953,949</td>
</tr>
<tr>
<td>Energy Drinks</td>
<td>115,652,452</td>
<td>$148,035,139</td>
</tr>
<tr>
<td>Enhanced Water</td>
<td>14,396,947</td>
<td>$18,428,092</td>
</tr>
<tr>
<td>Ready-to-Drink Coffee</td>
<td>24,326,991</td>
<td>$31,138,548</td>
</tr>
<tr>
<td><strong>Sugary Drink TOTAL</strong></td>
<td><strong>877,878,745</strong></td>
<td><strong>$1,123,684,793</strong></td>
</tr>
</tbody>
</table>
## Sample Annual State Revenues

<table>
<thead>
<tr>
<th>State</th>
<th>$.01/oz (norm)</th>
<th>$.015/oz (Phila)</th>
<th>$.0175/oz (Seattle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>$300 m</td>
<td>$388 m</td>
<td>$417 m</td>
</tr>
<tr>
<td>Illinois</td>
<td>$608 m</td>
<td>$781 m</td>
<td>$834 m</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>$273 m</td>
<td>$352 m</td>
<td>$377 m</td>
</tr>
<tr>
<td>North Carolina</td>
<td>$458 m</td>
<td>$588 m</td>
<td>$629 m</td>
</tr>
</tbody>
</table>
Do The Taxes Work?
Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study

M Arantxa Colchero,1 Barry M Popkin,2 Juan A Rivera,3 Shu Wen Ng2

BMJ, 2015

In Mexico, Evidence Of Sustained Consumer Response Two Years After Implementing A Sugar-Sweetened Beverage Tax

M. Arantxa Colchero1, Juan Rivera-Dommarco2, Barry M. Popkin3 and Shu Wen Ng4,*

Health Affairs, 2017
Higher Retail Prices of Sugar-Sweetened Beverages 3 Months After Implementation of an Excise Tax in Berkeley, California

Jennifer Falbe, ScD, MPH, Nadia Rojas, MPH, Anna H. Grummon, BA, and Kristine A. Madsen, MD, MPH


Impact of the Berkeley Excise Tax on Sugar-Sweetened Beverage Consumption

Jennifer Falbe, ScD, MPH, Hannah R. Thompson, PhD, MPH, Christina M. Becker, BA, Nadia Rojas, MPH, Charles E. McCulloch, PhD, and Kristine A. Madsen, MD, MPH

Counter Arguments

Regressive

Jobs

Will not reduce obesity
Regressive

- Obesity/diabetes are regressive
- Revenues can be progressive
- Australia study – largest benefits to those most vulnerable

Jobs

- Modeling research projects small increase in jobs
- Berkeley – 15% increase in food sector revenues

Will not reduce obesity

- Research shows otherwise
Philadelphia Mayor Jim Kenney

"What we're looking to do is to take some of that profit, to put it back into the neighborhoods that have been their biggest customers, to improve the lives and opportunities for the people who live there."

2) http://www.npr.org/sections/thesalt/2016/04/08/473548273/philly-wants-to-tax-soda-to-raise-money-for-schools
Virtues

Immediate impact

Very low cost

Revenue generation

Evaluations are positive
The Future

Increased tax levels?
Graduated taxes?
Tax on sugar overall?
Other taxes?
Resources

Healthy Food America
www.healthyfoodamerica.org/

American Heart Association
www.heart.org/idc/groups/ahaec
public/@wcm/@global/documents/downloadable/ucm_490766.pdf

Rudd Center
http://www.uconnruddcenter.org/sugary-drinks-tax-information