Matters: Health, Obesity, and Public Policy Choices in Arizona



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ARIZONA HEALTH FUTURES

Policy Primers: a nonpartisan guide to a better understanding of key terms and issues in the Arizona health policy landscape.

Taxing Matters: Health, Obesity, and Public Policy Choices in Arizona

Tammie Daniels knows she and her husband need to lose weight. He's facing knee replacement surgery and complications from diabetes. She struggles with both the physical and emotional pitfalls of overeating – the over-indulgence leads to depression, so she eats more.

She knows her fast-food diet is part of the problem, but she works all day and goes to school at night. After running her teenager around town to sports practice, there's little time or energy left to cook dinner at home. Besides, the family is on a tight budget and it's cheaper to whip through the drive-thru.

What if it were easier, and less costly, for Tammie Daniels and her family to eat fresh fruits and vegetables instead of a hamburger, fries and a soda?

What if there were TV commercials, billboards and warning labels that hammered home the dangers of obesity and excess weight in the same way that the public health community launched an assault on tobacco a generation ago?

What if Tammie and her family lived in a community and culture designed to promote exercise, active living and greater personal responsibility for maintaining a healthy diet and weight?



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

Adam Smith, Wealth of Nations, 1776

Food, Public Policy and Health

The situation Tammie Daniels and millions of other Americans find themselves in today – overweight, burdened with chronic diseases and living in a fast-paced convenience culture of super-sized choices – did not arise overnight. It has been methodically nurtured by decades of agricultural policies and subsidies that encourage the overproduction of commodities like corn and sugar, the growth of a massive processed food industry, a cultural shift from eating food prepared in the home to eating food on the go, and an attendant advertising juggernaut that promotes the consumption of vast quantities of food as the ritualistic centerpiece of every occasion.

Americans are living large. Literally. Many of us no longer eat to live. We live to eat.

We are facing a rising epidemic of obesity, and its impact on our health and related health care costs is alarming. But just as public policy played a role in creating the conditions underlying this epidemic, so, too, can public policy play a role in ameliorating these conditions and promoting healthy living, healthy eating and healthy communities.

In this *Arizona Health Futures Policy Primer*, we summarize public policy alternatives that Arizona might entertain to curb the obesity epidemic. We specifically highlight tax policy, which has come to the fore recently in many states as they struggle with declining revenue, budget deficits and rising health care and social costs related to obesity and chronic diseases.

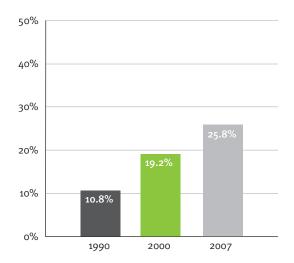
Our central thesis, consistent with past SLHI reports, is that Arizona needs to pursue an integrated *diversity* of public policy and community development strategies – and not rely on any one approach alone – to realize the goal of healthy people and healthy communities.

Weight, Health and Costs: An Arizona Snapshot

Like the rest of the nation, Arizona incurs significant health consequences and costs related to overweight and obesity. Different surveys, time periods and methods of calculation produce varying comparative analyses, but the following bulleted summary provides a reasonable "all things considered" snapshot of the national and Arizona scene.

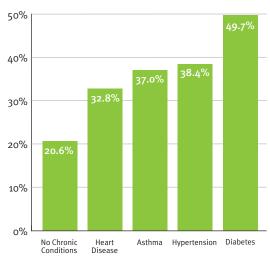
- Over the past 18 years, the estimated prevalence of adult obesity in Arizona has more than doubled (Figure 1).
- In 2008, almost 63% of Arizona adults were overweight or obese (AHS 2008).
- A recent report¹ calculates almost one-third of Arizona children (30.6%) are overweight or obese 26th highest in the nation.
- Treatment of obesity-related diseases is nearing \$150 billion annually, according to a study in the journal *Health Affairs*.² Because the poor are disproportionately affected, about half of that bill is paid by Medicaid and Medicare.
- In Arizona, one online calculator³ estimates total 2008 annual medical costs of \$955 million due to adult obesity. Slightly over half (52.7%) is Medicaid (\$307m) and Medicare (\$196m) costs. This figure could well be low.

FIGURE 1: Prevalence of Adult Obesity in Arizona, 1990-2007



Source: ADHS, Bureau of Public Health Statistics.

FIGURE 2: Prevalence of Obesity Among Arizona Adults with Selected Chronic Conditions



Source: Arizona Health Survey (AHS), 2008.

- More than one-quarter of increased medical costs in the 1987-2001 period involved obesity-related expenditures. If obesity were at the same level in 2008 as in 1987, health care spending would be approximately \$200 billion a year below current amounts.⁵
- Based on increases in average health care spending per capita, worker obesity amounts to a per capita cost shift of \$259 in 2009, totaling \$25.6 billion in extra premium costs for all non-obese workers with employer-sponsored insurance.⁶
- Arizona adults with selected chronic conditions are significantly more likely to be obese than those without chronic conditions (Figure 2). Almost one-half of Arizona adults with diabetes, for example, are obese. The incidence of diabetes in Arizona has more than doubled since 1990, now afflicting about one in 10 adult residents.

Factors Contributing to Obesity

Food and Beverage Consumption Patterns

- Over the past several decades, the increasing affordability of soda, sugar and sweets and the decreasing affordability of fresh fruits and vegetables (Figure 3) makes it easier to consume more of the former and less of the latter. One study reported that the BMI of children living below the federal poverty level was approximately 50 percent more sensitive to fruit and vegetable pricing than the BMI of higher-income children.⁷
- U.S. children and adults are clearly getting more calories today from sugar-sweetened beverages (SSBs) than they were in 1965 (Figure 4). Daily caloric intake from SSBs increased 171% from 1978-2000 alone (Figure 5). This 120-calorie increase represents 50% of Americans' daily average caloric increase during that period.

OBESITY AND OVERWEIGHT: DEFINITIONS⁴

Obesity and
overweight are
terms based on
a person's body
mass index (BMI),
which shows
the relationship
between weight
and height as
an indicator of
body fatness.
For adults, overweight is defined
as a BMI ≥ 25, and
obese is defined
as a BMI ≥ 30.

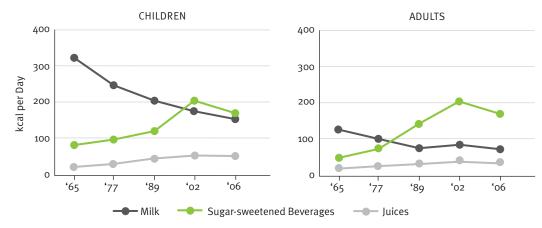
For children, body fat levels change with age and vary between boys and girls. Generally, children at the 85-94.9% of BMI are classified as overweight. Those at the 95% level or higher are obese.

FIGURE 3: Relative Price Change for Fresh Fruits and Vegetables, Sugars and Sweets, and Carbonated Drinks, 1978-2009



Source: Brownell K, Frieden T. New England Journal of Medicine, April 30, 2009; 360;18: p. 1807.

FIGURE 4: U.S. Trends in Per Capita Calories from Beverages

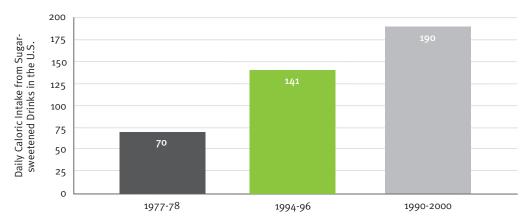


Source: Brownell K, et. al. New England Journal of Medicine, September 11, 2009; 361:1599-1605.

- A recent study by the UCLA Center for Health Policy Research⁸ showed that two-thirds of California teens and about 40% of children ages 2-11 drink at least one soda a day. Those findings varied on where the children lived, with kids in low-income, urban communities with a larger number of fast-food outlets and convenience markets likely to consume more sugary drinks.
- The change in relative prices of foods and beverages can lead to changes in consumption. Several studies estimate that a 10% increase in the price of SSBs could reduce consumption of them by 8-11%. Another study reported that a 10% increase in the price of fast food was associated with a nearly 6% reduction in the prevalence of adolescent obesity.9

The increasing affordability of soda, sugar and sweets — and the decreasing affordability of fresh fruits and vegetables — makes it easier to consume more of the former and less of the latter.

FIGURE 5: Daily Caloric Intake From Sugar-Sweetened Drinks in the U.S.



Source: Brownell K, et. al. New England Journal of Medicine, September 11, 2009; 361:1599-1605.

Food Distribution and Culture

- The food industry spends \$30 billion annually to persuade Americans to eat their products, the most profitable of which are highly processed foods. Communities contain multiple fast food outlets and convenience stores, food courts in malls, schools and airports anywhere large numbers of people congregate. In one urban study, 10 researchers found that children who frequented neighborhood markets on their way home from school most often bought chips, candy and, sugary beverages a significant amount of their daily calories for a dollar or two.
- Emerging research using mapping technology has shown that in so-called "food deserts" areas where nutritious food is scarce due to a lack of grocery stores and fresh produce vendors residents tend to rely on fast-food outlets or corner markets that stock packaged, processed, high-fat foods and little, if any, fresh produce. Those limited options, primarily in rural and low-income urban areas, lead to a higher risk of overweight and obesity. Access to healthy foods leads to healthier diets and improved health outcomes, according to research in California, Pennsylvania and Washington, D.C.¹¹
- The presence of supermarkets that sell fresh fruits and vegetables in communities is associated with lower levels of obesity and overweight, while the presence of convenience stores is associated with higher levels. ¹² Analysis of data from the 2008 Arizona Health Survey (AHS) suggests that the addition of one neighborhood convenience store is associated with a 4% rise in obesity. Other research, however, suggests that the impact of barriers to the purchase of nutritional foods may be exaggerated. ¹³
- Attendant with the rise of the processed food and fast food culture, food portion sizes have increased significantly. People are consuming more calories and thus gaining more weight. The National Institutes of Health (NIH) has developed an interactive web site¹⁴ illustrating the difference in food portion sizes compared to 20 years ago.
- Food consumption is imbued with significant psychological and social meaning. People are often under social pressure to participate in the ritualistic activity of eating, and in the same way and proportion that the social group does. Food can be a short-term stress reliever, providing comfort and nurturance in the absence of other emotional outlets. Many people eat more in response to negative emotions such as boredom, sadness or anger. Advertisers target these psychological and social triggers, thus encouraging over consumption.

Daily caloric intake from SSBs increased 171% from 1978-2000 alone.

The View from Maryvale

Pediatrician Tom Eccles says at least half of the children he sees at the Maryvale Family Health Center are overweight or obese, and many are likely headed for a lifetime of health problems. They lack safe places to exercise in their neighborhoods, safe routes to walk to school and nearby grocery stores that sell fresh fruits and vegetables.

"Most of my kids don't want to be heavy. They don't have access to the most healthy food choices," Eccles says. "Obesity is a public health emergency that we are treating on an individual level. For the sake of convenience and good old-fashioned capitalism, we've created a new food structure."

"They're economically unable to commit to a healthy diet," says Janet Davis, who manages the Maryvale clinic, part of Maricopa Integrated Health System. "We're begging these people to change their diet and putting the foods that they need out of reach."

Many factors – including personal choice – drive the daily American diet. Eccles says policy options should be mindful of changing family dynamics and acculturated behaviors. Teenagers will gather at fast-food joints, and families will continue to lead busy lives on tighter wallets.

"It's cheaper to fill up a family with carbohydrates and fat — and you get less complaining from your children — than it is to buy vegetables and learn how to prepare them," Eccles says. "We have to find solutions that fit into the cultural patterns that have developed as opposed to reverting to an agrarian culture that will never return."

Lifestyle and the Built Environment

- Compared to the past, fewer people are engaged in vigorous physical activity to offset the intake of a high caloric diet. In Arizona and elsewhere, a lifestyle dependent on the automobile and living in communities that aren't always conducive for walking, running and other outdoor activities make it harder to get adequate physical exercise. Sedentary lifestyle and leisure activities such as video games, watching television and movies, and accessing the Internet have superseded many traditional sports and exercise activities; formal membership in fee-based gyms and fitness centers has replaced informal physical activities, but this is not always an option for lower income persons.
- In Arizona, 22.6% of adults and 8.7% of youth reported they did not participate in any form of physical activity or exercise in the past 30 days (2005 Behavioral Risk Factor Surveillance System). Approximately 56% of Arizona adults engage in moderate physical activities more than three times/days per week; 42% engage in vigorous physical activities more than two times/days per week (AHS, 2008).
- Physical education/exercise has been steadily deemphasized in Arizona and other states as more time is earmarked to cognitive skill development and testing. With fewer students walking to school, and with declining opportunities for safe, vigorous exercise and play both within and without the school environment, BMI levels for children are increasing.
- Despite the importance of exercise in maintaining optimal weight and good health, researchers estimate that 82% of adult obesity results from excess caloric intake, and only 18% is caused by insufficient exercise. 15

Other Factors

- Certain genetic factors (the gene GAD2, for example) are thought to be responsible for weight gain in a minority of seriously overweight people. While the interplay between genetic and environmental factors related to obesity is not fully understood, it seems likely that multiple genetic factors are involved in the neuronal control of weight regulation and are more active in certain families and subpopulations than others. This is an area of fruitful scientific research.
- Some diseases (e.g., Cushing's disease, hypothyroidism, depression) and medications (steroids, certain antidepressants) are associated with weight gain. While we continue to make medical progress in these areas, it is often difficult to determine whether it is the illness, medications, or related psychological factors that are contributing to weight gain and making weight loss more difficult.

Taxing Unhealthy Foods in Arizona

Given the magnitude of the obesity epidemic and its negative impact on health and productivity, what public policy options might states like Arizona consider in reducing its incidence and burden?

A number of policy options in education, labeling and advertising, food assistance programs, research, and urban development present themselves, and we will mention some of them in passing. Here, we focus on tax policy and the arguments, pro and con, on applying strategies from the successful "war" on tobacco to reduce the impact of obesity on preventable chronic disease, disability and death. The current economic climate makes this discussion

Tobacco and Fattening Foods: Similarities and Differences¹⁶

Similarities

- Both are major risk factors for chronic disease and premature death.
- Both generate significant health costs.
- Both involve aggressive marketing campaigns by industries that reap significant financial rewards.
- Both are disproportionately represented among lower socioeconomic groups.
- Both carry social stigma.
- Both are hardwired to neurological pathways involved with substance abuse and other addictive behaviors, though not to the same degree (the addition of caffeine to foods like potato chips, cereal, etc.).

Differences

- Food and drink are necessary for human survival. Tobacco isn't.
- In small to moderate quantities, fattening foods are harmless and can even promote health.
- All tobacco products are "junk." Not so all food and beverage products.
- Physical exercise can help to ameliorate some of effects of fattening food. No so for tobacco.
- The vast majority of tobacco use begins in adolescence. While addressing child and adolescent obesity is important, the majority of obesity starts in adulthood. With rising rates of obesity in children, however, this pattern may be changing.



timely, because states are investigating alternative sources of revenue to meet the growing demand for health and human services in the face of massive budget deficits. Taxes on potentially unhealthy foods and products like sugar-sweetened beverages (SSBs) have been either enacted or proposed as one fruitful strategy to pursue.

"It's hard to look at these things [taxes on selected substances] anymore without some degree of cynicism. It won't have anything to do with obesity at the end of the day. Obesity will be the excuse. I think it's a disservice to the debate to be trying that kind of a dodge."

Kevin McCarthy, president, Arizona Tax Research Association



"Coke is part of our society. It's so ingrained. I have no problem with a [soda] tax. I think it's a great idea. I just don't know how effective it's going to be."

Alvin Perelman, MD, pediatric endocrinologist

Taxing Potentially Fattening Food: The Pro Argument¹⁷

Why would Arizona consider taxing potentially fattening food and beverages? There are at least five central reasons:

- **RAISING THE PRICE REDUCES CONSUMPTION.** There is some evidence that changing the relative prices of both healthy and unhealthy foods affects consumption patterns and obesity levels. For example, increasing the price of SSBs by 10% has been estimated to cut consumption by an average of 8%, and a penny-per-ounce tax on SSBs is projected to reduce consumption by 10%. ¹⁸
- **RAISING REVENUE.** For example, the Congressional Budget Office estimates that a 3-cent excise tax on a 12-ounce soda could raise \$24 billion over four years. This revenue has been proposed for everything from paying for health reform, health and education services to reduce obesity, and providing budget relief for cash-strapped states. See the accompanying box (p. 10) for estimates of what various approaches to taxing fattening foods might raise in Arizona.
- CORRECT A CLASSIC MARKET FAILURE INVOLVING "EXTERNALITIES." Neither the buyer nor seller of potentially fattening food pays the full increase in obesity-related health care costs. "Many such costs are financed by taxpayers, employers that pay insurance premiums, or workers whose wages are reduced to compensate for their companies' higher premiums. A fattening food tax would, in effect, shift those external costs to the purchasers of fattening foods, thus lessening the extent of this market failure."
- **PROMOTE PERSONAL RESPONSIBILITY.** This is related to the "externalities" argument. People have the right to buy and consume whatever food they wish. But they also need to take personal responsibility for the costs they impose on the rest of society. They can do this by paying a fattening foods tax to help defray the publicly funded medical costs that result from obesity.
- SEND A PUBLIC HEALTH MESSAGE ABOUT THE DANGERS OF FATTENING FOOD.

 If people had to pay more for consuming fattening foods and had clear product labeling information on their potentially harmful nature they may change their eating habits accordingly.

Current Taxes

Some 40 states currently impose modest taxes on SSBs, candy and snack foods. Of these, 33 states have sales taxes on soft drinks, but at an average rate of 5.2%, the taxes are too small to discourage consumption. Unlike tobacco taxes, the soda and snack food tax revenues – levied at grocery stores or vending machines – generally aren't targeted for health programs, but rather go directly into the states' general fund.¹⁹

Taxes are higher in other countries. The United Kingdom applies a 17.5% value-added tax (VAT) to certain foods, snacks and alcohol; France has a similar VAT of 19.6% for foods like sweets, chocolate and margarine; and Canada levies a 5% tax on various snack food items. It is not clear what impact, if any, these taxes have had on reducing consumption, although obesity is projected to be reduced if such taxes are accompanied by subsidies for the purchase of fresh fruits and vegetables.

Taxing Fattening Food: The Con Argument

Opponents of a tax on fattening foods make the following arguments – or variations of them:

- **THESE TAXES ARE REGRESSIVE.** They are disproportionately borne by those lower on the socioeconomic scale, who by necessity spend a larger portion of their income on food.
- THEY TARGET RESPONSIBLE AS WELL AS IRRESPONSIBLE CONSUMPTION PATTERNS.

 Million of non-obese people enjoy an occasional soda, fries and a cheeseburger.

 Why should they have to pay an additional tax for their responsible behavior?
- THE GOVERNMENT SHOULD STAY OUT OF TRYING TO REGULATE WHAT PEOPLE EAT AND DRINK. Taxing fattening foods is one more example of excessive governmental social engineering and control. So long as individuals are willing to accept personal responsibility for their behavior, they should enjoy the maximum freedom and market choices possible.
- THEY POTENTIALLY PENALIZE PEOPLE WHO MAY NOT HAVE GOOD FOOD ALTER-NATIVES. Unless steps are taken to ensure that lower socioeconomic people have adequate, affordable healthy food choices available in their communities, a tax on selected foods may further restrict purchasing options.
- "SIN" TAXES ARE DISINGENUOUS. Whether it's taxing junk food, tobacco or alcohol, these taxes usually end up being more about raising revenue and balancing state budgets than reducing obesity and other health ills. Unless proponents of such taxes are willing to earmark all revenue for anti-obesity programs and such, it is a pure and simple tax hike dressed up as a public service.
- THERE ARE FAR BETTER WAYS TO REDUCE OBESITY THAN SINGLING OUT SPECIFIC
 PRODUCTS FOR INCREASED TAXATION. It is more effective to focus on increased
 public education, accurate labeling of nutritional content and the importance of
 physical exercise to help balance caloric intake than to rely on the blunt instrument
 of tax policy.



"I don't think
it's the role
of government
to increase their
activities to
curb people's
behavior in
that way.
I don't think
it's fair. If we
don't approve
of it, let's
outlaw it."

Nancy Barto, Arizona legislator

Ecod Tax

Estimates of Tax Revenues in Arizona

Estimates of revenues that could conceivably be generated in Arizona from some type of unhealthy food tax vary widely, depending on what products are taxed, the venue where they are purchased, and in what amount. The following examples are based on different assumptions and state "calculators," and illustrate a range of options. They are meant to be suggestive, and not definitive, of possible revenue:

10% sales tax on all fattening foods as defined on the "less healthy" nutrition scale
of a food rating schematic.²⁰

2. "Nickel a Drink" [12 oz] tax on Sugar-Sweetened Beverages (SSBs).21

Annual revenue, 2010\$155 million

3. One cent/fl. oz excise tax on SSBs.22

Annual revenue 2008.....\$342 million

4. One cent/fl. oz tax on SSBs, 2010.23

DRINK TYPE	AZ GALLONS CONSUMED	TAX REVENUES
Regular Soft Drinks	130,171,372	\$166,619,356
Fruit Beverages	71,268,029	\$91,223,077
Sports Drinks	22,716,468	\$29,077,079
Ready-to-Drink Tea - Nondiet	9,153,516	\$11,716,500
Flavored Water	9,424,358	\$12,063,178
Energy Drinks	6,216,907	\$7,957,641
Ready-to-Drink Coffee	935,104	\$1,196,933
Total sugar-sweetened beverages	249,885,754	\$319,853,764

Adding tax on diet drinks to the above

\$516 million

Revenue From a Local Tax

Instead of (or in addition to) a state tax on SSBs, local officials could consider a city-wide or other form of local tax on SSBs. Here is one estimate of what could be raised in the city of Phoenix alone:

One cent/fl. oz excise tax on SSBs.²⁴

Designing an Optimal Tax Strategy²⁵

There are a number of policy design issues that Arizona and other states face in deciding whether, and how, to implement a tax strategy to reduce consumption of fattening foods and encourage healthy eating and lifestyles:

- **1. WHAT TO TAX.** Many proponents of taxing fattening foods want to simplify the process by zeroing in on sugar-sweetened beverages (i.e., the "soda tax"). This is justified by the SSB's impact on obesity and lack of any nutritional value. Most of the state obesity tax initiatives being proposed today focus solely on soda, although some include taxing candy, sugared drinks, chips and so on.
 - An alternative approach is to apply taxes to a "broader and more objectively defined set of fattening foods." This involves analyzing food items on a numerical scale by balancing their nutritional benefits (fruit and vegetable content, fiber, protein) against their nutritionally risky elements (excess calories, saturated fat, sugar, salt). This results in rating foods as healthy, intermediate and less healthy, and conceivably devising a corresponding scheme of excise taxes. Great Britain, Australia and New Zealand have used variations of this approach to decide what food products can be advertised to children and/or limiting the circumstances under which a food manufacturer can claim health benefits for certain products.
- With an "upstream" excise tax imposed on producers and distributors, consumers see the higher prices on the shelves before they hit the cash register, thus potentially causing a greater drop in consumption. An excise tax also avoids sales tax administrative complications for stores. On the other hand, most states already have a sales tax collection infrastructure in place, and as a percentage of the purchase price, sales taxes will be indexed to inflation automatically. Sales taxes also permit a targeted exemption for those "food desert" communities without adequate access to healthy foods like fresh fruits and vegetables.
- 3. EARMARKING THE REVENUE. Presumably proponents of taxing some or all fattening foods view the tax as an important tool in reducing obesity and improving health. If the tax is, as some opponents claim, simply a subterfuge to raise general revenue, then it is indeed bad public policy. That said, proponents have suggested revenue be earmarked for either current health care reform efforts (e.g., subsidizing low-income citizens to obtain adequate health insurance coverage) or financing specific community and population anti-obesity efforts. Public support for such taxes depends on how they are "framed," and how revenues will be used: in one recent poll, only 31% of New Yorkers said they supported an "obesity" or "fat" tax; 52% supported a soft drink tax, and 72% supported such a tax if the revenue is dedicated to obesity prevention.²⁶
- **4. THE LEVEL OF THE TAX.** If a fattening food tax is to have a measurable impact on obesity, then it has to be high enough to actually discourage consumption. Analysts with the U.S. Department of Agriculture suggest that such taxes need to be between 10-30% of the price of the food in order to change behavior. By way of illustration, one common suggestion is to increase the price of SSBs by one cent/fluid ounce to

"We're trying to do something more aggressively and more quickly than tobacco. What this initiative is about is trying to get folks focused, to bring it all together to a unified agenda. A tax is a way to start that process, even if it doesn't pass. We're looking at supporting some states that are going to lose."

Andrew Hysell, project director Save the Children discourage consumption. This would raise the price of a 12-pack of 12-oz. cans of Coca Cola from, say, \$3.33 to \$4.77 – an increase of some 43%. Following analysts' guidelines, the tax could be reduced to .5 cents/fluid ounce – an increase of 22% for a 12-pack of Coke – and still reduce consumption. Based on a review of the literature, determining the optimal level of taxation to discourage consumption is an inexact science at best.

5. LINKING THE TAX WITH A SUBSIDY THAT LOWERS THE PRICES OF HEALTHY FOODS.

A number of proponents of taxing fattening foods argue that a significant portion of the revenue generated should finance a subsidy for low-income persons to purchase healthy foods like fresh fruits and vegetables. Such a subsidy would presumably shift purchasing patterns towards healthy, rather than fattening, foods and increase the likelihood of reducing obesity.

6. **GETTING THE TAX PASSED.** The above policy design issues play an important role in the actual passage and implementation of some type of tax to combat the obesity epidemic. With no chance of getting a SSB or related food tax through the Arizona legislature anytime soon, any such measure would need to be placed on the ballot by initiative. The 1998 Voter Protection Act made voter-approved programs in Arizona off limits to legislative tinkering but is currently under attack by some legislators who want the authority to raid voter-approved programs – including education, health care and early childhood development – during lean budget times. That – and Arizona's anti-tax climate in general – makes it an uphill battle to pass a soda tax or related fattening food tax in the near-term future.

Longer term, discussion of some type of anti-obesity tax is a way to seed and galvanize a sense of urgency among policy makers and the general public on taking aggressive, focused steps to reduce the huge negative consequences of America's obesity epidemic. Even if the state doesn't pass a tax initiative now, we believe there are good reasons to put the issue on the table and ramp up the public policy conversation.

"I think a multi-pronged approach

– blasting it from every possible angle –
is the best way to do something and make an impact.

Everything put together is going to be the answer.

If [a soda tax] is going to be divisive

and people can't agree on it,
let it go and do 10 other things."

Bonnie Gance-Cleveland, director, Center for Improving Health Outcomes in Children, Teens and Families, ASU College of Nursing and Health Innovation

More Public Policy Interventions to Reduce Obesity

In addition to investigating the implementation of some type of fattening foods tax in Arizona, there are other public policy interventions and community-based projects already under way in Arizona and across the nation to address the obesity epidemic that deserve our collective attention and support. We note some of them in summary fashion:

Food Labeling

Research and recent experience in both the U.S. and other countries show that "front of box" food labeling of nutritional content can lead to marked changes in consumer buying habits. In one U.S. supermarket chain that implemented a "three star" rating system for good, better and best nutritional value, consumer selection of foods with stars increased up to 4.5 times higher than foods without the stars.²⁷ More restaurants and other prepared food outlets are voluntarily providing caloric and nutritional information on selections, and some studies (but not all) suggest consumers are making more healthy choices. More than 20 states and localities are considering proposals to require menu labeling.

Food Advertising

The effect of advertising fattening food is alarming, especially on children. One recent study found that food advertising causes between one-seventh and one-third of obesity among American children. Another study suggest that banning fast food advertising

alone would reduce the number of overweight American children ages 3-11 and 12-18 by 18% and 14% respectively.28 Australia bans food advertisements aimed at children 13 and younger; the Netherlands bans advertising sweets to children 12 and younger; Sweden, Norway and Quebec ban all advertising aimed at children, regardless of the product. Obviously such bans in the U.S. would precipitate a constitutional challenge under the First Amendment's freedom-ofspeech clause, but with obesity now representing an enormous public health risk, advertising regulation should be on the public policy agenda.



"Obesity is an overriding and huge public health issue, and it's extraordinarily expensive to deal with because of the long-term consequences. To me, it's our obligation to try to do something about it. The question is, is there the political will to fight the battle, fight the food lobby and make sure it happens?"

Will Humble, acting director, Arizona Department of Health Services

Food Assistance Programs

Federal and state programs providing food assistance to low-income and targeted populations have been revamped to include more emphasis on healthy foods and consumption patterns:

- **WIC** Changes nationwide to the Women, Infants and Children (WIC) nutrition program, effective October 1, 2009, increase allowances for fresh produce, prohibit high-fat cheeses and milk for most recipients and require whole grains. Though the new rules reduce the amount of fruit juice mothers can buy for their children, pediatricians generally believe the allocation at 128 ounces a month is too high and should be reduced to zero.
- **SNAP** The Federal Supplemental Nutrition Assistance Program (SNAP, formerly the food stamp program) is under pressure from state health officials to limit the types of foods that can be purchased with food stamps. Arizona officials are seeking a waiver from the federal government to revise the SNAP program by banning certain foods that can be purchased with food stamps and labeling those that are approved as healthy and nutritious something health care professionals, academics and advocates have been pushing for years.

School Nutrition and Physical Education

Arizona schools, like those across the country, are focusing on ways to encourage more healthy eating and active living among students:

- **NUTRITION STANDARDS** Legislation passed in 2005 banned soft drinks, candy and other junk food at elementary and middle schools, and required the Arizona Department of Education to develop new nutritional standards for K-8 schools that apply to vending machines, snack bars, ala carte items, fundraisers and school events during the normal school day. High schools are exempt from the law, but educators say many high schools voluntarily comply, and there are efforts to expand the law to include high schools.
- PHYSICAL EDUCATION STANDARDS The Arizona State Board of Education approved new physical education (PE) standards in October 2009, incorporating much of what was learned during a pilot program created by 2006 legislation. The pilot schools increased the amount of PE during the school day and hired a certified PE teacher. Results showed children were more active during the weekend, had fewer absences and visits to the school nurse, and kept their AIMS scores stable. Among other things, the new PE standards will require an emphasis on personal fitness and prohibit withholding PE as a punishment.
- **TECHNICAL ASSISTANCE** Arizona is in the second year of a five-year, \$2.3 million grant from the Centers for Disease Control and Prevention to provide technical assistance to help schools establish wellness policies and school health councils to implement them. The policies and councils are required for schools that served federally funded meals, though most schools don't have them, and most parents don't know they're supposed to.

• **CHILD CARE** The Arizona Department of Health Services (ADHS) has won an exemption from a rule-making moratorium to rewrite child care regulations. Recently ADHS unveiled a three-year program to reduce licensing fees for child care facilities that encourage healthy eating and exercise. New regulations could make some of those changes permanent, including reduced screen time, increased physical activity, healthier foods and family-style meals.

Public Education, Research and Training

A number of public education, research and training projects are either under way or in the works to address obesity issues. Some examples include:

- **CHILDHOOD INITIATIVES** The Robert Wood Johnson Foundation will spend \$500 million in the next six years targeting 16 states, including Arizona, "with the goal of building a national movement to reverse the childhood obesity epidemic by 2015 by improving access to affordable healthy foods and increasing opportunities for physical activity in schools and communities across the nation." Coalition building in Arizona is expected to result in local and state proposals this coming year to revise child care regulations, begin body-mass index tracking in schools and promote access to healthy foods.
- **GRANT APPLICATIONS** Maricopa County and the state of Arizona have applied for grants from the Centers for Disease Control and Prevention to combat obesity. The grants of \$10 million to \$20 million apiece, funded through the federal stimulus program, will trickle down to local communities for programs that increase physical activity, improve nutrition and reduce obesity and overweight. One recent example: the University of Arizona's Canyon Ranch Center for Prevention and Health Promotion recently received funding from CDS to promote community advocacy and policy change to combat obesity in towns along the Arizona-Mexico border.
- UNIVERSITY RESEARCH Researchers at Arizona State University, among others, are immersed in a variety of obesity-related projects. At the Center for Improving Health Outcomes in Children, Teens and Families at ASU's College of Nursing and Health Innovation, there are projects to teach parents and children about portion control, train physicians to better recognize and counsel families about obesity and overweight, encourage exercise routines that stick with pre-diabetic Hispanic teens and help youngsters recognize and cope with depression related to their weight.
- PHYSICIAN TRAINING AND FAMILY INVOLVEMENT The Arizona chapter of the American Academy of Pediatrics is distributing a "toolbox" to encourage better identification and intervention of overweight and obese kids. The 5-2-1-0 AZ Way to Go! program calls for five servings of fruits and vegetables, two hours maximum screen time, one hour of physical activity and no sugar-sweetened beverages. The toolbox includes information about calculating body-mass-index and how to most effectively counsel children and their parents.

The 5-2-1-0 AZ Way to Go! program calls for five servings of fruits and vegetables, two hours maximum screen time. one hour of physical activity and no sugarsweetened beverages.

The program will develop and implement initiatives to increase Maryvale residents' access to healthy foods and physical activity.

Maryvale on the Move

One example of a project that will focus on ways to link public policy to efforts to reduce obesity – in this case, childhood obesity – is *Maryvale on the Move (MTM)*, a planned four-year effort that is receiving funding from the Robert Wood Johnson Foundation's *Healthy Kids, Healthy Communities* project. The goal is to implement healthy eating and active living policy- and environmental-change initiatives that support healthier communities for children and families, especially those in disadvantaged locations.

Maryvale, a predominantly Latino village west of downtown, has more than 190,000 residents—36 percent of whom are less than 18 years of age—and the challenges to active living and healthy eating are a microcosm of Phoenix's concerns. The community's 37 square miles, for example, include only a few parks with limited safe access for children traveling on foot or by bicycle. The 13 playgrounds and tot lots are typically small, and hours for the four public pools recently were cut to save money.

On the other hand, Maryvale has many assets. There is a new YMCA facility, five community and senior centers, many churches, 60 block watch groups and more than 30 neighborhood associations. There are two Weed and Seed programs, and the area is home to the International Rescue Committee.

Through a broad partnership facilitated by St. Luke's Health Initiatives and involving community centers, community development centers and foundations, MTM will develop and implement initiatives to increase Maryvale residents' access to healthy foods and physical activity. Some examples of local policies that could be targeted include:

- Incentives to attract grocery stores to the community.
- Special zoning and licensing to encourage development of corner vegetable and fruit markets, or permanent farmer's markets.
 - Plan, build and maintain a network of sidewalks and street crossings that connect schools, parks, and other destinations (the "complete street" concept).
 - Collaborate with schools to develop and implement "Safe Routes to Schools" programs.
 - Redevelop blighted areas into green spaces, parks, community gardens, etc.

Food Geography and the Built Environment

Efforts are underway in Arizona and other states to develop urban policy and land use to encourage active living and healthy eating. Guides are available for cities, zoning authorities and urban planners on ways to modify zoning requirements, designate downtown areas as pedestrian malls and automobile-free zones, and modify residential neighborhoods, workplaces and shopping centers to promote physical activity.

- **COMMUNITY GARDENS** A number of community projects in Arizona, including some of those participating in St. Luke's Health Initiatives' *Health in a New Key* community building project, have undertaken community garden projects, where local residents and volunteers plan, install and sustain local sources of garden-grown fresh produce.
- **FOOD GEOGRAPHY** The Food Trust, a Philadelphia-based nonprofit, has encouraged supermarket development in underserved urban and rural areas of Pennsylvania, New York, Louisiana and Illinois, improving access to fresh fruits and vegetables. The trust is working on similar initiatives in New Jersey and Colorado, and has funding from the Robert Wood Johnson Foundation to eventually expand to eight more states.

A Call to Action

If this short overview of policy options to address a growing obesity epidemic in Arizona and other states has made anything clear, it is that doing nothing is not an option.

We have discussed tax policy as one promising avenue to consider, primarily because of the state's dire economic straits and the growing interest in finding new sources of revenue to address underlying health and social concerns. There are good reasons to consider a tax on sugar-sweetened beverages if, in fact, the resultant revenues are directed to efforts to reduce the incidence of obesity through public education, public policy and community-based projects. On the other hand, if the revenues are intended to replenish the general fund and/or displace other legitimate public health and social services, then the case for such a tax is, in our view, considerably weakened.

At the same time, other policy options briefly outlined above demand our equal attention and involvement, and provide diverse ways of addressing what in the end is a multi-faceted, deeply ingrained issue in American culture. Here are some illustrative examples:

- Take steps in Arizona to educate citizens about the nutritional content of food and beverages through accurate labeling. Grocery stores and restaurants are voluntarily providing caloric and nutritional information, but more need to get on board. Some consumers still won't make healthy food choices, but it won't be because they lack information.
- Put the regulation of food advertising on the public policy agenda, especially those foods advertised for children. We realize this is an uphill battle in the face of the constitutionality of free speech (and big money to spend on that speech), but other countries have banned advertising certain foods aimed at children to beneficial effect, and so can the U.S.

Many policy options demand attention and involvement, and provide diverse ways of addressing what in the end is a multifaceted, deeply ingrained issue in American culture.

At the very least, we should pursue policies and public education campaigns directed at elementary school *fundraisers* that send young children out into neighborhoods hawking tubs of cookie dough.

- Take steps to encourage citizens to purchase fruits, vegetables and other healthy foods by pursuing opportunities such as the federal Healthy Incentives Pilot grants as part of the SNAP (food stamps) program. Despite the current state budget deficit and slashing of positions, there are still creative ways agencies like the Arizona Department of Security and Department of Health Services can work collaboratively to leverage both federal and private funds to provide incentives for healthy eating and living.
- Pursue policies that make all Arizona K-12 schools "junk-food free" environments. This is a hard sell in schools that earn much needed income from lucrative contracts with vendors of sugar sweetened beverages, chips and similar fare. At the very least, we should pursue policies and public education campaigns directed at elementary school fundraisers that send young children out into neighborhoods hawking tubs of cookie dough.
- Support coalition building and advocacy around the issues of nutrition, exercise and healthy living in Arizona neighborhoods and communities. In our experience, a fruitful place to begin is with groups like churches, neighborhood associations and community centers. For funders and organizers, start with the community's interests and build on the resulting partnerships. In one case, a coalition began with addressing heart disease among adults and ended up promoting community gardens, farmer markets and exercise for people of all ages.
- Pursue policies that integrate the principles and practices of healthy living into the
 built environment. That means communities with safe places to walk and exercise,
 reasonable access to sources of healthy food, common areas like parks and playgrounds,
 clean air, and access to primary health care services that focus on wellness and
 prevention, among other things. This is simply good design and sound environmental
 and social ecology.
- Be the change that you seek. All of us who are committed to building healthy, sustainable and resilient communities are morally obligated to practice what we preach. No one is perfect, and changing ingrained eating and living habits grounded in well established cultural and social patterns is difficult at best, even for those who have the attendant knowledge, motivation and resources. The worst thing one can do is lecture others on what to eat and how to live without living that way oneself.

In the end, there is no single solution in the war on obesity. The forces of over consumption are strong and well established in American culture, and the battle will be intense and prolonged. But if we are serious about improving our own and the public's health, reducing health care costs and increasing the productivity and creative energy of our citizens through healthy eating and active living, we are collectively obliged to engage the battle with perseverance and long-term commitment.

Thousands of concerned Arizonans are already on the front lines.

We invite you to join them.

Sources

- 1 Levi, J, et. al. F as in Fat: How Obesity Policies are Failing in America 2009. Trust for America's Health, Robert Wood Johnson Foundation, July 2009.
- 2 Finkelstein, EA, et. al. "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates." Health Affairs, 28:5, July 27, 2009.
- 3 Liquid Candy Tax Calculator. Center for Science in the Public Interest (2008 figures). www.cspinet.org/liquidcandy.
- 4 Engelhard, CL, et. al. Reducing Obesity: Policy Strategies From the Tobacco Wars. University of Virginia and the Urban Institue, July 2009, p. 4.
- 5 Thorpe, KE, Ogden, L. "What Accounts for the Rise in Health Care Spending?" Institute for Advanced Policy Solutions, Emory University, Atlanta, GA. 2008.
- 6 Engelhard, CL, et. al. op. cit., p. 5.
- 7 Strum, R., Datar, A. "Food Prices and Weight Gain During Elementary School: 5-year Update." Public Health, 122(11): 1140-1143. November 2008.
- 8 Babey, SH, et. al. "Bubbling Over: Soda Consumption and Its Link to Obesity in California." California Center for Public Health Advocacy, UCLA Center for Health Policy Research, September 2009.
- 9 Chaloupka, FJ. Sugar-Sweetened Beverage Taxes and Public Health. Robert Wood Johnson Foundation Research Brief, July 2009. www.rwjf.org/files/research/20090731ssbbrief.pdf.
- 10 Borradaile KE, et. al. "Snacking in Children: The Role of Urban Corner Stores," American Academy of Pediatrics, Pediatrics, October 12, 2009. www.pediatrics.org.
- "Designed for Disease: The Link Between Local Food Environments and Obesity and Diabetes." California Center for Public Health Advocacy, UCLA Center for Health Policy Research, April 2008; and Borradaile, KE. op. cit.
- 12 Morland, K, et. al. "Supermarkets, Other Food Stores, and Obesity." *American Journal of Preventive Medicine*, 2006; 30(4), pp. 333-339.

- 13 Cited in Engelhard, CL. op. cit., p. 27.
- 14 http://hp2010.nhlbihin.net/portion/.
- 15 Cited in Engelhard, CL. op. cit., p. 15.
- 16 Adapted from Ibid, pp. 10-18.
- 17 Adapted from Engelhard, CL. op. cit.
- 18 Brownell, KD, Frieden, TR. "Ounces of Prevention The Public Policy Case for Taxes on Sugared Beverages." *New England Journal of Medicine*. April 30, 2009, 360(18): 1805-08.
- 19 Brownell, KD, et. al. "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages."

 New England Journal of Medicine, October 15, 2009, 361: 1599-1605.
- 20 Taken from Engelhard, CL. op. cit., p. 32.
- 21 "Taxing Sugared Beverages Would Help Trim State Budget Deficits, Consumers' Bulging Waistlines, and Health Care Costs." Center for Science in the Public Interest, September 2009. http://www.cspinet.org/new/pdf/state_budget_ report_-_sugar_tax.pdf.
- 22 Center for Science in the Public Interest. Liquid Candy Calculator. www.scpinet.org/liquidcandy/.
- 23 Revenue Calculator for Soft Drink Taxes. Rudd Center for Food Policy and Obesity, Yale University. www.yaleruddcenter.org/sodatax.aspx.
- 24 Ibid.
- 25 Adapted from Engelhard, CL. op. cit.
- 26 Friedman, RR. "Soft Drink Taxes: A Policy Brief. Rudd Center for Food Policy and Obesity, Yale University, Fall 2009, p. 4.
- 27 Cited in Engelhard, CL. op. cit., p. 37.
- 28 Cited in Ibid, p. 41.



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Our Mission

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