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Impact and Ethics of Excluding Sweetened Beverages From the SNAP Program

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The state of New York recently petitioned the US Department of Agriculture (USDA) for permission to conduct a demonstration project in which sweetened beverages would be excluded from the foods eligible to be purchased with Supplemental Assistance Nutrition Program (SNAP) benefits (i.e., food stamps) in New York City.

The USDA and advocacy groups have raised objections to new SNAP restrictions such as the proposed exclusion of sweetened beverages. Some objections rest on empirical issues best resolved by demonstration projects or pilot studies of new exclusions. Other objections question the

equity of excluding sweetened beverages from SNAP; these objections are important but not ethically decisive.

The USDA should approve the proposed demonstration project and should encourage other pilot studies to assess the effects of excluding sweetened beverages from SNAP. (*Am J Public Health*. 2011; 101:2037–2043. doi:10.2105/AJPH.2011.300225)

AMERICANS' USE OF FOOD stamps has reached an all-time high. Use of the Supplemental Assistance Nutrition Program (SNAP), formerly known as the

Food Stamp Program, surged during the recent recession; the number of recipients rose from 31 million people in November 2008 to 38 million in November 2009, reaching more than 44 million in early 2011. One in 8 Americans now receives SNAP assistance (i.e., food stamps).¹ SNAP benefit levels were increased in 2009 as part of the economic stimulus bill (the American Recovery and Reinvestment Act),² but Congress has eliminated those increases effective November 2013,³ despite the unprecedented use of SNAP, continued high unemployment, and some researchers' belief that SNAP assistance levels are not high

enough to feed families a healthy diet.⁴

Now more than ever, SNAP funds need to be deployed as efficiently as possible to achieve SNAP's aims of alleviating hunger and improving the nutrition and health of low-income people.⁵ One way to work toward this goal is to modify SNAP to exclude foods that have minimal nutritional value or that especially contribute to poor nutrition and ill health, such as sweetened beverages, and New York City wants to try it. The state government of New York recently petitioned the US Department of Agriculture (USDA) for permission to conduct a demonstration project in which sweetened beverages



would be excluded from the food items eligible to be purchased with SNAP benefits in New York City.⁶ The proposal, more exactly, is to exclude sweetened beverages containing more than 10 calories per cup, excluding fruit juice without added sugar, milk products, and milk substitutes.

There is precedent for excluding foods from food assistance programs: the Special Supplemental Nutrition Program for Women, Infants, and Children gives participants assistance to purchase only the specific food items deemed most nutritionally beneficial.⁷ There is also precedent for excluding items from SNAP: currently, SNAP assistance cannot be used to purchase alcoholic beverages, among other items.

In accordance with the Food and Nutrition Act of 2008, the USDA administers the SNAP program, and states must get permission from the USDA to run demonstration projects and pilot studies in which foods are excluded from SNAP. A permanent modification to SNAP, such as the permanent exclusion of sweetened beverages, would require permission from the USDA and might even require a change in the law. In 2004, Minnesota's Department of Human Services petitioned the USDA for permission to exclude soft drinks and candy from the foods eligible for purchase with food stamps, but the USDA turned down the request.⁸ In addition, the USDA has raised several objections to placing any new restrictions on SNAP. Some antihunger advocacy groups, notably the New York City

Coalition Against Hunger, also oppose the proposed restriction on sweetened beverages, even though such groups typically support efforts to improve the health and nutrition of low-income people. First I make the positive case for sweetened beverage exclusion; then I review and respond to the objections raised by the USDA and antihunger groups.

THE CASE FOR EXCLUDING SWEETENED BEVERAGES FROM SNAP

Funding SNAP participants' purchase and consumption of sweetened beverages does not further SNAP's primary aims, which are to alleviate hunger and improve the nutrition and health of low-income people. Sweetened beverages do not alleviate hunger because they do not satiate.⁹ Nor do sweetened beverages improve nutrition, because they have minimal nutritional value.¹⁰ The addition of sweetened beverages simply makes the diets of SNAP participants worse by adding excess calories and sugar, which contribute to overweight, obesity, diabetes, and other chronic diseases.

The role of sweetened beverages in overweight, obesity, and chronic disease has been detailed elsewhere.¹¹ Some of the relevant data: today Americans consume 200 to 300 more calories per day than they did 30 years ago;¹² soft drinks are the single largest source of calories in the American diet (9% of total calories¹³); and 10% to 15% of children's and adolescents' calorie intake comes from beverages.¹⁴

On average, children consume 172 calories from sweetened beverages each day, and adults consume 175 calories.¹⁵ According to another study, adolescents consume 357 calories from sweetened beverages each day.¹⁶ Nearly half of the sugar consumed by Americans comes from sweetened beverages.¹⁷ Each additional sweetened beverage consumed per average day has been found to increase a child's odds of becoming obese by 60%.¹⁸ Randomized controlled trials have shown that substituting sweetened beverages with low-calorie drinks decreases body mass index in overweight children.¹⁹ The risk of developing diabetes was found to be 83% higher among women who consumed 1 or more sweetened beverages a day.²⁰ Finally, it is important to note that lower-income people consume more sugary sodas and sweetened beverages than do higher-income people, according to surveys.²¹

By design, SNAP assistance levels are just high enough to fund purchase of a nutritionally adequate diet, so SNAP participants' purchases of sweetened beverages may replace purchases of healthier foods that are required to meet the government's dietary standards.²² According to a recent study of a large supermarket chain, carbonated soft drinks accounted for 6.9% of the grocery bill of SNAP users, compared with 4.38% for the average shopper.²³ These purchases of sweetened beverages should be limited, to free up funds to achieve SNAP's aim of providing low-income families with a nutritionally adequate diet. This is all the more true if SNAP benefit levels are being cut.

At a time when the efficiency and effectiveness of nutrition programs are critical, funding SNAP participants' purchases of sweetened beverages is a notably inefficient and counterproductive use of federal nutrition and wellness program resources. With its right hand, the federal government funds nutrition education and wellness programs to encourage healthy eating; but with its left hand, the federal government funds SNAP participants' purchase and consumption of sweetened beverages. This funding for sweetened beverages contradicts and counteracts the funding for wellness programs, and ultimately outstrips it: in 2011 the federal government will spend an estimated \$4 billion on soda for SNAP participants but only \$650 million to prevent chronic diseases such as diabetes.²⁴

OBJECTIONS TO EXCLUDING SWEETENED BEVERAGES

The USDA, antihunger organizations, and social justice advocacy groups have raised several objections to placing new restrictions on SNAP.

Embarrassment, Stigma, and Reduced SNAP Participation

One of the USDA's primary concerns with any new restriction on SNAP is that it could increase the embarrassment and stigma associated with SNAP use and thereby deter SNAP use. SNAP participants who are unaware of the new exclusion of sweetened beverages would attempt to purchase the excluded item, and it



would be embarrassing to be told at the cash register that they cannot purchase it. This embarrassment, in the USDA's words, "has the potential to stigmatize participants by singling them out as food stamp participants, and may discourage some eligible low-income persons from participating in the program."²⁵

Response

In 2006, only 67% of eligible people received SNAP assistance.²⁶ Use of SNAP assistance has increased dramatically during the recent recession, but an estimated 15 million people who are currently eligible for SNAP assistance still do not receive it.²⁷ Thus, there is a need to increase eligible people's use of SNAP assistance. Reducing the stigma associated with use of SNAP might be crucial to achieving that end. Eligible nonparticipants have identified stigma as a reason why they wouldn't seek SNAP assistance, although stigma is not the most commonly identified reason, and only 14% of eligible nonparticipants identify stigma as a reason for not seeking SNAP assistance.²⁸

It is important to determine whether new exclusions are likely to cause embarrassment and stigma for a significant number of SNAP participants, whether that stigma would deter use of SNAP, and whether minimizing the risk of embarrassment and stigma is an ethically decisive consideration.

Some food and beverage items are already ineligible for purchase with SNAP assistance, namely, alcoholic beverages, hot foods, and foods that will be eaten in the store. SNAP assistance also cannot

be used to purchase household supplies and cooking supplies, e.g., paper towels and plastic wrap.²⁹ If new exclusions are put into place, there should be an aggressive information campaign to alert SNAP participants to them. Nonetheless, some SNAP participants would likely remain unaware of a new sweetened beverage exclusion and would attempt to purchase the excluded item. Some of these purchases will be successful because SNAP participants sometimes purchase groceries with a combination of an electronic benefits transfer (EBT) card, which is how SNAP assistance is disbursed, and cash. In those cases, the cost of the sweetened beverages would be covered by the cash, without the purchaser necessarily realizing which form of payment was used for the sweetened beverages. But attempts to purchase sweetened beverages with EBT cards alone will be unsuccessful and might well be embarrassing, causing people to feel singled out and stigmatized as SNAP participants.

However, will a significant number of SNAP participants feel stigmatized or embarrassed? Will a significant number of SNAP participants who do feel embarrassed and stigmatized be deterred from using their benefits again as a result? Will this feeling cause a significant number of people who currently do not receive SNAP assistance to forgo SNAP assistance in the future? Will it cause an appreciable increase in the social stigma associated with SNAP use? All of these outcomes seem unlikely, but these are empirical issues that can only be assessed through a pilot study.

Even if a sweetened beverage exclusion does not significantly deter use of SNAP, embarrassment and stigma are significant problems in and of themselves. However, the possibility that new exclusions would cause embarrassment is not a good enough reason to reject exclusions, especially without studying whether the embarrassment and stigma would be significant. Even if the embarrassment and stigma proved to be significant, this fact would have to be weighed against the potential benefits of the sweetened beverage exclusion: lower rates of overweight, obesity, diabetes, and other chronic disease, conditions that are themselves stigmatizing. Rejecting improvements to the SNAP program is not the best way to reduce the stigma associated with SNAP use.

The USDA has taken steps to reduce the stigma of SNAP use, including changing the name of the program in 2008 from the Food Stamp Program to the Supplemental Nutrition Assistance Program, replacing paper coupons with EBT cards that work like debit cards,³⁰ and, most recently, encouraging grocers who accept SNAP to display "We Welcome SNAP Benefits" signs.³¹ The upsurge in SNAP use during the recent recession might also have helped reduce the stigma associated with use of SNAP, perhaps by framing SNAP as essential assistance that tides families over rough times, rather than as welfare for poor and nonworking people.³² Excluding sweetened beverages from SNAP could further bolster the public perception of SNAP, casting SNAP as a carefully

designed nutrition assistance program that helps families eat healthier, as opposed to an inefficient welfare program.³³

Exclusions May Be Ineffective in Changing Purchases

Another concern is that excluding sweetened beverages from SNAP will not decrease their purchase and consumption, because SNAP participants will simply use other sources of income to purchase sweetened beverages.³⁴ SNAP participants are expected to spend 30% of their income on food (a household's SNAP assistance level is the maximum allotment for a household of that size, minus 30% of the household's net income).³⁵ So SNAP participants may simply use the portion of their food budget that comes from non-SNAP income to purchase sweetened beverages. A related concern is that the exclusion of sweetened beverages will cause SNAP participants to switch to other beverages, such as diet soda, that have no nutritional value whatsoever—a seemingly inefficient use of nutritional assistance funds.

Response

Ideally, the exclusion of sweetened beverages will reduce SNAP participants' purchase of them, freeing up SNAP funds for the purchase of healthy, nutritionally dense foods such as fruits and vegetables. Even if the freed-up funds are used instead to purchase diet sodas or other beverages with no nutritional value, this change would support SNAP's aim of improving participants' nutrition and health, because drinking



beverages with no nutritional value is healthier than overconsuming sugary drinks.

But would participants actually purchase fewer sweetened beverages? Or would they simply use their other, non-SNAP income to purchase sweetened beverages? We do not know how many participants could afford to use their non-SNAP income to purchase sweetened beverages and whether they would choose to do so if they could. Soft drinks are subject to sales tax in 33 states, at a mean rate of 5.2%, but items purchased with SNAP assistance are exempt from sales tax.³⁶ Thus, excluding sweetened beverages from SNAP effectively increases the price of soft drinks for SNAP participants by at least 5.2% on average. According to one estimate, a 10% increase in the price of soft drinks would result in an 8% to 10% reduction in their consumption.³⁷ The extent to which SNAP participants would be sensitive to a smaller 5.2% increase in the price of soft drinks is uncertain.

The effectiveness of a sweetened beverage exclusion in reducing SNAP participants' purchases of sweetened beverages should be empirically investigated in pilot studies and demonstration projects.

Education and Incentives Are Preferable to Exclusions

A further objection is that nutrition education and financial incentives to eat healthy food are preferable to exclusions, either because those measures will be more effective at improving SNAP participants' diets, or, as recently suggested in an editorial in the

Journal, because such measures are less controversial.³⁸

A related concern is that exclusions on what SNAP assistance can be used to purchase send the wrong message, implying that poor people (and the bad choices they make) are the problem, when in fact the problem is inadequate physical and financial access to healthy food. Preventing low-income people from purchasing sweetened beverages and junk food will not solve the access problem, because it does not build grocery stores in their neighborhoods or give them enough money to buy healthy food.³⁹

Response

To expect people to eat healthy food when they lack physical and financial access to good provisions is absurd, so programs that increase low-income people's access to healthy food should be encouraged. An example is New York City's Health Bucks program, which gives SNAP participants who spend \$5 in SNAP assistance at farmers' markets an additional \$2 coupon to spend at farmers' markets. Ideally, increasing SNAP participants' consumption of fruits and vegetables would automatically decrease their consumption of unhealthy foods, making it unnecessary to exclude unhealthy foods from SNAP. Unfortunately, when people add fruits and vegetables to their diet, they do not necessarily reduce their overall energy consumption; nor do they necessarily lose weight.⁴⁰ Incentives to eat healthy food must be supplemented with efforts to reduce consumption of unhealthy foods. Improved nutrition education for

SNAP participants might reduce consumption of sweetened beverages, but whether education would be as effective as a sweetened beverage exclusion is unknown.

Furthermore, even if education and incentive programs were effective in reducing consumption of unhealthy food, these programs cost money. To extend incentive and education programs to a significant portion of the 41 million people who currently receive SNAP assistance would cost a great deal of money. In the current fiscal environment, to expect such education and incentive programs to be optimally funded is unrealistic.

It is also worth noting that controversial measures such as financial disincentives and outright prohibitions are commonly and successfully used to discourage unhealthy behavior. Tobacco taxes, alcohol taxes, seat-belt laws, and helmet laws are examples of measures that prevent unhealthy behavior by making it more costly or prohibiting it.

Exclusion Unfairly Targets Low-income People

Another objection to the exclusion of sweetened beverages from SNAP is that it unfairly targets low-income people.⁴¹ Changes to public subsidy programs might be seen as unfairly targeting low-income people if they disproportionately burden low-income people so that higher-income people can receive disproportionate benefits; for example, this charge would apply to reductions in SNAP assistance levels to fund programs that disproportionately benefit higher income people.

Response

The proposed exclusion of sweetened beverages from SNAP is not unfair in this way. It does not disproportionately burden low-income people to benefit higher-income people; rather, it is meant to benefit low-income people by improving their diet and health.

The sweetened beverage exclusion might seem unfair in another sense: it restricts the choices of SNAP participants but not those of nonparticipants, thereby exacerbating disparities in choice between SNAP recipients and higher-income people. It is true that the exclusion of sweetened beverages from SNAP would cause a reduction in some participants' consumer choice. Participants who rely exclusively or heavily on SNAP assistance to purchase food would become unable or less able to purchase sweetened beverages, creating a disparity in beverage choice between SNAP recipients and higher-income people.

However, this disparity in consumer choice is not ethically decisive. Ideally, public assistance programs would be able to remedy a range of disparities in choice, self-determination, and well-being that are created by poverty. However, the goal of SNAP is to address a specific problem: the diet and nutrition of low-income people. The disparity of overriding importance, when evaluating changes to SNAP, is the disparity in diet and nutrition—and the consequent disparity in health—between low-income and higher-income people. The sweetened beverage exclusion will address



these disparities in diet, nutrition, and health, not exacerbate them.

Exclusion Unduly Restricts Choice of SNAP Participants

An additional objection claims that a sweetened beverage exclusion would unduly restrict the choice of SNAP participants by limiting their choices when purchasing beverages. Because SNAP assistance cannot be used to purchase sweetened beverages, SNAP participants would be unable or less able to purchase those beverages, which would constitute an unwarranted reduction of their purchasing ability and choice.

Response

Industry groups will cast any reduction in consumer choice as a significant loss of freedom, but it is important to recognize what this reduction in consumer choice does and does not amount to. SNAP participants will not experience a reduction in their level of assistance (i.e., the dollar amount). They will not experience a reduction in their ability to feed their families a nutritionally adequate diet. They will not experience a reduction in their overall level of nutrition or health. They will just experience a reduction in the kinds of beverages they can choose among when choosing how to feed themselves and their families. They will have fewer beverages to choose among than higher-income people have.

The reduction in consumer choice caused by excluding sweetened beverages is not ethically decisive. The goal of ensuring that SNAP participants' diets are nutritionally adequate exists in

tension with the goal of maximizing participants' consumer choice. Maximal consumer choice is incompatible with a nutritionally adequate diet, given the reality that many SNAP participants and other Americans choose to purchase a nutritionally inadequate diet when faced with a food environment that heavily promotes inexpensive, unhealthy food items. It is ethically justifiable to modestly limit the consumer choice afforded by SNAP to improve the nutrition and health of SNAP participants, just as it is ethically justifiable to limit choice of unhealthy products in other settings such as schools, day care centers, hospitals, and places of employment. Such limitations are, in fact, already built into SNAP.

SNAP is not cash assistance that participants use to maximize their consumer choice; rather, it is assistance to buy food and food only.

Significant limitations on SNAP participants' consumer choice and limitations on the purchase of staple foods or otherwise necessary foods would be unjustifiable. However, the exclusion of sweetened beverages does not rise to this level because sweetened beverages are food products with little nutritional value that add nothing but excess calories to the diet. Though some consumers consider sweetened beverages to be a necessary part of their families' diet, this is precisely the mindset that the exclusion of sweetened beverages is meant to challenge. The goal of ensuring that SNAP participants' diets are nutritionally adequate justifies the modest restriction of consumer choice caused by the exclusion of sweetened beverages.

Similarly, the goal of improving the efficiency of the SNAP program justifies the modest restriction of consumer choice caused by the exclusion of sweetened beverages. At the time of this writing, SNAP participants were unable to purchase prepared foods with SNAP assistance, presumably because funding the purchase of prepared food is an inefficient and expensive way to alleviate hunger and improve nutrition and health. Similarly, the purchase of sweetened beverages should be prohibited because it, too, is an inefficient way to alleviate hunger and improve nutrition and health. Sweetened beverages do not satiate, they provide unneeded calories, and they have minimal nutritional value. When the goal of having an efficient public subsidy program is in tension with the goal of maximizing participants' autonomy, it is justifiable to achieve more efficiency through limitations on autonomy, especially when the limitation on autonomy is merely a modest restriction of consumer choice.

CONCLUSIONS AND RECOMMENDATIONS

Several objections have been raised to the proposed restriction on SNAP assistance for purchase of sweetened beverages. Some of these objections rest on empirical issues, for example the objection that excluding sweetened beverages from SNAP will not affect SNAP participants' purchases of sweetened beverages. These empirical issues are best resolved by demonstration projects or pilot studies of new exclusions.

Other objections question the equity of excluding sweetened beverages from SNAP, claiming that excluding sweetened beverages from SNAP reduces the consumer choice of SNAP participants and creates a disparity in consumer choice. These objections are important, but not decisive. Public assistance programs can justifiably address specific problems and disparities; the primary goal of SNAP is to improve the diet, nutrition, and health of low-income people, and the exclusion of sweetened beverages is an effective way to achieve this goal.

The USDA should approve the proposed demonstration project in which sweetened beverages would be excluded from the food items eligible to be purchased with SNAP benefits in New York City. The USDA should also encourage other pilot studies to assess the effects of excluding sweetened beverages from SNAP. ■

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- The level of SNAP assistance is based on the Thrifty Food Plan (TFP), a model diet plan that is designed to meet the Recommended Dietary Allowances of the National Academy of Sciences while being low in cost and deviating as little as possible from the typical diet of low-income people. The Thrifty Food Plan does deviate significantly from the typical low-income diet because that diet falls short of recommendations for fruits, vegetables, and many micronutrients. Also, the TFP does not quite meet the dietary standards; it falls short on some micronutrients. The TFP specifies consumption levels of "soft drinks, sodas, fruit drinks, and ales (including rice beverages)" for all age-gender groups. These consumption levels are very low: they range from 0 to 0.38 pounds/week (for males aged 51-70 years), which is less than one 8-ounce serving of soda per week. It stands to reason that any increase in purchase of sweetened beverages above the



extremely low level specified by the TFP level necessitates a decrease in the purchase of healthy foods to below the TFP level. SNAP assistance levels simply are not high enough to fund purchase of sweetened beverages above specified levels and to fund purchase of healthy foods at specified levels. See: Center for Nutrition Policy and Promotion, US Department of Agriculture. Thrifty food plan, 2006. Available at: <http://www.cnpp.usda.gov/Publications/FoodPlans/MiscPubs/TFP2006Report.pdf>. Published April 2007. Accessed November 7, 2010.

23. Shenkin JD, Jacobson MF. Using the food stamp program and other methods to promote healthy diets for low-income consumers. *Am J Public Health*. 2010; 100(9):1562–1564. Data on SNAP users' purchase of sweetened carbonated soft drinks and other sweetened beverages such as sports drinks and fruit drinks, but excludes diet carbonated soft drinks—are unavailable.

24. Shenkin and Jacobson, Using the food stamp program. The American Recovery and Reinvestment Act of 2009 allocated \$1 billion for a Prevention and Wellness Fund, including \$650 million “to carry out evidence-based clinical and community-based prevention and wellness strategies authorized by the PHS Act, as determined by the Secretary, that deliver specific, measurable health outcomes that address chronic disease rates.” Public Law 111-5-American Recovery and Reinvestment Act of 2009. Available at: <http://www.gpo.gov/fdsys/pkg/PLAW-111publ5/content-detail.html>. Accessed November 6, 2010.

25. Food and Nutrition Service, US Department of Agriculture. Implications of restricting the use of food stamp benefits - summary. Available at: <http://www.fns.usda.gov/ora/menu/Published/SNAP/FILES/ProgramOperations/FSPFoodRestrictions.pdf>. Published March 1, 2007. Accessed November 7, 2010.

26. Cunyngnam KE, Castner LA, Schirm AL. Reaching those in need: state food stamp participation rates in 2006. Washington, DC: Food and Nutrition Service, US Department of Agriculture; 2008. Available at: <http://www.fns.usda.gov/ora/menu/Published/snap/SNAPPartState.htm>. Accessed April 21, 2011.

27. The estimate of eligible nonparticipants as of November 2009 is 15 to 16

million, according to Kevin Kincannon, US undersecretary of agriculture. As quoted in: DeParle and Gebeloff, Food stamp use soars.

28. According to one study, only 69% of eligible nonparticipants would participate in SNAP even if they knew they were eligible. The other 31% identified various reasons for not participating, the top 3 being “personal independence” (91%), “costs of application or participation” (61%), and stigma (44%). See: Bartlett S, Burstein N. Food Stamp Program Access Study: eligible nonparticipants. Available at: www.ers.usda.gov/publications/efan03013/efan03013-2/efan03013-2a.pdf. Accessed November 7, 2010.

29. Food and Nutrition Service, US Department of Agriculture. Supplemental Nutrition Action Program: eligible food items. Available at: <http://www.fns.usda.gov/snap/retailers/eligible.htm>. Accessed November 6, 2010.

30. US Government Accountability Office. Food stamp program: steps have been taken to increase participation of working families, but better tracking of efforts is needed. GAO-04–346. Available at: www.gao.gov/products/GAO-04-346. Published March 5, 2004. Accessed November 7, 2010.

31. USDA unveils new consumer information resources about SNAP for people in need of food assistance [press release]. Washington, DC: Food and Nutrition Service, US Department of Agriculture; May 19, 2010. Available at: <http://www.fns.usda.gov/cga/PressReleases/2010/0272.htm>. Accessed November 7, 2010.

32. DeParle and Gebeloff, Food stamp use soars.

33. US Government Accountability Office, Food stamp program.

34. The USDA made this point in: Food and Nutrition Service, US Department of Agriculture, Implications of restricting the use of food stamp benefits.

35. Food and Nutrition Service, US Department of Agriculture. 25. How many people get SNAP benefits, and at what cost? Available at: <http://www.fns.usda.gov/snap/faqs.htm#25>. Accessed November 7, 2010.

36. Brownell, Farley, and Willett, et al. The public health and economic benefits of taxing sugar-sweetened beverages. Many states levy sales tax on soda, even though they have no sales tax on groceries. Of the 45 states that have a general sales tax, 31 do not levy sales tax on

groceries; but 24 of the 31 states that do not levy sales tax on groceries do levy sales tax on soda. These data were obtained from a comparison of the Center on Budget and Policy Priorities' list of states that do not levy sales tax on groceries (available at: <http://www.cbpp.org/cms/?fa=view&id=1230>; accessed November 7, 2010) with Stateline.org's list of states that tax soda (available at: <http://www.stateline.org/live/details/story?contentId=476625>; accessed November 7, 2010). See also: Food and Nutrition Service, US Department of Agriculture. A short history of SNAP. Available at: <http://www.fns.usda.gov/snap/rules/Legislation/about.htm>. Accessed November 7, 2010.

37. Andreyeva T, Long MW, Brownell KD. The impact of food prices on consumption: a systematic review of research on the price elasticity of demand for food. *Am J Public Health*. 2010;100(2):216–222.

38. Shenkin and Jacobson, Using the food stamp program.

39. This argument has been made in a slightly different context: a discussion of proposed taxes on sweetened beverages (i.e., the excise tax on sweetened beverages proposed by Governor Paterson of New York). The Food Bank for New York City objected to the soda tax thus: “Recognizing that millions of New Yorkers live in an environment that makes it difficult—sometimes prohibitively so—to maintain healthy dietary practices, it is worth noting that a tax on sweetened beverages, as proposed in the Governor's executive budget, addresses neither the financial nor the geographic access barriers that curtail the ability of low-income New Yorkers to make healthier food choices—i.e. it makes healthy food neither more affordable nor more available to low-income New Yorkers. Indeed, if anything, it leaves low-income individuals less able to afford food and other necessities, as all regressive taxes do.” See: Stampas T. Testimony prepared by Triada Stampas for the State Senate Committee on Health on Food Policy in New York State, January 22, 2010, on behalf of Food Bank for New York City. Available at: http://www.nysenate.gov/files/pdfs/Triada%20Stampas-Food%20Bank%20for%20New%20York%20City_0.pdf. Accessed June 25, 2010.

40. Whybrow et al. found no reduction in energy intake or fat intake, and no weight loss, in people who were given fruits and vegetables to add to their diets.

After 8 weeks, there was no significant difference among subjects given 0g/day, 300g/day, or 600g/day of fruits and vegetables. Rolls et al. reviewed several studies in which subjects encouraged to increase their fruit and vegetable intake did not lose weight unless they were also encouraged to reduce fat intake and lose weight. A limitation of these studies is that fruit juice was considered fruit, even though juice is not as satiating as whole fruit and hence is not as conducive to weight loss. Whybrow S, Harrison CL, Mayer C, James Stubbs R. Effects of added fruits and vegetables on dietary intakes and body weight in Scottish adults. *Br J Nutr*. 2006;95(3):496–503. Rolls BJ, Ello-Martin JA, Tohill BC. What can intervention studies tell us about the relationship between fruit and vegetable consumption and weight management? *Nutr Rev*. 2004;62(1):1–17.

41. This objection was attributed to Maine Equal Justice Partners, an advocacy group that objected to a Maine state legislator's effort to seek USDA approval to exclude sweetened beverages from SNAP. The Maine legislature voted down the proposal. Haskell M. State rejects food stamp restrictions. *Bangor Daily News*. April 3, 2009. Available at: <http://www.bangordailynews.com/detail/103038.html>. Accessed November 7, 2010.