



The New York Academy of Medicine

At the heart of urban health since 1847

Policy Brief: Healthy Food Procurement Policy for New York State

March 2012

Contents

I.	Overview: Healthy Food Procurement Policy for New York State.....	2
II.	Rationale for Establishing Healthier Policies	4
III.	Healthy Food Procurement Policy Options.....	8
A.	Policy Strategies	10
B.	Policy Scope	11
IV.	Food Procurement Policies and Practices in New York	13
A.	Current Policies	13
B.	Potential Barriers to Change.....	18
C.	Notable Policies in Other Locations.....	20
V.	Changing Procurement Policy in New York State	21
VI.	Resources	25
VII.	Endnotes and References	28

I. Overview: Healthy Food Procurement Policy for New York State

Implementing standards for government food procurement has been recommended as a means for 1) improving the nutrition of people who consume government-sponsored foods; 2) modeling healthful nutrition to the wider public; and 3) increasing the marketplace demand for healthy foods. Proponents include the Institute of Medicine, the Centers for Disease Control and Prevention, and the White House Task Force on the Prevention of Childhood Obesity.^{1,2,3,4,5} Some New York State agencies do currently have food purchasing and nutrition standards, but New York State does not have a statewide, multi-agency policy ensuring the healthfulness of the foods it procures for food service or food sales.

A New York State government food procurement policy could require that foods purchased, provided, or made available within a particular setting or jurisdiction follow certain guidelines. Procurement laws and policies typically aim to protect against corruption and other misuse of public funds, but other governmental interests such as environmental protection, supporting local farmers, remedying past discrimination, and improving public health can also be served through procurement policies. To achieve improved population health in New York State through food procurement policies, multiple strategies can be considered: comprehensive nutrition standards; limited standards and bans; wellness policies; and buy-local purchasing policies.

Among some obesity-prevention and nutrition advocates there is particularly strong support for nutrition standards. As is discussed in further detail below, there are obstacles to implementing comprehensive nutrition standards, including costs and administrative barriers like a lack of tracking systems. It may be possible to build capacity toward implementation of nutrition standards by taking interim steps. These would include the development and dissemination of voluntary statewide standards and the imposition of bans or limits on purchases of certain nutrients or foods whose consumption is discouraged, like sugar-sweetened beverages, sodium, and trans fats.

Another option may be to build on New York's current policies and programs addressing local food procurement. Standards crafted to boost fruit, vegetable, and other healthy purchases from regional farmers and producers would have the advantage of being viewed as an economic development effort and have an existing framework of support, including Executive Order No. 39 *Establishing State Policies*

for the Promotion of Sustainable Local Farms and the Protection of Agriculture Lands, the Farm-to-School program, and the Pride of New York program. This framework could be supplemented by an Executive Order requiring all agencies to set targets for New York-based procurement of whole foods such as fruits, vegetables, and low-fat dairy, and prepared foods that meet certain criteria for food preparation. The tracking systems established to enable meeting such targets would help create a system for future reporting on adherence to nutrition standards.

Table 1 Summary of Potential Healthy Procurement Policy Strategies

Type of Policy	Scope	Related NYS Policies	Ways NYS Could Move in this Direction
Comprehensive Nutrition Standards	Impose targets and limits for multiple nutrients and foods and meals	<ul style="list-style-type: none"> Some NYS agencies adhere to federal guidelines or have own standards NYS DOH has a set of voluntary guidelines for meetings and events 	<ul style="list-style-type: none"> Issue voluntary comprehensive standards for all agencies Issue mandatory comprehensive standards
Limited Standards	Impose limits around a particular nutrient (e.g., sodium) or foods (e.g., sugary beverages).	<ul style="list-style-type: none"> NYS Education Law prohibits the sale of candies and sugary beverages from the beginning of the school day until the end of the last scheduled meal period 	<ul style="list-style-type: none"> Set sodium targets Impose a ban on sugary beverages on government premises Impose a ban on use of trans fats in preparation or sale of foods on government premises
Wellness	Offer guidance on how food service can be healthier	<ul style="list-style-type: none"> NYS Education Law encourages the formation of school councils to address wellness 	<ul style="list-style-type: none"> Adopt the US federal wellness standards for all NYS agencies

Type of Policy	Scope	Related NYS Policies	Ways NYS Could Move in this Direction
Local	Encourage purchasing from farmers and other producers and distributors within a defined geographic area.	<ul style="list-style-type: none"> • State laws allow geographic preference • Executive Order 39 encourages local procurement 	<ul style="list-style-type: none"> • Set agency targets for the quantity of foods locally purchased (e.g., 20% of all foods)

II. Rationale for Establishing Healthier Policies

There is currently increased scrutiny of government costs and expenditures, and particularly of health-care related costs. Obesity-related spending in New York exceeds \$7.6 billion per year. Diet-related illnesses such as cardiovascular disease and diabetes cost another \$34 billion and \$12 billion, respectively. Much of this cost is absorbed by the state Medicaid system because rates of obesity and chronic disease are highest among New York’s lowest-income residents. At the same time, a large proportion of the individuals receiving government food services are also low-income residents. It makes sense, therefore, to review current state food procurement policies and to work toward assuring that foods purchased with government funds promote good health or, at a minimum, do not contribute to poor health.

Numerous organizations, including the Institute of Medicine, the Centers for Disease Control and Prevention, and the White House Task Force on the Prevention of Childhood Obesity, have suggested enhanced food and nutrition standards as a means for increasing access to healthy food and decreasing access to unhealthy foods, but also because it models healthy food availability for the wider community.^{6,7,8,9,10} While the decision to consume healthier foods is up to the individual, the 2001 *Surgeon General’s Call to Action to Prevent and Decrease Overweight and Obesity* notes that “individual behavior change can occur only in a supportive environment with accessible and affordable healthy food choices and opportunities for regular physical activity.” And furthermore, studies consistently find an association between policies that increase the availability of healthier foods and increased consumption. For example, increasing the availability of chain supermarkets is associated with lower adolescent BMI and overweight status.¹¹ A 2-year randomized control trial of a school-based intervention that increased the

availability of lower-fat foods in cafeteria à la carte areas found that sales of lower-fat foods did increase among adolescents.¹² A review of the workplace literature concluded that workplace efforts that included healthier food offerings led to an average net loss of 2.8 pounds among workers at 6–12-month follow-up.¹³

A core concept for all healthy procurement strategies is to support individuals' adherence to the *Dietary Guidelines for Americans* (DGA). Created by the US Department of Agriculture and the US Department of Health and Human Services, the DGA is “based on a preponderance of the scientific evidence for nutritional factors that are important for promoting health and lowering risk of diet-related chronic disease.”¹⁴ The DGA was developed with the intention of accommodating “the varied food preferences, cultural traditions, and customs of the many and diverse groups who live in the United States.” The DGA are oriented toward the needs of “healthy Americans ages 2 years and older,” but due to the rising incidence of chronic disease, the 2010 edition is also aimed at “those who are at increased risk of chronic disease.” It informs the federal nutrition assistance and education programs, and serves as the basis for consumer education.

The DGA identify which foods individuals should consume more of (fruits and vegetables, whole grains) and “food components” they should consume less of (sodium, fats, sugars, refined grains, and alcohol). The DGA is accompanied by the *USDA Food Patterns*, which identifies daily amounts of foods to consume and limits on the maximum number of calories that should be consumed from solid fats and added sugars for various populations. Another resource for nutritionists is the Dietary Reference Intakes (DRIs) values. Developed by the Food and Nutrition Board of the Institute of Medicine, these aid in the design of meals for individuals.

If procurement policies successfully change food availability and consumption, they could:

- Reduce intake of artificial trans fats and saturated fats, which reduces risk of CVD;¹⁵
- Increase dietary fiber, which is protective against weight gain¹⁶, CVD, type-2 diabetes¹⁷, and certain types of cancer;¹⁸
- Increase nutrient intakes, which is preventative against obesity¹⁹, certain types of cancer²⁰, and important in healthy aging;²¹

NYAM Policy Brief: Healthy State Food Procurement

- Reduce sodium intake, which is linked with reducing risk of hypertension, which in turn reduces risk of CVDs;²²
- Reduce intake of SSBs, which reduces risk of obesity²³, diabetes²⁴, CVD²⁵, and kidney²⁶ and liver damage;²⁷

In its widest reach, a statewide, multi-agency healthy food policy has the potential to affect the food environment for:

- 44 million visitors to New York's State parks with food concessions²⁸, operated by the Department of Parks, Recreation, and Historic Preservation
- 3 million recipients of emergency food assistance²⁹, provided through the DOH
- 1.8 million enrolled public school students³⁰, supervised by the State Education Department
- 680,546 children and adults served through the state child and adult care food program³¹, provided through DOH
- 293,424 state employees³²
- 290,000 inpatients at state-supported hospitals
 - NYC Health and Hospitals Corporation: 225,000 inpatients³³
 - Stony Brook University Medical Center: 30,000 inpatients³⁴
 - SUNY Downstate Medical Center: 18,000 inpatients³⁵
 - SUNY Upstate Medical Center: 16,926 inpatients³⁶
- 221,686 students enrolled at state colleges³⁷
- 197,000 older adults receiving congregate and home-delivered meals through NYS Office for the Aging³⁸
- 58,000 individuals incarcerated by the Department of Corrections and Community Supervision (DOCCS)³⁹
- 40,105 people served through Office of Mental Health (OMH) inpatient and residential services⁴⁰
- 30,000 residents in Bureau of Adult Care homes regulated by DOH⁴¹
- 17,000 youth held in detention⁴², overseen by the Administration for Children's Services
- 11,600 individuals with disabilities in programs through the Office for People with Developmental Disabilities⁴³

- 10,000 inpatients at Office of Alcoholism and Substance Abuse Services treatment centers⁴⁴

Procurement policies may also affect 1.1 million local government employees⁴⁵ as well as thousands of workers in nonprofit and federal government offices co-located with state offices and programs.

Healthier food procurement policies could potentially play a role in addressing some of the nutrition-related health status disparities among New Yorkers. The majority of New York's food service programs are targeted to vulnerable populations such as older adults, individuals with mental illnesses, and low-income New Yorkers, and these are all groups with higher rates of nutrition-related illnesses.* Also, DOCCS is one of the state's largest agencies and therefore largest government food purveyors. Fifty-one percent of incarcerated individuals are Black and 25% are Hispanic, two populations that also have high rates of diet-related illness.⁴⁶ Furthermore, procurement policies could impact disparities through the state worker population. Approximately 8.4% of state employees earn salaries within Classified Service Grades 1-6,⁴⁷ which has a maximum salary of \$30,252.⁴⁸ Depending on their exact income and household size, many of these employees fall under or near the federal poverty threshold. And while the state workforce is approximately 75% white, some of the agencies that have food-serving responsibilities have notably high percentages of minority workers. The Office of Child and Family Services workforce, for example, is 29.6% Black; the Office of Alcoholism and Substance Abuse Services (OASAS) workforce is 23% Black and 6% Hispanic; the OMH workforce is 28% Black and 6.8% Hispanic.

The extent of the potential health improvement statewide is difficult to estimate. Although healthy procurement policies are increasingly being implemented in the US, as of yet there are no completed health evaluations and no models that might help predict the impact of such changes. Part of the challenge of estimating the impact is that there is enormous variation in the degree to which New Yorkers are exposed to a government food service environment. At one extreme is the exposure of, for

* Thirty percent of Blacks and 28% of Latinos in New York are obese, compared to 24.3% of Whites. More than a third of adults earning less than \$15,000 per year are obese compared with roughly a quarter of adults earning \$50,000 or more per year. The prevalence of cardiovascular disease for New Yorkers earning less than \$25,000 is twice as high as the rate for New York residents with income greater than \$25,000 (11% and 5%, respectively). Individuals with mental illness also have disproportionately high rates of obesity, with some reports indicating 83% of people with serious mental illness being overweight or obese.

example, a park visitor purchasing a snack at a concession stand. At the other is the long-term, intensive exposure of a mental hospital inpatient. These various exposures necessarily lead to differential health impacts. Health improvement would also necessarily depend on the extent to which new policies improve current practices. As is discussed in Section IV, many of New York's agencies have some standards in place. A Health Impact Assessment (HIA) that includes a baseline survey of all agency food-purchasing standards and policies, and a study of compliance with those standards may be warranted to help measure the potential impact of a new policy.[†]

It is also important to note that there is little information on the impact of policy-change unaccompanied by additional educational support. Most studies indicating a positive impact of access on consumption (including those cited above) involve multiple changes or interventions (such as introducing disease management, nutritional counseling, or physical activity breaks).

III. Healthy Food Procurement Policy Options

There are at least two important dimensions to a healthy food procurement policy: the policy strategy and the policy scope. As is discussed below, setting nutrition standards, which set targets around the provision of certain nutrients or foods, is just one policy strategy. Wellness guidelines and buy-local purchasing policies are additional approaches. Policy scope is another important consideration. A policy may cover the whole government or certain agencies, but also, governments both serve and sell foods, and do so in a wide variety of settings and for a wide variety of populations. These dimensions are summarized and illustrated with examples in Table 2.

[†] The County of Los Angeles conducted a HIA that modeled the potential impact of reducing sodium in its food procurement. It anticipated that adults eating at the targeted food service venues could consume 233 fewer mg of sodium each day. This led to fewer cases of uncontrolled hypertension in the study population, and lower costs of treatment. The study authors concluded that food procurement policy can contribute to positive health impacts in Los Angeles County. Such a study could be replicated in New York State to consider comprehensive standards, limited standards, wellness policies, or local procurement.

Table 2 Examples of Approaches to Healthy Procurement

(See the Resources for further information on the cited examples)

Example	Strategy	Scope	Standards Used
NYC Agency Food Standards	Mandatory Comprehensive Nutrition Standards	Food served by city agencies and contractors, and on government property <i>(does not apply to foods sold)</i>	Standards developed by the NYC Department of Health and Mental Hygiene
Massachusetts State Agency Food Standards	Mandatory Comprehensive Nutrition Standards	Food served by city agencies <i>(does not apply to foods served or sold to employees)</i>	Adapted NYC standards
Delaware Healthy Eating Initiative	Mandatory Comprehensive Nutrition Standards	Food sold at state parks	Standards developed by the Nemours Health and Prevention Services
Santa Ana, CA Resolution on Healthy Snacks in Vending Machines	Mandatory Comprehensive Nutrition Standards	Food sold through vending machines on public properties within the executive branch of state government	How “healthy” will be defined is not specified in the statute
State of New York Healthy Meeting Guidelines	Voluntary Comprehensive Nutrition Standards	Foods served by state agencies and contractors at meetings and events for employees and the public	Developed by the NYS Department of Health
City of Boston Executive Order on Sugary Beverages	Limited Nutrition Standards (no sugary beverages)	Beverages sold and served on City property	City of Boston Healthy Options Beverage Standards
GSA Wellness & Sustainability Guidelines	Wellness Standards	Foods sold and food service at Federal worksites	Developed by the GSA and Dept. of Health and Human Services
Woodbury County, IA Policy for Rural Economic Revitalization	Local Procurement Policy	Foods purchased by county agencies	“Local” is food grown and processed within 100 miles of Sioux City, IA

A. Policy Strategies

1. Comprehensive Nutrition Standards

Nutrition standards can set the number of calories, fat, sodium, or other nutrient per beverage, snack, or meal. Alternatively, they may set the number of fruit and vegetable servings per day. The CDC has created the document, *Improving the Food Environment Through Nutrition Standards: A Guide for Government Procurement*, to help states and localities adopt policies that promote what they refer to as “comprehensive nutrition standards.” The standards are comprehensive in that they target multiple nutrients, including reducing sodium, fats, and sugar. The City of New York has adopted comprehensive nutrition standards for foods served by all city agencies.

To develop comprehensive standards, states and localities have typically designated or established a local committee to help translate the DGA into standards that are usable by local food procurement staff. These staff members may be purchasing in bulk from wholesalers or (as in the case of smaller agencies and subcontractors like child care providers) may be purchasing from smaller neighborhood retailers. On both circumstances, the purchasers will face constraints relating to issues such as cost, the availability of certain foods, and the food service and food preparation environment.

2. Limited Standards and Bans

Nutrition standards may also work toward decreasing the availability of specific DGA-discouraged “food components”, such as trans fat, or a particular food. For example, the City of Boston has banned sugary-beverage sales on government property because the DGA identifies them as a high source of excess daily calories. The amount of sodium in certain products is also receiving increasing attention. Alternatively, standards may work toward increasing the availability of DGA-recommended food items. For example, standards may require a fruit or vegetable with every meal.

3. Wellness Standards

Wellness standards recommend particular practices for food procurement, preparation, and display. They may accompany nutrition standards or stand on their own. For example, the federal Government Services Administration has “wellness and sustainability criteria” for its food service at federal worksites. Among its criteria is that staff should review whether vendors will use a “nutritionist in menu preparation, follow healthy cooking techniques, and offer light and vegetarian options.”⁴⁹ The food service concessions at the USDA and the Department of Health and Human Services are further subject

to nutrition standards, called the *Health and Sustainability Standards*. Other federal agencies are “strongly encouraged” to adhere to the complementary standards, but only the wellness standards apply across all federal agencies. Wellness standards can also address the wider food service environment by requiring posting of nutrition information, and offering preferential pricing for healthier items.

4. Local procurement policies

Local procurement policies can support healthier diets in a number of ways. First, the nutritional value (in addition to taste and freshness) of some fruits and vegetables begins to change after they have been harvested,⁵⁰ thus foods that travel less time are more fresh and may have more nutrients. But also, within regions with large amounts of farmland such as New York State (23% of New York’s land area is farmland⁵¹), requiring that a certain percentage of foods be locally-sourced can direct purchasing agents to obtain more foods from farmers. Not all locally-produced foods are necessarily farm-fresh or healthy (New York does have local manufacturers of processed, less-healthy foods). But some of New York’s top agricultural products include dairy, fruits, berries, nuts, and melons. Increasing the procurement of these items would increase in government settings the availability of products free of added sugars, fats, and salt. One pilot study of the effects of local sourcing found that participants who followed a local diet reduced caloric intake and increased consumption of fruits and vegetables.⁵² Also, advertising foods as “local” is known to have consumer appeal and has been a strategy for increasing fruit and vegetable consumption in schools, worksites, and other settings.

Additional health benefits unrelated to diet include potentially improved food safety (locally produced foods can minimize the risk of spreading food-borne illnesses); support for local jobs (employment and income are determinants of health outcomes); and reduced environmental impacts from the reduced transportation of foods.

B. Policy Scope

A state-level food procurement policy can apply to all food procurement across all agencies. It is also possible to make several distinctions. The first is whether to make the policy a recommendation **for voluntary compliance** or to make it **mandatory**. While voluntary standards are sometimes perceived as weak, in the context of food procurement, voluntary standards can help the state fulfill its charge of

serving as a model and may help some agencies that did not previously have any guidance to move toward healthier procurement.

Another consideration is foods served versus sold. Governments commonly **serve foods** at no cost in venues such as adult care facilities and group homes; correctional facilities; public hospitals; senior centers; homeless shelters; and child care facilities. In some cases these meals are underwritten with federal funding and must adhere to some federal standards, but states are allowed to exceed the minimum federal requirements.⁵³ Standards that address **foods sold** cover procurement for settings such as government employee cafeterias; public school and public university cafeterias; vending at parks and recreation facilities, and highway rest stops; and vending machines on government property and in government offices. Vending machine sales have been specifically targeted in many healthy procurement policies.

A third distinction is the **population** that will be affected. For example, standards might apply only to foods made available to the direct clients of a relevant government agency (patients in a hospital, inmates in prison) but not to the foods available in cafeterias or vending for employees of and visitors to those agencies. Foods served or sold to children and youth across multiple agencies and programs might be a target. Also, all foods sold or served to state employees may be a target as part of a worksite wellness effort. Or conversely, all foods sold or served to employees may be exempted.

A final consideration is the specific **setting**. Public schools and hospitals are common targets for healthier procurement. Proponents argue that these institutions have a particular responsibility to model healthy food choices. The recent federal reforms to the meals provided through the National School Lunch Program (NSLP) and the NYS Farm-to-School program are two examples of efforts in school settings. Health Care Without Harm manages an international effort to improve the healthiness of foods sold and served in hospitals.⁵⁴ Parks have also increasingly become a site for standards. The National Park Service (NPS), for example, recently announced a Healthy Foods Strategy, to provide healthy food options to all national park visitors. The NPS Director stated that parks should “educate visitors on food and potentially influence the choices they make after they leave the parks.” Other settings, such as the vending machines often found in waiting areas at government agencies or police

stations may be less clearly linked in the popular imagination as a place for implementing healthy food standards.

IV. Food Procurement Policies and Practices in New York

New York State agency procurement is governed by the State Finance Law, Article 11, §§ 160-168. The New York State Procurement Council develops additional guidance for implementation of this law. In September 2009, the Council issued new guidelines governing State agency procurements, and in 2009-2010 the Council updated the majority of the procurement bulletins governing specific areas of procurement policy and practice. Food and nutrition standards are not addressed in the Council's guidance. However, many state agencies do have their own food-related policies. The DGA is a common reference point for these standards.

The NYS Office of General Services (OGS) assists state agencies and local governments with procurement by creating centralized contracts. Approximately 98% of the food procured through OGS goes to just three agencies: DOCCS, the NYS Office for People with Developmental Disabilities (OPWDD), and OMH. State agencies are not required to purchase food through OGS

Some State programs' food procurement, such as that done by the NYS Office for the Aging senior meals and the DOH Child and Adult Care Feeding Program, is in practice largely decided at the local level because the meal providers are local organizations. While these organizations are allowed to purchase foods through the OGS, they generally prefer to buy their foods at grocery stores and other local retail outlets. They may also have contracts with food service vendors that are not handled through the OGS.

A. Current Policies

Across New York, there are currently examples of all four types of procurement policies; comprehensive nutrition standards, limited nutrition standards, wellness policies, and local procurement policies. Table 3 summarizes some of the standards and practices of New York's major state agencies.[‡]

[‡] This information was obtained through telephone calls to staff at the indicated agencies. The information was self-reported and not further verified. The extent of agency compliance with the standards was not determined and it should be noted that there are no statewide systems in place to obtain such information. Instead, each agency has its own inspection and monitoring regimes.

1. Comprehensive Standards

Many of New York's state agencies, including the three largest (DOCCS, OMH, and the OPWDD), as well as the NYS Office for the Aging, follow comprehensive nutrition standards. DOCCS has a registered dietitian who works to ensure prisoner meals follow USDA guidelines. The OPWDD has 13 regional Developmental Disabilities Services Offices, each of which has local, comprehensive nutrition standards for food purchasing. OMH patients have individualized meal plans based on the DGA.

School districts are not state agencies but statewide, school breakfasts and lunches are subject to the comprehensive nutrition standards of the federally-funded NSLP. The NSLP standard does not currently apply to foods sold in schools outside of these meals, known as "competitive" foods. Similarly the Child and Adult Care Food Program, while administered by the state, is funded by the federal government and therefore subject to federal nutrition guidelines.

In New York City, Mayor Michael Bloomberg issued Executive Order 122 establishing *Standards for Purchased Food, Standards for Meals and Snacks Served, and Agency and Population-Specific Standards and Exceptions*.⁵⁵ These comprehensive, agency-wide standards went into effect March 19, 2009. The standards were developed by the city's Food Policy Task Force with participation from city agency staff and apply to meals and snacks served at schools, senior centers, homeless shelters, child care centers, after school programs, correctional facilities, public hospitals and parks and other city agency facilities and programs. The standards include guidelines for trans fats, sodium, and calories, as well as food preparation methods. The standards apply to foods served but not to foods sold on government property or through licensees. New York City also has standards for all beverage vending machines on city property.⁵⁶

Table 3 Selected Food and Nutrition Standards and Practices of Statewide Programs

(based on an informal telephone survey of selected agencies)

Program	Clients	Self-reported Procurement Methods and Standards
NYS Office for the Aging Senior Meals Program	Adults over age 60	<ul style="list-style-type: none"> • State-contracted local service providers procure individually and must adhere to municipal policies and practices • Providers are required to demonstrate compliance with DGA
Office for People with Developmental Disabilities	People with mental disabilities	<ul style="list-style-type: none"> • State-contracted local service providers procure individually • 13 regional offices develop own food standards based on DGA and reviewed by OPWDD • Therapeutic diets for some patients
Office of Mental Health	Adults and youth with mental illness	<ul style="list-style-type: none"> • OMH hospitals can procure individually but largely rely on a central contract with SYSCO • OMH operates a Cook/Chill Production Center which services many of their hospitals • Follow DGA in meal planning and there are therapeutic diets for some patients • Youth in-patient programs follow NSLP guidelines for lunch.
Office of Alcoholism and Substance Abuse Services Treatment Centers	Adults and youth in treatment	<ul style="list-style-type: none"> • Some of the state-contracted local service providers do own food preparation and some do their own procurement. Some providers contract with a vendor. • Service providers can also use the OMH Cook/Chill Facility. • RDs review menus and provide specialized diets as needed.
Department of Corrections and Community Supervision	Incarcerated adults	<ul style="list-style-type: none"> • Central system of purchasing for 70 sites • Also has the Oneida Cook/Chill Food Production Center which produces food for all sites, plus county jails • Menu is analyzed by RD on staff and follows DGA
New York State Child and Adult Care Food Program	Low-income children and adults	<ul style="list-style-type: none"> • State-contracted local service providers purchase food locally • State staff monitor compliance with DGA
OCFS, Div. of Juvenile Justice & Opportunities for Youth Residential Facilities	Youth in state custody	<ul style="list-style-type: none"> • Follow standards for children and youth established by the food and nutrition board of the National Academy of Sciences' National Research Council, the DGA, and the NSLP

2. Limited standards and bans

The State Education Law prohibits the sale of candies and sugary beverages on school premises from the beginning of the school day until the end of the last scheduled meal period.⁵⁷ Some localities, including Albany and New York City, have banned the use of trans fat in food preparation. A bill proposing a statewide ban has been proposed for several years in the state legislature but has not yet passed. New York City requested permission from the federal government to bar food stamp participants from purchasing sugary beverages with food stamps. The proposal was intended on a trial basis for study. The federal government has denied this request.

The NYS Department of Health (DOH) has developed *Guidelines for Healthy Meetings*.⁵⁸ These voluntary standards are included in DOH Division of Chronic Disease Prevention contracts and contract bidders are required to complete a form indicating intent to implement or current adherence to a *Comprehensive Healthy Foods Policy*. At present, there is no enforcement of the guidelines or adherence to a healthy foods policy.

3. Wellness policies

All New York public schools are required to have wellness policies. This is imposed through the NSLP, but also through a law passed by the state legislature. The State Education Law requires districts to create child nutrition advisory committees that will address “vending machine sales, menu criteria, educational curriculum teaching healthy nutrition, educational information provided to parents or guardians regarding healthy nutrition and the health risks associated with obesity, opportunities offered to parents or guardians to encourage healthier eating habits to students, and the education provided to teachers and other staff as to the importance of healthy nutrition.”

4. Local procurement

Both New York State Finance Law, Section 165.4a, and the General Municipal Law, Section 103, Subdivision 8-a, explicitly allow state agency, local government, and school district contracts to require that solicited food products are grown, produced, or harvested in New York State.⁵⁹ The Cuomo Administration also recently extended Executive Order No. 39 (Enacted November 4, 2010) *Establishing State Policies for the Promotion of Sustainable Local Farms and the Protection of Agriculture Lands*. This order recognizes that there are “significant environmental, health and economic benefits from expanding agriculture production, including locally-grown food” and directs state agencies to consider

“the goal of achieving the significant environmental, health and economic benefits from expanding production of, and demand for, locally grown food” and “where feasible and without increased cost or burden, and as consistent with current law, to increase the proportion of their total food purchases comprised of locally grown food.” In addition, the 2002 New York State Farm to School Legislation charges the NYS Department of Education and Department of Agriculture & Markets with working together to facilitate the purchase of New York farm products by schools, universities, and other educational institutions.⁶⁰

Despite these policy supports, local purchasing by government agencies has reportedly been deterred by concerns that geographic preferences are not permitted. This concern may stem from misunderstandings about the dormant Commerce Clause doctrine (DCCD) of the US Constitution, which courts have held to imply that states and localities cannot impose laws that discriminate against foods and services from other states and localities. However, there is a “market-participant exception” to the DCCD. In the same way that a private citizen can decide to only patronize local businesses, state and local agencies may choose to only buy from local producers.⁶¹ The federal government also recently clarified that institutions participating in a number of federal programs, including the Child and Adult Care Food Program, Summer Food Service Program, Department of Defense Fresh Program, and the NSLP may “apply an optional geographic reference in the procurement of unprocessed locally grown or locally raised agricultural products.”⁶²

The New York State Food Policy Council has recommended that New York “strengthen the connection between local food products and consumers” and “foster a culture of healthy and local eating for all New York State residents.” In its 2009 report to the Governor, the Council suggested 20% of all food purchased by state agencies and authorities should be produced locally.⁶³

New York’s City Council has indicated interest in promoting local food procurement as a means for reducing the costs of healthy food, supporting economic development, and creating a more sustainable food system. The 2010 report *Foodworks: A Vision to Improve NYC’s Food System* by the Office of the New York City Council Speaker Christine Quinn discusses increasing urban agriculture and supporting farmers in upstate New York, along with an intent “to develop new procurement guidelines that encourage purchasing from regional farmers.” It also suggests legislation to support tracking of local

food procurement. The Manhattan Borough President's 2010 report *FoodNYC: A Blueprint for a Sustainable Food System* similarly recommends mandating and facilitating local food procurement.⁶⁴

B. Potential Barriers to Change

The potential barriers discussed below were drawn from studies done in a variety of institutional settings and jurisdictions.^{65,66,67,68} These findings are likely applicable to New York State, but there may also be challenges and concerns unique to New York that could be identified through a local assessment.

1. Cost

New standards could lead to higher institutional costs because the fresh, whole foods and lean meats recommended by the DGA tend to cost more than the prepackaged foods commonly served in institutions. Labor costs may also rise if higher-skilled or more labor is needed to prepare foods, and if costly equipment purchases or facility modifications are needed.

Most of the work to date estimating costs due to enhanced procurement standards has been done in the context of school food. The Institute of Medicine (IOM) projects that changing most current school food offerings to meet the DGA would incur a 4%-9% increase in costs for lunch and an 18% - 23% increase for breakfast. The USDA Food and Nutrition Service (FNS) estimates a 3% increase for lunch, and a 26% increase for breakfasts, or an overall 12% increase.⁶⁹

At the same time, however, the State of Massachusetts conducted a review of the literature on schools with nutrition standards that exceed the DGA and concluded that ultimately:

The cost of the school's total food budget was not increased due to several creative strategies. Food service staff marketed the benefits of healthier foods to the students and school personnel. These schools also worked with food vendors and local manufacturers to identify healthier food options. In several instances they worked with manufacturers to change the nutritional content to reflect USDA nutrition standards. These companies knew they would benefit by then being able to secure multiple contracts from other agencies within their state or region.⁷⁰

At the root of the differences between the FNS and IOM estimates, and the conclusion of the State of Massachusetts is that the content of the standards matters. Implementing standards that simply exceed

current federal standards (the Massachusetts analysis) may not incur the same costs as seeking to meet the DGA. Furthermore, schools and other institutions may vary in their baseline offerings and therefore in the extent to which changes will be needed. For example, the “Balanced Menus” intervention found cost-savings due to switching from a high-meat diet.⁷¹ However, Sodexo, a leading food purveyor, reports that its “Meatless Mondays” program for hospitals in New York does not result in reduced costs because of the costs of preferred meat substitutes (like Portobello mushrooms, which are expensive) and the spices used in vegetarian entrees.

Some additional variables that may affect agency cost include:⁷²

- Location. Urban areas tend to have higher labor costs. Institutions in rural areas unconnected to cooperative purchasing efforts may also have higher costs. Transportation routes and distance from the sources of healthier foods may also play a role.
- The bidding process. The bid specifications and the purchasing power of the purchasing agents will affect the ultimate negotiated cost.
- Distributors. Distributor costs and locations, as well as the level of competition for business among distributors will affect the ultimate cost to the purchasing agents.
- Food and ingredient preferences and availability.

An additional cost consideration is the staffing required to oversee development and implementation of a new statewide food policy. The *CDC’s Guide to Government Procurement* estimates that at minimum, for the first year of policy development and implementation, it is important to have the following personnel to develop and implement comprehensive nutrition standards: a food policy coordinator (at least 25% FTE); a project coordinator (100% FTE); a nutritionist or registered dietitian (at least 50% FTE). New York City has a full-time Food Policy Coordinator in the Office of the Mayor to oversee the implementation of its city-wide standards. The New York City Department of Health and Mental Hygiene has two, grant-funded registered dietitians also working with City agencies to meet the standards.

2. Limited food preparation capacities

Many institutions currently rely on prepackaged foods because they need only warming or frying prior to serving. Such organizations may lack the refrigeration to store fresh foods; the kitchen equipment for healthier food preparation, such as slicers, ovens, and steamers; and/or the physical space to prepare quantities of fresh foods. Personnel and training may also be lacking. Current food service staff may not have knowledge of nutrition science, menu planning, or healthy cooking practices.

3. Consumer preferences

Customers and clients may welcome having healthier food served or available for purchase, but if they are not pleased with changes, agency staff may have to implement programs or take additional steps to overcome the dissatisfaction of clients and customers. In the Balanced Menus intervention in California, at “Hospital B,” which staff described as serving an “old school, meat and potatoes crowd,” staff members felt they had to work hard to keep their new meals from appearing “exotic.” Dissatisfaction among customers of foods sold, coupled with the higher costs of healthier foods could affect the business model for some food services.

4. Lack of tracking systems

There is no existing statewide infrastructure to track agency food purchases or compliance with standards. Some individual agencies are currently reporting to the federal government about compliance with federal standards for food and nutrition programs, but many agencies are not currently required to make such reports. It will be necessary to establish both tracking and monitoring mechanisms.

C. Notable Policies in Other Locations

Two states have recently revised their food procurement standards. In January 2009, Massachusetts Governor Deval Patrick issued Executive Order 509 requiring all food purchased by state agencies or sold on state property to conform to certain nutrition standards. The standards apply to those agencies within the Executive Department that provide food, whether directly or through contract, as part of the basic services provided to agency clients and patients. It exempts food service to employees, vending machines, and concessions that provide food for sale through leases, licenses, or contracts at state programs.⁷³ Massachusetts has a separate *Healthy Meeting and Vending Guide* which provides recommended standards for food provided through those outlets.⁷⁴

Tennessee Governor Phil Bredesen issued a more limited executive order in August 2010 addressing all vending machines on public properties within the executive branch of state government. It requires “that guidelines be developed establishing minimum nutritional standards and standards for labeling and placement of food and beverages along with pricing and other incentives to encourage the purchase of items that meet these nutritional standards.” The Tennessee departments of Finance and Administration, and Health and Human Services, in conjunction with vendors will develop and publish the nutritional guidelines. The order also states that the Department of Health will publish recommendations for nutritional food and beverages provided to state employees at breaks, meetings, conferences, and other work-related events held on public property.⁷⁵

San Francisco’s Executive Directive 09-03 to promote “Healthy and Sustainable Food” has led to wide-ranging standards addressing vending machines, lease agreements, city contractors, mobile food vendors, and procurement for events and meetings.⁷⁶ Issued in June of 2009 by Mayor Gavin Newsom, the order is also notable for attempting to address multiple components of San Francisco’s food system. In addition to authorizing the creation of nutrition standards, it addresses promoting urban agriculture and regional food; hunger and food security; food business; and sustainable fisheries.⁷⁷

Some states and cities have established more limited standards that apply only to particular settings. For example, Los Angeles has adopted healthy standards for all its vending machines.⁷⁸ San Diego requires snacks sold in vending machines at recreation centers and sports facilities to meet nutrition standards. The State of Delaware and Kansas City, MO, have required their parks to offer healthy food items for sale. Notably, Delaware requires that the healthy options be priced competitively or lower than unhealthy items.”⁷⁹

V. Changing Procurement Policy in New York State

1. Options for State Action

Setting new statewide policy can begin in two ways: The legislature may pass a law or the governor may issue an executive order. In either case, a committee or multi-agency team will be needed to identify standards feasible for agency implementation. Given the many changes that may be required for agency

vendor relationships and internal food-handling practices, a phase-in schedule and technical assistance program should likely be implemented.

Particularly if mandatory comprehensive nutritional standards are desired, it may be advantageous to conduct a survey of current standards and efforts in state agencies.⁵ Comprehensive standards are likely the most technically challenging to implement of the four procurement policies outlined in this paper and may require the most change in agency practices. A survey could assess feasibility by government setting (such as food preparation facilities and presence of nutritionists and dietitians on staff) and the receptivity of clients, customers, and staff. A survey might also identify needed supports that could be presented in tandem with the proposal. It may also be advisable to specifically determine the views of public employees or their unions.

It will be important to have a communication plan to support the policy.⁸⁰ A tracking mechanism may also be desired to monitor compliance.

Lastly, it is advisable to consider the timing of other policy actions. For example, the public may not be receptive to imposing a new statewide regulatory regime when taxes are also being raised or thousands of government jobs are being cut.

2. Influencing Factors in the NYS Policy Environment

Directing public-sector funding toward improved health outcomes can be seen as part of a larger public sector and private sector trend toward “sustainable” investment. The concept is that investment should include accountability for the social, environmental, and health effects of an organization’s practices. As noted previously, the federal government has established wellness criteria for food procurement for government facilities and the *Healthy, Hunger-Free Kids Act of 2010* authorized the creation of higher standards for foods served and sold in schools. Additional examples include the effort in public and private hospitals, including many in New York,^{**} to become “healthy hospitals” that offer healthy foods

⁵ A preliminary study along these lines was done for this paper and then expanded upon by the NYS DOH and the NYS Food Policy Council in 2011. The instruments developed for that work could serve as the basis for a fuller study.

^{**} Health Care Without Harm lists the following New York institutions as having adopted purchasing policies that promote health and sustainability goals: Bon Secours Health System, Warwick, NY; Good Samaritan Hospital of

for patients, employees, and visitors. Many large employers are investing in worksite wellness, which includes educational programs for employees as well as modifications to the environment like offering healthier meals and physical activity breaks. Meta-analyses suggest returns on investment of \$5.93 for every dollar spent on wellness.⁸¹ In New York City, there was relatively little opposition voiced when its nutrition standards were announced in 2008 or implemented in 2009.

A countervailing trend is the economic downturn since 2007, which has placed substantial pressure on governments to cut costs. Though it may yield some longer-term economic development and/or cost-savings related to decreases in the incidence of chronic-disease-related costs, healthy food procurement is likely to raise food and food preparation costs in the short-term. Critics will also anticipate that implementation of the standards will require additional regulations and oversight, which can be costly and burdensome for businesses. Concerns about a growing so-called “nanny state” is also a counterforce. As evidenced during the recent efforts to impose a tax on sugar-sweetened beverage in New York, there is strong opposition to public health interventions that appear to curtail consumer options. In response to such concerns, obesity-prevention interventions in the U.S. are often targeted (or presented as being targeted) toward children, a subset of the population whose choices can be acceptably limited in the interest of their good health or to support parents in creating a healthy environment. Statewide food procurement standards could significantly affect children’s environments such as child care settings, recreation centers, and parks. However, many adults, particularly public employees, would also be affected. Lastly, there is also an impetus toward “decreasing the size of government.” The Department of Health was highlighted during the current governor’s 2010 gubernatorial campaign as an agency with an excessive number of task forces and councils. The existing Food Policy Council and the Procurement Council are two bodies that might assume some responsibilities around implementation of a new policy. In recent months, a workgroup of the Food Policy Council has been exploring the potential development of nutrition standards. However, a task force of all the affected agencies will likely be needed to craft a feasible statewide policy. New resources will also be needed for implementation and monitoring.

Suffern, NY; Community Hospital, Port Jervis, NY; The Center for Discovery, NY; Memorial Sloan-Kettering Cancer Center, NY; Northern Westchester Hospital, NY; Olean General Hospital, NY; The Orchard Nursing and Rehabilitation Centre, NY; Regeis Care Center, NY; Schervier Nursing Care Center, NY;

3. Potential Organizational Support in New York

Improving government food procurement policy aligns with the stated policy priorities of the New York chapters of the American Academy of Pediatrics and the American Heart Association,⁸² and the New York Academy of Medicine. Other potential supporters include the American Cancer Society, the Academy of Family Physicians, the NYS Dietetic Association, New York State Public Health Association, and the Public Health Association of New York City. New York's major insurers of government employees may also be supportive.

New York has dozens of community-based coalitions funded to work on community-based obesity prevention policies and which will likely support changes in food procurement policies. The medical schools, health professions programs, schools of public health, and food and nutrition programs at New York colleges and universities may also voice support.

If the implemented policy supports local procurement, it may gain additional support from economic development groups (including the Regional Economic Development Councils in rural areas), farmers, producers, and the NYS Council on Food Policy. As discussed above, there is also support for local food procurement in the Offices of the New York City Council Speaker and the Manhattan Borough President.

National organizations that would potentially voice support for the change include the American Academy of Physicians, the American Public Health Association, the Association of State and Territorial Health Officials, the Center for Science in the Public Interest, the National Association of County and City Health Officials, and Yale Rudd Food Policy Center.

VI. Resources

Healthy Food Procurement Toolkits and Overviews

- PHLP's *Understanding Healthy Procurement: Using Government's Purchasing Power to Increase Access to Healthy Food*
www.phlpnet.org/sites/phlpnet.org/files/Understanding_Healthy_Procurement_2011.pdf
- CDC's *Improving the Food Environment Through Nutrition Standards: A Guide for Government Procurement*
www.cdc.gov/salt/pdfs/DHDSP_Procurement_Guide.pdf

New York State Purchasing

- NY State Office of General Services, Procurement Services Group
Customer Service: (518) 474-6717
www.ogs.state.ny.us/BU/PC/Default.asp
- NY State Procurement Guidelines State Procurement Council
<http://www.ogs.state.ny.us/procurecounc/pdfdoc/guidelines.pdf>

Healthy Food Procurement Standards

- NYS *Guidelines for Healthy Meetings*
www.health.state.ny.us/nysdoh/prevent/guidelines.htm
- US Government Services Administration's *Wellness and Sustainability Guidelines*
www.gsa.gov/portal/content/104429
- NYC *Agency Food Standards*
www.nyc.gov/html/doh/html/cardio/cardio-vend-nutrition-standard.shtml
- MA *State Agency Food Standards*
www.mass.gov/Eeohhs2/docs/dph/com_health/nutrition_phys_activity/eo509_proposed_food_standards.pdf
- City of Boston Executive Order on Sugary Beverages
<http://www.bphc.org/Documents/SugarSweetenedBeverageExecutiveOrder.pdf>

Beverage Vending

- PHLP *Developing a Healthy Beverage Vending Agreement Fact Sheet*
www.nplanonline.org/system/files/nplan/HealthyVendngAgrmnt_FactSheet_FINAL_090311.pdf

- American Beverage Association/Clinton Foundation Beverage Standards
www.schoolbeverages.com/

Beverage and Food Vending Machine Policies

- King County (Seattle) *Healthy Vending Guidelines*
www.kingcounty.gov/healthservices/health/%7e/media/health/publichealth/documents/nutrition/HealthyVendingGuidelines.ashx
- Baldwin Park, CA Resolution No.2008-014
baldwinpark.granicus.com/MetaViewer.php?view_id=10&clip_id=882&meta_id=94002
- Monterey County, CA *Healthy Vending Machine Policy*
www.co.monterey.ca.us/admin/pdfs/HealthyVendingPolicy.pdf
- San Diego, CA Healthy Choice Options in Vending Machines on County Property, Policy No. K-14
www.co.sandiego.ca.us/hhsa/programs/phs/documents/HealthyChoiceOptionsinVendingMachinesPolicy3-07.pdf
- Santa Ana, CA Resolution No. 2006-053
www.eatbettermovemore.org/sa/policies/pdftext/StAnaHealthySnacks.pdf
- NYC Beverage Vending Machine Standards
www.nyc.gov/html/doh/downloads/pdf/cardio/cardio-vending-machines-standards.pdf

Healthy Concessions/Mobile Vending on City Property

- Munch Better at Delaware State Parks
www.destateparks.com/general_info/healthy-eating.asp
- Kansas City Parks and Recreation Vending Policy 4.7.08
www.kcmo.org/idc/groups/parksandrec/documents/parksrecreation/012710.pdf

Nutrition Standards

- *2010 Dietary Guidelines for Americans*
www.cnpp.usda.gov/dietaryguidelines.htm
- American Heart Association's *Recommended Nutrition Standards for Procurement of Foods and Beverages Offered in the Workplace* (www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_320781.pdf) and *Policy Statement on Worksite Wellness Programs* (www.circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.109.192653)

Local Procurement

- NY State Assembly's *Selected Food, Farm and Nutrition Policy Laws: Introduction*
www.assembly.state.ny.us/comm/Food/20110109/report.pdf
- Woodbury County, IA *Policy For Rural Economic Revitalization*
<http://www.agobservatory.com/library.cfm?refID=96615>

VII. Endnotes and References

¹ Lee, V., Healthy Eating Active Living Convergence Partnership, & Prevention Institute. (2008). Strategies for enhancing the built environment to support healthy eating and active living. S.I.: Healthy Eating Active Living Convergence Partnership. Available at: http://www.eatsmartmovemorenc.com/TheEvidence/Texts/Convergence_Partnership_HEAL.pdf. Accessed on March 9, 2011.

² Kettel, K. L., Centers for Disease Control and Prevention (U.S.), & National Center for Chronic Disease Prevention and Health Promotion (U.S.). (2009). Recommended community strategies and measurements to prevent obesity in the United States. Atlanta, GA: U.S. Dept. of Health & Human Services, Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/mmwr/pdf/rr/rr5807.pdf>. Accessed on March 9, 2011.

³ Institute of Medicine. Parker, L., Burns, A. C., & Sanchez, E. (2009). Local government actions to prevent childhood obesity. Washington, DC: National Academies Press. Available at <http://www.iom.edu/~media/Files/Report%20Files/2009/ChildhoodObesityPreventionLocalGovernments/local%20govts%20obesity%20report%20brief%20FINAL%20for%20web.ashx> Accessed on March 9, 2011.

⁴ Frieden, T. R., Collins, J., & Dietz, W. (March 01, 2010). Reducing childhood obesity through policy change: Acting now to prevent obesity. *Health Affairs*, 29, 3, 357-363.

⁵ United States. (2010). Solving the problem of childhood obesity within a generation: White House Task Force on Childhood Obesity report to the President. Washington, D.C.: Executive Office of the President of the United States. Available at: <http://www.letsmove.gov/obesitytaskforce.php> Accessed on March 9, 2011.

⁶ Lee et al, 2008

⁷ Kettel et al, 2009

⁸ Institute of Medicine, 2009

⁹ Frieden et al, 2010

¹⁰ United States. (2010). Solving the problem of childhood obesity within a generation: White House Task Force on Childhood Obesity report to the President.

¹¹ Powell, L. M., Auld, M. C., Chaloupka, F. J., O'Malley, P. M., Johnston, L. D., & Bridging the Gap Research Informing Practice and Policy for Healthy Youth Behavior. (October 01, 2007). Associations Between Access to Food Stores and Adolescent Body Mass Index. *American Journal of Preventive Medicine*, 33,4.

¹² Kettel et al, 2009

¹³ Anderson LM, Quinn TA, Glanz K, Ramirez G, Kahwati LC, Johnson DB, Ramsey Buchanan L, Archer WR, Chattopadhyay S, Kalra GP, Katz DL, Task Force on Community Preventive Services. The effectiveness of worksite nutrition and physical activity interventions for controlling employee overweight and obesity: a systematic review. *Am J Prev Med* 2009;37(4):340-357.

- ¹⁴ United States. (2010). Nutrition and your health: Dietary guidelines for Americans. Washington, D.C: Dept. of Health and Human Services. Available at: <http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm>. Accessed on March 9, 2011.
- ¹⁵ Willett, W. C., & Ascherio, A. (1997). Health of trans fatty acids. *American Journal of Clinical Nutrition*, 66(suppl), 1006s-10s.
- ¹⁶ Howarth, N. C., Saltzman, E., & Roberts, S. B. (2001). Dietary Fiber and Weight Regulation. *Nutrition Reviews*, 59(5), 129-139. Blackwell Publishing Ltd. Retrieved from <http://dx.doi.org/10.1111/j.1753-4887.2001.tb07001>.
- ¹⁷ Montonen, J., Knekt, P., Järvinen, R., Aromaa, A., & Reunanen, A. (2003). Whole-grain and fiber intake and the incidence of type 2 diabetes. *American Society for Clinical Nutrition*, 77(3), 622-629. Retrieved from <http://www.ajcn.org/content/77/3/622.short>
- ¹⁸ Holmes, M. D., Liu, S., Hankinson, S. E., Colditz, G. A., Hunter, D. J., & Willett, W. C. (2004). Dietary Carbohydrates, Fiber, and Breast Cancer Risk . *American Journal of Epidemiology* , 159 (8) , 732-739. Retrieved from <http://aje.oxfordjournals.org/content/159/8/732.abstract>
- ¹⁹ Rolls, B. J., Drewnowski, A., & Ledikwe, J. H. (2005). Changing the Energy Density of the Diet as a Strategy for Weight Management. *Journal of the American Dietetic Association*, 105(5, Supplement), 98-103. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0002822305002956>
- ²⁰ Hebert, J. R., Hurley, T. G., Olendzki, B. C., TeasYunsheng Ma, J., & Hampl, J. S. (1998). Nutritional and Socioeconomic Factors in Relation to Prostate Cancer Mortality: a Cross-National Study. *Journal of the National Cancer Institute*, 90(21), 1637-1647. Retrieved from <http://jnci.oxfordjournals.org/content/90/21/1637.abstract>
- ²¹ Drewnowski, A., & Shultz, J. (2001). Impact of aging on eating behaviors, food choices, nutrition, and health status. *journal of nutrition, health and aging*, 5(2), 75-9. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11426286/>
- ²² Bibbins-Domingo, K., Chertow, G. M., Coxson, P. G., Moran, A., Lightwood, J. M., Pletcher, M. J., & Goldman, L. (2010). Projected effect of dietary salt reductions on future cardiovascular disease. *The New England journal of medicine*, 362(7), 590-9. doi:10.1056/NEJMoa0907355
- ²³ Dennis, E. a, Flack, K. D., & Davy, B. M. (2009). Beverage consumption and adult weight management: A review. *Eating behaviors*, 10(4), 237-46. Elsevier Ltd. doi:10.1016/j.eatbeh.2009.07.006
- ²⁴ Vartanian, L. R., Schwartz, M. B., & Brownell, K. D. (2007). Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *American journal of public health*, 97(4), 667-75. doi:10.2105/AJPH.2005.083782
- ²⁵ Brown, C. M., Dullo, a G., & Montani, J.-P. (2008). Sugary drinks in the pathogenesis of obesity and cardiovascular diseases. *International journal of obesity (2005)*, 32 Suppl 6, S28-34. doi:10.1038/ijo.2008.204
- ²⁶ Shoham, D. A., Durazo-Arvizu, R., Kramer, H., Luke, A., Vupputuri, S., Kshirsagar, A., & Cooper, R. S. (2008). Sugary Soda Consumption and Albuminuria: Results from the National Health and Nutrition Examination Survey,

1999–2004. *PLoS ONE*, 3(10), e3431. Public Library of Science. Retrieved from <http://dx.doi.org/10.1371/journal.pone.0003431>

²⁷ Assy, N., Nasser, G., Kamayse, I., Nseir, W., Beniashvili, Z., Djibre, A., & Grosovski, M. (2008). Soft drink consumption linked with fatty liver in the absence of traditional risk factors. *Canadian journal of gastroenterology = Journal canadien de gastroenterologie*, 22(10), 811-6. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2661299&tool=pmcentrez&rendertype=abstract>

²⁸ Statistic obtained from the NYS Parks Department. Reflects visitors to state parks with food amenities.

²⁹ Statistic reported at http://www.hungeractionnys.org/DSS%20Report%20_FINAL.pdf. We assume that most of the food pantries and soup kitchens that serve the reported population of 3 million have some connection to the New York State Department of Health Hunger Prevention and Nutrition Assistance Program.

³⁰ Statistic reported at: <http://frac.org/wp-content/uploads/2010/07/ny.pdf>

³¹ Statistic reported at http://www.health.ny.gov/statistics/prevention/nutrition/cacfp/ytd_fedfiscalyear_2007_statistics.htm

³² Statistic reported at: <http://www2.census.gov/govs/apes/09stny.txt>

³³ Statistic reported at: <http://www.nyc.gov/html/hhc/html/board-report/2010-year-in-review.shtml>

³⁴ Statistic reported at: <http://www.stonybrookmedicalcenter.org/regionalresource/>

³⁵ Statistic reported at: http://www.downstate.edu/sunyintro/suny_facts.html

³⁶ Statistic reported at: http://www.upstate.edu/publicaffairs/best_care/pdf/current.pdf

³⁷ Statistic available at http://www.suny.edu/About_suny/fastfacts/index.cfm

³⁸ Statistic obtained by the NYS Department of Health, 2008.

³⁹ See http://www.docs.state.ny.us/Research/Reports/2010/UnderCustody_Report.pdf

⁴⁰ Directed to this information by Mary-ellen Riley, OMH Assistant to Deputy Commissioner. See also <http://bi.omh.ny.gov/pes/Summary%20Reports?pageval=prog-res&yearval=2009>

⁴¹ Statistic obtained by the NYS Department of Health, 2008.

⁴² Statistic reported at: http://www.idanys.org/juvenile_detention_association1.html

⁴³ Statistic obtained by the NYS Department of Health, 2008

⁴⁴ Statistic reported at: <http://www.oasas.state.ny.us/publications/pdf/oasas-ptr.pdf>

⁴⁵ Statistic reported at <http://www2.census.gov/govs/apes/09locny.txt>

⁴⁶ State of New York Department of Correctional Services. *Under Custody Report: Profile of Inmate Population in Custody on January 1, 2010*. Available at http://www.docs.state.ny.us/Research/Reports/2010/UnderCustody_Report.pdf Accessed on May 24, 2011

⁴⁷ State of New York Department of Civil Service. 2010 New York State Workforce Management Report Available at <http://www.cs.state.ny.us/hr/docs/2010.pdf> Accessed on May 24, 2011

⁴⁸ See http://goer.ny.gov/Labor_Relations/CSEA_07-11.cfm

⁴⁹ The Wellness and Sustainability Focus areas are available at http://www.gsa.gov/graphics/pbs/Practices_for_Concessions_Operations.pdf

⁵⁰ Farenga, S., & Ness, D. (January 01, 2010). Going Locavore: Teaching Students about the Benefits of Food Produced Locally. *Science Scope*, 33, 5, 52-56. Available at [http://web.mac.com/grinell/iWeb/grinell%20smith/108B%20notes%20\(Fall%2010\)_files/Going%20locavore.pdf](http://web.mac.com/grinell/iWeb/grinell%20smith/108B%20notes%20(Fall%2010)_files/Going%20locavore.pdf) Accessed on May 24, 2011

⁵¹ See <http://www.ers.usda.gov/statefacts/ny.htm>

⁵² Rose, N., Serrano, E., Hosig, K., Haas, C., Reaves, D., & Nickols-Richardson, S. (January 01, 2008). The 100-Mile Diet: A Community Approach to Promote Sustainable Food Systems Impacts Dietary Quality. *Journal of Hunger & Environmental Nutrition*, 3, 270-285.

⁵³ Public Health Law and Policy National Policy & Legal Analysis Network to Prevent Childhood Obesity. (2011). Understanding Healthy Food Procurement. Available at http://www.phlpnet.org/sites/phlpnet.org/files/Understanding_Healthy_Procurement_2011.pdf Accessed on March 9, 2011.

⁵⁴ See http://www.noharm.org/all_regions/issues/food/

⁵⁵ A copy of the order is available at http://www.cspinet.org/new/pdf/nyc_food_standards_executive_order.pdf

⁵⁶ The NYC Standards for Beverage Vending Machines are available at www.nyc.gov/html/doh/html/cardio/cardio-vend-nutrition-standard.shtml

⁵⁷ NYS Education Law: Title I-General Provisions, Article 19-Medical and Health Service, Section 915

⁵⁸ The Guidelines are available at <http://www.health.state.ny.us/nysdoh/prevent/docs/guidelines.pdf>

⁵⁹ Per analysis by Public Health Law and Policy and also Bob Stern, Senior Program Manager for the NYS Assembly Program Development Group and Staff Director for the Task Force on food, Farm, and Nutrition Policy.

⁶⁰ Information on the Farm to School program is available at: <http://www.farmentoschool.org/state-home.php?id=17>

⁶¹ Brannon P. Denning, Samantha Graff, and Heather Wooten. "Laws on Locally Grown Food and Constitutional Limits on State and Local Government: Suggestions for Policymakers and Advocates" *Journal of Agriculture, Food Systems, and Community Development* 1.1 (2010): 139-148. Available at http://www.agdevjournal.com/attachments/115_JAFSCD_Laws_on_Locally_Grown_Food_Corrected_10-10.pdf Accessed on May 18, 2011.

⁶² See <http://edocket.access.gpo.gov/2011/2011-9843.htm>

⁶³ New York State Council on Food Policy Report to Governor David A. Paterson. Making Connections: Developing a Food System for a Healthier New York State. Recommended State Food Policies. December 2009. Available at: http://www.nyscfp.org/docs/NYS_CFP_Final_Report_2009.pdf. Accessed on March 9, 2010.

⁶⁴ Clapp, J., Stringer, S. M., & Manhattan (New York, N.Y.). (2010). FoodNYC: A blueprint for a sustainable food system. New York, N.Y: Manhattan Borough President's Office . Available at: http://www.mbp.org/uploads/policy_reports/mbp/FoodNYC.pdf. Accessed on March 9, 2011.

⁶⁵ Gase LN, Kuo T, Dunet DO, Simon PA. Facilitators and barriers to implementing a local policy to reduce sodium consumption in the County of Los Angeles government, California, 2009. *Prev Chronic Dis* 2011;8(2). Available at: http://www.cdc.gov/pcd/issues/2011/mar/10_0060.htm. Accessed on February 25, 2011.

⁶⁶ Information on the Balanced Menu project is available at: <http://www.jhsph.edu/clf/Features/2010/bmbc.html>

⁶⁷ Information about the project and study that yielded the report Access to Healthy Foods in Washington is available at: http://depts.washington.edu/waaction/tools/featured_resources/access_report.html

⁶⁸ NGA Center for Best Practices. (January 2010) Issue Brief: State Strategies to Help Schools Make the Most of Their National School Lunch Program. Available at: <http://www.nga.org/Files/pdf/1001SCHOLLUNCH.PDF>. Accessed on March 9, 2011.

⁶⁹ "Nutrition Standards in the National School Lunch and School Breakfast Programs (Proposed Rule)," 76 Fed. Reg. 2494 (January 13, 2011)

⁷⁰ Nutrition and Physical Activity Obesity Initiative, Bureau of Community Health Access and Promotion, MA Department of Public Health. (April 2010) Executive Order 509 Establishing Nutrition Standards for Food Purchased and Served by State Agencies: Questions and Answers Available at: http://www.mass.gov/Eeohhs2/docs/dph/com_health/nutrition_phys_activity/eo509_qa.pdf Accessed on March 9, 2010.

⁷¹ Lagasse L, Neff R. (April 2010) Balanced Menus: A Pilot Evaluation of Implementation in Four San Francisco Bay Area Hospitals Developed for San Francisco Physicians for Social Responsibility and Health Care without Harm. Available at: <http://www.jhsph.edu/clf/Features/2010/bmbc.html> Accessed on: March 9, 2011

⁷² Stallings, V. A., Suitor, C. W., Taylor, C. L., Institute of Medicine (U.S.), & National Academies Press (U.S.). (2010). School meals: Building blocks for healthy children. Washington, D.C: National Academies Press.

⁷³ Information on Massachusetts Executive Order No. 509 is available at www.mass.gov/Eeohhs2/docs/dph/com_health/nutrition_phys_activity/eo509_qa.doc

⁷⁴ The Massachusetts Healthy Meeting Guide is available at http://www.mass.gov/Eeohhs2/docs/dph/com_health/nutrition_phys_activity/healthy_meeting_event_guide.pdf

⁷⁵ Tennessee Executive Order No. 69 is available at: <http://tennessee.gov/sos/pub/execorders/exec-orders-bred69.pdf>

⁷⁶San Francisco Executive Directive 09-03 is available at: <http://www.sfgov3.org/Modules/ShowDocument.aspx?documentid=74>

⁷⁷ Information on San Francisco Executive Directive 09-03 is available at:
<http://www.sfgov3.org/index.aspx?page=754>

⁷⁸ Public Health Law and Policy, 2011.

⁷⁹ Center for Science in the Public Interest. State and Local Procurement Policies. Available at:
http://cspinet.org/new/pdf/state_policy_descriptions.pdf. Accessed on March 9, 2011.

⁸⁰ Centers for Disease Control and Prevention. (February 2011) Improving the Food Environment Through Nutrition Standards: A Guide for Government Procurement. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Available at http://www.cdc.gov/salt/pdfs/DHDSP_Procurement_Guide.pdf. Accessed on May 5, 2011.

⁸¹ Chapman LS. Meta-evaluation of worksite health promotion economic return studies. *The Art of Health Promotion*. 2003;6(6):1-16.

⁸² American Heart Association. Recommended Nutrition Standards for Procurement of Foods and Beverages Offered in the Workplace. Available at http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_320781.pdf Accessed on March 9,