SAFER CHEMICALS

Food

SUSTAINABLE PURCHASING LEADERSHIP COUNCIL

Product Subcategories Covered

- Institutional foods and beverages

Issues and Impacts

Food systems are vast and complex and impact many environmental and human health issues besides chemical exposure, for example, nutrition, farmworker equity, water use, energy use, climate change, soil erosion, and deforestation. Reducing and transforming agricultural chemical use is a good first step, but menu changes, behavior change and broader policies are also essential. More than any other category, an integrated approach is essential for food procurement efforts.

Farm workers bear the brunt of health impacts from excessive or inappropriate pesticide use since their exposure is direct and frequent.

Fertilizer pollution: Nitrogen and phosphorus pollution can come from excessive chemical fertilizer use, and can also originate from concentrated animal feeding operations (CAFOs), where the manure of tens of thousands of animals become harmful pollutants instead of beneficial plant nutrients. Excessive fertilizers in runoff create algal blooms, remove oxygen from the water and ultimately kill aquatic life.

Many certifications, but only a few common ones. Due to the complexity of food systems, it is usually not feasible to require specific farming practices in bidding documents, therefore certifications are especially important to food procurement. There are at least 19 third-party food certifications in the US, but most are relatively rare in the marketplace. USDA Organic, Rainforest Alliance Certified, and Fair Trade Certified are the most commonly available and recognized food certifications addressing agricultural chemicals, although Fair Trade is more oriented to farmer welfare than chemical use restrictions.

Buying locally produced food reduces the pollution and climate impact of transportation, and also supports local economies. Specifying locally produced food is more feasible for some products than others, and is not always possible when supply chains are not transparent.

Genetically modified organisms (GMOs) come in many forms. Some have actually helped reduce pesticide use for certain crops by introducing disease and pest resistance. However, the predominant GMOs in agriculture today are designed to make crops herbicide resistant, allowing even greater herbicide use and potential harm to living things. GMO-free food labeling may therefore be beneficial for some crops (such as corn and soy), but not for others.

Plant-forward diets are widely recommended for reducing the climate impacts of meat and dairy production. Promoting institutional menu changes is one way to move food procurement in the right direction.

Specialized food restrictions exist for certain institutions like hospitals and correctional facilities. Precut and/or prepackaged foods may be required for these users, and prisons have special packaging requirements for safety reasons. In these situations, obtaining certified foods may become more challenging.

Certified foods, such as USDA Organic, usually cost more than uncertified foods. The average difference is 7.5%, but there is wide variation between product categories. Increased costs can be accommodated through cost savings in other areas, for example, reducing meat or processed food purchases.

Chemicals of Concern

High risk pesticides. "Pesticides"include any chemicals used to kill living organisms: Insecticides, herbicides, rodenticides, fungicides, and more. Their toxicity to humans and the environment varies widely. Older classes of insecticides like carbamates and organophosphates (for example, chlorpyrifos), along with soil fumigants such as methyl iodide, are among the most dangerous for farm workers. Risks to consumers eating treated food are lower but occasionally significant, and not fully understood. Some newer classes of pesticides, such as neonicotinoids and pyrethoids, are less toxic to humans but pose risks to pollinators or aquatic animals.

Chemical fertilizers increase production but also pollute waterways, causing algae blooms, killing fish and causing "dead zones" in marine areas, for example, the Gulf of Mexico. Together with certain pesticides, chemical fertilizers can also effectively sterilize soils by killing microorganisms and reducing organic matter.

Antibiotic use for meat production is sometimes used to encourage faster growth of animals, rather than to treat diseases. More antibiotics are used for animals than for humans in the US. Antibiotics overuse promotes antibiotic-resistant microbes that pose serious human health threats.

SPLC Recommendations

Get to know your chefs. Understanding the needs and constraints of food services is critical to moving food purchases in a sustainable direction. Work with food service staff in your organization to collect data on current purchases, and identify opportunities for promoting plant-forward menus, and local or certified produce.

Develop an overall food policy and plan. Establish a working group to incorporate climate impact, nutritional goals, sustainable food production, social equity and local needs into an overall policy for your organization. Make connections with existing food procurement, green purchasing, climate action and food/wellness policies.

Prioritize your efforts based on spend data for different food items and also based on opportunities available in your locality. For example, you may find that it is simpler to specify locally produced, organically certified dairy products than to specify local vegetables.

Use third-party certifications. Specify certified products in bid solicitations, starting with priority product categories. USDA Organic, Rainforest Alliance, and Food Alliance Certified directly address agricultural chemical use. Consider applying other third-party certifications to address seafood, sustainable meat production, and animal welfare issues, including Fair Trade Certified, Marine Stewardship Council, American Grassfed, Animal Welfare Approved by AGW, and Certified Humane Raised and Handled.

SPLC Category Guidance

SPLC's Sustainable Procurement Resources for Food Services, Food and Beverages offer in-depth information on contract language, strategies, case studies, trainings, community discussions and other resources.

Resources

- A Municipal Guide to Climate-Friendly Food Purchasing, 2017. Responsible Purchasing Network.
- Center for Good Food Purchasing offers independent analysis of institutions' purchasing data, and uses its "Good Food Purchasing Standards" as criteria for the progra