The UnProcessed Pantry Project Framework to Address Nutrition in the Emergency Food System

Low-income populations suffer a greater burden of chronic diseases and food insecurity, are more likely to consume ultra-processed food, and are less likely to meet dietary recommendations than the general population. Ultraprocessed food is manipulated with artificial ingredients and can be high in sodium, calorific sweeteners, and saturated fats and, thus, has deleterious health effects. The NOVA framework, created by Monteiro and colleagues, is commonly applied to public health research to characterize food processing at different levels (unprocessed, minimally processed, processed culinary ingredients, processed, ultraprocessed). In the United States, ultraprocessed food typically is accessible, affordable, and convenient, whereas minimally processed food typically is more difficult to access, expensive, and less convenient. Over time, the availability of ultraprocessed food has increased across the global food supply and in the diets of individuals worldwide, especially among low-income populations.

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system operates as a sophisticated network of food banks, food pantries, soup kitchens, and other emergency food programs to provide food for millions of food-insecure and low-income Americans (Figure A, available as a supplement to the online version of this article at http://www.ajph.org). Food banks and food pantries acquire food and beverages through donations and purchases from individuals, food retailers, farmers and processors, national companies and organizations, and federal commodities. Food pantries typically distribute food to clients. A food pantry client’s dietary quality relies on the food and beverages made available in the food pantry, as well as any food and beverages acquired outside the pantry setting. Food offered at food pantries can range from ultraprocessed to unprocessed, and for many food pantries, the nutrient quality of the food supply is not consistent, which has implications for a client’s ability to maintain a healthy diet.

Because of growing numbers of food pantry clients with documented health disparities, a need has been noted for more consistent supplies of nutritious food in the emergency food system, both nonperishable and perishable. The “working poor” are a growing population of US households that experience food insecurity and often do not qualify for federal food assistance programs, such as the Supplemental Nutrition Assistance Program. This population increasingly relies on emergency food to make ends meet. The acute severity of this need was underscored in a different population during the 2019 US government shutdown, when an influx of furloughed government workers without paychecks turned to the emergency food system, including food pantries, to meet their food needs.

Organizations across the emergency food system have adopted nutrition frameworks to encourage the donation and purchase of more nutritious food at food banks and food pantries. These nutrition frameworks focus on encouraging food pantries to source certain food from broad categories (e.g., cereals, vegetables) and monitor levels of key nutrients in each category (e.g., sodium, saturated fat). These nutrition frameworks can be used to promote more nutritious donations and purchases of food that target broad food categories and specific nutrients, but they have lacked in their translation for use across stakeholders, including food pantry clients.

Because of the complexity of food choices, food banks, food pantries, clients, and other stakeholders in the emergency food system need a framework in which to understand the differences across the processing levels of various food types. Food pantries offer a critically important setting in which to supply a broad range of nutritious food, perishable and nonperishable, and to limit ultraprocessed food. A new framework is needed to help create a food supply in the emergency food system that limits ultraprocessed food when possible, promotes the availability of nutritious perishable and nonperishable food through acquisition and policy, and supports food justice that improves the compromised nutrition and health needs of food pantry clients.

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TOWARD A MORE EQUITABLE FOOD SYSTEM WITH UP3

To make progress on decreasing health disparities among food-insecure populations, the overall food system needs to confront equity in the nutrient quality of food in the emergency food system.

The emergency food system has evolved from an ad hoc stopgap system to address cyclical food insecurity to one that increasing numbers of households rely on to make ends meet. Food pantries may hesitate to discourage donations of any type of food because of the possibility that donors stop or decrease donations, client choice is limited, or the demand to address hunger is unmet. Clients are responsible for selecting or accepting, consuming, and preparing food. The promotion and donation of nutritious food, along with nutrition education for clients, should be seen as investments in client health.

Economic challenges and widening income disparities have led to an increased reliance on the emergency food system, especially...
What are the different types of food?

Fresh foods come from plants or animals. They are close to their natural state. They are often washed, ground, chilled, or sliced before eating.

Fresh foods include fruits, vegetables, whole grains, meats, legumes, nuts and seeds, milk, tea, and coffee.

Pantry staples include ingredients used to cook or flavor fresh foods. They are usually not eaten alone. They include foods that have been peeled, diced, or pulsed.

Prepared food is often made from both fresh food and pantry staples. This food is processed to make food last longer or to improve taste. This food may be canned, cooked, or baked.

Prepared food is lower in added salt/sodium, sugar, and saturated fat.

Prepared food includes meals and snacks prepared with pantry staples AND fresh foods that are LOW in:
- salt/sodium
- added sugars
- saturated fat

Examples include soups, stir fries, sandwiches, and salads.

How much should be available in the food supply?

Pantry staples should be available for clients who prepare meals and snacks.

Lightly prepared food should be available as much as fresh food.

How much should I eat of this type of food?

Use pantry staples in small amounts when cooking meals.

Use pantry staples in small amounts when cooking meals.

Eat less of this type of food compared to fresh and lightly prepared food.

Eat less of this type of food than all other types of food.

What are some examples of this food?

Pantry staples include food such as:
- Vegetable oil, butter, sugar, spices, salt, flour, corn starch, baking powder, honey, and maple syrup. Some pantry staples such as hot sauce, soy sauce, and bouillon are ultra-processed. Choose unprocessed pantry staples whenever possible. Add only a small amount of ultra-processed pantry staples to fresh food when there is no substitute.

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- Vegetable oil, butter, sugar, spices, salt, flour, corn starch, baking powder, honey, and maple syrup. Some pantry staples such as hot sauce, soy sauce, and bouillon are ultra-processed. Choose unprocessed pantry staples whenever possible. Add only a small amount of ultra-processed pantry staples to fresh food when there is no substitute.

How much should be available any other type?

Pantry staples should be available for clients who prepare meals and snacks.

Lightly prepared food should be available as much as fresh food.

Eat more fresh food than any other type. Try to include fresh food in every snack and meal.

Eat less of this type of food compared to fresh and lightly prepared food.

Eat less of this type of food than all other types of food.

What is the UnProcessed Food Project (UP3) advisory board?

The UP3 advisory board includes livingstone Food Resource Center and Gallatin Valley Food Bank staff and volunteers, and Montana State University students who provided critical feedback during the development of the UP3 framework and William Dietz, MD, PhD, director of the Sumner M. Redstone Global Center for Prevention and Wellness, Milken Institute School of Public Health, George Washington University, for significant input into the initial article.

Note. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

REFERENCES


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C. Byker Shanks conceptualized and designed the UnProcessed Pantry Project (UP3) framework, wrote the editorial, and managed revisions. E. Weinmann, J. Holder, M. McCormick, C. A. Parks, K. Vanderwood, C. Coburn, N. Johnson, and A. L. Yaroch provided input into the design of the UP3 framework and revised the editorial for important intellectual content. A. L. Yaroch provided project mentorship.

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**Supplemental Material** Food banks and food pantries acquire food and beverages through donations and purchases from individuals, food retailers, farmers and processors, national companies and organizations, and federal commodities (Figure A). Food rescue, or redirecting food that would be wasted, from any of these locations is common. Food banks typically collect, store, and distribute food and beverages for distribution through food pantries to individuals and families in need. Food pantries typically distribute food to clients. Food pantries range in type of organization, capacity, and size, from independent non-profits to affiliations with local organizations such as faith-based organizations.

**Figure A.** Food Acquisition and Distribution in the Emergency Food System

*USDA Foods contribute to the emergency food system through several programs, such as The Emergency Food Assistance Program (TEFAP).*