Faculty across disciplines, from cross-cutting STEM fields, humanities, and social sciences, discuss a common topic or contemporary matter from the lens of their field. The conversation is open to all participants in the room, bringing the strength of the collective disciplines to bear on a wicked problem.

Many human diets used to be local, rural foods. With urbanization and globalization, there is an increase in convenient, processed foods in the marketplace. What happens when the population goes from being rural to urban? A more robust understanding of these issues is needed to develop fresh approaches and policy solutions.

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The Modernization of Diets, Globally

Because of industrialization, most populations went from consuming food items as they are primarily grown or produced to a drastic increase of processed foods, riddled with sugar, preservatives, and chemical additives. The ability for people to elevate out of poverty and have access to processed food, like McDonald’s, has increased on a global scale, and their preferences have ultimately changed. Diets in urban areas around the world have diversified, and the foods found in urban areas now come from western-style industrialization. The growth of packaged food worldwide has seen a 25% increase, which is significantly more drastic than in the US, which has seen a 10% increase over the same time period. This modernization of diets around the globe is a direct function of how people are connected to markets and food sources as well as taste preferences, with little focus on nutrition.

What is Processed Food?

Processed foods are foods that have been altered from their natural state for preservation or convenience. This includes most food items in your cabinets, freezer and refrigerator!

Can you guess which items here are whole and which are processed?
Processed Food and the Human Body

Impacts on Health and wellbeing

All foods consumed affect the body’s cells, so looking inside of the body helps us understand the changes that occur with “westernized” or processed food diets. Research has suggested that access to good, nutritional food that can protect a person’s body against disease and harm, while unhealthy foods, such as processed foods and fast food, can actually promote disease, obesity, depression, and overall bad health. However, financial health has traditionally been seen as necessary to access good nutrition.

The types of food eaten today are highly processed and extremely low in raw nutrients. If a person eats low-quality food, with a surplus of processed food, this diet can increase the likelihood of chronic diseases, cancer, neuro-genetic diseases, and faster aging. These health issues are being seen earlier and earlier with consumption, causing “oxidative stress.” In relation to food metabolism, food leads to a reaction from the elements to the genes through the body’s metabolism, causing a person to age. With an increase in food, or bad quality food, ageing is accelerated, and it can cause chronic diseases such as cancer.

With the increased access to unhealthy foods, these issues are occurring now in developing countries. This low-quality food changes the expression of genes within the body. The genome becomes bigger due to the oxidative stress. This stress causes DNA damage and changes the expression of genes, leading to the metabolic diseases. The altered genome, with the larger nucleus (meaning it is less compact), is directly linked to cancer.

Food Aid: Are We Doing More Harm than Good?

Food aid is the response from governments and US agencies to countries which have experienced some sort of emergency, such as extreme weather, conflict, or other natural disasters. Over the past thirty or forty years, the food shipped to these countries is taken from the US surplus and delivered via the US aid agencies. Aid is also used to address long-term chronic hunger through development programs. Typically, the people receiving the aid have had diets based on locally-grown crops, such as sorghum or millet. Food aid introduces processed food, such as processed wheat, and as a result, the people who are receiving the aid become accustomed to this new type of less nutritious food over time.

Aid comes in through programs linked to monetary sources (i.e., Food for Peace). Due to the success of these programs, dietary preferences in developing countries are changing, diets are much less healthy, and people are migrating to urban areas where these “westernized” diet can be found. Food aid actually prevents people from keeping their traditional diets of local foods with proper nutrition. For example, powdered milk given out through aid and many women will give this powdered milk to babies rather than breastfeeding. There is more nutrition in breast milk which is not found in powdered milk, so the lack of nutrients in the substitute powdered milk impacts the children.
“Westernization” is the marketing of companies in the west. How other countries are “westernized” is by the exposure to increased protein dense foods, increased energy-dense foods, lowering rice consumption in diets, and the availability of convenience foods. The majority of the manufacturers of these types of foods are based in the western world. They have created a shift to wheat-based products and convenience foods. The reason for this shift, or the globalization of a western diet, is driven by the liberal approach of the free flow of foods and the assumption that farming in other areas of the world will have to change.

This “free flow of foods” actually creates a vertical integration of the food supply, wherein the farmers are coerced into producing the food items or crops that companies are able to sell. They are now producing cash products. The shift creates an interest in income-based activities and the availability of convenience foods can cause a decrease in cooking.

How do we, as a community, deal with this issue? What could be done to convince people to eat healthily? Some solutions might lie in increased “food literacy” by explaining what kinds of food are available. Talking about cultures and traditions in relation to food can increase food literacy. Include community members during the discussion. This information and dialogue would also be possible to inform policymakers, so they could also advocate healthy food choices, regulation structures, and having a number value linked to diets and health.

In many places across the globe, working class is inextricable from high caloric intake and low nutrition. The term “Westernization” in relation to eating means increased access to manufactured, processed foods which are more affordable for those with less income to spend on food. People who live in poorer countries were eating local, subsistence crops and that has been replaced with processed foods with only a little meat or fish to supplement it. The consequences of this change are dire; for those eating low nutrient, high-calorie diets can lead to obesity, cardiovascular disease, and cancer.

How can policies help shape diets? When comparing the government’s approach to rising obesity levels in France to the US, policy-making similarities and differences should be evaluated. Issues with obesity have increased in both countries, but French children are the most sedentary children in Europe with an average of five hours of screen time each day. The difference lies in the approach each country takes to this increased child obesity. There is a bigger tendency in France to speak about it as a crisis or an epidemic. In the US, the majority of media framing is that is not the government’s job to tell people what they should or should not eat, as it is not what can be termed a “nanny state.” Comparing the types of laws and regulations these two governments have for nutrition education, school lunches, and children’s advertisements can be indicative of the approach taken to food choices.

This Contemporary Matters Discussion Summary is prepared by PPRI based upon what our panel of experts shared with the audience.