

Food System Disruptions and Solutions

Partnerships that provide game changing solutions in the face of unprecedented challenges

Overview



Longstanding partnerships with school nutrition programs and food banks allowed the U.S. dairy community to rapidly pivot during COVID-19 and connect the farm to schools and food banks nationwide.

These public-private partnerships formed in a crisis to:

- 1 Provide people, especially children, experiencing food insecurity with nutrient-rich dairy foods
- 2 Support farmer livelihoods by ensuring nutrient-rich foods enter the marketplace
- 3 Promote resource conservation by strengthening supply chains to get food from the farm to schools and food banks. However, they can be replicated and expanded to address these same issues in a post-pandemic society

Impact

- **The COVID-19 pandemic led to a rapid rise** in the rate of food insecurity. It was estimated that 50 million people, including 17 million children in the U.S. experienced food insecurity in 2020 – up from 35 million people and 11 million children in 2019.¹
- **As a result of COVID-19, approximately 124,000 schools closed** for in-person learning across the US. While federal funding continued to support school feeding programs for the 30 million students who rely on school meals daily, additional resources were crucial to provide schools with the necessary resources and equipment to package and deliver meals outside of the cafeteria in a safe way.^{2,3}



Food System Disruptions and Solutions

- **COVID-19 lockdowns and closures led to the shuttering of food service establishments**, including restaurants, hotels and cafeterias. This left many foods without a place to go and farmers unable to sell their products into the marketplace.
- **Many farmers were unable to access their traditional markets**, and with nowhere for their food to go were forced to plow food back into the soil, dump milk and cull herds, resulting in income losses, food and nutrient loss and waste.
- **From the farm gate to the food bank and schools, food systems stakeholders leveraged partnerships** and entered uncharted territory together to prevent nutrient-rich foods from going to waste and ensure that people experiencing food insecurity were able to receive these nutritious foods.
- **This game changing, scalable solution** contributes to the 2030 Agenda for Sustainable Development by directly addressing many of the Sustainable Development Goals, including SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation & Infrastructure) and SDG 12 (Responsible Consumption and Production).

Food systems stakeholders leveraged partnerships and entered uncharted territory together to prevent nutrient-rich foods from going to waste

What is it?

Through longstanding partnerships with school nutrition programs and food banks, the U.S. dairy community pivoted during COVID-19 to rapidly connect the farm to schools and food banks. By leveraging partnerships and bolstering the supply chain, the industry got nutrient-rich dairy foods to children and families experiencing food insecurity through school and emergency food programs. On top of pre-pandemic challenges in the cold storage supply chain, the system also had to respond to lockdowns and public health safety measures. Closures of schools

and food service establishments resulted in supply chain 'bottlenecks' and labor shortages, making it challenging for farmers and food distributors to quickly redirect food to alternate pathways to reach children and families. Communities in need of access to nutritious foods, as well as farmers in need of an outlet for their food, were all left in a lurch as the pandemic gripped the nation. Due to the impacts of COVID-19, schools and food banks, along with supply chain partners, developed solutions to the chronic situation of limited access to fresh produce, dairy foods and protein-rich foods. These innovative program strategies to meet unprecedented demand due to the pandemic were instituted to provide new and safer food distribution methods, which can be sustained in a post-pandemic world.



Food System Disruptions and Solutions

Background

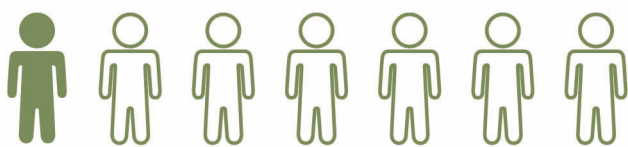
The number of food insecure individuals across the globe is at a crisis level. In the U.S., 35 million people, including 11 million children, experienced food insecurity prior to the COVID-19 pandemic. Early projections indicated that the number of people in the U.S. who will experience food insecurity in the wake of COVID-19 could rise dramatically to more than 50 million people total, including 17 million children.¹

The pressure on U.S. schools to nourish children facing hunger has seldom been greater and schools have taken extraordinary measures to deliver school meals to children outside of the cafeteria to solve this problem. Today, as many as 1 in 4 U.S. children is food insecure, up from 1 in 7 prior to the pandemic. A recent Rockefeller Foundation report identified public schools as anchors of community nutrition and recognized the important role they play in ensuring children are nutrition secure.^{1,4}

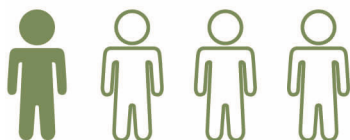


Food Insecurity Among Children

In 2018, **1** in **7** children were food insecure



In the wake of the 2020 pandemic **1** in **4** children may be food insecure



Sources: Feeding America, USDA

© 2020 National Dairy Council®

To address this alarming issue, schools were committed to continue their operations to nourish children and food banks committed to providing more meals and delivering more health promoting, nutritious foods than ever before to people experiencing food insecurity. As a longstanding partner of school nutrition programs and food banks and as a steadfast champion of improving food security, the U.S. dairy community pivoted to support them and this challenge by leading the charge to rapidly connect the farm to schools and food banks by leveraging partnerships and bolstering the supply chain.

Access to nutritious foods, particularly dairy foods, produce and protein-rich foods, was a challenge for food banks prior to the pandemic. Product perishability and food safety concerns, which require an efficient and well-managed cold storage supply chain, can be a difficult barrier to overcome

Food System Disruptions and Solutions



for both schools and food banks. On top of pre-pandemic challenges in the cold storage supply chain, the system also had to respond to lockdowns and public health safety measures. Closures of schools and food service establishments resulted in supply chain ‘bottlenecks’ and labor shortages made it challenging for farmers and food distributors to quickly redirect food to alternate pathways to reach and nourish children and families in need.

Closures of school buildings for learning meant that continuing to serve meals to children who rely on school meals for a significant portion of their daily nutrition became more important than ever as families were faced with increased food insecurity at a time of increased need. Families and communities in need of access to nutritious foods, as well as farmers in need of an outlet for their food, were all left in a lurch as the pandemic gripped the nation. Photographs and headlines documented the seemingly endless lines of people in need of food assistance, and many farmers were forced to dump their nutritious bounties and income in the field.

Due to the impacts of COVID-19, both schools and food banks, along with supply chain partners, have developed acute solutions to the chronic situation of limited access to fresh produce, dairy foods and protein-rich foods. These

innovative program strategies designed to meet unprecedented demand due to the pandemic were instituted to provide new and safer food distribution methods, which can be sustained in a post-pandemic world. Public health safety was stressed for workers delivering food to schools and food banks and additional measures were needed to protect the people on the frontline. Resources to deliver food safely to families were needed including personal protection equipment



Food System Disruptions and Solutions

and cold storage solutions to protect perishable products in the last mile of distribution. Food distribution sites in urban, rural and suburban communities developed solutions by creating partnerships with food supply chain stakeholders. These program strategies include collaborations among local farmers, purveyors, processors and suppliers to redirect the supply where it is most needed. For example, the need for refrigeration solutions for the influx of perishable foods brought engagement with new partners in the refrigerated trucking industry. Mass distributions of food maximized the ability to provide nourishment for the millions of people thrust into food insecurity without the need to rely on brick and mortar locations. Food was brought to people in the neighborhoods where they live; this allowed those with limited access to transportation to secure much needed food. The Farmers to Families Food Boxes brought new players to the table. Unique food systems actors stepped in to source and deliver fresh produce, dairy foods and protein foods for families in need. Food that would typically have been used in food service venues was redirected to people experiencing food insecurity thus reducing food loss, nourishing people in need, supporting farmer livelihoods and conserving natural resources.



Due to the impacts of COVID-19, both schools and food banks, along with supply chain partners, have developed acute solutions to the chronic situation of limited access to fresh produce, dairy foods and protein-rich foods

While these activations evolved as a crisis response, they are potential solutions that could be scaled-up to support future nutritious food access challenges for communities experiencing food insecurity in the U.S. and beyond. Schools were able to continue their school meal operations serving over 6.3 million meals in fiscal year 2020 to children through innovative strategies. Since the start of the pandemic, food banks nationwide have experienced a 55% increase in people seeking assistance and distributed approximately 5.8 billion meals to community members in need of food.^{3,5}

References

- ¹ Unglesbee, B., Howland, D., & Vembar, K. (2020). The Impact of the Coronavirus on Food Insecurity in 2020. *Feeding America*, accessed March 8, 2021
- ² McLoughlin, G. M., Fleischhacker, S., Hecht, A. A., McGuirt, J., Vega, C., Read, M., Colón-Ramos, U., & Dunn, C. G. (2020). Feeding Students During COVID-19—Related School Closures: A Nationwide Assessment of Initial Responses. *Journal of Nutrition Education and Behavior*, 52(12), 1120–1130. <https://doi.org/10.1016/j.jneb.2020.09.018>
- ³ USDA (2021). USDA Program Information Report U.S. Summary, 2019 - FY 2020. September 2020.
- ⁴ The Rockefeller Foundation. (2020). Reset the Table: Meeting the Moment to Transform the U.S. Food System.
- ⁵ Feeding America (2020). Coronavirus is the perfect storm for our neighbors trying to make ends meet. Accessible at: <https://www.feedingamerica.org/take-action/coronavirus>

Food System Disruptions and Solutions

Examples of national and local activations

Dairy organizations across the U.S. quickly identified solutions to address food systems disruptions.

As a result, dairy foods made it from the farm to communities through food banks and schools. They addressed the identified challenges in the following ways:

- **Milk that had no place to go due to disruptions in the supply chain.** Dairy farmers connected with companies and food banks to process and distribute milk to schools and food banks.
- **Cheese that was intended for food service.** Connected a cheese company with a food bank with packaging capabilities to slice and package cheese into consumer-friendly sizes and distribute it to food bank clients.
- **Companies that did not have enough refrigerated trucks to handle the volume of milk needed for mass distribution sites.** Local dairy organization provided transportation solutions to ensure milk made it to food distribution sites.
- **Milk companies were asked to alter the container sizes for schools to allow gallons and half-gallons** to be used in school nutrition programs. Staff monitored USDA waivers and communicated with the dairy community to inform them about the new rules and regulations.

During the pandemic, GENYOUth raised over \$20 million dollars through “For Schools’ Sake – Help Us Feed Our Nation’s Kids!” from corporations, foundations, athletes, influencers and individuals, to support the distribution of millions of school meals to children. To date, 10,000 schools have received grants.



- **School closures affected 30 million students who rely on school meals for a substantial portion of their daily nutrition.** During the pandemic, GENYOUth raised over \$20 million dollars through “For Schools’ Sake – Help Us Feed Our Nation’s Kids!” from corporations, foundations, athletes, influencers and individuals, to support the distribution of millions of school meals to children through innovations including grab n go, drive through, pick up and school bus drop off. To date, 10,000 schools have received grants.