



Credit: Elisabeth Spratt

GRASS-FED BEEF INSTITUTIONAL PROCUREMENT ANALYSIS

Key Findings & Intervention Recommendations

MARCH 2021



Pasture Project
AT THE WALLACE CENTER

Acknowledgements

The project is supported by funding from the Searle Funds at The Chicago Community Trust.

We acknowledge the collaboration and contributions from our partners in developing and reviewing this guide:

| | |
|------------------------------------|--|
| Advocate Healthcare Aurora | Katie Wickman, Sustainability Manager Chris Martin, System Culinary Manager |
| Chicago Food Policy Action Council | Marlie Wilson, Good Food Purchasing Project Manager |
| Chicago Meat Collective | McCullough Kelly-Willis, Founder |
| Field Museum | Carter O'Brien, Sustainability Manager Luz Barcenas, Food and Beverage Director |
| Good Meat Project | Camas Davis, Executive Director |
| Healthcare Without Harm | Courtney Crenshaw |
| Homestead Meats | Ehran Ostrreicher, Owner and Founder |
| Illinois Farm to School Network | Diane Chapeta, Illinois Farm to School Program Manager |
| Illinois Stewardship Alliance | Molly Gleason, Communications Director |
| Loyola University Chicago | Aaron Durnbaugh, Director of Sustainability |
| Midwest Foods | Alex Frantz, Local and Sustainability Coordinator |
| Museum of Science & Industry | Brad Schiever, Director Retail and Guest Services |
| Natural Direct | Scott Dickinson, Owner and Founder |
| Northwestern University | Greg Kozak, Director of Sustainability |
| Real Food Challenge | Tina White |
| Sugar Beet Co-op | Stephen Speck, Grocery & Wellness Manager/ Buyer |

Executive Summary

New markets are needed for common agricultural products that serve as cornerstones of the Midwestern economy, providing both producers and communities opportunities to diversify their revenue along the entire supply chain while shifting toward a more regenerative production system. However, for new markets to emerge, the demand must be present.

Project partners Delta Institute and Pasture Project, part of the Wallace Center at Winrock International, evaluated the specific practices and otherwise myriad dynamics that shape the procurement of food by institutional entities to create regional demand for grass-fed beef products. Specifically, the report focuses on the potential for procurement of grass-fed beef products by K-12 schools, universities, hospitals, and other cultural or recreational institutions such as sports arenas, concert venues, and museums as food service outside of retail and direct sales is estimated to comprise nearly 50 percent of grass-fed beef sales in the US—with approximately one third occurring in educational and healthcare facilities. This growing market offers a timely and vital opportunity for Illinois producers to supply locally produced grass-fed beef—with multiple economic and regenerative impacts at the producer and community level.

To conduct this analysis, the project team conducted interviews with key stakeholders in the procurement process. Additional research was conducted to provide context and background on the procurement process and case studies are used to further illustrate opportunities for unique food sourcing and procurement solutions within each institutional type. Ultimately, the project team used these findings to provide readers with a clear picture of the pathways along which food products travel from farms to institutional food service establishments in Illinois.

Most importantly, the report presents potential interventions which have been identified by the project team to be applied by stakeholders at various points in the procurement process including production, aggregation, processing/distribution, food service, and actions taken at the institutional level. In this context, interventions refer to specific, strategic actions applied by institutional actors to improve upon the current situation. The interventions described herein are recommended for implementation based on the assessment and synthesis of the factors described throughout the report; these include current procurement practices, policy drivers, constraints, opportunities, and the impact of the COVID-19 pandemic.

The report describes actionable steps that can be taken by stakeholders to improve procurement practices among institutions. The actions include:

- Advocating for policies and programs, such as the Good Food Purchasing Policy, that drive organizations to change procurement practices;
- Creating educational materials to connect procurement with environmental metrics;
- Facilitating a stronger network between grass-fed beef producers, distributors, and buyers to support institutional purchasers; and
- Developing tools such as template bid specifications for reporting for food service contracts to increase transparency and accountability in the procurement process.

There are significant economic and environmental benefits associated with improving local markets for grass-fed beef production and procurement in Illinois. Delta Institute and Pasture Project will continue to support the development and implementation of near- and long-term interventions and investments coordinated across the value-chain to create low-risk, high-value options for producers and buyers. Moreover, deploying the interventions will help to increase the supply of locally produced, healthy beef for the Chicago market, both for individual consumers and large institutional buyers and provide a model for implementing similar efforts across Illinois in the long-term. Ultimately, we intend for this work to strengthen regenerative grazing and grass-fed beef markets, driving a broader transition to agriculture practices that support healthy soil, viable farms, and access to healthy, local foods in Illinois.



Credit: Elisabeth Spratt

Contents

| | |
|---|-----------|
| Acknowledgements | 2 |
| Executive Summary | 3 |
| Introduction..... | 7 |
| K-12 Education | 8 |
| Background..... | 8 |
| Current Procurement Practice | 8 |
| Policy Driver..... | 9 |
| Constraints..... | 9 |
| COVID-19 Impacts..... | 10 |
| Opportunities | 11 |
| Procurement Pathway and Recommendations..... | 14 |
| Higher Education | 15 |
| Background and Current Procurement Practice | 15 |
| Policy Driver..... | 16 |
| Constraints..... | 16 |
| COVID-19 Impact..... | 16 |
| Opportunities | 17 |
| Procurement Pathway and Recommendations..... | 19 |
| Hospitals | 20 |
| Background..... | 20 |
| Current Procurement Practice | 21 |
| Policy Driver..... | 21 |
| Constraints..... | 22 |
| COVID-19 Impact..... | 22 |
| Opportunities | 23 |
| Procurement Pathway and Recommendations..... | 24 |
| Cultural and Recreational Institutions | 25 |
| Background and Current Procurement Practice | 25 |
| Policy Drivers..... | 26 |
| COVID-19 Impact..... | 27 |
| Opportunities | 28 |

| | |
|---|-----------|
| Procurement Pathway and Recommendations..... | 29 |
| Next Steps | 30 |
| Appendices | 31 |
| A. Stakeholder List | 31 |
| B. Pricing Information..... | 32 |
| C. School Districts | 33 |
| D. Higher Education..... | 35 |
| E. Hospital systems..... | 36 |
| F. Recreational and Cultural Institutions | 37 |
| References..... | 38 |

Introduction

The food service industry is estimated to comprise nearly 50 percent of grass-fed beef sales in the US and approximately 30 percent of that is through educational, healthcare, and hospitality/catering services. This presents an opportunity for Illinois producers to enter the emerging market for locally produced grass-fed beef. This report provides an overview of food sourcing and procurement processes within the institutional food service industry, including the educational sector, higher education, cultural institutions, and hospitals. The report also highlights activities related to local and sustainable food sourcing by such institutions located within the Chicago area foodshed and provides a summary of key takeaways that inform potential future market interventions. Interventions will be addressed in the accompanying report.

Given the timing of this project, this report also looks at the impact of the COVID-19 pandemic on the food supply chain and implications for expanding the grass-fed beef production in Illinois. The pandemic, which has led to disruptions and reconfigurations in nearly all sectors of the economy, has also revealed major flaws in the supply and distribution of meat in the US. From unsafe working conditions in processing facilities, to food shortages and pricing fluctuations,¹ many more consumers are now thinking about where their food comes from and how it was processed. It is hard to predict the longevity of peoples' and institutions' ever-changing behavior when it comes to food purchasing. Yet, the pandemic may have triggered a major restructuring of the current food system toward a more just and sustainable one, with a basis in local and resilient operations. In the short term as well, disruptions associated with the pandemic may bode well for smaller local producers and processors as they demonstrate their resilience.²

Independent processors have seen demand grow and have been able to keep their facilities clean and not crowded while major food distributors that supply food to restaurants, school cafeterias, and college dining halls have seen their profits shrink.³ Institutions that purchase and serve food are still adjusting to pandemic induced changes. As such, this report provides a basis for crafting market interventions that enable more Illinois grass fed beef producers to supply their products to consumers in Chicago. The project team also explored other market pathways that may create entry points for local grass-fed beef producers in Illinois. These included food cooperatives, specialty distributors, butcher shops, etc. These businesses were also impacted by the COVID-19 pandemic, and while adjusting to reduce in-person patronage, have been experiencing higher than typical demand. Meat products have been in higher demand because the pandemic was generating more demand for products with transparent production methods.⁴

Markets for local, or grass-fed beef remains niche. For local butcher shops, specialty beef orders are driven by client demand. Smaller wholesalers and distributors work with producers based on relationships that develop over time although they are interested in partnering with new ones as well given market differentiation, ensured quality of product, and sustainable business growth models. Though these types of businesses are emerging as key links within the value chain for individual consumers, this project has focused on exploring large scale institutional buyers as main mechanisms to expand market opportunities for local grass-fed beef producers.



K-12 Education

Background

Primary and secondary schools feed hundreds of thousands of Chicagoland kids each year. The National School Lunch Program (NSLP) offers public and non-profit private participating school districts funding for each reimbursable meal they serve.⁵ In exchange, the schools must serve lunches that meet federal meal pattern requirements and offer the lunches at a free or reduced price to eligible children. In addition to cash reimbursements, schools participating in the NSLP receive USDA Foods. States select USDA Foods for their schools from a list of menu items purchased by the agency.

Current Procurement Practice

The NSLP program is administered at the state level by the Illinois State Board of Education.⁶ The federal reimbursement funding a school receives per meal is dependent on if the meal is paid by the student, offered at a reduced price, or offered free of charge. Reimbursement rates are also dependent on the percentage of students utilizing free or reduced-price meals (more or less than 60 percent of the student body). Given these parameters, **federal reimbursement can range from \$0.33 to \$3.53 per meal.**⁷ Breakfast, milk, and after school snacks are also reimbursed at rates ranging from \$0.08 to \$2.26.⁸ Additionally, **this limited funding is not exclusive to food purchasing**, but is intended to also cover labor, supplies, overhead, and other costs.⁹ This system makes funding and restrictions associated with it one of the biggest challenges in making changes in procurement practices.

Federal funding and contract rules¹⁰ are key factors in budgeting and procuring food products for school cafeterias, respectively. For meal service contracts over \$250,000, formal competitive bids are required and must follow federal standards. If the district's contract for vended meal services will not exceed \$250,000 annually, informal bidding procedures may be used. Smaller districts are typically required to consider three bids and select the lowest cost one but may have more flexibility in setting bid requirements depending upon food production characteristics such as

location, nutritional value, or environmental impact. Public school districts that participate in NSLP are typically required to select the **lowest priced bidder when sourcing food products**.

Policy Driver

Changing institutional behaviors around school food sourcing can be motivated by the adoption of policies or goals that prioritize environmental or health objectives. For example, public institutions in the City of Chicago and Cook County, including Chicago Public Schools (CPS), have adopted the Good Food Purchasing Policy (GFPP), which provides a flexible framework to support cities in creating benchmarks for procurement around the five values.^{11,12,13}

The GFPP provides a metric based, flexible framework that encourages large institutions to direct their buying power toward five core values: local economies, environmental sustainability, valued workforce, animal welfare and nutrition.¹⁴ The GFPP is an important driver for changing food procurement practices, which commonly involves contracts with large-scale food service companies.

However, despite the adoption of the GFPP, no additional funding is allocated for sourcing higher quality products for CPS. Another challenge associated with GFPP implementation after adoption is the lack of consistent data to establish baselines and track progress toward goals due to contracts typically lacking specific requirements for reporting purchasing sources, volumes, prices, etc. As implementation of GFPP ramps up in the City of Chicago, partners are working to address the issue of data transparency and reporting by updating solicitation & “request for proposal” (RFP) language. Furthermore, there are advocacy efforts to change state-level procurement code so that school districts can use best-value RFPs versus lowest bidder solicitations when bidding out for a food service management company. Despite the adoption of GFPP by the Chicago Public School District (CPS), sourcing grass-fed beef for CPS or school districts in general, will require addressing various barriers.

Constraints

Introducing grass-fed beef into large school districts, especially large ones such as CPS, will be difficult due to the challenges associated with getting grass-fed beef into school cafeterias which can fit into the following categories:

- Funding
- Federal meal requirements (including meat processing requirements),
- Infrastructure at school facilities
- Existing contracts with food service providers
- Quantity of meals provided

Due to pricing restrictions and the volume of meals served across large school districts such as CPS, beef is not typically found on school lunch menus. Recently proposed policy changes to the federal school lunch program, made in January 2020, might make it easier to include hamburgers in school lunches. An [article](#) published by The Washington Post in January 2020 evaluated the

possibility that nutritional recommendation changes would increase the servings of potatoes (french fries), pizza, and hamburgers in place of fruit and vegetables (Reiley).¹⁵ However, given that **beef is one of the most expensive meats food service providers purchase**, an increase in the number of burgers served will likely mean procurement of large quantities of mass-market beef.

Animal processing restrictions significantly influence beef sourcing for schools. For schools participating in the NSLP, **beef, chicken, and pork used as part of school lunches must be sourced from a USDA-inspected processor**. Small and mid-sized processors face a variety of challenges in scaling up to meet USDA guidelines and regulations, which are more easily met by massive processing facilities.

Although CPS has adopted the Good Food Purchasing Policy, it remains in a contract with Aramark and **only 30 percent of CPS schools have actual kitchens onsite**. That means, according to the Illinois Farm to School Network, that an Aramark-run commissary is responsible for delivering pre-prepared and pre-packaged food for most CPS schools. At schools with the facilities for on-site dining services, these are managed by an Aramark staffer.

Due to meal volume and menu requirements, the most likely way to introduce beef in schools is through patties and ground beef. Schools primarily source beef patties, either raw or often completely cooked to avoid food safety issues and requirements for written Standard Operating Procedures for handling raw beef. Alternatively, schools sometimes use bulk ground beef. For example, USDA sells commodity “crumbles” that are either pre-cooked or come as ten-pound bricks of raw ground beef.¹⁶

COVID-19 Impacts

According to the National Farm to School Impact assessment report, school shutdowns due to COVID-19 virtually eliminated school markets as an option for local producers.¹⁷ Further, it led to schools prioritizing restructuring delivery options for meals, starting grab-and-go and/or meal kit programs. Fewer lunches were served in the spring of the pandemic, resulting in decreased product need. In many cases, the products included in those meals needed to be shelf stable or pre-wrapped, preventing producers who could not offer minimally processed or value-added products from participating.



Most schools offer free or reduced lunches to eligible students. Strict eligibility requirements, which were expected to make it harder to feed kids during the pandemic were waived when the pandemic started because providing and collecting documentation to verify eligibility has been more difficult during the pandemic. This flexibility extended through the entire 2020-2021 school year, according to this [press release](#) from USDA (www.usda.gov) making it participation possible for kids who were not previously eligible to receive meals.

Pandemic related budget cuts to school nutrition programs will likely make sourcing local food, and grass-fed beef, more challenging. In addition to lost revenue from fewer meals served, schools are

also facing increased costs related to obtaining new equipment and transportation of meals under a new distribution method, personal protective equipment, packaging, and increased food and staffing costs.

More positively, the COVID-19 crisis has boosted the importance of school nutrition programs and positioned schools as hubs for food access for the whole community, for accessing local food. Many school sites started serving food to all community members. Furthermore, since the City of Chicago and CPS adopted the GFPP, it will continue to be the framework that incentivizes sourcing local and sustainable options once budgets and staff capacity recover.

Opportunities

Opportunities for expanding the local sourcing of grass-fed beef do exist, particularly for smaller school districts in Illinois. The Illinois Farm to School Network has developed extensive resources for local procurement including materials to assist school districts with sourcing local food items, funding programs, outreach and communication, and other steps in the process. Illinois Farm to School Manager Diane Chapeta suggested that Wheeling's school district is among districts that are at the forefront of sourcing local foods.

Wheeling High School contracts with Organic Life as their food service management provider. Organic Life started as a company focusing on providing healthy school lunch services and now manages food services for schools across the U.S., as well as restaurants and hotels. When they work with schools, they develop menus that are nutritious and appeal to kids. They might be a good organization to consider grass-fed beef products and/or be an ally in determining entry points for local producers. Smaller, suburban school districts in the Chicago area and other school districts in communities where producers operate may be better suited to become early adopters of a grass-fed beef purchasing program than a large school district like CPS. School districts in the Upper Fox River and Kishwaukee watersheds are identified as priority for higher feasibility for expanded grass-fed beef production. These include school districts and schools in Boone, Cook, Kane, Lake, McHenry, Ogle, Winnebago, De Kalb, and Lee Counties.

A success story is Chapeta suggested that suburban Wheeling's school district, which is among districts that are at the forefront of sourcing local foods. Notably, Wheeling High School contracts with Organic Life as their food service management provider. Organic Life started as a company focusing on providing healthy school lunch services and now manages food services for schools across the US, as well as restaurants and hotels. When they work with schools, they develop menus that are nutritious and appeal to kids. They might be a good organization to consider grass-fed beef products and/or be an ally in figuring out entry points for local producers.

Although advancing changes within CPS procurement could be challenging due to its size and food service management contract constraints, piloting interventions within CPS could offer learnings that other school districts in the Chicago metro area and across the state can benefit from. There are opportunities to work with CPS, which has been running a Farm to School program since 2013 and has recently adopted the GFPP. CPS' implementation of the GFPP has led Aramark to work with

vendors that support local procurement. Prior to pandemic shutdowns, CPS reported more than \$8.9 million in local spending as of February 29, 2020 during the 2020-2021 school year. Most common sourced local products include green beans, corn, carrots, fresh potatoes, apples (more than 50 percent of spending), and chicken drumsticks (about 12 percent of spending), which comes from Miller Poultry in Indiana. CPS does not currently source beef locally. As Aramark's vendor, FarmLogix manages CPS's Farm to School program and procures local items. FarmLogix started operating in 2013 and currently offers distribution and procurement services to entities across the country. FarmLogix also provides technology tools and services that help track sustainability benchmarks and product attributes. For grass fed beef producers, among others, FarmLogix offers services such as e-commerce and logistics management, and other business-related services.

Private schools in Chicago, Cook County, and Illinois are a mix of parochial, alternative- education focused, private university affiliates, secular schools, and more. Notably, private schools such as Francis Parker and St. Ignatius contract with Chicago-area based Quest Foods (which sources food from Gordon Food Service), while the Latin School and Lycée Francais de Chicago partner with Handcut Foods (who partner with Local Foods and the Butcher and Larder). Both Quest and Handcut Foods have facilities on-site that allow for on-site culinary preparation, as opposed to CPS facilities where much of the food preparation is centralized off-site through an Aramark commissary.

To determine the level of participation and/or interest in local food sourcing in the project area of interest in Illinois, we the project team reviewed data from the Farm to School Census conducted in 2015 (reflecting 2013-2014 school year activities). These are broken down by school districts in counties in the priority watersheds (Upper Fox River and Kishwaukee), Cook County school districts, and Chicago Public Schools. The table below summarizes the school population and their sourcing practices for local food and meat, in particular. Data suggests that just under a quarter of school districts in the project area reported conducting Farm to School (F2S) programming -- a group of early adopters whose experience and lessons learned can be leveraged to help other schools get started. The Census data also suggests that there is growing interest in local food sourcing with another 10 percent of the school districts in the priority watersheds and Cook County reporting plans to start F2S activities in the future. Farm to School Census data may skew interpretation of the current state of local food sourcing because the self-reported data from school districts depended on different definitions of "local" for all who reported.

According to the F2S Census, which reflects the 2013-2014 school year, 23 school districts in Illinois sourced local meat, and eight more reported interest. The census data does not break down meat products by type, but it is likely poultry as chicken being often reported as one of the top five items purchased. Appendix C lists school districts in the project area that have reported purchasing local meat in the census or have more recent initiatives. Those school districts may be good candidates for approaching to introduce grass-fed beef products into their dining.

Table 1. Farm to School statistics in priority watersheds, Cook County, and Chicago Public Schools

| | Priority Watersheds (excluding Cook County) | Cook County (excluding CPS) | Chicago Public School District |
|--|--|--------------------------------|---------------------------------------|
| # Of School Districts with F2S Programs (Of All School Districts) | 16/79 | 25/96 | Has F2S |
| # Of School Districts That Purchased Local Meat (Of F2S Districts) | 2/16 | 3/25 | Serves local meat (poultry, not beef) |
| Students Attending (F2S Districts) | 90,444 | 262,531 | 396,641 |
| Number of Schools (F2S Districts) | 143 | 484 | 682 |
| Frequency Serving Local Meat | More than weekly (for those that do) | Daily (for those that do) | More than monthly |

Case Study

Some states in the U.S. have begun focusing on local beef sourcing as part of their F2S programming. For example, the state of Montana implemented a research project called the [Montana Beef to School Program](#) to develop strategies that support sourcing more local beef for schools (and to honor Montana's ranching heritage).¹⁸ When the project wrapped up in 2018, it developed a set of resources for schools including profiles of schools that already source local beef, a procurement decision tree, and procurement templates, and created a basis for further program design in Montana. Montana has a much more local beef production and a comparatively small student population compared to Illinois, making matchmaking between schools and producers a big part of the successful strategy. Yet, the **procurement resources could be helpful for schools and districts in Illinois because federal policies related to school meals and procurement apply across the country.**



Figure 1. (Photo) Montana Beef to School: Five Profiles

Procurement Pathway and Intervention Recommendations

With a better understanding of how food procurement in the education sector works and key food service providers involved, we can start to identify strategies and interventions that might allow introduction of grass-fed beef into this market. A typical procurement pathway for schools and school districts is described below. There are several options for schools, depending on their size, capacity, and infrastructure to operate with or without a contracted food service provider. If utilized, food service providers often require purchasing from their own preferred vendor list. Schools can also source directly from the USDA National School Lunch Program which buys from approved USDA vendors. Following are various interventions grouped by where along the pathway they would affect change.

Intervention

Local technical assistance providers work with farmers to become approved USDA vendors and assess USDA National Lunch Program market size for beef.

Umbrella organizing, and advocacy entities implement targeted outreach and facilitate network building between farmers in the priority watershed(s) and processors (USDA inspected) and food hubs/distributors (e.g. Local Foods, FarmLogix) to establish business partnerships .

Advocacy organizations champion programs that provide financial and technical support to currently non-USDA inspected processing facilities to reach USDA inspection requirements.

Chefs and food service managers redesign school menus to offer fewer but higher quality meat options, source lower value cuts like ground beef, extend volume of products like beef burgers and chili with veggies/legumes; consider menu options that can also be served even if schools don't have full kitchen facilities

Policy advocacy organizations push for interventions such as adoption of the Good Food Purchasing Policy by jurisdictions, or development of state programs that support Illinois Farm to School activities. Other policy interventions that provide additional reimbursement for school meals for local food procurement should be considered.

Support organizations develop tools and resources to support sustainable beef procurement (contract templates, pricing guidelines, procurement guidelines, etc.) for schools^D that specifically offers guidance for local protein sourcing.

School administrators renegotiate reporting and tracking contract provisions to ensure food service providers share data on sourcing and production information.

School administrators, advocates, and policy makers develop novel financing strategies that uncouple reimbursement financing from a per-meal amount to a broader time scale to allow for more flexibility to budget over time, not per meal.

Justification

USDA's Agricultural Marketing Service (AMS) purchases 10-15 percent of the food served through the National School Lunch Program. USDA buys products through a competitive bidding and award process from approved vendors. Illinois grass-fed beef farmers, if approved, can gain entry into school procurement and sell directly into the National Lunch Program.^A AMS purchases fruits, vegetables, livestock, poultry, egg products, grains, dairy, peanut, and oil products for USDA Foods.

Food sourced by schools must come from USDA or state inspected facilities; distributors may be better positioned to sell to schools because they may already be preferred vendors or be able to provide product at scale.

Products are required to come from USDA or state inspected processing facilities. More processing facilities that meet these requirements can increase access and capacity for grass fed beef farmers.

Beef is one of the most expensive food items, so to fit into the budget, menus can include less but higher quality meat options supplement with other ingredients that cost less; majority of beef products used in schools consists of ground beef/patties (often has to be pre-cooked); some schools don't fully equipped kitchens for preparing meat.

Institution: The Good Food Purchasing Policy or similar framework with goals to source local/sustainable products drives change in procurement policies. Additional reimbursement policies have been implemented in New York^B (a 25 cents/meal for school districts that utilize more than 30 percent locally grown products, i.e. anything grown in NY, while Michigan is launching a 10 cents/meal reimbursement statewide.^C

Local meat procurement, whether through food service providers or administered internally, is not currently common practice in Illinois. While smaller districts, parochial schools have more flexibility, and potentially more resources, respectively, they still need supporting capacity to source local beef.

Contracts with food service providers lock in procurement practices for several years and can reduce transparency regarding and access to decisions about food sourcing.

Federal reimbursement for school meals is limited, dependent on student utilization of free and reduced prices, and intended to cover overhead costs as well as food.

^A<https://fns-prod.azureedge.net/sites/default/files/f2s/SellingLocal.pdf>; <https://www.ams.usda.gov/selling-food/becoming-approved>

^B<http://finys.org/growing-opportunity>

^C<https://www.tencentsmichigan.org/>

^Dhttp://illinoisfarmtoschool.org/wp-content/uploads/2015/06/Local_Procurement_Decision_Tree.pdf



Higher Education

Background and Current Procurement Practice

Nationwide, less than 20 percent of colleges and universities manage their own food management and distribution services. Of the 81 percent of colleges and universities that outsource food management, 70 percent of the market is dominated by three major companies — Sodexo, Compass Group, and Aramark.¹⁹



Figure 2. (Photo) Be-Trayed: How Kickbacks in the Cafeteria Industry Harm Our Communities - and What to Do About It

The scale at which these companies operate allows them to source from preferred vendors at high volumes and low prices. According to the 2020 report published by Real Food Generation, “Be-Trayed: How Kickbacks in the Cafeteria Industry Harm our Communities - and What to Do About It” (Apoliona-Brown et al),²⁰ the system for selecting vendors and contract terms are often opaque and lock out small farmers and ranchers from the college food service market. The company representatives make most of the buying decisions and source high volume of products from approved vendor lists that allows them to keep prices low.

In line with national trends, most Chicago’s colleges and universities also hold dining service contracts with one of the big three management companies (Compass, Aramark, or Sodexo) or their subsidiaries with each institution maintaining its own process for bidding on contracts. Those contracts tend to be long term (seven to 10 years) and make up a large portion of the profit for the food service companies. For example, University of Maine System has a 10-year contract with Sodexo worth \$12 million annually.²¹ Universities can obtain low-cost food

products, but there is little transparency in product sourcing and distribution pathways. Several Chicago-area universities contract a Compass Group-subsubsidiary called Bon Appetit, which has a robust sustainability program. Bon Appetit's Farm to Fork program stands out as one of the service providers that integrates local food provisions in their protocols and could be leveraged to expand local grass-fed beef procurement.²²

Policy Driver

Among the numerous Chicago-area colleges and universities, only Northwestern University has adopted the Real Food Campus Commitment, a framework for reforming food procurement motivated by student organizing that **sets numeric targets and builds accountability and stronger governance** into this system. The Real Food Campus Commitment establishes goals that university administrators are encouraged to meet. Stakeholders representing the student body often must advocate for more aggressive action as this is a voluntary commitment.

Constraints

Like K-12 educational institutions, **universities' dining options call for limited types of beef products, in particular ground beef**. Though volume varies depending on the size of the student body, according to Real Food Challenge staff, a **common barrier for universities is finding farmers/distributors who can supply** ground beef consistently at the needed volume. Similar to the GFPP, one of the key barriers when committing to the Real Food challenge is the **lack of access to data about food sourcing that allows institutions to establish baseline and track progress**.

COVID-19 Impact

As universities started getting ready for fall semesters, many are rethinking their approaches to keep students well fed and healthy.²³ There is no formula for this and very little certainty around what will be effective and maintainable in a post-pandemic world. The pandemic university dining experience of the future may include things like robotic food prep and delivery, meal kits, pop-up food tents and trucks to provide on the go options and/or outdoor dining. All of these seem to signal a move away from fully equipped on-site kitchens, which tend to be favorable for including meat dishes on the menu, however, these tactics can open new opportunities for smaller, trial projects that specialize in something like burgers calling for niche sourcing of something like grass-fed beef.



Universities' revenue has also been significantly impacted by the reduction in meal plans and individual purchases and an increased spending for maintaining sanitary conditions in transportation, food-prep, and dining facilities.²⁴ This has led to renegotiation of contract terms between universities and their food service providers who are seeing large losses in revenue themselves.

While the uncertainty is a challenge to planning efforts, this situation is likely to change the negotiation dynamics between institutions and food service providers in the long term. One potential outcome is that it might lead to more competitive contract terms and openings for smaller and sustainability minded providers to offer appealing options for institutional procurement or even push universities to transition to independently operated dining services.²⁵

While the pandemic has disrupted data tracking and other activities for those colleges and universities that are part of the Real Food Challenge, real food advocates view this moment as a fork in the road and an opportunity to rebuild the food supply chain with transparency and accountability to provide not only food security to students, but also equity to farm and food service workers.²⁶

In the long term, once the universities emerge from the economic and operational crisis, the pandemic might serve as a catalyst for rethinking the college food service model with cyclical menus and crowded dining halls. Innovation in the spheres of customization, as well as grab-and-go, take-out, and delivery options will drive menu design.²⁷ In addition to concerns about health and safety, the pandemic will continue to elevate the issue of dining transparency at many institutions as students want to know where their food came from and how it is prepared.²⁸

Opportunities

The Real Food Challenge framework incorporates local productions and existing third-party certifications into their standards to ensure a certain level of quality control and reduce the burden for buyers. For producers, having these environmental and animal welfare certifications allows for easier entry into the value chain. The Real Food Challenge framework currently recognizes the following standards and certifications that are relevant to considering how grass-fed beef products can enter the value chain:²⁹

- Local sourcing standard: All production, processing, and distribution facilities must be within a 250-mile radius of the institution. This radius is extended to 500 miles for meat, poultry, and seafood
- Humane sourcing certifications: Animal Welfare Approved/Certified (AWA) by A Greener World, AWA Grassfed by A Greener World,
- Ecological sourcing certifications: Organic, Regenerative Organic

Smaller colleges and universities (whether public or private) have more flexibility in terms of how they can work with different vendors, typically because they are not constrained by contracts with external food service management services (food service managed by internal staff). Though they may not always have the resources to dedicate to identifying and managing local vendors, private institutions may be able to rely on a strong donor base and endowment to support this work. **Often procurement flexibility is a direct result of how independently the dining services are operated.**

According to Real Food Challenge staff, it is likely that university sustainability pledges and student or faculty-led organizing efforts play an important role in changing how these contracts are structured during the re-negotiation process to ensure that certain food production standards are

met with accompanying reporting. The *Be-Trayed: How kickbacks in the cafeteria industry harm our communities - And what to do about it* report highlights the need for greater transparency and accountability so that institutions can have access to information about food sources and prices.³⁰ Real Food Challenge has compiled several case studies and resources for higher education institutions looking to incorporate local food sourcing, including sample contract language and parameters for consideration in food service contract negotiation.³¹

In appendix D, we identify Chicago-area universities and their food service providers. With a better understanding of how food procurement in the higher education sector works and key food service providers involved, we can start to identify strategies and interventions that might allow introduction of grass-fed beef into this market.

Case Study

As part of Northwestern University's sustainability plan, the university has committed to participating in the Real Food Challenge to achieve a 20 percent level of "real food" on campus by 2020, to increase the use of sustainable food served in University dining facilities to 20 percent (from 2018 baseline) of total food purchases by 2021, and to achieve Green Restaurant Certification for all dining halls by 2018.³² The Green Restaurant Certification includes standards for meat sourcing related to production practice including organic, humane, and local.³³



Figure 3. (Photo) Real Food Challenge logo

Generally, universities set sustainability goals to uphold their reputations around social and environmental responsibility. Food sourcing commitments in university's sustainability plans are often driven by students campaigning and mobilizing for changes. Having a champion in dining management that can help to push these goals forward, as is the case at Northwestern University.

To move toward the 20 percent targets, the university is still working on establishing a baseline because they switched vendors in 2018 (Compass is the new food service provider with a 15-year contract in place). The baselining efforts halted when the pandemic began. While the Green Restaurant certification was achieved under the old food service provider, the university will need to verify compliance since Compass took over. The university is currently developing an updated sustainability plan that will go into effect in July 2021, which will likely have new targets related to food procurement.³⁴

Procurement Pathway and Intervention Recommendations

With a better understanding of how food procurement in the higher education sector works and key food service providers involved, we can start to identify strategies and interventions that might allow introduction of grass-fed beef into this market. The procurement pathway for colleges and universities is similar to that for K-12 educational institutions, however, there are no restrictions imposed by USDA (e.g. those associated with the National School Lunch Program). Food service management may be handled in-house or by a contracted food service provider such as Aramark. If utilized, food service providers require purchasing from their own preferred vendor list..Below we outline some potential interventions to consider based on which point along the pathway is impacted.

Intervention

Support organizations provide assistance and additional coordination needed to obtain certification such as Animal Welfare Approved by A Greener World, Grassfed by A Greener World, Organic by USDA, or emerging Regenerative farming certification to farmers.

Aggregators and/or distributors supplying institutional buyers provide guidance to farmers on product type needed by various institutions.

Umbrella organizing and advocacy entities implement targeted outreach and facilitate network building between farmers in the priority watershed(s) and food hubs (e.g. Local Foods) and distributors (e.g. Bon Appetit) to establish business partnerships.

Student groups advocate for more sustainable food sourcing or Real Food Challenge commitment; nonprofit organizations identify school groups interested in food sourcing and establish a process for networking, sharing tools and resources, etc.

University administration renegotiate contracts with food service providers to improve reporting and tracking and ensure data on sourcing production information is made available.

Production (Beef Farmers)

Aggregation

Processing/ Distribution (Beef Processing Facilities, Food Hubs & Distribution Companies)

Food Service

Institution (Universities and Colleges)

Justification

Institutional sustainability targets or pledges such as Real Food Challenge often include third party certifications as requirements when sourcing food products. Such certifications can help qualify farmers to participate. Real Food Campus Challenge is a framework to set goals to source local/sustainable products, which is the most common policy framework used to date.

Higher education institutions are typically limited to ground beef/ patties as selected products.

It's difficult to find local farmers to source from at scale even when higher education institutions are committed to doing so. Partnerships with food hubs and distributors can help broaden the reach of grass fed beef farmers.

Real Food Campus Challenge is a framework to set goals to source local/sustainable products, which is the most common policy framework used to date. Pressure from student organizations is seen as a major driver for Real Food Campus Challenge commitment.

When universities contract with food service providers, it locks them into contracts for several years and reduces flexibility and transparency in sourcing. Poor tracking and low availability of sourcing data makes it difficult to assess procurement. Colleges with independently run dining services have much more control over sourcing.



Hospitals

Background

The healthcare sector represents another category of large institutional buyers with an opportunity to introduce locally produced grass-fed beef through the hospital procurement process. After a recent wave of consolidations, there are nine major private hospital systems in northern Illinois and 56 hospitals. Cook County Health's John H. Stroger, Jr. Hospital is the flagship of the public system, along with Provident Hospital (see appendix E for complete list). Patient meals are budgeted at about \$2 to \$3 per meal. Other meals served at hospitals include retail cafeterias or food at catered events, for which pricing is more flexible and higher.³⁵ Estimated food purchasing spend for the Chicago area hospitals, which have a total of 15,787 available beds,³⁶ is upwards of \$51.8 million annually.

When it comes to food service and purchasing, private hospital systems tend to fall into two categories: managed by hospital system staff or outsourced to a food service provider. Hospital systems that do not contract out services have more control over their purchasing. Hospital systems tend to enter contracts with major food service providers such as Aramark, Sodexo, or the Compass Group. In addition, mergers and consolidation of systems has led to group purchasing organizations (GPO), a separate entity that negotiates prices with vendors on behalf of the institutions. Even if the hospital does not contract out food service, they may still utilize GPOs to purchase food.

University health systems tend to have fewer locations, so GPOs often wield less power in these cases. The university hospital systems are typically able to make their own independent procurement choices regardless of the university system's food service contracts. For instance, while the University of Illinois at Chicago's university food service is contracted to Compass Group, the UIC's Health System food service is managed independently. University of Chicago contracts out its university food service to Compass Group subsidiary, Bon Appetit, whereas the hospital system contracts with Aramark.

Current Procurement Practice

Certain trends that have emerged within educational institutions — such as contracting with Aramark, Compass Group, Sodexo, or one of its subsidiaries – are also apparent in hospital procurement scenarios. GPOs create an additional layer of complexity in the process, because contracts with the GPO, in large part, determine what the hospital buys.

Our discussion with staff at the Advocate Aurora Hospital system shed more light on the procurement process. A team of representatives from different departments and locations are involved in decisions regarding purchasing. That team includes clinicians, operations managers, and sustainability and nutrition professionals. Though Advocate Aurora's food service is self-operated, their primary vendor for sourcing is US Foods and is also part of a GPO, Premier. To be able to enter this pathway into the value chain, **a grass-fed beef producer (or a distributor) would have to be on US Foods' approved vendor list to have US Foods buy their products.**

The GPO negotiates prices with the food vendor and contracts for that product at the negotiated price for three years. Approximately 80 percent of the annual budget for food purchasing is allocated for GPO/primary vendor products. The remainder can be used for other items including those that may be on trial basis or based on patient needs. This 20 percent budget allocation could provide an opportunity to purchase grass-fed beef products.³⁷ All of the hospitals in the Advocate Aurora system operate under the same procurement scheme. Furthermore, GPOs such as Premier buy on behalf of multiple hospital systems and hospitals. Finding entry points into such a large system could prove challenging. Like the education sector, starting on a small scale with either a pilot project or working with a smaller hospital might be beneficial.

Policy Driver

Much like in higher education, **there are several organizations, such as Healthcare Without Harm (HWH) and Practice Greenhealth, advocating for hospitals and hospital systems to adopt sustainable procurement practices and policies.** A report published in 2016 by HWH, titled "[Sustainably Raised Meat and Poultry](#)"³⁸ (Mitchell et al) reported out that 80 percent to 90 percent of hospital procurement is made through GPOs. Notably, in a companion report published by HWH, titled "[Strategies to Increase Sustainable Food Options via GPOs and Distributors](#)"³⁹ (Kulick), the author encourages hospital staff interested in local food to serve or seek out appointments to purchasing committees and to encourage "specialty" producers to apply to become a GPO-approved vendor.

HWH published several possible approaches institutions can take using limited budgets and costs in its 2012 report titled "[Health Care's Commitment to Sustainable Meat Procurement](#)"⁴⁰ (Healthcare Without Harm). These included reducing overall meat consumption, working to find processors and distributors for a locally sourced meat supplier, and cost rationalization. Food procurement officials at the Fletcher Allen Health Care in Vermont pointed out that the cost of switching to antibiotic-free chicken is about the same cost as providing care and treating an individual suffering from an antibiotic resistant infection (about \$67,000).⁴¹

Several hospital systems, including Advocate Aurora, NorthShore Hospital, and the University of Illinois Health Systems signed the 2005 Healthcare Without Harm Food pledge.⁴² Advocate Aurora has also signed the Healthier Hospital pledge (a Practice Greenhealth project) which requires committing either to a “Less Meat, Better Meat” pledge or a local, sustainable food purchasing program. Advocate Aurora has committed to the latter.

Constraints

Hospital procurement is rigidly structured and difficult to change quickly. Food sourcing decisions are primarily based on financial, allergenic, and nutritional considerations. Typically, patient food is a portion of all hospital expenses, and grass-fed beef is often seen as too expensive for patient menus. On the other hand, retail food service can be a revenue generator and has the potential to introduce grass-fed beef dishes.

COVID-19 Impact

The impact of COVID-19 is perhaps felt the strongest in the healthcare sector. While patient food services continue to operate in hospitals, retail food providers within hospitals – providers that could introduce more expensive options such as grass-fed beef - remain closed in many instances.



According to the Farm to Institution New England (FINE) Impact Assessment report, hospitals faced many similar challenges as did other institutional buyers when it comes to food procurement.⁴³ The pandemic exposed inefficiencies in the food system, with many food businesses having to pivot and adopt innovative solutions to get food to people. However, the pandemic has also highlighted weaknesses forcing discussion about traceability and transparency to the forefront, which will hopefully lead to more flexible and resilient supply chains in the future.

The general unknown that hospitals, like other institutions, are facing makes planning menus, procuring food, and engaging in other farm-to-institution activities challenging. Hospitals have had to adjust their operations numerous times over the last several months and have significantly reduced or paused their dining operations. With reduced visitation capabilities, there have been widespread staff furloughs, surplus food, and disrupted supply chains. For many institutions already under financial strain, these disruptions and uncertainty will have a significant impact further affecting food (especially local food) budgets. Additionally, the move to grab-and-go programs is often in conflict with the models that institutions have developed to integrate local farm-impact foods (e.g., salad bars).⁴⁴

Opportunities

Hospitals that operate without an external food service provider have more flexibility in purchasing, though the processes around procurement are highly structured because purchasing decisions are made for the entire hospital system involving a whole team of professionals as well as large volumes of product. Individual producers are unlikely to sell directly into the hospital, however distributors that are approved vendors can serve as the link between producers and primary food vendors for hospitals. The process for becoming approved vendors can serve as a mechanism for local grass-fed beef producers to enter the value chain.

Some hospitals that have made HWH commitments have piloted and found ways to introduce grass fed items into their food services can serve as informational resources to others interested in doing so. In California, HWH launched the grass-fed beef to institution purchasing pilot in collaboration with the Community Alliance with Family Farmers and TomKat Ranch, bringing grass fed beef to hospitals and schools.⁴⁵ Networking among professionals involved in the procurement process to share lessons learned and identifying key entry points for sustainable locally produced foods into the process.

Case Study

[Practice Greenhealth](#) is a nonprofit, membership-based organization that provides healthcare entities (including hospitals and group purchasing organizations) with sustainability resources and technical assistance.⁴⁶ Practice Greenhealth's initiatives include Food, which incorporates nutrition, the environment, and the local community and food economy in purchasing considerations.



PRACTICE
Greenhealth

Figure 4. (Photo) Practice Greenhealth logo

Dartmouth-Hitchcock Medical Center (DHMC) in New Hampshire is a Practice Greenhealth member that has worked since 2009 to reduce the number of miles food sourced by the hospital travels and support local New England farmers. DHMC has established a multi-departmental Menu Committee that provides information and recommendations for local food sourcing options and was able to source almost a quarter of food locally in 2012 - including burger patties. Additionally, hospital staff serve on a Healthy Living Committee with New Hampshire community members to identify opportunities for the hospital to engage with and provide benefit to the surrounding community. One initiative that came out of both committees was the establishment of a weekly farmers market on site at DHMC.⁴⁷ **Leveraging Practice Greenhealth resources and case studies provides an opportunity for Chicago-area hospitals to incorporate local sourcing practices for grass fed beef.**

Procurement Pathway and Intervention Recommendations

The procurement pathway for hospitals is similar to that of colleges and universities. Food service management may be handled in-house or by a contracted food service provider such as Aramark. Group Purchasing Organizations (GPOs) play a large role in procurement (also involved in the higher education procurement process). If utilized, food service providers and GPOs require purchasing from their own preferred vendor list. Below we outline some potential interventions to consider based on which point along the pathway is impacted.

Intervention

Support organizations provide assistance and additional coordination needed to obtain certification such as Animal Welfare Approved, Grassfed, Organic, or emerging Regenerative farming certification to farmers.

Umbrella organizing and advocacy entity implement targeted outreach and facilitate network building between farmers in the priority watershed(s) and distributors that are approved vendors to establish business partnerships with food service providers that contract with GPOs.

Chefs pilot seasonal menu options and/or specialty items for retail dining, healthcare professionals share resources on public health benefits of grassfed beef.

Procurement professionals and value chain coordinators develop a stakeholder network in hospitals that develop strategies for sustainable sourcing (contracting templates, technical resources, etc.), to share lessons learned, and facilitate adoption of HWH pledge for local/sustainable food sourcing.

^A https://noharm-uscanada.org/sites/default/files/documents-files/3373/Healthier%20food%20purchasing%20standards_6-25-20_0.pdf

^B <https://practicegreenhealth.org/about/news/hospitals-collaborate-vendors-address-public-health-through-animal-agriculture>

Justification

Institutional sustainability targets or pledges such as Healthcare Without Harm or Greenhealth often include third party certifications within their standards when sourcing food products. Such certifications can help qualify farmers to participate^A

Hospitals are subject to a complex and highly structured procurement system that includes the use of GPOs for multiple facilities; GPO purchasing is 80 to 85 percent of total food spend. Farmers partnering with approved vendors is the potential entry point for producers for large-scale sourcing.

Cost and health considerations play an important role in food purchasing decisions; sourcing beef raised without antibiotics has public health benefits related to reducing antibiotic resistance.^B

Healthcare without Harm and Greenhealth can serve as important vehicles for hospitals to change their food sourcing practices by convening and supporting local partners.



Cultural and Recreational Institutions

Background and Current Procurement Practice

For the purposes of this memo, cultural institutions refer broadly to music venues, publicly and privately-owned stadiums, museums, and other educational or recreational destinations. This section highlights several examples where food procurement reflects organizational sustainability initiatives and provides a high-level overview of the food-service management landscape among cultural institutions in Chicago (a list of institutions is included as appendix F).

The Shedd Aquarium and the Field Museum, which both have institutional sustainability goals to meet through LEED and other programs, have been at the forefront of institutional food purchasing commitments. In 2013, the Field Museum consulted with Beyond Green Sustainable Food Partners to craft a sustainable food operator program that would help the restaurants put the museum's mission of conservation into practice within its walls and to educate the public while doing so." The Field Museum restaurants, operated by Aramark's entertainment venue subsidiary, were able to divert just under 75 percent of their waste and purchase just under 20 percent of their food with sustainable labels (the goal is to have 35 percent of the food sourced be local and/or sustainable). The Field Museum serves approximately one million meals annually and one of their top sellers is a beef burger priced at \$10.75. One of Aramark's preferred vendors that supplies local food, produce primarily, is Midwest Foods. The restaurants at the Field Museum update their menus seasonally, and the chef, along with the Aramark general manager for Field Museum, makes decisions about what to order and places weekly orders with preferred/approved vendors. **One of the main barriers in sourcing local food is the lack of suppliers with consistent, high-volume stock.** Other factors that impact decision making for the Field Museum include leadership buy-in, demonstrating value add, and marketing to visitors.

The Museum of Science and Industry (MSI) also has sustainability initiatives, though only a small portion of their activities focus on food services currently. Programs are focused on health-related improvements such as eliminating all high fructose corn syrup products in their food court, but the museum is also interested in finding ways to source more sustainable options more broadly. MSI recently renewed their contract (15-year term) with Centerplate, a subsidiary of Sodexo, as their food service provider. MSI serves about one million meals annually, split between regular museum visitors and events held at the museum (150 per year). For events, MSI contracts with Van Lang Foods to handle food preparation and service. Van Lang Foods utilizes MSI's recipes, but sources ingredients from their own vendors. MSI and Shedd Aquarium employ the same executive chef, so the institutions share the approach in menu development and decision making related to food sourcing. Organizations, especially those with sustainability plans or initiatives, do have the ability to incorporate local/sustainable standards into food service providers' RFPs and contracts.

The Art Institute of Chicago and the Museum of Contemporary Art have higher-end restaurants Terzo Piano and Marisol. Marisol's menu was created by local and slow food advocate Jason Hammel. Terzo Piano, led by Tony Mantuano and Carolina Diaz, mention their farm-to-table commitments as well.

Food service at Wrigley and Guarantee Rate Fields and the United Center are typically supplied by Chicago-based Levy Restaurants, a subsidiary of the Compass Group. Levy Restaurants also has a contract with Ravinia, Lincoln Park Zoo, Navy Pier, and the Chicago Botanic Gardens. As menu construction and consistent buying have come up in conversations with Midwest Foods among many others, Levy Restaurants might be an interesting stakeholder to engage in future interventions given the **need for a consistent supply and offering of burgers at sporting events**. For Chicago's Soldier Field, the Chicago Bears organization, and the Chicago Park District both have input on food vending and contracting decisions.

Catering, restaurants, and concessions at McCormick Place and Wintrust Arena are managed by Savor, an internal food service management provider. McCormick Place is a Green Seal Certified convention center. Along with a commitment to a rooftop farm, Savor reports having more than 33 percent of all food purchased at McCormick Place as local, organic, or environmentally preferred, including seafood and antibiotic-free meats.

Policy Drivers

Chicago Park District (CPD), furthermore, oversees concessions and food services for various camps and youth programming. CPD procurement for their summer and afterschool meal programs (does not include CPD concessions) is subject to the **Good Food Purchasing Policy as adopted by the City of Chicago**. Currently, work is underway to establish a baseline of existing food sourcing, which is challenging due to lack of consistent data sharing provisions for contracted food service providers.

Some preliminary data suggests that CPD does not purchase beef for their summer camp programs (which typically serves 20,000 children) due to cost constraints and limitations in the

types of meals that can be served; specifically, these programs typically serve grab-and-go style cold meals. CPD is interested in expanding the GFPP policy to Parks concessionaires utilizing something like a "GFPP Pledge" that would facilitate self-reporting of data collection coupled with external verification.

For many cultural institutions, decisions related to food sourcing might be driven by organizational sustainability plans and/or commitments, initiatives akin to Corporate Social Responsibility (CSR) or Environmental, Social, and Corporate Governance (ESG) initiatives in the corporate sector. These are voluntary commitments and motivated by the relative alignment with organization mission, desire to uphold the reputation or stay ahead of the curve on sustainability issues.

Another institution type working to incorporate local food sourcing is sporting venues, through the [Green Sports Alliance](#) (GSA). The GSA is a trade organization that works with sports leagues, teams, venues, and their partners on renewable energy, healthy food, recycling, water efficiency, species preservation, safer chemicals, and other environmentally preferable practices. The GSA launched in 2011 and currently serves over 300 member teams, venues, and universities from 20 different leagues and 14 countries. Members make a commitment to improve their environmental performance, supported by GSA resources and expertise.⁴⁸

COVID-19 Impact

Institutions in this category have all been significantly impacted by the COVID-19 pandemic, with most temporarily closing, scaling down their operations, or, in the case of professional sports, conducting events with no live audience or greatly limited audience capacity. Much of the potential work with cultural institutions will depend on the speed and degree to which institutional budgets react to economic recovery efforts during the COVID-19 crisis and in its aftermath. Already, cultural institutions are facing severe funding restrictions and have responded by imposing furloughs and/or closing, temporarily or otherwise. Because these institutions serve as the community gathering spaces, the post-pandemic world will likely lead them to rethink the entire user experience and space design to accommodate public health concerns. For food service, that might mean food courts may be replaced by smaller, dispersed food vendors, and buffets by boxed products.⁴⁹



Opportunities

Cultural and recreational institutions may provide promising opportunities for grass-fed beef to enter the market as they typically serve large swaths of the population and are motivated to be aligned with environmental and social aspirations of the community they serve. However, each institution and institution type operate under a distinct set of constraints and sustainability goals/policies. All institutions have a need to source large volumes of product, so **identifying institutions that have a strong driver (e.g., adopted sustainability initiatives), or are smaller, and/or can pilot a project will be key to target tailored interventions. Working with chefs who are involved in food purchasing decisions will also help impact large-scale adoption of new products like grass-fed beef.**

Case Studies

[Shedd Aquarium Seafood Sourcing](#) ⁵⁰

The Shedd Aquarium, which leads several environmental and conservation campaigns, including action against plastic straws and invasive aquatic species,⁵¹ has developed a Sustainable Seafood toolkit aimed at equipping food purchasers with resources to improve seafood procurement practices.⁵²

The toolkit includes:

- Definitions of key terms and certifications;
- Popular “myths” around seafood production and research-supported responses;
- A Sustainable Seafood worksheet to help clarify organizational priorities and expectations for use in communication and coordination with food service providers; and,
- Additional resources for further information.

This resource sets a precedent for developing a similar set of tools to establish and communicate environmentally based buying standards for beef.



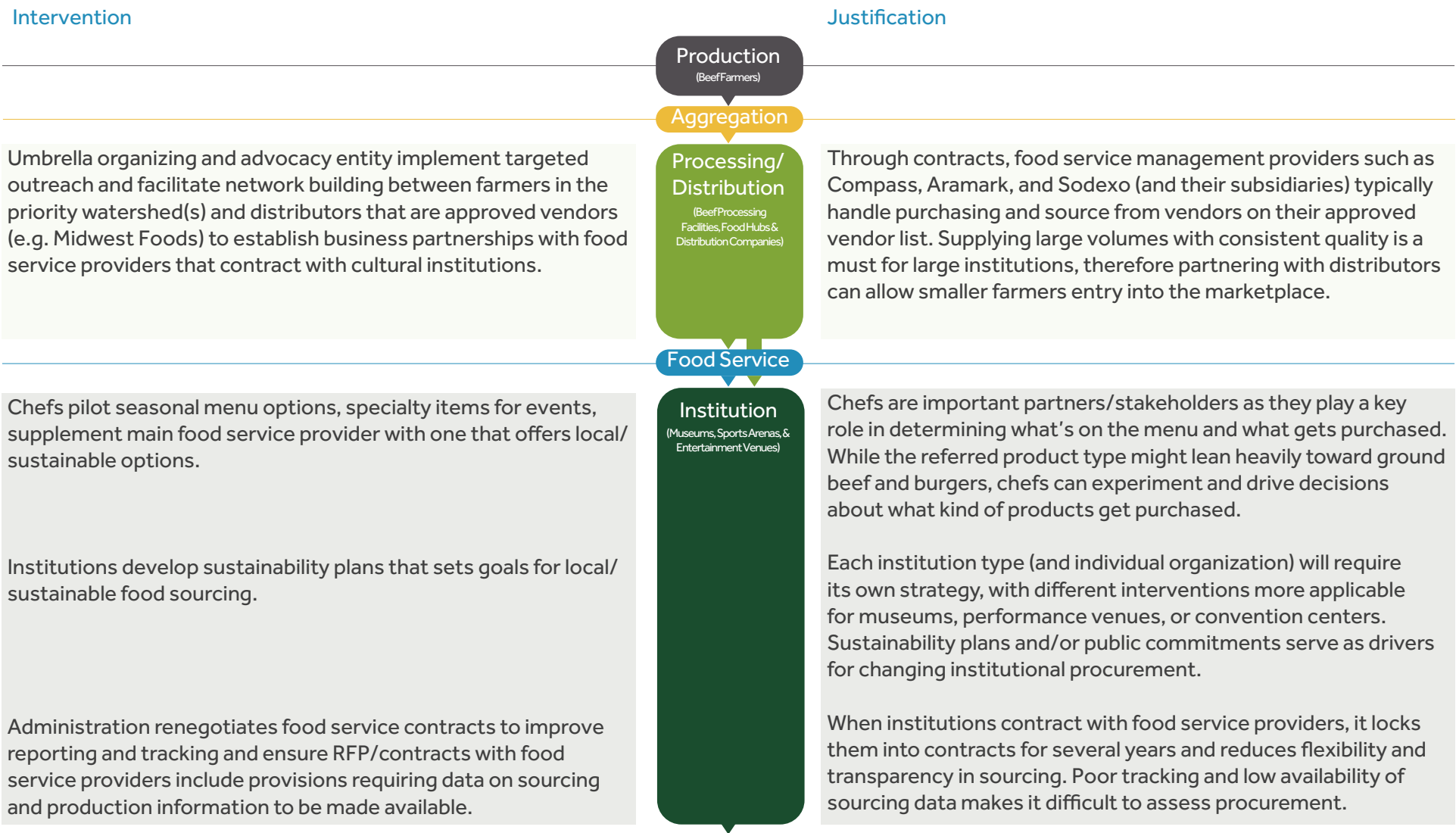
Figure 5. (Photo) Shedd Aquarium; Credit: Chris6d

[Green Sports Alliance - Shire Gate Farm](#)

Several member venues of the [Green Sports Alliance](#)⁵³ have incorporated grass-fed beef menu items into their stadium concessions offerings. The Dome at America's Center ("The Dome") in St. Louis, Missouri (formerly named the Edward Jones Dome) developed a partnership with [Shire Gate Farm](#)⁵⁴ to source grass-fed beef for hot dogs and hamburgers. Shire Gate Farm is in Owensville, Missouri, 80 miles from the Dome. The farm is owned by Will Witherspoon, a former NFL player, who has been able to connect athletic health with sustainability and meet the procurement pricing thresholds to bring grass-fed beef to a new audience.⁵⁵

Procurement Pathway and Intervention Recommendations

The procurement pathway for cultural institutions, by and large, is similar to other institutions discussed in this report. Different types of such institutions come with their own set of drivers and challenges related to food sourcing. Food service management may be handled in-house or by a contracted food service provider such as Aramark. If utilized, food service providers require purchasing from their own preferred vendor list. Below we outline some potential interventions to consider based on which point along the pathway is impacted.



Next Steps

Institutional procurement practices could be leveraged to provide an opportunity for local producers to enter the grass-fed beef value chain. Procurement processes for different institution types each come with its own set of opportunities and challenges and will require tailored intervention strategies to be developed in more detail. We know that demand drivers are key. They may come directly from consumers in the retail sector, but in the world of institutional procurement, demand is generated when institutions set goals, adopt policies, or otherwise publicly commit to implementing sustainable food sourcing practices (e.g., Good Food Purchasing Policy, Real Food Challenge, Healthcare Without Harm).

While institutional purchasing often calls for a high volume of a particular cut and has very rigid procurement rules, identifying interventions that develop supporting tools and/or explore new vendors and sourcing practices will be key to begin a transition. Recommendations for intervention strategies are presented for each institution type in the sections above.

Overall, the recommendations include advocating for policies and programs such as Good Food Purchasing Policy that drive organizations to change procurement practices; creating educational materials to connect procurement with environmental metrics; facilitating a stronger network between grass-fed beef producers, distributors, and buyers in Illinois to support institutional purchasers; and lastly developing procurement tools such as template bid specifications for reporting for food service contracts to increase transparency and accountability in the procurement process. Though this report focuses on the role of institutional buyers, expanding local grass-fed beef production will require coordinated actions across the value chain.

Many opportunities exist to facilitate value chain coordination that brings in locally and sustainably produced food to institutional buyers across sectors. At the national level, the Center for Good Food Purchasing, Healthcare Without Harm, and Real Food Generation (along with several other national partners like the National Farm to School Network) are collaborating in a coalition called "Anchors in Action," to align their good food standards for the member organizations, a coalition of which Chicago's Good Food Purchasing Initiative is a part of. Anchors in Action aspires to create a living laboratory for what coordinated values-based procurement could look like across hospitals, colleges, school districts, and cultural institutions on the ground in the Chicago Metro and beyond.

Appendices

A. Stakeholder List

Stakeholders/institutions engaged for research in the memo, supplemented by desktop research

| System Role | Primary Category | Secondary Category | Organization Name | Contact Name |
|----------------|----------------------|----------------------|---|--|
| Buyer | Education | University (Private) | Loyola University Chicago | Aaron Durnbaugh |
| Buyer | Arts & Culture | Museum | Field Museum | - Carter O'Brien, Sustainability Manager - Luz Barcenas, Food and Beverage Director |
| Buyer | Arts & Culture | Museum | Museum of Science & Industry | Brad Schiever, Director Retail and Guest Services |
| Buyer | Recreation | Park District | Chicago Park District | Through CFPAC |
| Buyer | Government | Prison / Jail | Cook County Juvenile Temporary Detention Center | Through CFPAC |
| Buyer | Health | Hospital | Advocate Healthcare Aurora | Katie Wickman Chris Martin |
| System Support | Support Organization | Advocacy / Nonprofit | Real Food Challenge | Tina White |
| System Support | Support Organization | Advocacy / Nonprofit | Healthcare without Harm | Courtney Crenshaw |
| System Support | Support Organization | Advocacy / Nonprofit | Chicago Food Policy Action Council | Marlie Wilson |
| System Support | Support Organization | Advocacy / Nonprofit | Illinois Farm to School Network | Diane Chapeta |
| System Support | Support Organization | Advocacy / Nonprofit | Illinois Stewardship Alliance | Molly Gleason |
| Consumer Sales | Retail | Co-op | Sugar Beet Co-op | - Angelic Lugo, General Manager - Stephen Speck, Grocery & Wellness Manager/ Buyer |
| Consumer Sales | Retail | Butcher Shop | Homestead Meats | Ehran Ostrreicher |
| Consumer Sales | Retail | Butcher Shop | Chicago Meat Collective | McCullough Kelly-Willis |
| B2B Sales | Wholesale | Distribution | Natural Direct | Scott Dickinson |
| B2B Sales | Wholesale | Distribution | Midwest Foods | Alex Frantz |

B. Pricing Information

Prices for Midwestern grass fed beef products⁵⁶

| Name | Price | Product Type |
|------------------------------------|--|--|
| Apachowa Farm - Blanchardville, WI | \$4/lb hanging weight plus butchering fee | Whole, half, or split quarters |
| Boru Farms - Freeport, IL | \$6.50/lb hanging weight | Averages 75 lbs per quarter |
| Brammeier Farms - Wilton, IA | \$9/lb | 25lb bundles, which contains a variety of cuts |
| Brammeier Farms - Wilton, IA | \$4/lb hanging weight plus processing fees | Whole, half, or split quarters |
| Brammeier Farms - Wilton, IA | \$7/lb | Ground beef (in quantities of 20lbs or more) |
| Mint Creek Farm - Cabery, IL | \$12 to \$13/lb plus processing fees | Whole, half, or split quarters |
| Providence Farms - Fairbanks, IN | \$5/lb | Grass-fed hamburger (1 and 2lb packages) |
| Providence Farms - Fairbanks, IN | \$11/lb | Grass-fed chuck roast (2.5 to 5 lbs each) |
| Sugar Beet Coop | - \$8 to \$10/lb - \$13 to 16/lb - \$5 to \$6/lb | - Ground beef - Ribeye - Roasts |
| Field Museum Dining | \$10.75 per burger | CDK Angus beef burger |

C. School Districts

Table listing school districts in the project area that have reported purchasing local meat in the Census or have more recent initiatives. Those school districts may be good candidates for approaching to introduce grass-fed beef products into their dining. Note: HUSSC refers to Healthier U.S. School Challenge.

| School | County | Census Designations/ Other Distinctions | F2S Participant | Top Local Food Items | Local Meat Items | Sourcing |
|------------------------|--------|--|-----------------|--|------------------------|---|
| Belvidere CUSD 100 | BOONE | HUSSC award winner | No | None | No | N/A |
| Calumet City SD 155 | COOK | HUSSC award winner | No | None | No | N/A |
| City of Chicago SD 299 | COOK | HUSSC award winner | Yes | Apples (fresh), chicken (antibiotic free), carrots (frozen), corn (frozen), green beans (frozen) | Chicken (from Indiana) | Directly from food processors and manufacturers, distributors, food buying cooperatives, food hubs, food service management companies, USDA foods |
| Cook County | COOK | HUSSC award winner | No | None | No | N/A |
| Evanston CCSD 65 | COOK | Top district | Yes | Apples, chicken, corn, lettuce, carrots | Chicken | Distributors, DoD Fresh Program Vendors |
| Evanston Twp HSD 202 | COOK | None | Yes | Lettuce (romaine, iceberg), apples chicken (dark and white meat), milk | Chicken | Direct purchase from farmers, direct purchase from farmers markets, distributors, food buying cooperatives, DoD Fresh Program Vendors |
| River Trails SD 26 | COOK | HUSSC award winner | Yes | Corn, green beans, peas, mixed vegetables, carrots | No | Directly from farmers, distributors, food buying cooperatives, DoD Fresh Program Vendors, USDA foods |

| | | | | | | |
|---------------------------------|---------|---|-----|---|---------|--|
| Thornton Fractional Twp HSD 215 | COOK | None | Yes | Apples - fruits misc., chicken, vegetables - broccoli and romaine lettuce, herbs, dairy | Chicken | Distributors, DoD Fresh Program Vendors, USDA foods |
| Township HSD 214 (Wheeling HS) | COOK | Innovative practices in food, according to outreach | Yes | Apples | No | Distributors, food buying cooperatives, USDA foods |
| Aurora West SD 129 | KANE | Top district | Yes | Apples, poultry, carrots, pears, strawberries | Chicken | Distributors, food service management companies, DoD Fresh Program Vendors, USDA foods |
| Fox Lake GSD 114 | LAKE | None | Yes | Milk, buns and bread, corn antibiotic free chicken drumsticks, corn, whole apples | Chicken | Directly from food processors and manufacturers, distributors, food buying cooperatives, DoD Fresh Program Vendors |
| McHenry CCSD 15 | MCHENRY | HUSSC award winner | No | None | No | N/A |
| McHenry CHSD 156 | MCHENRY | HUSSC award winner | No | None | No | N/A |
| Woodstock CUSD 200 | MCHENRY | HUSSC award winner | Yes | Dairy, apples, potatoes, produce items, fruit items | No | Directly from food processors and manufacturers, distributors, food buying cooperatives, food from DoD Fresh Program Vendors, food from USDA foods |

D. Higher Education

Table below summarizes Chicago-area universities and their food service providers.

| University | Food Service Providers/Other Comments |
|-----------------------------------|--|
| University of Chicago | Dining Services contracted with Bon Appetit , subsidiary of Compass Group |
| University of Illinois at Chicago | Dining Services contracted with Compass Group |
| Northwestern University | <ul style="list-style-type: none"> - Signatory of the Real Food Challenge Campus Commitment - Dining Services contracted with Compass Group - 230 Compass Group food service workers laid off July 21, 2020 - Active food justice group on campus |
| City Colleges of Chicago | <ul style="list-style-type: none"> - No formal cafeteria/dining facilities - Contracts with Fooda fast-casual restaurant food service |
| Columbia College Chicago | Dining Services contracted with Chartwells , a Compass Group subsidiary |
| DePaul University | Dining Services contracted with Chartwells , a Compass Group subsidiary |
| Roosevelt University | Dining Services contracted with Aladdin Food Service , subsidiary of Elior |
| Lake Forest College | <ul style="list-style-type: none"> - Dining Services contracted with Parkhurst Dining - Some information about buying local food from Lake Forest College farm |
| Wheaton College | Dining Services contracted with Bon Appetit , subsidiary of Compass Group |
| Loyola University | <ul style="list-style-type: none"> - Dining Services contracted with Aramark, part of Aramark's "green thread" program - Dining Services has a sustainability plan - Loyola University Medical School has a testimonial on Handcut Food's homepage and seems to work with them regularly in some capacity |

E. Hospital systems

The table below summarizes Chicago-area Hospital Systems and their respective food procurement characteristics.

| Institution | System Size | Food Service | Sustainability Info |
|--------------------------------------|---|----------------------------------|--|
| Advocate Aurora | <ul style="list-style-type: none"> - Operates 10 hospitals in Illinois, including Illinois Masonic, Lutheran General, and Trinity Hospital, - 14 hospitals in Wisconsin, - 3 million meals served annually - Also, an extensive medical group practice with more than 350 locations | US Foods (vendor); Premier (GPO) | Healthcare without Harm Food pledge signatory (circa 2005) |
| NorthShore University Health Systems | Operates five hospital systems in the Chicago suburbs | Information not provided | Healthcare without Harm Food pledge signatory (circa 2005) |
| AMITA Health | Operates 14 hospitals in Chicago and the collar counties | Information not provided | None |
| Loyola University Health System | Operates 3 hospitals in Chicago and the surrounding suburbs | Handcut Foods | None |
| Edward-Elmhurst Health | Operates two hospitals in the Chicago suburbs | Information not provided | None |
| Sinai Health System | Operates four hospitals in and around Chicago | Information not provided | None |
| University of Chicago Medicine | Operates six hospitals in the Chicago area and surrounding suburbs | Aramark | None |
| Northwestern Medicine | Operates seven hospitals in the Chicago area and surrounding suburbs | Information not provided | None |
| University of Illinois Hospital | Operates one hospital in the Chicago area | Information not provided | Healthcare without Harm Food pledge signatory (circa 2005) |
| Rush University | Operates four hospitals in and around Chicago | Information not provided | None |

F. Recreational and Cultural Institutions

Below, we summarize Chicago-area cultural institutions and their food service providers.

| Institution | Food Service | Sustainability & Other Info |
|--|---|---|
| Soldier Field | Aramark | <ul style="list-style-type: none"> - Contracting is recommended by the Chicago Park District - Overview and accounting of all food vendors and food procurement - Crain's Chicago Business article; Bears' Aramark selection process |
| Huntington Park Pavilion on Northerly Island | Aramark | None |
| Allstate Arena | Aramark | None |
| Donald E. Stephens Convention Center in Rosemont | Aramark | None |
| Field Museum | Aramark | <ul style="list-style-type: none"> - Consulted with Beyond Green - Greener Field campaign |
| Shedd Aquarium | Centerplate, subsidiary of Sodexo | <ul style="list-style-type: none"> - Sustainable Seafood partners - Sustainable Seafood Toolkit - Sustainable Seafood Benefits |
| Museum of Science and Industry | Centerplate, subsidiary of Sodexo | Van Lang Food for events |
| Peggy Notebart Nature Museum | Southport Grocery and Cafe | None |
| Lincoln Park Zoo | Levy Restaurants, subsidiary of Compass Group | <ul style="list-style-type: none"> - Lists Gordon Food Service & produce from Midwest Foods under "specialty food partners" - Sustainable Seafood information - Partners with Green City Market to jointly manage "Edible Gardens" |
| Ravinia | Levy Restaurants, subsidiary of Compass Group | Significant number of beef offerings including brisket and burgers |
| United Center | Levy Restaurants, subsidiary of Compass Group | None |
| Wrigley Field | Levy Restaurants, subsidiary of Compass Group | None |
| Guaranteed Rate Field | Levy Restaurants, subsidiary of Compass Group | Sources produce from the Chicago Botanic Gardens for some dishes |
| Navy Pier | Spectra and Levy Restaurants | None |
| Art Institute of Chicago | Restaurant and chef purchasing likely | Head Chef of Terzo Piano - Tony Mantuano |
| Museum of Contemporary Art | Restaurant and chef purchasing likely | None |
| Chicago Park District | Concessions are operated by Park Concession Management LLC, | <ul style="list-style-type: none"> - Park District/Park Concession Management contract circa 2007 - Under the Good Food Purchasing Policy as City of Chicago Department - 2019 summer programs purchased no beef due to price and facility constraints |
| McCormick and Wintrust Arena | Savor | Savor operates a rooftop farm and garden |

References

- ¹ <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/us-food-supply-chain-disruptions-and-implications-from-covid-19#>
- ² Held, Lisa. "As COVID-19 Disrupts the Industrial Meat System, Independent Processors Have a Moment to Shine". *Civil Eats*. <https://civileats.com/2020/05/19/as-covid-19-disrupts-the-industrial-meat-system-independent-processors-have-a-moment-to-shine/>
- ³ Hugh Robert, Special to The Republican. "Off The Menu: Food Service Distribution Companies Feel COVID-19 Impact." *Masslive*, 23 May 2020, <https://www.masslive.com/dining/2020/05/off-the-menu-food-service-distribution-companies-feel-covid-19-impact.html>
- ⁴ Byington, Lillianna. "As Meat Giants Face Scrutiny, Small and Niche Producers Capitalize." *Food Dive*, 8 June 2020, <https://www.fooddive.com/news/as-meat-giants-face-scrutiny-small-and-niche-producers-capitalize/578687/>.
- ⁵ U.S. Department of Agriculture Food and Nutrition Service. "National School Lunch Program (NSLP) Fact Sheet." <https://www.fns.usda.gov/nslp/nslp-fact-sheet>
- ⁶ Illinois State Board of Education. "School Nutrition Programs Administrative Handbook". <https://www.isbe.net/Pages/SchoolNutritionAdminHandbook.aspx>
- ⁷ U.S. Department of Agriculture Food and Nutrition Service. "National School Lunch, Special Milk, and School Breakfast Programs, National Average Payments/Maximum Reimbursement Rates". <https://www.govinfo.gov/content/pkg/FR-2020-07-22/pdf/2020-15764.pdf>
- ⁸ U.S. Department of Agriculture Food and Nutrition Service. "National School Lunch, Special Milk, and School Breakfast Programs, National Average Payments/Maximum Reimbursement Rates". <https://www.govinfo.gov/content/pkg/FR-2020-07-22/pdf/2020-15764.pdf>
- ⁹ Correspondence with Diane Chapeta, Illinois Farm to School Network. December 17, 2020
- ¹⁰ Illinois State Board of Education. "SNP FSMC/Vended Meals Contracts". <https://www.isbe.net/Pages/SNP-FSMC-Vended-Meals-Contracts.aspx>
- ¹¹ Bronsing-Lazalde, Christina. "Chicago Public School Board Votes to Adopt Good Food Purchasing Policy." Center for Good Food Purchasing, 29 June 2017. goodfoodpurchasing.org/chicago-public-school-board-votes-to-adopt-good-food-purchasing-policy.
- ¹² Bronsing-Lazalde, Christina. "Chicago Food Policy Action Council Secures Good Food Purchasing Program for City of Chicago." Center for Good Food Purchasing, 8 Dec. 2017, goodfoodpurchasing.org/chicago-food-policy-action-council-secures-good-food-purchasing-program-for-city-of-chicago.
- ¹³ Bronsing-Lazalde, Christina. "Chicago Food Policy Action Council Applauds Cook County Adoption of Good Food Purchasing Program." Center for Good Food Purchasing, 26 May 2018, goodfoodpurchasing.org/chicago-food-policy-action-council-applauds-cook-county-adoption-of-good-food-purchasing-program.
- ¹⁴ Center for Good Food Purchasing. goodfoodpurchasing.org/program-overview.
- ¹⁵ Reiley, Laura. "More pizza, fewer vegetables: Trump administration further undercuts Obama school-lunch rules". *The Washington Post*. <https://www.washingtonpost.com/business/2020/01/17/usda-proposes-changing-school-menus-allow-more-fries-pizza-fewer-vegetables-fruits-reversing-michelle-obama-effort/>
- ¹⁶ Delta Institute staff discussion with Illinois Farm to School Network staff. June 1, 2020.
- ¹⁷ Local Food Systems Response to Covid. "National Farm to School Network (NFSN) –." Local Food Systems Response to Covid, lfsccovid.localfoodeconomics.com/impact_assessments/national-farm-to-school-network-nfsn. Accessed 16 Mar. 2021.
- ¹⁸ Matsunami, Kei, and Demetrius Fassas. "Beef to School | Farm to Cafeteria Network." Montana Healthy Food and Communities Initiative, farmtocafeteria.ncat.org/beef-to-school. Accessed 16 Mar. 2021.
- ¹⁹ Apoliona-Brown, Puanani. "Be-Trayed: How Kickbacks in the Cafeteria Industry Harm Our Communities – and What to Do About It". *Real Food Generation*. <https://static1.squarespace.com/static/5c87f97e16b640312ba8b707/t/5ed18cefe080e33f63771371/1590791411431/Be-Trayed-+Kickbacks+Report+2020-5-29.pdf>

-
- ²⁰ Apoliona-Brown, Puanani. "Be-Trayed: How Kickbacks in the Cafeteria Industry Harm Our Communities – and What to Do About It". *Real Food Generation*.
<https://static1.squarespace.com/static/5c87f97e16b640312ba8b707/t/5ed18cefe080e33f63771371/1590791411431/Be-Trayed-+Kickbacks+Report+2020-5-29.pdf>
- ²¹ Apoliona-Brown, Puanani. "Be-Trayed: How Kickbacks in the Cafeteria Industry Harm Our Communities – and What to Do About It". *Real Food Generation*.
<https://static1.squarespace.com/static/5c87f97e16b640312ba8b707/t/5ed18cefe080e33f63771371/1590791411431/Be-Trayed-+Kickbacks+Report+2020-5-29.pdf>
- ²² Delta staff discussion with Natural Direct, 7/21/2020
- ²³ Black, Jane. "With Robot Deliveries and Outdoor Tents, Campus Dining Will Be Very Different." *The New York Times*, 13 July 2020, <https://www.nytimes.com/2020/07/13/dining/college-food-coronavirus.html>.
- ²⁴ By Janet Lorin V Bloomberg News. "College Budgets Take Another Hit with Dining Halls Sitting Empty." *Pittsburgh Post-Gazette*, 11 Mar. 2021, <https://www.post-gazette.com/news/education/2020/11/11/college-budgets-dining-halls-empty-COVID-19-pandemic/stories/202011120025>
- ²⁵ By Janet Lorin V Bloomberg News. "College Budgets Take Another Hit with Dining Halls Sitting Empty." *Pittsburgh Post-Gazette*, 11 Mar. 2021, <https://www.post-gazette.com/news/education/2020/11/11/college-budgets-dining-halls-empty-COVID-19-pandemic/stories/202011120025>
- ²⁶ "The Crossroads of 2020." *Real Food Challenge*, <https://www.realfoodchallenge.org/blog/crossroads-2020/>. Accessed 16 Mar. 2021.
- ²⁷ Alex, Sojo. "The Impact of COVID-19 on Campus Dining Menus." *Envision Strategies*, 10 July 2020, <http://www.envstrategies.com/news/2020/7/10/the-impact-of-covid-19-on-campus-dining-menus>.
- ²⁸ Fischer, Michael. "Gen Z Was Already Transforming Campus Dining. Then COVID-19 Happened." *EAB*, 29 Sept. 2020, eab.com/insights/expert-insight/facilities/gen-z-was-already-transforming-campus-dining-then-covid-19-happened.
- ²⁹ "Implementation & Product Shift Resources." *Real Food Challenge*, <https://www.realfoodchallenge.org/resources/implementation-product-shift-resources/>. Accessed 16 Mar. 2021.
- ³⁰ Apoliona-Brown, Puanani. "Be-Trayed: How Kickbacks in the Cafeteria Industry Harm Our Communities – and What to Do About It". *Real Food Generation*.
<https://static1.squarespace.com/static/5c87f97e16b640312ba8b707/t/5ed18cefe080e33f63771371/1590791411431/Be-Trayed-+Kickbacks+Report+2020-5-29.pdf>
- ³¹ "Implementation & Product Shift Resources." *Real Food Challenge*, <https://www.realfoodchallenge.org/resources/implementation-product-shift-resources/>. Accessed 16 Mar. 2021.
- ³² "Resource Conservation : SustainNU - Northwestern University." <https://www.northwestern.edu/sustainability/program-areas/resource-conservation/index.html>. Accessed 16 Mar. 2021.
- ³³ Green Restaurant @ Certification Standards,. https://d3656a02-c3a1-4531-9b80-7bd14919d48c.filesusr.com/ugd/4d780f_5a38ce19ffc247d3a0b845f44fe894dd.pdf
- ³⁴ Delta Institute staff discussion with Northwestern University staff, 3/13/2020
- ³⁵ Sachs, Elizabeth. "Emerging Local Food Purchasing Initiatives in Northern California Hospitals". University of California-Davis Sustainable Agriculture Research & Education Program, Agricultural Sustainability Institute. <https://sarep.ucdavis.edu/sites/g/files/dgvnsk5751/files/inline-files/FarmToHospitalInitiativesWeb.pdf>
- ³⁶ Crain's Chicago Business Data Center, updated on 9/20/2019.
- ³⁷ Delta Institute staff discussion with Advocate Aurora staff, 8/6/2020.
- ³⁸ <https://noharm-uscanada.org/sites/default/files/documents-files/3841/Health%20Care%20Procurement%20-%20Sustainable%20Meat%20and%20Poultry.pdf>
- ³⁹ https://noharm-uscanada.org/sites/default/files/documents-files/910/Sustainable_Food_and_GPOs.pdf
- ⁴⁰ https://noharm-uscanada.org/sites/default/files/documents-files/844/HC_Commitment_Sustainable_Meat_Procurement.pdf
- ⁴¹ Eng, Monica. "Hospitals Cut Meat with Antibiotics from Menu." *The Seattle Times*, 27 July 2010,

<https://www.seattletimes.com/seattle-news/health/hospitals-cut-meat-with-antibiotics-from-menu/>.

- ⁴² Eng, Monica. "Hospitals Cut Meat with Antibiotics from Menu." The Seattle Times, 27 July 2010, <https://www.seattletimes.com/seattle-news/health/hospitals-cut-meat-with-antibiotics-from-menu/>.
- ⁴³ "Farm to Institution New England (FINE) –." Local Food Systems Response to Covid, ifscovid.localfoodeconomics.com/impact_assessments/farm-to-institution-new-england-fine. Accessed 16 Mar. 2021.
- ⁴⁴ "Farm to Institution New England (FINE) –." Local Food Systems Response to Covid, ifscovid.localfoodeconomics.com/impact_assessments/farm-to-institution-new-england-fine. Accessed 16 Mar. 2021.
- ⁴⁵ "California Hospitals and Schools Bring the (Grass-Fed) Beef." Health Care Without Harm, 23 Aug. 2019, noharm-uscanada.org/articles/news/us-canada/california-hospitals-and-schools-bring-grass-fed-beef.
- ⁴⁶ "About Us | Practice Greenhealth." Practice Greenhealth, practicegreenhealth.org/about/about-us. Accessed 16 Mar. 2021.
- ⁴⁷ "Case Study: Sustainable Food Procurement and Provision" Dartmouth-Hitchcock Medical Center. Practice Greenhealth. https://practicegreenhealth.org/sites/default/files/upload-files/casestudy.dhmc_sustainablefood.final_0.pdf
- ⁴⁸ "About." Green Sports Alliance, 23 July 2020, greensportsalliance.org/about.
- ⁴⁹ "How Will Museums Change After COVID-19?" SmithGroup, <https://www.smithgroup.com/perspectives/2020/how-will-museums-change-after-covid-19>. Accessed 16 Mar. 2021.
- ⁵⁰ "Sustainable Seafood | Shedd Aquarium." Shedd Aquarium, <https://www.sheddaquarium.org/care-and-conservation/take-action-for-animals/sustainable-seafood>. Accessed 16 Mar. 2021.
- ⁵¹ "Care and Conservation | Shedd Aquarium." Shedd Aquarium, <https://www.sheddaquarium.org/care-and-conservation/take-action-for-animals/sustainable-seafood>. Accessed 16 Mar. 2021.
- ⁵² https://s3.us-east-2.amazonaws.com/sheddaquarium.org-production/nxTVm4efx7niqDytH7dkk72A?response-content-disposition=inline%3B%20filename%3D%22sustainable-seafood-toolkit-v.2.pdf%22%3B%20filename%2A%3DUTF-8%27%27sustainable-seafood-toolkit-v.2.pdf&response-content-type=application%2Fpdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAJ37YQFR5IFJTXQ5A%2F20201217%2Fus-east-2%2Fs3%2Faws4_request&X-Amz-Date=20201217T191609Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=c6cf294163d777724e78b9081508f66460a016689ab9cd6ab9cee6c96e761ace
- ⁵³ <https://greensportsalliance.org/wp-content/uploads/2019/02/ChampionsofGameDayFoodReport.pdf>
- ⁵⁴ <http://www.shiregatefarm.com/#thefarm>
- ⁵⁵ Henly, Alice. "Champions of Game Day Food". Natural Resources Defense Council and Green Sports Alliance. <https://greensportsalliance.org/wp-content/uploads/2019/02/ChampionsofGameDayFoodReport.pdf>
- ⁵⁶ "EatWild - Illinois." Eat Wild, www.eatwild.com/products/illinois.html. Accessed 16 Mar. 2021., "Bulk Beef." Mint Creek Farm, <https://www.mintcreekfarm.com/bulk-beef>. Accessed 16 Mar. 2021.