



Nourishing Today
Sustaining Tomorrow

Blueprint for Building Statewide Protein-Focused Child Nutrition Programs



Case Study: Beef Sticks for Backpacks & Beefing Up Backpacks

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Introduction

About one in five children in the United States lives in a food-insecure household.¹ Weekends can be especially difficult when school meals aren't available. Weekend backpack programs step in to fill the gap by sending children home on Fridays with food they can rely on until Monday.

Beefing Up Backpacks (BUBP) in Pennsylvania and Beef Sticks for Backpacks in Colorado add an innovative, protein-focused twist: shelf-stable, individually wrapped beef sticks. These kid-friendly snacks provide essential protein to support healthy growth, learning and development.

At the same time, these programs connect local beef producers, processors and community partners in a collaboration that strengthens families, supports local agriculture and builds resilient communities.

These protein-focused backpack programs demonstrate how leveraging local supply chains can feed vulnerable children and strengthen demand for beef. They not only fill critical nutritional gaps for children, but also promote community resilience, agricultural education, local economic development, and strong public-private partnerships.

This blueprint outlines a comprehensive, system-based strategy to design, launch, scale and sustain similar programs across the country.



Step 1: Statewide Needs Assessment

Objective: Establish the scale, distribution and nature of weekend child hunger.

KEY ACTIVITIES

- Partner with regional / state food banks and other organizations that support child food insecurity. There is no coalesced weekend backpack program database within states as they are not traditionally supported by state or federal governments so an assessment utilizing the following data is necessary:
 - » Number of students enrolled in free/reduced lunch (state Department of Education)
 - » Participation in backpack programs by county/school district (if accessible)
 - » Weekend or out-of-school meal gaps
- Conduct GIS mapping to visualize underserved regions
- Build a database as you network within this space
- Interview school administrators and food bank staff to understand barriers (e.g., storage, logistics, dietary constraints)

Outcome: A statewide gap analysis that clearly defines where nutritional interventions are most needed, grant writing, identification of agricultural partners/donors who can and will support future fundraising efforts.



Step 2: Stakeholder Engagement & Coalition Building

Objective: Assemble a cross-sector coalition to co-design the program.

KEY STAKEHOLDERS

- State beef councils and producer groups
- Universities with meat packing/processing facilities
- University extension systems
- Local/regional beef processors
- Food banks and school backpack programs focused on feeding food insecure kids through the weekends.
- Nonprofits focused on childhood hunger (e.g., Feeding America affiliates)
- Policy advocates, ag marketing boards and local legislators

Best Practice: Colorado's Beef Sticks for Backpacks is supported by local beef producers & packers and the Colorado Beef Council, their beef sticks are produced at CSU's on campus meat lab, and distribution to the backpack programs is supported by local food banks, creating shared ownership and long-term buy-in.

Step 3: Program Design

Objective: Build a program model that integrates seamlessly into existing food distribution frameworks and aims to support backpack programs that focused on distributing food to children experiencing weekend food insecurity with beef/protein.

DESIGN ELEMENTS

- **Product format:** Choose shelf-stable, USDA-approved beef products that mirror daily nutritional needs to the availability of beef trim (e.g. 1 ounce beef stick) and choose child-friendly seasoning, ideally focusing on allergen free ingredients.
- **Source:** Land-grant universities with meat laboratories offer an ideal environment for launching and scaling backpack programs

as the mission to serve the public through agricultural research, education and extension. This makes them uniquely positioned to support community-based food security efforts. Their on-campus meat labs provide USDA-inspected facilities, skilled staff and hands-on student training – allowing for local processing of donated cattle or beef trim into safe, nutritious beef sticks.

By partnering with these universities, we can reduce processing costs, strengthen educational outcomes, and create a sustainable, community-rooted pipeline of high-quality protein for food-insecure children. This synergy aligns perfectly with the land-grant system's commitment to advancing agriculture, supporting rural communities, incorporating young adults into the system with fresh ideas, and addressing real-world challenges through the management of commercially scaled food production programs.

If land grant universities are not an option, identify regional processors for trim donations and production.

- **Packaging:** Brand-consistent, tamper-proof, child-friendly, nutrition label-compliant, with wording that is compliant with USDA FSIS rules without any claims.
- **Distribution:** Sync with existing weekend backpack or summer feeding programs utilizing existing food bank infrastructure to maximize available logistics. It is okay to start with a small distribution area so that production and distribution can sustainably scale up overtime. Major donors prefer programs with proven, scalable models.

OPERATIONS BLUEPRINT

1. Beef distributors, packers/processors, and other industry players to donate beef trim or production time. Consider offering a sponsor's logo or branding on the beef stick packaging to help attract donors.
2. Solicit industry businesses for donated products of seasoning, packaging and casings. Local packers/processors who are supportive of the



program can help connect the program with their suppliers and leverage their business relationships to help garner ongoing or one-time donations.

3. Product picked up in bulk by regional food banks or community organizations and delivered either directly to backpack programs or made available at food distribution locations.
4. Local coordinators insert beef sticks into backpacks with future considerations of educational materials.

Step 4: Infrastructure & Data Management

Objective: Ensure scalable operations and measurable outcomes.

INFRASTRUCTURE NEEDS

- Distribution logistics support (fleet or third-party couriers) if they do not exist within the food bank system
- Depending on the scale of the program considerations for inventory tracking

DATA MANAGEMENT REQUIREMENTS

- Central database of all participating schools, backpack programs, and food banks
- Tracking of donations, recipients and geographic coverage
- Pre/post program survey tools for teachers, parents and students

METRICS TO CAPTURE

- Pounds of beef distributed
- Number of children served (by county)
- Program cost per unit
- Change in weekend nutritional profile of meals
- Feedback from school personnel on outcomes
- Educational materials distributed, engagements with local producers, and more

Step 5: Funding Strategy

Objective: Secure diversified and sustainable funding.

FUNDING SOURCES

- Beef Checkoff program contributions.
- Corporate sponsors (e.g., processors, ag suppliers)
- Local foundations and community grants may or may not be restricted to a community or county. Restricted grants can be used to cover expenses to produce or distribute in specific locations with an accurate data management system whereas non-restrictive grants can be used for any program costs.
- State agriculture or nutrition agency allocations and/or grants. Grants may exist for both initial capital expenses such as processing equipment and grants for ongoing funding needs for production.
- Donor-driven campaigns with access to an online payment portal (matching gift strategies).
- In-kind donors of raw materials (beef trim), casings, spices, packaging materials, processing equipment servicing/repair.
- In-kind donors of processing equipment. Existing processing equipment at a university meat lab may need to be updated based on scale.

FINANCIAL MODEL

- Cost per unit: Approx. \$0.14–0.77 (includes processing, packaging, and other inputs)
- Initial fundraising target: \$10,000–\$30,000 to support pilot and scale-up
- Create a self-sustainable funding model

