

Preserving Hope: A Canning Initiative to Combat Food Insecurity in Champaign, Illinois



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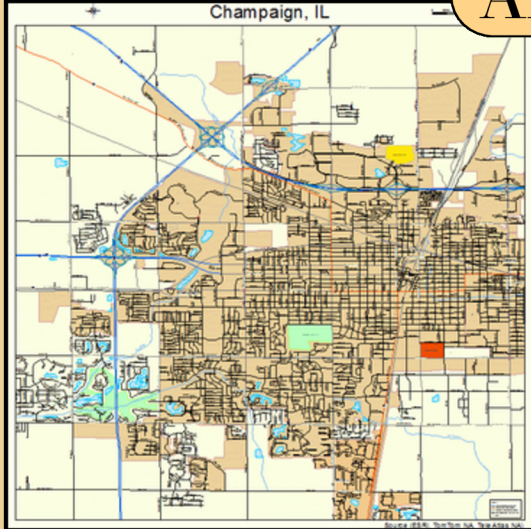


The Issue

Food insecurity is a widespread and persistent challenge in the United States, affecting every county and congressional district, impacting millions of individuals and families. Compounding this issue is the paradox of food waste, where inefficiencies in the food system lead to substantial amounts of edible produce being discarded due to spoilage or supply chain mishandling. According to Hake et al. (2024), nearly 50% of people facing hunger in the U.S. are ineligible for federal assistance programs like SNAP, further exacerbating cycles of poverty, hindering educational attainment, and perpetuating health disparities in vulnerable communities.



Area of Implementation



Our proposal focuses on Champaign-Urbana, a community in Illinois where food insecurity and poverty remain significant issues. Despite being home to the University of Illinois, the region has a poverty rate of nearly 22%, with many residents facing barriers to consistent access to nutritious food. Food deserts in underserved neighborhoods intensify these challenges, leaving families dependent on food pantries and emergency food services. By leveraging canning as a sustainable solution, this initiative aims to combat food insecurity while addressing food waste. Utilizing surplus or imperfect produce from local farms, grocers, and food banks, we can extend the shelf life of perishable goods, ensuring at-risk populations have access to long-lasting, nutritious options. Starting in Champaign-Urbana, we aim to refine this model and expand it to other cities facing similar challenges.



This initiative directly supports SDG 1 (No Poverty) by providing a tangible way to alleviate food access issues in low-income areas. It aligns with SDG 2 (Zero Hunger) by enhancing food security and empowering individuals with preservation skills, and SDG 12 (Responsible Consumption and Production) by reducing food waste and promoting sustainable consumption practices. These efforts emphasize the critical connection between people and nature, reducing the environmental burden of food waste while reinforcing equitable and sustainable food systems.



Our Solution



Implement local workshops on safe canning methods and distribute goods made from surplus produce.

Why Canning?

Canning is a time-tested food preservation technique. Instead of producing more, we can extend the shelf life of existing food. This initiative combines canning and waste reduction into a strategy addressing food insecurity and promoting sustainability.

What to Can?

We aim to safely can high-acid foods like fruits, juices, and pickled items, which naturally prevent spoilage and inhibit Clostridium botulinum growth. Using water bath canning and techniques like hot-packing, we can preserve these abundant local foods effectively while following USDA guidelines to ensure safety and reduce waste.

Partnerships

We will request donations of unsellable or excess produce from local farmers. This provides them with a way to dispose of unwanted goods while showcasing their support for the community, enhancing their business's reputation.

Outreach

We will partner with community centers and libraries to host lectures and workshops on proper canning preservation methods, complemented by informative handouts and worksheets. Targeting students and adults with children, we'll use extension resources to ensure scientific accuracy and prevent foodborne illnesses.



Case Study

During World War II, community canneries emerged in the United States as a government-funded response to food insecurity, providing the public with tools like pressure canners and support from community volunteers to aid in food preservation. These canneries complemented the government's encouragement of Victory Gardens, which empowered citizens to grow their own food and contribute to national food security efforts (Springate, 2023).

1. COMMUNITY RESILIENCE

Educating participants in practical canning techniques strengthens community resilience by promoting knowledge-sharing that can be applied at home or scaled to community-wide initiatives.

2. REDUCED FOOD LOSS AND WASTE

By reducing food loss at farms and waste at homes, we can reduce CO2 emissions from landfills.

3. YEAR-ROUND NUTRITION ACCESS

Distributing canned jars provides community members with year-round access to nutritious produce, reducing reliance on fast food or inexpensive, unhealthy options, particularly for children's nutrition during seasons with limited fresh produce.





17 PARTNERSHIPS FOR THE GOALS



Implementation

Resources Required:

- Canning materials
 - Reusable mason jars & lids
- Excess food stock
- Local partnerships
- Venues for workshops
- Funding for promotional materials

Reach out to and connect with potential stakeholders (Local farms, schools, community centers, UIUC's Agriculture Extension Office)



Host canning workshops (At community centers/schools)

- free how-to canning demonstrations, providing materials
- Maximum 3 months after initially reaching out to stakeholders



Gather supplies (Jars for canning, excess food stock from local farms)



Work with partnerships to organize and promote workshop events (Social media, reach out to local newspapers)

Provide workshop attendees free canning resources and how-to guides to take home to encourage participants to begin practicing canning

Create educational materials on canning (Flyers, pamphlets, how-to guides, information on economic benefits)



Continuation of workshops and promotion to reach more people who would benefit. Expansion of initiative to **achieve food security goals**. Initiative will continue into the foreseeable future.

Challenges

Sufficient funding could be a challenge for this initiative, as our project relies on funding to purchase promotional materials and canning resources that cannot be sourced through recycling. Increased funding will enhance our ability to promote the initiative, maximizing its reach and impact.



An application for a grant of \$5,000 for this initiative has been submitted to ISEE (Institute for Sustainability, Energy and Environment @ UIUC) for our proposed initiative.

Monitoring the success and reach of our project could be difficult, as it is hard to measure how many people will implement canning practices into their lifestyles following attending the workshops.



We will track metrics such as workshop attendance and participant age ranges, supplemented by feedback surveys to gather insights through word-of-mouth and improve future sessions.

Food safety and hygiene are important factors to consider when it comes to canning. We will begin by canning high-acid foods, which are safe without specialist equipment. With sufficient funding, we plan to invest in pressure canners for demonstrations and community use, enabling the preservation of a wider variety of foods to enhance food security and reduce waste.



In Conclusion

Our project, focused on food canning as a solution to food insecurity and waste, aligns with key Sustainable Development Goals, including SDG 1 (No Poverty), SDG 2 (Zero Hunger), and SDG 12 (Responsible Consumption and Production). By leveraging surplus and imperfect produce, our initiative addresses two critical challenges simultaneously: extending the shelf life of perishable goods to provide year-round nutrition and reducing the quantity of food waste, both of which contribute to food security.

Through partnerships with local farms, grocers, and organizations, as well as educational outreach and canning demonstrations, we aim to empower communities in Champaign-Urbana with practical food preservation skills while building a scalable model for broader implementation. Our approach integrates sustainability across social, economic, and environmental dimensions by reducing waste, stabilizing food access, and fostering community resilience and partnerships.

By starting locally and expanding incrementally, we hope to create a sustainable and adaptable solution that addresses food security, empowers communities, and sets a precedent for sustainable food consumption and production practices nationwide.



Innovative Reintroduction of a Time-Tested Approach to Food Security



Potential for Replication in Other Communities

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