

# FEDERAL NUTRITION PROGRAMS DURING THE COVID-19 PANDEMIC: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

## Healthy Eating Research

Research Brief, December 2021

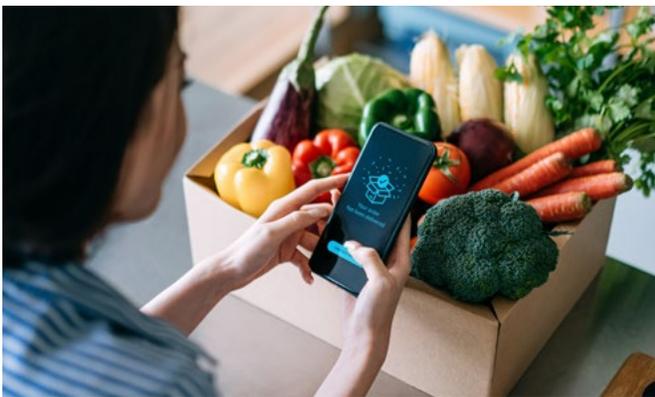
### Problem Statement

Estimates from March to April 2020 show U.S. food insecurity [doubled overall and tripled](#) among households with children as the nation shut down and many families lost sources of income due to the COVID-19 pandemic. Similarly, data from the Centers for Disease Control and Prevention (CDC) reported [an increase in overweight and obesity among children aged 2-19 years](#) during the pandemic as children spent more time away from school and childcare settings and lost access to healthy meals and structured opportunities for physical activity. Throughout the pandemic response, federal nutrition assistance programs have served as a first line of defense against food and nutrition insecurity for millions of families with low incomes.

### Background and Challenges

The United States Department of Agriculture (USDA) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) currently serves over [6 million](#) women, infants, and children by providing a [nutritious supplemental food package, breastfeeding promotion and support, and nutrition education](#). To receive benefits, individuals must meet [eligibility requirements](#) and become certified during an in-person WIC clinic visit. [Research](#) has shown numerous benefits of WIC participation, including: 1) improved birth outcomes; 2) savings in healthcare costs; 3) improved diet and diet-related health outcomes; and 4) improved infant feeding practices.

Despite the significant need for food assistance during the COVID-19 pandemic, WIC participants faced many barriers to accessing WIC services and redeeming benefits.



**The pandemic presented new challenges and exacerbated existing barriers faced by WIC participants, including:**

- ▶ **Difficulty accessing required in-person appointments:** Federal regulations require in-person appointments for participant certification and re-certification. Barriers to enrollment pre-pandemic (travel time/costs, bringing children to appointments, taking time off work) worsened during the pandemic when public transportation was limited and schools and childcare programs closed. Additionally, many participants did not feel safe accessing in-person appointments due to risk of COVID-19 transmission.
- ▶ **Limited availability of WIC-approved food items:** To redeem food package benefits, WIC participants must purchase [WIC-eligible food items](#). Due to food supply chain shortages at the beginning of the pandemic, WIC participants found it difficult to purchase and redeem several WIC-approved food items, including milk, infant formula, eggs, and bread.
- ▶ **Inability to redeem WIC benefits online:** Many consumers transitioned to ordering and purchasing groceries online in order to practice social distancing during the pandemic. However, the ability of WIC participants to make online grocery purchases using benefits was very limited, creating barriers to redeeming food package benefits for many families. Currently online ordering within WIC is allowed, but federal policy requirements prohibit online transactions (payment) using WIC EBT/eWIC benefits, meaning WIC participants still need to pay in person at grocery pickup.

## Response to Challenges and Lessons Learned

In response to the challenges posed by the COVID-19 pandemic, the [Families First Coronavirus Response Act](#) authorized USDA to approve waivers, requested by WIC state agencies and Tribal Nations, which would ensure WIC benefit access for families already participating in the program, as well as newly eligible families. Examples of these waivers include: 1) [physical presence waiver](#), 2) [remote benefit issuance waiver](#), 3) [extended benefits issuance waiver](#), 4) [minimum stock waiver](#), and 5) [food package substitution waiver](#).

These waivers and flexibilities provided researchers a natural experiment opportunity to understand the impact of these program changes on diet quality, food security, and related health and economic outcomes for children and families. In response, Healthy Eating Research (HER) announced a special COVID-19 Rapid-Response Funding Opportunity in Summer of 2020 focused on the Federal Nutrition Assistance Programs to inform decision-making regarding innovative policies and/or programs during and after the COVID-19 pandemic. HER [funded](#) four research teams to examine the implementation of WIC remote services and online grocery ordering during the pandemic. This brief presents key findings from those studies.



### WIC Remote Services

#### New York City, New York

In March 2020, USDA granted New York State's WIC physical presence waiver, removing the in-person requirement for all visits (except first time enrollment visits) and enabling WIC employees to renew benefits and provide nutrition consultations by phone for existing program participants. Public Health Solutions, the largest provider of community-based WIC services in New York State serving nearly 30,000 participants in New York City (NYC), conducted [a rapid-response study](#) to examine patient satisfaction and preferences with regard to virtual WIC visits in NYC from July to October 2020. The study aimed to evaluate phone visits by examining missed appointments, acceptability, and preferences.

#### Key Findings:

- ▶ Waiving the in-person requirement for most appointments supports participation in the WIC program: the “no-show” rate was reduced by 45%.
- ▶ WIC participants reported that they receive high-quality consultations over the phone.
- ▶ Only 1 in 8 WIC participants would prefer to return to in-person visits when the pandemic is over.

#### Washington State

In response to the Washington state “Stay Home, Stay Healthy” order in March 2020, Washington WIC clinics closed to the public. Consequently, the Washington WIC state agency requested multiple waivers from USDA to increase WIC flexibilities and allow local agencies to begin offering nearly all WIC appointments remotely, mostly by phone. Some sites offered video appointments or limited in-person services (e.g., allow participants to pick up WIC cards, breast pumps), mailed materials, or texted with participants. Additionally, WA WIC expanded its list of allowable foods by more than 600 items in April 2020 by allowing a greater variety of food brands, forms, and package sizes. Researchers from University of Washington partnered with the WA State Department of Health WIC Program to conduct a [mixed methods study](#) to assess: 1) the reach and effectiveness of the programmatic changes instituted by Washington WIC during the pandemic; 2) the processes, facilitators, and challenges involved in implementation; and 3) considerations for continuation of these programmatic changes in the future.

#### Key Findings:

- ▶ Staff and WIC participants were highly satisfied with remote services and valued their convenience, though some missed access to regular height, weight, and iron measurements. Nearly all wanted remote services to continue in some form post-pandemic.
- ▶ WIC participation increased, especially among children, with differences in participation trends by race and ethnicity. Show rates increased for certification appointments (72% to 77%) and nutrition education (78% to 96%).
- ▶ Participants appreciated the expanded food options as they increased variety and flexibility during the pandemic. Participants especially valued the additional options for milk, yogurt, cereal, and cheese.



## WIC Online Grocery Ordering

### Knoxville, Tennessee

Researchers at the University of Tennessee conducted a [WIC Click & Collect Pilot Study](#) pre-pandemic, June 2019 through February 2020, to test the feasibility and acceptability of WIC online ordering from both WIC participants' and WIC vendors' perspectives. The WIC Click & Collect process (Figure 1) provides WIC participants the opportunity to place an online grocery order through a retailer's website or mobile app ("click"), and then pick up and pay for that order using their WIC benefits at the store ("collect"). This model is allowable within current federal WIC requirements because it does not require an online transaction (payment) with WIC EBT.

#### Key Findings:

This online ordering model was feasible and acceptable to both WIC participants and WIC vendor staff.

Several [recommendations](#) for WIC agencies, vendors, and other stakeholders interested in implementing online ordering include:

- ▶ **Communication:** Personalized communication between the shopper/store and the WIC participant can enhance customer loyalty. Food substitutions (when the store is out of the requested item) should be handled through a clear, consistent process with input from WIC participants as not all substitutions are WIC-approved items.
- ▶ **Online Ordering (Click):** Identifying WIC-approved items online can help WIC participants shop faster and more accurately. In addition, selling/listing produce by price or pound (not by individual item or piece) can help participants maximize the total value of their WIC fruit and vegetable cash value benefits.
- ▶ **Payment (Collect):** Mobile eWIC card readers and split-tender transactions improve checkout for both WIC participants and vendor staff. In addition, reducing or eliminating online ordering fees can enhance equity and increase participation.

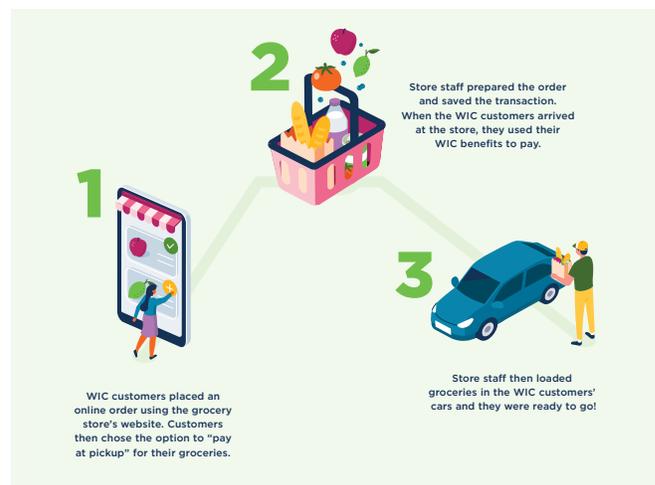


Figure 1

### Oklahoma

In 2020, a grocery chain in Oklahoma developed and implemented a WIC online ordering system allowing WIC participants to order food online via an app or a website and then pick up their orders with EBT card payment in-store or at curbside. The retailer is a "WIC-only" store chain whose stock is 100% WIC-eligible items. Researchers at Old Dominion University conducted a [mixed-methods evaluation](#) of the WIC online ordering model from February to December 2020 to examine whether COVID-19 incidence was associated with WIC online ordering adoption and how WIC online ordering affected participants' redemption behaviors. Similar to the Click & Collect pilot study, this model is allowable within current federal WIC requirements.

#### Key Findings:

- ▶ WIC online ordering was adopted by 5.4% of customers in July-December 2020, which accounted for 2.6% of the WIC revenues for this chain.
- ▶ WIC participant motivations for adopting online ordering included: convenience and ease, time-savings, and the COVID-19 pandemic.
- ▶ Participants utilizing online ordering had significantly higher redemption rates for infant formula, infant fruit and vegetable, cheese/tofu, yogurt, eggs, cereal, and juice, but lower redemption rate for low-fat milk without statistical significance.

## Immediate Needs for Short-Term Recovery

Findings from these four rapid-response projects emphasize the importance of remote services and online ordering in WIC, yet additional policy, program, and research efforts are needed in the short-term to improve availability and accessibility of services.



### Remote Services

- ▶ **Policy:** Maintain USDA waivers for physical presence requirements and remote benefits issuance that are currently set to [expire](#) 90 days after the public health emergency ends. This will provide WIC agencies and providers with the ability to determine which visit types can be permanently offered as virtual visits to reduce missed appointments. This will be especially helpful for visits that are more administrative and do not include nutrition counselling.
- ▶ **Program:** Develop training and support materials for WIC providers offering virtual services. Pilot other means of collecting height, weight, and iron measurements that are valid and reliable, but minimally burdensome for participants.
- ▶ **Research:** Further research is needed to better understand the effectiveness of virtual visits (particularly, video calls vs. phone calls), as well as appropriate frequency and visit types that may lend better to virtual or in-person visits and enhance program retention.



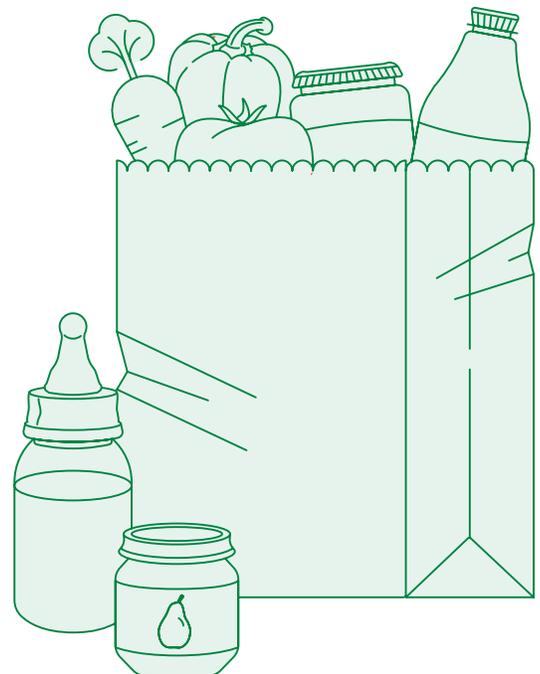
### Online Ordering

- ▶ **Policy:** Create federal policy requirements that allow for safe online transactions using WIC EBT/eWIC benefits to modernize and enhance the WIC shopping experience and to ensure an equitable experience for WIC participants.
- ▶ **Program:** WIC vendors should consider providing online ordering with WIC using a Click & Collect model. This is a feasible option that WIC vendors can implement right away while policy and regulatory changes related to online transactions are being developed.

- ▶ **Research:** As online ordering and online transactions with WIC are tested and implemented, strategies to optimize the WIC online shopping experience are needed. Additionally, to promote equity, uptake of online shopping options among WIC vendors and participants should be explored to determine if there are barriers for certain vendors or participants.

## Long-Term Recovery and Innovation

Long-term recovery efforts must be simultaneously prioritized to ensure long-term availability and accessibility of WIC services. WIC remote services and online ordering are two feasible and acceptable avenues for improving WIC program participation, retention, and overall experience by removing the many barriers that participants faced prior to, and during, the COVID-19 pandemic. Engaging multiple stakeholders (USDA, WIC agencies, WIC vendors, EBT processors, e-commerce platforms, WIC participants, researchers) in the continued development of WIC remote services and online ordering platforms and technology is greatly needed. In addition, clear communication and commitment from the federal government on the landscape for WIC remote services and online ordering in the post-pandemic era is essential for fostering the long-term certainty many stakeholders need to invest in innovative technologies for WIC.



## Acknowledgements

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### Citations for rapid-response grants summarized in this brief:

- ▶ Mclean M, Haynes L, Tkachenko O, Hennessey Z. [Acceptability, Preference, and No-Show Rates for In-Person and Phone-Based Consultations at Nine WIC Centers in New York City Before and During COVID-19.](#) Healthy Eating Research; Durham, NC: 2021.

- ▶ Otten J, Quinn E, Rose C. [WIC Remote Services and Expanded Food Options: Insights from Washington's COVID-19 Response.](#) University of Washington, 2021.
- ▶ Zimmer MC, Kovalsky E, Anderson Steeves E. [WIC Online Ordering: Opportunities and Issues to Consider During the COVID-19 Pandemic.](#) Durham, NC: Healthy Eating Research; 2021.
- ▶ Zhang, Q. [WIC Online Ordering in the COVID-19 Pandemic: Opportunities and Challenges.](#) Healthy Eating Research, October 27, 2021.

## Suggested Citation

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### About Healthy Eating Research

*Healthy Eating Research* (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University under the direction of Mary Story PhD, RD, program director, and Megan Lott, MPH, RDN, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially among lower-income and racial and ethnic minority population groups that are at highest risk for poor health and well-being and nutrition related health disparities. For more information, visit [www.healthyeatingresearch.org](http://www.healthyeatingresearch.org) or follow HER on Twitter at [@HERResearch](https://twitter.com/HERResearch).

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