

Supplementary Materials – Quantitative Study Measures

Item or measure	Description	Measure Citation
Participant characteristics		
Demographic characteristics	Self-report survey age (continuous), gender (categorical: female, male, other), ethnicity (categorical: Hispanic or Latino(a), not Hispanic or Latino(a)), race (categorical: African American or Black, Asian, Native American, American Indian, or Alaskan Native, Pacific Islander, Samoan, or Hawaiian, Multiethnic or mixed or more than one race or ethnicity, White), education (continuous, years), employment (categorical: full-time, part-time, unemployed looking for work, unemployed not looking for work, receiving disability payments, retired, home maker, student, temporarily laid off), financial assistance (categorical includes all federal assistance programs), income (categorical: less than \$10,000 through more than \$100,000 USD), health insurance (categorical: Insurance through a current or former employer or union, insurance purchased directly from an insurance company, government medical insurance, TRICARE, VA, Indian Health Service, Other), household makeup (count: number and age of each person living in the household).	N/A
Address	Self-report survey street address, city, state, and ZIP code	N/A
Diagnosis	Participants are asked to self-report if they have one of three chronic disease types (e.g., high blood pressure, diabetes, dyslipidemias) in the eligibility screener. If a chronic disease is reported, the diagnosis is confirmed in the Epic electronic health record.	N/A
Primary outcomes – Intervention feasibility, adherence, and satisfaction		

Intervention feasibility – recruitment and retention	Feasibility includes the number of people screened, eligible, enrolled, and completed which is tracked through RedCap and excel spreadsheets by the study team. Recruitment is calculated as the number of people enrolled divided by the number of people screened. Retention is calculated as the number of people that completed the study divided by the number of people that enrolled.	Jacques RM, Ahmed R, Harper J, et al. Recruitment, consent and retention of participants in randomised controlled trials: a review of trials published in the National Institute for Health Research (NIHR) Journals Library (1997-2020). BMJ Open. 2022;12(2):e059230. Published 2022 Feb 14. doi:10.1136/bmjopen-2021-059230
Intervention adherence – appointments completed	Adherence includes the number of participants that attend each appointment as set, the number of appointments rescheduled, and the percentage of monthly appointments completed. Data is recorded in and extracted from the pantry's Salesforce® system.	New measure
Intervention adherence – selection of MTG	The proportion of points allocated to MTG items in the prepopulated cart and the proportion of points allocated to MTG items in the final cart after shoppers have made their desired adjustments. Data is recorded in and extracted from the pantry's Salesforce® system.	New measure
Intervention fidelity – recipes	Use of the study recipes – “Did you use the recipes provided from the market?” Categorical: Yes, no, didn't notice any recipes response options. Asked of all groups in a self-report survey at follow-up.	Adapted from: Hollis-Hansen K, Tan S, Bargnesi S, et al. Feasibility and implementation of a grocery shopping intervention for adults diagnosed with or at-risk for type 2 diabetes. Public Health Nutr. 2023;26(10):2118-2129. doi:10.1017/S1368980023001453
Intervention satisfaction – General	General intervention satisfaction is measured by asking “How likely is it that you would recommend this program to a friend or colleague?” from a scale of one (very unlikely) to 10 (extremely likely). Asked of all groups in a self-report survey at follow-up.	New measure
Intervention satisfaction – Pantry services	Five-item food satisfaction survey (e.g., “The food has been helpful” “The	Adapted from Dunmire M. Level of Satisfaction Among Food Pantry

	food provided was food my household likes to eat”) with a four-point Likert scale (Strongly agree to strongly disagree). Asked of all groups in a self-report survey at follow-up.	Clients, Staff/Volunteers, and Directors and its Association with Client Choice in Food Pantry Layouts South Dakota State University; 2019.
Intervention satisfaction – food resource coaching	Coaching satisfaction is measured among those randomized to receive it using five-items (e.g., “the sessions with the coach were helpful” “the information provided by the coach was easy to understand”) and a four-point Likert scale (Strongly agree to strongly disagree). Asked of group receiving food resource coaching only in a self-report survey at follow-up.	New measure
Exploratory outcomes		
Nutrition security	Nutrition security is a validated measure of a household's perceived ability to acquire nutritious foods. The outcome is the mean of the four items scored from 0 (if the participant selects “Always”) to 4 (if the participant selects “Never”). Asked of all groups in self-report survey at baseline and follow-up.	Calloway EE, Carpenter LR, Gargano T, Sharp JL, Yaroch AL. (2022). Development of new measures to assess household nutrition security, and choice in dietary characteristics. <i>Appetite</i> . https://doi.org/10.1016/j.appet.2022.106288
Food Security	Food security is sufficient access to food to meet a households' nutritional needs. The measure is scored using the USDA six-item, short form food security survey module where affirmative responses are summed, and responses can be analyzed categorically (0-1 = high or marginal food security, 2-4 = low food security, 5-6 = very low food security) or as a count depending on the distribution of the data. Asked of all groups in self-report survey at baseline and follow-up.	Blumberg SJ, Bialostosky K, Hamilton WL, Briefel RR. The effectiveness of a short form of the Household Food Security Scale. <i>Am J Public Health</i> . 1999;89(8):1231-1234. doi:10.2105/ajph.89.8.1231

Perceived diet quality	Perceived dietary quality is measured using a single validated item “In general, how healthy is your overall diet?” with excellent, very good, good, fair, and poor response options. Asked of all groups in self-report survey at baseline and follow-up.	Sullivan VK, Johnston EA, Firestone MJ, Yi SS, Beasley JM. Self-Rated Diet Quality and Cardiometabolic Health Among U.S. Adults, 2011-2018. <i>Am J Prev Med.</i> 2021;61(4):563-575. doi:10.1016/j.amepre.2021.04.033
Diet quality	The Mini-Eating Assessment Tool (Mini-EAT) is a rapid dietary screener that measures consumption of fruits and vegetables, whole grains, refined grains, fish and seafood, legumes, nuts, and seeds, low-fat dairy, high-fat dairy, and sweets. Asked of all groups in self-report survey at baseline and follow-up.	Lara-Breitinger KM, Medina Inojosa JR, Li Z, Kunzova S, Lerman A, Kopecky SL, Lopez-Jimenez F. Validation of a Brief Dietary Questionnaire for Use in Clinical Practice: Mini-EAT (Eating Assessment Tool). <i>J Am Heart Assoc.</i> 2023 Jan 3;12(1):e025064. doi: 10.1161/JAHA.121.025064. Epub 2022 Dec 30. PMID: 36583423; PMCID: PMC9973598.
Cooking and food provisioning self-efficacy and food agency.	Cooking and food provisioning action scale (CAFPAS) measures an individual's cooking and food provisioning specific self-efficacy and food agency. Asked of all groups in self-report survey at baseline and follow-up.	Karlsson, S. et al. (2023) An evaluation and shortening of the Cooking and Food Provisioning Action Scale (CAFPAS) using item response theory', <i>Food Quality and Preference</i> , 108, p. 104880. Available at: https://doi.org/10.1016/j.foodqual.2023.104880 .
General self-efficacy	Assesses how much people believe they can achieve their goals, despite difficulties. Asked of all groups in self-report survey at baseline and follow-up.	Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. <i>Organizational research methods</i> , 4(1), 62-83.
Adaptive capacity	A measure of household resiliency that captures a household's ability to react and adapt to a financial shock. Asked of all groups in self-report survey at baseline and follow-up.	Calloway EE, Carpenter LR, Gargano T, Sharp JL, Yaroch AL. (2022). Development of three new multidimensional measures to assess household food insecurity resilience in the United States. <i>Frontiers in Public Health.</i> https://doi.org/10.3389/fpubh.2022.1048501

UCLA Loneliness Scale	Loneliness is perceived isolation from others and is measured using the UCLA loneliness scale. Each of the 11 items begins with a question stem, “How much of the time do you feel...” and uses a three-point Likert scale ranging from 1 (often) to 3 (hardly ever or never) to measure loneliness. Asked of all groups in self-report survey at baseline and follow-up.	11-item UCLA Loneliness scale from Lee J, Cagle JG. Validating the 11-Item Revised University of California Los Angeles Scale to Assess Loneliness Among Older Adults: An Evaluation of Factor Structure and Other Measurement Properties. Am J Geriatr Psychiatry. 2017;25(11):1173-1183. doi:10.1016/j.jagp.2017.06.004
EuroQol: EQ-5D-5L	The EQ-5D-3L is a measure of wellbeing and includes items on mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Asked of all groups in self-report survey at baseline and follow-up.	Feng YS, Kohlmann T, Janssen MF, Buchholz I. Psychometric properties of the EQ-5D-5L: a systematic review of the literature. Qual Life Res. 2021;30(3):647-673. doi:10.1007/s11136-020-02688-y