

## Food is Medicine Initiatives to Address Chronic Diseases and Reduce Health Disparities

“Food is Medicine” (FIM) (or food as medicine) is a category of tailored food-based nutritional interventions specifically linked to the health care system that are intended to prevent, treat, or manage chronic diseases and often address food and nutrition insecurity. Additionally, FIM interventions are intended to complement food security programs, such as the Supplemental Nutrition Assistance Program (SNAP), the Food Distribution Program on Indian Reservations (FDPIR), the Nutrition Assistance Program (NAP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), that help people, children, and families with limited incomes and disabilities access quality food.

### How Food is Medicine Interventions can be Defined

Three of the most common FIM interventions include produce prescriptions, medically tailored groceries (MTG), and medically tailored meals (MTM). FIM interventions that are medically tailored are meant to address an acute medical issue for a defined duration that are specifically designed to meet the patient’s nutritional needs. In addition to the specific FIM intervention, providing nutrition education, such as cooking classes, or a referral for a dietitian may be part of the intervention.



Produce prescriptions are vouchers or debit cards provided by health care providers for free fruits and vegetables that can be redeemed at various locations.<sup>i</sup> They can typically be redeemed at the health care site where the produce prescription was prescribed or at farmers’ markets or a participating retailer. Produce prescriptions usually include a variety of fresh, canned, or frozen fruits and vegetables that do not contain added sugars, sodium, or fat.



Medically tailored groceries (MTG) are non-prepared grocery items selected by a nutrition professional as part of a treatment plan. The patient typically collects the food at a clinic or food pantry and prepares it at home.<sup>ii</sup>

Medically tailored meals (MTM) are delivered to individuals living with acute illness through a referral from a medical professional or health care plan. Meal plans are tailored to the medical needs of the patient by a Registered Dietitian Nutritionist (RDN) and are designed to improve health outcomes, lower cost of care, and increase patient satisfaction.<sup>iii</sup>



### Why are Food is Medicine Initiatives Important?

Access to, affordability of, and consumption of nutritious food is a social determinant of health (SDOH) that plays an important role in addressing health disparities. FIM interventions create an essential link between health care and community care to provide comprehensive patient care with support for managing and treating chronic diseases, reducing food and nutrition insecurity, and improving quality of life. FIM interventions are still evolving, and the volume of research that evaluates these interventions is growing.

## Evidence Supporting Food is Medicine Interventions

There is promising evidence that the three most common FIM health care system interventions – produce prescriptions, MTGs, and MTMs – are effective in helping to manage chronic diseases. FIM interventions were assessed as part of the 2021 Aspen Institute on FIM Research Action Plan.<sup>iv</sup> MTM was the most thoroughly examined intervention in the Aspen Institute report, which showed moderate evidence to support MTM and included studies that showed evidence of reducing hospital admissions and readmissions, lowering medical costs, and improving medication adherence. For instance, one study looked at home delivered MTM to patients with metastatic cancer as a means of palliative care.<sup>v</sup>



The Aspen Institute report also showed evidence of decreasing food insecurity with MTG, with another study showing that most food purchased with the funding was “healthy” food.<sup>vi</sup> Another study in the report, a randomized controlled trial, examined a food insecurity intervention at a cancer center. The three study groups were a hospital cancer clinic–based food pantry, food voucher plus pantry, and home grocery delivery plus pantry; all demonstrated reducing food insecurity. Specifically, the pantry and home delivery plus pantry study groups showed improved quality of life, and the food voucher plus pantry study group was the most effective at improving treatment completion among medically underserved, food-insecure patients with cancer who were at risk of impaired nutritional status.<sup>vii</sup> The Aspen Institute evaluation also showed moderate evidence to support produce prescriptions, influencing diet quality, food security, and diabetes outcomes.<sup>viii</sup>



A recent cost analysis from the Tufts Friedman School of Nutrition Policy modeled cost savings in private and public insurance options of an MTM intervention for patients living with chronic diseases, including cancer, who had limited activities in daily living, including an analysis among those who had food insecurity. The study estimated significant cost savings (billions) in each insurer category over one and 10-year intervals.<sup>ix</sup>



At the 2022 White House Conference on Hunger, Nutrition, and Health, private businesses and public agencies pledged to support research in hunger and health initiatives. There has been increasing interest from large, private foundations to fund additional FIM pilots and formative implementation research to determine how to better scale these interventions. For example, public-private partnerships have been developed to support FIM interventions,<sup>x</sup> such as the Rockefeller Foundation’s partnership to develop a FIM intervention with the U.S. Department of Veterans Affairs (VA) health system.

## Food is Medicine Initiatives in Action

At the federal level, the Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS) allow for state Medicaid plans to cover FIM interventions through section 1915(b) and 1115 waivers, changes to state plan authorities, managed care in lieu of services and settings (ILOSs),

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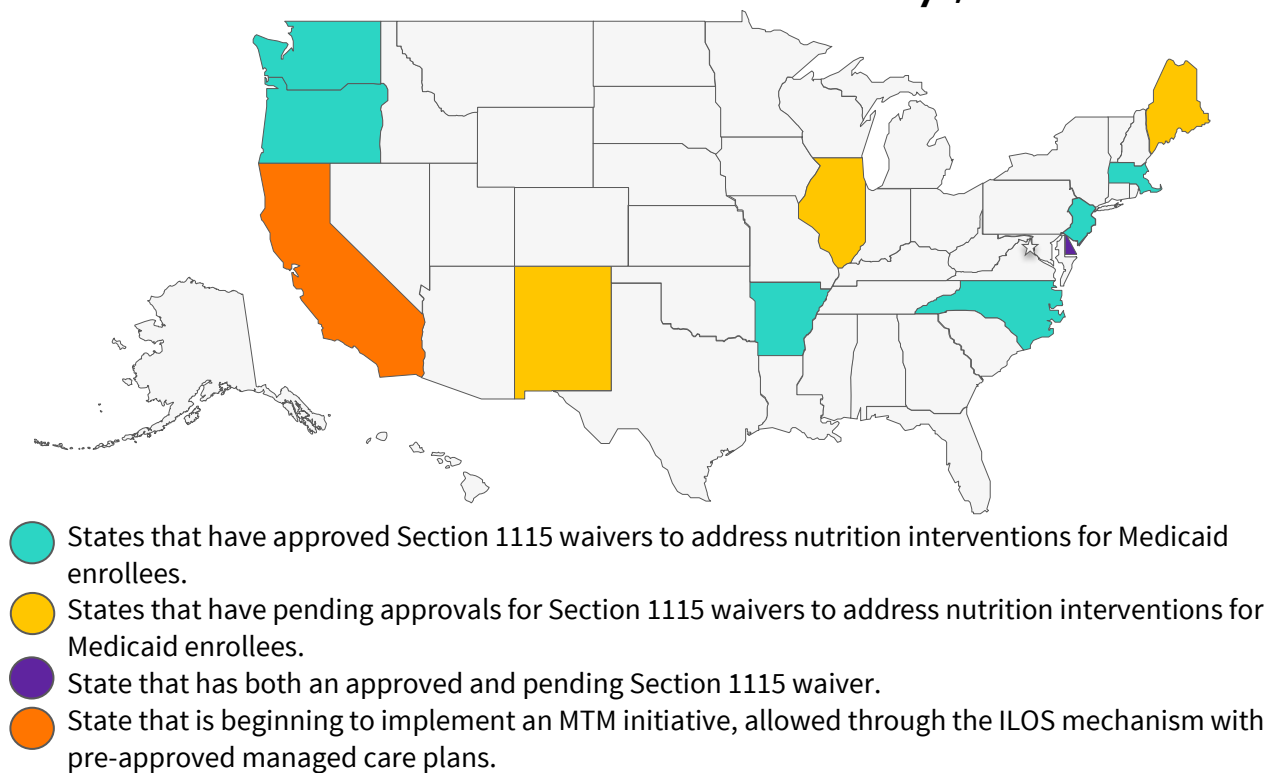
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and the Children’s Health Insurance Program (CHIP) Health Service Initiatives (HSIs) at the option of the state or plan, as applicable.

To date, seven states have approved Section 1115 waivers to address nutrition interventions support for Medicaid enrollees. They are Arkansas, Delaware, Massachusetts, New Jersey, North Carolina, Oregon, and Washington. Four states have programs that are pending approval: Delaware, Illinois, Maine, and New Mexico.<sup>xi</sup> Delaware has both an approved and pending Section 1115 waiver. California is beginning to implement an MTM initiative, allowed through the ILOS mechanism with pre-approved managed care plans.<sup>xii</sup>

The U.S. Department of Agriculture’s (USDA) investments in FIM include grant funding at the Gus Schumacher Nutrition Incentive Program (GusNIP) for produce prescription programs. These programs reach close to 2,000 individuals each month and does not require a grantee funding match.<sup>xiii</sup> Additionally, the VA, in partnership with the Rockefeller Foundation and the Indian Health Services (IHS), recently implemented pilot produce prescription programs.<sup>xiv</sup>

### States using Medicaid Demonstrations or ILOS to Provide Medicaid Enrollees Nutrition Interventions in the U.S. as of January 1, 2024



### Considerations for Food is Medicine Policies

While food is necessary for life, food is also personal, celebratory, and rooted in individual cultures and traditions. It is important to recognize that the process of transforming ingredients into meals is not intuitive and requires time, skills, cookware, and equipment. Additionally, it is fundamental that FIM

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interventions are patient-centered as much as possible, meaning that patients are involved in the process and their needs and limitations are respected. Provider expertise also needs to be recognized to ensure they have the flexibility to assess and modify FIM interventions and/or their dose or duration when necessary.

## ACS CAN's Position: Advocating for Food is Medicine Initiatives

ACS CAN supports policies and funding that increase access to FIM initiatives and interventions intended to prevent, treat, or manage chronic diseases and often address food and nutrition insecurity by:

- ❖ Increasing federal funding at the USDA, IHS, VA, and HHS for FIM initiatives.
- ❖ Supporting state and local FIM demonstration programs, pilots, and research to determine the impact of these initiatives on people living with or at risk for chronic diseases. These programs may include produce prescriptions, medically tailored groceries, or medically tailored meals as FIM interventions, and recommend the inclusion of nutrition education and a program evaluation.
- ❖ Supporting policy changes that involve coverage or provision of FIM, including new payment models and Medicaid waivers.

For more information on ACS CAN's advocacy work around healthy eating and active living environments, please visit <https://www.fightcancer.org/what-we-do/healthy-eating-and-active-living>.

<sup>i</sup> Downer, S., Berkowitz, S. A., Harlan, T. S., Olstad, D. L., & Mozaffarian, D. (2020). Food is medicine: actions to integrate food and nutrition into healthcare. *BMJ (Online)*, 369, m2482–m2482. <https://doi.org/10.1136/bmj.m2482>

<sup>ii</sup> Ibid.

<sup>iii</sup> *The Medically Tailored Meal Intervention*. Food is Medicine Coalition. (n.d.). <https://www.fimcoalition.org/our-model>

<sup>iv</sup> Downer S, Clippinger E, Kummer C. Food is Medicine Research Action Plan. Published Jan. 27, 2022. Retrieved at [https://www.aspeninstitute.org/wp-content/uploads/2022/01/Food-is-Medicine-Action-Plan-Final\\_012722.pdf](https://www.aspeninstitute.org/wp-content/uploads/2022/01/Food-is-Medicine-Action-Plan-Final_012722.pdf).

<sup>v</sup> Ishaq, O., Mailhot Vega, R., Zullig, L., Wassung, A., Walters, D., Berland, N., Du, K. L., Ahn, J., Leichman, C. G., Jill Cohen, D., Gu, P., Chachoua, A., Leichman, L. P., Pearl, K., & Schiff, P. B. (2016). Food as medicine: A randomized controlled trial (RCT) of home delivered, medically tailored meals (HDMTM) on quality of life (QoL) in metastatic lung and non-colorectal GI cancer patients. *Journal of Clinical Oncology*, 34(26\_suppl), 155–155. [https://doi.org/10.1200/jco.2016.34.26\\_suppl.155](https://doi.org/10.1200/jco.2016.34.26_suppl.155).

<sup>vi</sup> Paolantonio, L., Kim, S. Y., Ramirez, J., Roberts-Eversley, N., Li, Y., Melnic, I., Wu, M., Jutagir, D. R., Smith, J., Oladele, M., & Gany, F. (2020). Food Purchasing Behavior of Food Insecure Cancer Patients Receiving Supplemental Food Vouchers. *Supportive Care in Cancer*, 28(8), 3739–3746. <https://doi.org/10.1007/s00520-019-05183-4>.

<sup>vii</sup> Gany, F., Melnic, I., Wu, M., Li, Y., Finik, J., Ramirez, J., Blinder, V., Kemeny, M., Guevara, E., Hwang, C., & Leng, J. (2022). Food to Overcome Outcomes Disparities: A Randomized Controlled Trial of Food Insecurity Interventions to Improve Cancer Outcomes. *Journal of Clinical Oncology*, 40(31), 3603–3612. <https://doi.org/10.1200/JCO.21.02400>.

<sup>viii</sup> Downer S, Clippinger E, Kummer C. Food is Medicine Research Action Plan. Published Jan. 27, 2022. Retrieved at [https://www.aspeninstitute.org/wp-content/uploads/2022/01/Food-is-Medicine-Action-Plan-Final\\_012722.pdf](https://www.aspeninstitute.org/wp-content/uploads/2022/01/Food-is-Medicine-Action-Plan-Final_012722.pdf).

<sup>ix</sup> Sharib, J. R. (2023, November 28). *True cost of food: Food Is Medicine Case Study*. Food is Medicine. <https://tuftsfoodismedicine.org/true-cost-fim-case-study-report/>.

<sup>x</sup> Burky, A. (2023, February 27). *As SNAP benefits wane, food-as-medicine companies carve out a niche in healthcare*. Fierce Healthcare. <https://www.fiercehealthcare.com/digital-health/snap-benefits-wane-food-medicine-platforms-carve-out-niche-healthcare>.

<sup>xi</sup> Guth, Madeline, Published: Nov 15, 2022. (2023, January 25). *Section 1115 waiver watch: Approvals to address health-related social needs*. KFF. <https://www.kff.org/medicaid/issue-brief/section-1115-waiver-watch-approvals-to-address-health-related-social-needs/>

<sup>xii</sup> State of California—health and human services agency ... - DHCS. (n.d.). [https://www.dhcs.ca.gov/Documents/MCQMD/Fact-Sheet-ILOS\\_final\\_4-14-2021\\_a11y.pdf](https://www.dhcs.ca.gov/Documents/MCQMD/Fact-Sheet-ILOS_final_4-14-2021_a11y.pdf).

<sup>xiii</sup> *GUSNIP Ntae Y3 impact findings*. Nutrition Incentive Hub. (n.d.). <https://nutritionincentivehub.org/gusnip-ntae-y3-impact-findings>

<sup>xiv</sup> Bleich, S. N., Dupuis, R., & Seligman, H. K. (2023). Food Is Medicine Movement-Key Actions Inside and Outside the Government. *JAMA health forum*, 4(8), e233149–e233149. <https://doi.org/10.1001/jamahealthforum.2023.3149>.