

October 14, 2020

The Honorable Robert A. DeLeo  
Speaker of the House  
Massachusetts State House  
24 Beacon Street, Boston, MA 02115

The Honorable Karen E. Spilka  
Senate President  
Massachusetts State House  
24 Beacon Street, Boston, MA 02115

Chairman Michael Rodrigues  
Vice Chair Cindy Friedman  
Senate Committee on Ways and Means  
Massachusetts State House  
24 Beacon Street, Boston, MA 02115

Chairman Aaron Michlewitz  
Vice Chair Denise Garlick  
House Committee on Ways and Means  
Massachusetts State House  
24 Beacon Street, Boston, MA 02115

Secretary Michael J. Heffernan  
Secretary of the Executive Office for  
Administration and Finance  
Massachusetts State House  
24 Beacon Street, Boston, MA 02133

Senator Julian Cyr  
Vice Chair Denise Garlick  
Bill Sponsors  
Massachusetts State House  
24 Beacon Street, Boston, MA 02115

Dear Speaker DeLeo, Senate President Spilka, Chair Rodrigues, Chair Michlewitz, Vice Chair Garlick, Vice Chair Friedman, Secretary Heffernan, and Senator Cyr,

We are writing to encourage you to include support for critical Food is Medicine services within the Massachusetts state budget. Specifically, as the legislature deliberates its budget and considers how to distribute federal funds for state-based COVID-19 response efforts, we urge you to provide funding for the pilot program outlined in [S2772](#) and [H4278](#), *An Act Relative to Establishing and Implementing a Food and Health Pilot Program*, in the amount of \$8 million. As COVID-19 highlights the urgent need to address the issues of chronic illness, nutrition, and food insecurity in the Commonwealth, support for Food is Medicine services is a vital component of an equitable, effective state-wide COVID-19 response.

Food is Medicine services such as medically tailored meals, medically tailored food packages, nutritious food referrals, and population-level healthy food programs recognize and respond to the specific needs of individuals living with or at risk for serious health conditions affected by diet.<sup>1</sup> A growing body of evidence indicates that connecting low-income individuals with or at risk for diet-related diseases to Food is Medicine interventions is an effective, low-cost strategy to improve health outcomes, decrease use of expensive health care services, and improve patient quality of life.<sup>2</sup> Studies have specifically demonstrated that the provision of these services is associated with improved BMI,<sup>3</sup> increased fruit and vegetable intake,<sup>4</sup> and improved medication adherence<sup>5</sup> for individuals with chronic conditions and a reduction of HbA1c levels in individuals with diabetes.<sup>6,7</sup>

The COVID-19 pandemic has put unprecedented strain on the Massachusetts health care system and economy, and unexpectedly highlighted the tremendous burden of diet-related chronic disease affecting our state and nation. One of the greatest predictors of COVID-19 hospitalization and death is poor cardiometabolic health<sup>8-17</sup>, which includes obesity, diabetes, hypertension and cardiovascular disease, all of which are primarily preventable, and better managed, through improved diet and healthier food systems.<sup>18</sup>

Emerging research on COVID -19 and diet-related, chronic disease includes the following:

- A global systematic review found that people with obesity who contracted COVID-19 were 113% more likely than people of healthy weight to land in the hospital, 74% more likely to be admitted to an ICU, and 48% more likely to die.<sup>19</sup>
- A preprint study analyzing 287 COVID-19 patients in New Orleans found that a combined effect of hypertension, obesity, and diabetes comorbidities had a greater influence on COVID-19 severity and mortality than any one condition individually, concluding that individuals with metabolic syndrome exhibited nearly four times greater odds of severe and especially fatal COVID-19 outcomes compared to those without metabolic syndrome.<sup>20</sup>
- An analysis of COVID-19-related deaths of individuals with type 1 and type 2 diabetes found that increased COVID-19-related mortality was associated with cardiovascular and renal complications and, independently, with glycemic control and BMI. The authors note that HbA1c and BMI can be improved through health-care interventions.<sup>21</sup>
- In a large-scale general population study evaluating COVID-19 hospitalization likelihood, researchers found that compared to normal weight individuals, individuals with a BMI >25 had a 40% higher risk of hospitalization after controlling for age and sex and individuals with obesity ( $\geq 30$ ) had a 70% higher risk. Those with severe obesity ( $\geq 35$ ) were twice as likely to be hospitalized with COVID-19.<sup>22</sup>
- An early study of COVID -19 hospitalization in New York City found the odds of hospitalization among those diagnosed with COVID-19 were up to 6.2 times greater for patients with obesity, 4.3 times greater for patients with heart failure, and 2.8 times greater for patients with diabetes.<sup>23</sup>
- An estimated 85% of people with Type 2 diabetes have overweight or obesity, and most individuals with diabetes eventually die of heart failure.<sup>24</sup> Interpreting the above results from the New York City study, this means a patient coping with obesity, diabetes, and heart failure is *13.3 times more likely to be hospitalized* for COVID-19 than an individual of the same age without these conditions.
- A study of patients hospitalized with COVID-19 in the US showed that approximately 40% had diabetes or uncontrolled hyperglycemia on admission, and death rates were more than four times higher among those with diabetes or hyperglycemia (28.8%) than those without either condition (6.2%).<sup>25</sup>
- Research from Johns Hopkins suggests that hospitalizations of younger patients in the US may be largely driven by higher obesity rates in the US as compared to other countries.<sup>26-32</sup>

In addition, the crisis has raised household food insecurity levels to the highest rates ever recorded in the US.<sup>33</sup> Locally, changes to food access and severe job losses have led to food insecurity rates hovering between 14-23% in Massachusetts.<sup>34</sup> Individuals experiencing food insecurity often have lower quality diets, including lower intake of produce, than their food secure counterparts, contributing to poorer health outcomes.<sup>35</sup> While the explicit relationship between food insecurity and COVID-19 has yet to be analyzed, studies indicate that malnourishment is associated

with a greater risk for various bacterial, viral, and other infections.<sup>36</sup> Additionally, food insecure families frequently mitigate limited financial resources by adopting health-harming coping strategies such as delaying or forgoing medical care,<sup>37,38</sup> engaging in cost-related medication underuse,<sup>39-41</sup> choosing between food and other basic needs such as utilities,<sup>42,43</sup> opting to consume low-cost, energy-dense foods,<sup>44-46</sup> and/or forgoing food needed for special medical diets.<sup>47</sup> The dual health and economic crisis that we are experiencing now exacerbates the strain on resources and further complicates the complex strategies families use to feed themselves and make ends meet.<sup>48</sup>

The COVID-19 pandemic has also illustrated that neither risk nor outcome associated with the virus is equitably distributed, leaving communities of color most vulnerable due to [historical injustices, poor resource distribution, and systemic racism](#).<sup>49,50</sup> Black, Latinx, and indigenous individuals, as well as foreign-born non-citizens, have the greatest risk of contracting and dying from COVID-19 both across the United States and in Massachusetts, especially those who are low-income, food insecure, and have diet-related chronic diseases.<sup>51-55</sup> Improving access to Food is Medicine services may help combat health disparities during the COVID-19 pandemic by decreasing food insecurity within underserved and underrepresented populations; assisting in preventing and managing the higher rates of diet-related diseases these populations are at greater risk for; and by minimizing exposure for those at risk for, sick with, or recovering from COVID-19.

Services that keep Massachusetts residents healthy, resilient, and out of the hospital are an essential part of managing COVID-19. Unfortunately, despite the evidence and new opportunities through the MassHealth Flexible Services Program, broad, equitable access to Food is Medicine interventions remains limited across our state and within communities most impacted by COVID-19.<sup>56</sup> In surveys conducted to develop the Massachusetts Food is Medicine State Plan, almost half of responding nutrition service organizations identified lack of funding as a barrier to providing Food is Medicine interventions.<sup>57</sup> Furthermore, only 18% of these respondents said they received any funding through contracts with health insurers or health care partners, leaving the vast majority of these organizations reliant on donations and grants to support their Food is Medicine programs.<sup>58</sup> These services have proven to be a critical part of our state-wide COVID-19 response, yet the majority of Food is Medicine providers continue to be excluded from reliable, sustainable funding streams even in a time of need.

National organizations like the [American Diabetes Association](#) and [American Heart Association](#) acknowledge the toll COVID-19 is taking on the lives of individuals with poor cardio-metabolic health, highlighting the life-saving role of proper nutrition. Fortunately, healthy foods can rapidly improve metabolic health within 3-6 weeks in controlled intervention studies,<sup>59,60</sup> plus Food is Medicine interventions can be leveraged [to help local farmers and the Massachusetts economy](#) through increased sales of Massachusetts foods.

A recent [editorial in the Lancet](#), one of the world's leading medical journals stated: "with COVID-19, we have not just been fighting a communicable disease alone but also a growing backdrop of non-communicable diseases, such as diabetes and obesity, that have needlessly raised the death toll. In the aftermath of this pandemic, with the possibility of a global recession, mass unemployment, and a financial deficit that could impact the world for decades, it is perhaps naïve to think that additional resources will be available to improve metabolic health and reduce the burden of chronic disease. But that is exactly what needs to happen."

In this context, we urge the Massachusetts legislature to take immediate action to ensure that broad support of Food is Medicine services is a core element of Massachusetts' COVID-19 response. Thank you for supporting the role these services play in protecting the health of residents, caring for those impacted by COVID-19, and addressing the health disparities this crisis continues to exacerbate.

Sincerely,

## **Organizations**

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### **About Fresh**

Josh Trautwein, Co-Founder/CEO

### **American Heart Association**

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### **Center for Human Development**

Kelly Knox, Director of Grants

### **Community Servings**

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### **Friedman Food Policy Action Council**

Grace Flaherty, Co-President

### **Island Grown Initiative**

Rebecca Haag, Executive Director

### **Laboure College**

Lily S. Hsu, President

### **Massachusetts Food Systems Collaborative**

Winton Pitcoff, Director

### **Open Door**

Robin Stone, Nutrition Services Manager

### **Sustainable CAPE- Center for Agricultural Preservation & Education**

Francie Randolph, Founding Director

### **Activate Care**

Richard Porcelli, Director of Community Engagement

### **Center for Health Law and Policy Innovation**

Robert Greenwald, Faculty Director

### **Children's HealthWatch at Boston Medical Center**

Rich Sheward, Director of Innovative Programs

### **FoodLink**

DeAnne Dupont, Executive Director/President

### **The Greater Boston Food Bank**

Rachel Caty, Senior Manager of Nutrition

### **Just Roots**

Jessica O'Neill, Executive Director

### **Massachusetts Academy of Nutrition and Dietetics (MAND)**

Christina Ypsilantis, President

### **Mill City Grows**

Jessica Wilson, Executive Director

### **Project Bread**

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### **Victory Programs, Inc.**

Meg von Lossnitzer, Director of Victory Prevention

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