

July 8, 2020

The Honorable Robert A. DeLeo  
Speaker of the House  
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

Senate Chair Cindy Friedman  
Senate Vice Chair Harriette L. Chandler  
House Vice Chair Daniel Cullinane  
Joint Committee on Health Care Financing  
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 Aaron Michlewitz  
Vice Chair Denise Garlick  
House Committee on Ways and Means  
Massachusetts State House  
24 Beacon Street, Boston, MA 02115

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, Chair Friedman, Vice Chair Chandler, Vice Chair Cullinane, and Senator Cyr,

We are writing in continued support of the bill introduced by Senator Cyr and Vice Chair Garlick, *An Act Relative to Establishing and Implementing a Food and Health Pilot Program* ([H.4278](#) and [S.2772](#)). As COVID-19 highlights the critical need to respond to the issues of chronic illness, nutrition, and food insecurity in the Commonwealth, this bill is now more important than ever. We urge you to take immediate action on the issue of the Food and Health Pilot Program. We understand that the Senate bill (S. 2772) is currently before the Joint Committee on Health Care Financing and that, due to parliamentary procedures, the House bill (H. 4278) may be with the office of the Clerk. We therefore ask you to address this bill, using the amended language provided in S. 2772, prior to the end of the formal session.

We wish to highlight the importance of this legislation in the context of the COVID-19 response, specifically, that the impact of diet-related conditions like obesity, diabetes, hypertension and cardiovascular disease on COVID-19 severity and outcomes is one of the most significant factors driving this public health crisis in the US. In addition, the crisis has raised household food insecurity levels to the highest rates ever recorded in the US.<sup>1</sup> We therefore assert that this crisis has clearly demonstrated the need to enact a pilot program within MassHealth to assess the impact of *Food is Medicine* programs on health outcomes.

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>2-11</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>12-14</sup> Unfortunately, low income populations, and in particular low-income individuals of color, are at the highest risk of suffering from these comorbidities, food insecurity, and [COVID-19 mortality due to systemic inequities and structural racism](#).<sup>15 16</sup>

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

- 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>4</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>7</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>17</sup>
- As compared to other countries with major outbreaks, the US has a much higher rate of obesity, making the general population more susceptible to COVID -19 hospitalization and death. For example, the prevalence of obesity is in the US is around 40%, versus a prevalence of 6% in China, 20% in Italy, and 24% in Spain.<sup>3</sup>
- Research from John 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>39</sup>

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.”

We therefore renew our call for *Food is Medicine* to be fully integrated into the health care system. This work must be accelerated in the wake of COVID-19 as 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>18 19</sup>, plus *Food is Medicine* interventions can be leveraged to [help local farmers and the Massachusetts economy](#) through increased sales of Massachusetts foods. Furthermore, acknowledging that communities of color have higher rates of food insecurity, diet-related chronic disease, and now COVID-19,<sup>20</sup> this bill may play a role in improving racial inequities in the health care system.

In this context, and we urge the Massachusetts legislature to take immediate action on [H.4278](#) and [S.2772](#) *given they are directly related to the greatest public health crises of our lifetime.*

As we have previously testified, emerging research has shown that *Food is Medicine* is smart public health policy, but there is still more to learn, in particular how various intervention models can be combined to maximize impact in a cost-effective manner. For the sake of thousands of struggling

households across this Commonwealth, we must act with urgency. By taking action on this bill, you can help us understand how to make this system better.

Thank you for your support and we all look forward to working with you together to make the Food and Health Pilot Program a reality.

Sincerely,

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## References

1. Fields S. Record levels of food insecurity in the US because of Covid-19. *Marketplace* 2020.
2. Caussy C, Pattou F, Wallet F, et al. Prevalence of obesity among adult inpatients with COVID-19 in France. *The Lancet Diabetes & Endocrinology* 2020 doi: 10.1016/s2213-8587(20)30160-1
3. Kass DA, Duggal P, Cingolani O. Obesity could shift severe COVID-19 disease to younger ages. *The Lancet* 2020;395(10236):1544-45. doi: 10.1016/s0140-6736(20)31024-2
4. Petrilli CM JA, Yang J, et al. Factors associated with hospitalization and critical illness among 4,103 patients with Covid-19 disease in New York City. *medRxiv* 2020 doi: 10.1101/2020.04.08.20057794.this
5. Saban-Ruiz J, Ly-Pen D. COVID-19: A Personalized Cardiometabolic Approach for Reducing Complications and Costs. The Role of Aging Beyond Topics. *J Nutr Health Aging* 2020:1-10. doi: 10.1007/s12603-020-1385-5 [published Online First: 2020/05/15]
6. Sattar N, McInnes IB, McMurray JJV. Obesity a Risk Factor for Severe COVID-19 Infection: Multiple Potential Mechanisms. *Circulation* 2020 doi: 10.1161/CIRCULATIONAHA.120.047659 [published Online First: 2020/04/23]
7. The Lancet D, Endocrinology. COVID-19: underlying metabolic health in the spotlight. *The Lancet Diabetes & Endocrinology* 2020;8(6) doi: 10.1016/s2213-8587(20)30164-9
8. Mozaffarian D, Glickman D, Nikbin Meydani S. How your diet can help flatten the curve. *CNN* 2020.
9. Pearce K. Obesity a Major Risk Factor for Covid-19 Hospitalization *John Hopkins University* 2020.
10. Brody JE. How Poor Diet Contributes to Coranvirus Risk *New York Times* 2020.
11. People Who Are at Higher Risk for Severe Illness. *Center for Disease Control and Prevention*.  
<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>
12. Micha R, Penalvo JL, Cudhea F, et al. Association Between Dietary Factors and Mortality From Heart Disease, Stroke, and Type 2 Diabetes in the United States. *JAMA* 2017;317(9):912-24. doi: 10.1001/jama.2017.0947 [published Online First: 2017/03/08]
13. Micha R, Shulkin ML, Penalvo JL, et al. Etiologic effects and optimal intakes of foods and nutrients for risk of cardiovascular diseases and diabetes: Systematic reviews and meta-analyses from the Nutrition and Chronic Diseases Expert Group (NutriCoDE). *PLoS One* 2017;12(4):e0175149. doi: 10.1371/journal.pone.0175149 [published Online First: 2017/04/28]
14. Mozaffarian D. Dietary and Policy Priorities for Cardiovascular Disease, Diabetes, and Obesity: A Comprehensive Review. *Circulation* 2016;133(2):187-225. doi: 10.1161/CIRCULATIONAHA.115.018585 [published Online First: 2016/01/10]
15. Addressing Health Disparities in Diabetes. *Center for Disease Control and Prevention*.  
<https://www.cdc.gov/diabetes/disparities.html>
16. Food Security Status of U.S. Households in 2018. *United States Department of Agriculture*.  
<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx>
17. Bruce Bode VG, Jordan Messler, Raymie McFarland, Jennifer Crowe, Robby Booth, David Klonoff. Glycemic Characteristics and Clinical Outcomes of COVID-19 Patients Hospitalized in the United States *Diabetes Technology Society* 2020 doi: doi.org/10.1177/1932296820924469
18. Hall KD, Ayuketah A, Brychta R, et al. Ultra-Processed Diets Cause Excess Calorie Intake and Weight Gain: An Inpatient Randomized Controlled Trial of Ad Libitum Food Intake. *Cell Metab* 2019;30(1):67-77 e3. doi: 10.1016/j.cmet.2019.05.008 [published Online First: 2019/05/21]
19. Izadpanah A, Barnard RJ, Almeda AJ, et al. A short-term diet and exercise intervention ameliorates inflammation and markers of metabolic health in overweight/obese children. *Am J Physiol Endocrinol Metab* 2012;303(4):E542-50. doi: 10.1152/ajpendo.00190.2012 [published Online First: 2012/06/21]
20. Center for Disease Control and Prevention. COVID-19 in Racial and Ethnic Minority Groups.  
<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html> 2020.