

Testimony before the Senate Education Health and Environmental Affairs Committee

February 26, 2019

In **SUPPORT** of S.B. 768: Health and Wellness Standards - Correctional Facilities and Health Care Facilities (Sen. Patterson)

Presented by Daphene Altema-Johnson

*Disclaimer: The opinions expressed herein are our own and do not necessarily reflect the views of The Johns Hopkins University.*

Honorable Chair Pinsky, Vice Chair Kagan and Members of the Committee,

Thank you for the opportunity to submit this statement for the record in support of Senate 768.

We are researchers and educators at the Johns Hopkins Center for a Livable Future, an interdisciplinary academic center focused on food systems and public health. The Center is in the Bloomberg School of Public Health's Department of Environmental Health and Engineering. We have been researching the health and environmental impacts of dietary patterns, including Meatless Monday, a global movement with grassroots programs that encourage people to cut meat from their diets one day a week to promote personal and environmental health. Meatless Monday is a non-profit initiative of the Monday Campaigns which works in collaboration with our center, Columbia University and Syracuse University, and has been adopted in over 40 countries and in 22 languages. The Meatless Monday campaign has been successful because of its simple and actionable message. We believe that in expanding plant-based meal options in state prisons, SB 768 would improve the environmental and human health impacts associated with unhealthy dietary patterns for incarcerated individuals.

As public health professionals, we have reviewed the literature on the relationship between dietary patterns and chronic diseases, and the evidence is clear: high consumption of red and processed meat and low consumption of fruits and vegetables, whole grains and legumes are important risk factors contributing to heart disease, type 2 diabetes, stroke, colorectal cancer, and all-cause mortality.<sup>1,2,3,4</sup> Currently, people who are incarcerated are being served approximately twice the United States Department of Agriculture (USDA) recommended 34-ounce equivalent

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<sup>1</sup> Zheng Y, Li Y, Satija A, et al. (2019). Association of changes in red meat consumption with total and cause specific mortality among US women and men: Two prospective cohort studies. *BMJ*, 365, l2110.

<sup>2</sup> Schwingshackl, L., Hoffmann, G., Lampousi, A. M., Knüppel, S., Iqbal, K., Schwedhelm, C., ... & Boeing, H. (2017). Food groups and risk of type 2 diabetes mellitus: a systematic review and meta-analysis of prospective studies. *European Journal of Epidemiology*, 32, 363–375.

<sup>3</sup> Micha, R., Peñalvo, J. L., Cudhea, F., Imamura, F., Rehm, C. D., & Mozaffarian, D. (2017). Association between dietary factors and mortality from heart disease, stroke, and type 2 diabetes in the United States. *Jama*, 317(9), 912-924.

<sup>4</sup> Bouvard, V., Loomis, D., Guyton, K. Z., Grosse, Y., Ghissassi, F. E., Benbrahim-Tallaa, L., ... & Corpet, D. (2015). Carcinogenicity of consumption of red and processed meat. *The Lancet Oncology*, 16(16), 1599-1600.

of animal protein per week (or 4.8 ounces/day; includes meat, dairy and eggs)<sup>5</sup>. Research shows an inverse association between whole grain intake and the risk of type 2 diabetes, meaning people who eat more whole grains tend to have lower risk of type 2 diabetes.<sup>6</sup> Substituting daily half serving of meat with nuts or whole grains can decrease the risk of type 2 diabetes by 15%<sup>7</sup>. Foods like whole wheat, oats, quinoa, farro and rye, which are not currently offered at the correctional facilities, are important pantry staples when it comes to preventing or managing diabetes and heart disease.

In 2011, correctional facilities in Maryland spent \$3 million on hospitalizations of inmates for heart failure, renal failures, strokes, and acute respiratory failure<sup>8</sup>. However, taking preventative measures such as adopting basic lifestyle changes, like a plant-rich diet, will not only decrease hospitalization and prescription costs, but will also lower the risk of heart diseases, diabetes, obesity and some cancers. Overall, reducing the amount of meat incarcerated people consume by one day a week would afford people basic physiological benefits that are ultimately better for their health and are cost effective for the state of Maryland. Large numbers of studies have proven time and time again people who consume a diet high in vegetables, fruits, legumes and whole grains have a lower risk of heart disease, type 2 diabetes, obesity, some cancers, and stroke<sup>9</sup>. Per correctional facilities' policy, to regularly receive a plant-based meal such as lacto/ovo vegetarian, or vegan, an incarcerated person must have a medical prescription from a facility doctor. If they are able to receive and have more plant-based options available on a daily basis, they are likely to develop healthier eating habits. Furthermore, an incarcerated person only receives periodic health evaluations every four years, which means that many health conditions and/or illnesses have progressed to irreversible levels before intervention or treatments can start. This lack of healthy food access in prisons has not only severe health and equity implications, but economic ones as well.

In addition to the benefits listed above, decreasing meat and dairy consumption is also great for the environment. Large public institutions including school systems, universities, hospitals,

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<sup>5</sup> Healthy US-Style Pattern Recommended Intake Amounts.

[https://fns-prod.azureedge.net/sites/default/files/usda\\_food\\_patterns/HealthyUS-StylePattern-RecommendedIntakeAmounts.pdf](https://fns-prod.azureedge.net/sites/default/files/usda_food_patterns/HealthyUS-StylePattern-RecommendedIntakeAmounts.pdf)

<sup>6</sup> Kyro, C., Tjonneland, A., Overvad, K., Olsen, A., & Landberg, R. (2018). Higher Whole-Grain Intake Is Associated with Lower Risk of Type 2 Diabetes among Middle-Aged Men and Women: The Danish Diet, Cancer, and Health Cohort. *J Nutr*, 148(9), 1434-1444. doi:10.1093/jn/nxy112

<sup>7</sup> Pan A, Sun Q, Bernstein AM, et al. Changes in red meat consumption and subsequent risk of type 2 diabetes mellitus: three cohorts of US men and women. *JAMA Intern Med* 2013;173:1328–35. doi:10.1001/jamainternmed.2013.6633

<sup>8</sup> Wexford Health Sources, Inc., Maryland Department of Public Safety and Corrections Monthly UM Status Report 2011 <http://dpscs.maryland.gov/publicinfo/publications/pdfs/IHS/Medical-Services-Attachment-QA-13.pdf>

<sup>9</sup>Bertoia ML, Mukamal KJ, Cahill LE, Hou T, Ludwig DS, Mozaffarian D, Willett WC, Hu FB, Rimm EB. Changes in intake of fruits and vegetables and weight change in United States men and women followed for up to 24 years: analysis from three prospective cohort studies. *PLoS medicine*. 2015 Sep 22;12(9):e1001878.

correctional facilities and senior care residences hold tremendous purchasing power and supply about \$83 billion worth of food each year throughout the country.<sup>10</sup> Many studies, including research from our center,<sup>11</sup> show that a small number of emissions-intensive foods, including meat and dairy, account for the majority of the emissions associated with our diets. Encouraging a shift away from emissions-intensive foods and toward diets that are higher in plant-based proteins, fruits, and vegetables is critical for planetary and human health. Providing greater access to plant-based options in Maryland correctional facilities would position Maryland as a leader in promoting sustainable food systems and health. In addition, S.B. 768 would offer incarcerated people healthier dietary options by ensuring that healthy plant-based meals are offered to all incarcerated people.

Meatless Monday is a simple, yet effective, program that has garnered the attention of food brands, celebrities, restaurants, and many in the foodservice industry (hospitals, universities, K-12 and corporate companies). It uses weekly prompts and the unique cultural associations of Monday as the beginning of the week to positively affect a range of healthy behaviors, including eating healthy, exercising, and quitting smoking. Studies show Monday is the best day to begin healthier habits. According to a survey by Data Decision Group, 57% of people intend to eat healthier on Mondays. With Meatless Monday and plant-based options available in correctional facilities, people who are incarcerated would have a scheduled plant-based meal to possibly reduce the amount of animal protein consumed and increase intake of vegetables and plant-based foods to levels that are at least on par with the USDA recommendations.

S.B. 768 will benefit the climate and the health of thousands of vulnerable Maryland citizens. Thank you for your consideration, and I respectfully urge a favorable report.

Sincerely,

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<sup>10</sup> Santo, R. E., & Fitch, C. M. (2019). From Foodservice Management Contracts to US Federal Legislation: Progress and Barriers in Values-Based Food Procurement Policies. In *Institutions as Conscious Food Consumers* (pp. 77-102). Academic Press.

<sup>11</sup> Kim, B. F., Santo, R. E., Scatterday, A. P., Fry, J. P., Synk, C. M., Cebron, S. R., ... & Nachman, K.E.. (2019). Country-specific dietary shifts to mitigate climate and water crises. *Global Environmental Change*, 101926.