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Title: Produce Prescribing Practices to Address Chronic Disease
Introduced by: Brent Oldham for the Medical Student Section
Original Authors: Noumi Chowdhury, Abigail Rentschler, and Phillip Yang
Referred to: Reference Committee D
House Action: **APPROVED**

Whereas, diabetes mellitus was the seventh leading cause of death in Michigan in 2017¹, and

Whereas, 32.3 percent of adults and 17.3 percent of youth aged 10-17 in Michigan were obese in 2017², and

Whereas, nearly 68.4 percent of Michigan’s overweight and obese adolescents in 2010 ate fruits less than 2 times per day³, and

Whereas, less than 24 percent of Michigan’s overweight and obese adults in 2010 reported having consumed vegetables at the recommended level of 3 or more times per day³, and

Whereas, fruit and vegetable consumption in childhood may influence dietary patterns and health outcomes in adulthood⁴, and

Whereas, fruit and vegetable consumption decreases the rates of chronic conditions such as childhood obesity, coronary heart disease, and type 2 diabetes in adults aged 25-79^{5,6,7,8}, and

Whereas, fruit and vegetable consumption decreases the risk of hypertension, congenital heart disease, stroke, and obesity^{8,9}, and

Whereas, access to a fruit and vegetable prescription program at a federally qualified health center in Detroit, Michigan led to decreased HbA1c concentrations in uncontrolled type 2 diabetic residents¹⁰, and

Whereas, low-income participants of a healthy food incentive program established in an urban neighborhood in upstate New York to increase access to fresh produce for low-income patients diagnosed with obesity, hypertension, and/or type 2 diabetes led to a significant decrease in BMI of 0.74 kg/m2¹¹, and

Whereas, a fruit and vegetable prescription program in Flint, Michigan involving a partnership between a farmers’ market and a pediatric clinic was perceived as effective in improving food security, food access, and child consumption of fresh fruits and vegetables¹², and

Whereas, the intervention of prescribed fruits and vegetables has a significant impact on increasing patients’ awareness of the connection between food and health¹³, and

Whereas, MSMS supports programs and policies that remove barriers to and incentivize the purchasing and consumption of fresh produce¹⁴, and

Whereas, the 2018 Farm Bill supports the establishment of produce prescription programs¹⁵; therefore be it

53 RESOLVED: That MSMS endorse fruit and vegetable prescribing practices among physicians as a
54 means to prevent and reduce rates of chronic health conditions in Michigan; and be it further

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56 RESOLVED: That MSMS educate Michigan physicians on the availability and establishment of fruit
57 and vegetable prescribing programs.

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60 WAYS AND MEANS COMMITTEE FISCAL NOTE: \$25,000 or more as this resolution directs MSMS to engage in
61 physician outreach/education.

Relevant MSMS Policy:

Fresh Produce Access and Intake in Food Deserts

MSMS supports access to fresh produce and food education programs within food desert communities (as defined by the US Department of Agriculture) including programs and policies that remove barriers to and incentivize mobile produce market operations and the purchasing and consumption of fresh produce. (Res86-17)

Relevant AMA Policy:

Food Environments and Challenges Accessing Healthy Food H-150.925

Our AMA encourages the U.S. Department of Agriculture and appropriate stakeholders to study the national prevalence, impact, and solutions to the problems of food mirages, food swamps, and food oases as food environments distinct from food deserts.

¹ Myers L. Michigan mortality statistics. Michigan Department of Health and Human Services (MDHHS).

<https://www.mdch.state.mi.us/pha/osr/deaths/causrankcnty.asp>. Updated December 7, 2018. Accessed January 26, 2019.

² Robert Wood Johnson Foundation. The state of obesity in Michigan. <https://stateofobesity.org/states/mi/>. Accessed January 19, 2019.

³ Ims G. State of Michigan. Nutrition, physical activity, and obesity profile. Overweight and Obesity. Lansing, MI: National Center for Chronic Disease Prevention and Health Promotion; 2012. <https://www.cdc.gov/obesity/stateprograms/fundedstates/pdf/michigan-state-profile.pdf>. Accessed January 19, 2019.

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⁴ Maynard M, Gunnell D, Ness AR, Abraham L, Bates CJ, Blane D. What influences diet in early old age? Prospective and cross-sectional analyses of the Boyd Orr cohort. *The European Public Health Association*. 2005;16(3):315-23. <https://doi-org.proxy2.cl.msu.edu/10.1093/eurpub/cki167>. Accessed January 19, 2019.

⁵ Wang PY, Fang JC, Gao ZH, Zhang C, Xie SY. Higher intake of fruits, vegetables or their fiber reduces the risk of type 2 diabetes: A meta-analysis. *Journal of Diabetes Investigation*. 2016;7(1):56-69. <https://www.ncbi.nlm.nih.gov.proxy2.cl.msu.edu/pmc/articles/PMC4718092/>. Accessed January 18, 2019.

⁶ Epstein LH, Gordy CC, Raynor HA, Beddome M, Kilanowski CK, Paluch R. Increasing fruit and vegetable intake and decreasing fat and sugar intake in families at risk for childhood obesity. *Obesity Research*. 2001;9(3):171-8. <https://onlinelibrary-wiley-com.proxy2.cl.msu.edu/doi/full/10.1038/oby.2001.18>. Accessed January 19, 2019.

⁷ Bazzano LA, Serdula MK, Liu S. Dietary intake of fruits and vegetables and risk of cardiovascular disease. *Current Atherosclerosis Reports*. 2003;5(6):492-9. <https://link.springer.com/article/10.1007/s11883-003-0040-z>. Accessed January 18, 2019.

⁸ Boeing H, Bechthold A, Bub A, Ellinger S, Haller D, Kroke A, Leschik-Bonnet E, MÃ¼ller MJ, Oberritter H, Schulze M, Stehle P. Critical review: vegetables and fruit in the prevention of chronic diseases. *European Journal of Nutrition*. 2012;51(6):637-63. <https://www.ncbi.nlm.nih.gov.proxy2.cl.msu.edu/pmc/articles/PMC3419346/>. Accessed January 18, 2019.

⁹ Bertoa 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;12(9):e1001878. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4578962/>. Accessed February 8, 2019.

¹⁰ Bryce R, Guajardo C, Ilarrazza D, Milgrom N, Pike D, Savoie K, Valbuena F, Miller-Matero LR. Participation in a farmers' market fruit and vegetable prescription program at a federally qualified health center improves hemoglobin A1C in low income uncontrolled diabetics. *Preventive Medicine Reports*. 2017;7:176-9. <https://www.ncbi.nlm.nih.gov/pubmed/16185735>. Accessed January 18, 2019.

¹¹ Cavanagh M, Jurkowski J, Bozlak C, Hastings J, Klein A. Veggie Rx: an outcome evaluation of a healthy food incentive programme. *Public Health Nutrition*. 2017;20(14):2636-41. <https://www.ncbi.nlm.nih.gov/pubmed/27539192>. Accessed January 19, 2019.

¹² Saxe-Custack A, Lofton HC, Hanna-Attisha M, Victor C, Reyes G, Ceja T, LaChance J. Caregiver perceptions of a fruit and vegetable prescription programme for low-income pediatric patients. *Public Health Nutrition*. 2018;1-0. <https://www.ncbi.nlm.nih.gov/pubmed/29667562>. Accessed January 18, 2019.

¹³ Kearney M, Bradbury C, Ellahi B, Hodgson M, Thurston M. Mainstreaming prevention: prescribing fruit and vegetables as a brief intervention in primary care. *Public Health*. 2005;119(11):981-6. <https://www.ncbi.nlm.nih.gov/pubmed/16185735>. Accessed January 19, 2019.

¹⁴ Michigan State Medical Society. Fresh produce access and intake in food deserts. <https://www.msms.org/msmspolicies>. Accessed January 19, 2019.

¹⁵ United States Senate Committee on Agriculture, Nutrition, & Forestry. 2018 Farm Bill title-by-title summaries.

[https://www.agriculture.senate.gov/imo/media/doc/Conference percent20Report percent20Summaries.pdf](https://www.agriculture.senate.gov/imo/media/doc/Conference%20Report%20percent20Summaries.pdf). Accessed January 19, 2019.