RESOLUTION 21-12

Title: **Support of Fluoridation Research in Michigan**

Introduced by: **Kathleen Lorenz and Kelly Krcmarik for the Medical Student Section**

Original Author: **Kathleen Lorenz**

Referred to: **Reference Committee D**

House Action: **No Action.**

Whereas, adding fluoride to public water sources started as a public health initiative before the efficient and streamlined research methods we have today, and since its implementation, clinicians and public health workers have come to regard use of artificially fluoridated water as necessary and beneficial[1], and

Whereas, currently, 64% of Americans, and 89.8% of the Michigan population automatically receive fluoride in their drinking water[2], but only 3% of European countries artificially fluoridate their public water supplies, and

Whereas, over 91% of the U.S. fluoridated water is treated with fluorosilicic acid and sodium silicofluoride, yet few studies have examined effects of chronic low doses of these products in humans; existing studies have largely used sodium fluoride as the model compound for demonstrating safety and efficacy[3], and

Whereas, there have been no randomized clinical trials conducted to examine benefits or risks of introducing chronic, low levels of fluoride to drinking water[4], and

Whereas, recent studies have called the presumed benefits of fluoride into question by showing no difference in the amount of tooth decay between countries with and without fluoridated water[5], and no increase in dental caries in communities that have discontinued fluoridation[6], and

Whereas, human and animal studies have suggested multiple negative health effects associated with varied levels of fluoride, including neurotoxicity and reduced IQ[7], disrupted endocrine function[8], and dental fluorosis[9], and

Whereas, it is difficult to monitor or regulate the fluoride consumption of the population because fluoride has been shown to accumulate in the body[10], and fluoride consumption varies in individuals due to exposure from other occupational and environmental sources, especially with increasing presence of fluoride in food products[11], and

Whereas, more research is needed to examine the effect of fluoride on people within at-risk groups, such as infants, the elderly, diabetics, those with renal failure, and those hypersensitive to fluoride[12]; therefore be it

RESOLVED: That our MSMS support rigorous research into the risks and benefits of public water fluoridation, particularly the use of silicofluorides; and be it further

RESOLVED: That our MSMS urge the Michigan Department of Community Health to conduct further research regarding the risks and benefits of fluoridation of Michigan public water supplies, with particular emphasis on vulnerable populations.

WAYS AND MEANS COMMITTEE FISCAL NOTE: NONE

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[5] Neurath C. (2005) Tooth decay trends for 12 year olds in nonfluoridated and fluoridated countries. Fluoride, 38(4) 324-325.

[6] Seppa L, Karkkainen S, Hausen H. (2000) Caries trends 1992-1998 in two low-fluoride Finnish towns formerly with and without fluoridation. Caries Research, 34(6):462-8.

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(b) Li J, Yao L, and Shao Q. (2004) Effects of high-fluoride on neonatal neurobehavioural development. Chinese Journal of Endemiology, 23:464-465.

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(d) Fomon S, Ekstrand J, and Ziegler E. (2000) Fluoride intake and prevalence of dental fluorosis: trends in fluoride intake with special attention to infants. Journal of Public Health Dentistry, 60(3): 131-9.

[10] (a) Luke J. (2001). Fluoride deposition in the aged human pineal gland. Caries Research, 35:125-128.

(b) Alhave E, Olkkonen H, Kauranen P, Kari T. (1980) The effect of drinking water fluoridation on the fluoride content, strength and mineral density of human bone. Acta Orthopaedica Scandanavica, 51(3):413-20.

[11] Burgstahler, Albert. 2005). Residual Fluoride in Food Fumigated with Sulfuryl Fluoride. Fluoride, 38(3): 175-177.

[12] U.S. Department of Health and Human Services. (2003) Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine.