The Honorable Wes Keller Chair, House Health & Social Services Committee Alaska Capitol, Room 427 Juneau, Alaska 99801

Dear Representative Keller,

As a board-certified dermatologist practicing in Anchorage, I am writing to share concerns with HCR 5 and point out several inaccuracies in the cited data regarding vitamin D. I strongly believe the resolved statements in HCR 5 endanger the health of Alaska's citizens by overemphasizing the role of vitamin D in disease prevention. As a physician, my utmost concern is quality patient care and patient safety. It is critical that patients, particularly those who are at-risk for vitamin D deficiency, seek a medical evaluation prior to beginning a vitamin D supplementation regime. As noted in a 2010 study published by the Institute of Medicine (IOM), determining appropriate vitamin D intake is complicated and requires medical judgment and supervision.

I would like to point out specific omissions (**noted in bold**) in the cited data in HCR 5, which erroneously make the case for substantial vitamin D supplementation:

- A 2007 article published in the American Journal of Clinical Nutrition reported that a study that compared cancer rates of a group *of post menopausal women* taking 1100 IU of vitamin D supplements in combination with calcium to cancer rates of a group taking a placebo found the risk of developing any cancer after four years was 60 percent lower in the group taking vitamin D supplements (*page 1*, *line 16 page 2*, *lines 1-4*);
- A 2007 article published in the American Journal of Preventative Medicine reported that a study found blood serum levels of vitamin D of at least 33 ng/ml *to be associated with a 50 percent lower risk of colorectal cancer incidence* compared with blood serum levels of vitamin D of less than 12 ng/ml (page 2, lines 9-12);
- A 2001 study published in the Lancet found that children in Finland who received 2,000 IU a day of vitamin D for the first year of life 78 percent reduced risk of type 1 diabetes *over the ensuing* 31 years compared to children receiving 400 IU a day of vitamin D (page 2, lines 23-26);
- The Centers for Disease Control and Prevention report that influenza vaccine effectiveness varies greatly based on the age and immunocompetence of the vaccine recipient and the degree of similarity between the viruses in the vaccine and those in circulation (page 3, line 22-23);
- A 2010 article published in the American Journal of Clinical Nutrition reported that a study of a group of Japanese school children who received 1200 IU of vitamin D had a decreased incidence of influenza compared to children receiving placebo. The reduction was more prominent in specific subgroups of children who had not been taking other vitamin D supplements and who started nursery school after age 3 (page 3, lines 27-30); and
- A 2010 article in The Lancet reported that the risk of multiple sclerosis increases with latitude and with low blood serum levels of vitamin D (page 4, lines 3-4).

The key information missing from the above whereas clauses misrepresent the scientific data regarding vitamin D health benefits by neglecting to include critical information on the populations involved in the studies and the intent of the research. While there are epidemiologic studies that show a statistical relationship between lower vitamin D levels and a higher incidence of some of these diseases, there are also multiple studies that have suggested an inverse association between vitamin D intake and cancer. There is some evidence that too much vitamin D may be harmful.

Vitamin D should be obtained through a healthy diet which includes drinking milk, eating foods which are good sources of vitamin D, and taking vitamin supplements. Intentional exposure to ultraviolet light from indoor tanning beds or the outdoor sun to produce optimum levels of vitamin D is not recommended, as ultraviolet (UV) radiation exposure is associated with increased risk of skin cancer and melanoma.

FURTHER RESOLVED that the Alaska State Legislature urges the Department of Health and Social Services to provide vitamin D supplements to the elderly to prevent bone loss, falls, fractures, and other age-related health problems;

Calcium and vitamin D are two essential nutrients in bone health. Vitamin D supplements taken orally (according to the Institute of Medicine recommended dosage) along with calcium can prevent bone loss, falls and fractures in the elderly.

FURTHER RESOLVED that the Alaska State Legislature urges the Department of Health and Social Services to investigate substituting vitamin D supplementation for influenza vaccination as a less costly method for preventing influenza;

Studies have not conclusively demonstrated than vitamin D supplements will prevent infectious diseases. Vigorous vaccination practices and healthy living conditions will lower the rates of preventable infectious diseases and also reduce morbidity and mortality. HCR 5 would endanger patients by replacing a proven method of disease prevention with a vitamin supplementation program which has not been tested to protect the general population from infectious disease, such as influenza.

FURTHER RESOLVED that the Alaska State Legislature urges the Department of Health and Social Services to provide vitamin D supplements to pregnant women and infants to prevent pregnancy complications, preterm births, type 1 diabetes, and rickets.

As a physician who treats patients on a daily basis with skin cancer, including melanoma, I have seen first-hand the impact of the use of indoor tanning beds and an increase in diagnoses particularly in young women. This is a devastating disease for patients and their families, and I would urge you to take precaution in promoting vitamin D intake in a way that would increase use of indoor tanning beds. It is critical that the public be appropriately educated about vitamin D and be encouraged to consult their physician before taking any vitamin supplements. Finally, Alaskans should be educated about the dangers of ultraviolet radiation (UV). As stated previously, UV radiation from the sun and indoor tanning beds is associated with a significant increased risk in the development of skin cancer and melanoma. The public should be educated about proper sun protection and urged to avoid UV exposure from indoor tanning devices.

Thank you for the opportunity to provide written comments on HCR 5. For further information, please contact me at (907) 646-8500.

Sincerely.

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