



COMMENT ON DAWSON-HUGHES ET AL.

Intratrial Exposure to Vitamin D and New-Onset Diabetes Among Adults With Prediabetes: A Secondary Analysis From the Vitamin D and Type 2 Diabetes (D2d) Study. *Diabetes Care* 2020;43:2916–2922

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This letter concerns the secondary analysis (1) of the Vitamin D and Type 2 Diabetes (D2d) study (2). The D2d study was a randomized controlled trial to determine whether vitamin D supplementation (4,000 IU per day) reduced the risk of diabetes among adults with prediabetes (2). In an intention-to-treat analysis, vitamin D nonsignificantly reduced new-onset diabetes by 12% compared with the placebo (2). A secondary analysis was subsequently performed that evaluated hazard ratios (HRs) of developing diabetes in the entire cohort stratified by different achieved levels of vitamin D (1). When adjusted for treatment assignment only (vitamin D or placebo [model 1]) and compared with the cohort of achieving the vitamin D sufficient range of 50–75 nmol/L, those in the highest two cohorts of achieved vitamin D levels of 100–124 nmol/L and ≥ 125 nmol/L had significantly decreased

HRs of 0.65 and 0.41, respectively (1). The results were progressively adjusted for the following potential confounders: baseline BMI, race (model 2); sex, age (model 3); baseline physical activity (model 4); and baseline statin use (model 5). All of these adjustments lowered the HRs of model 1 of the 100–124 nmol/L and ≥ 125 nmol/L cohorts by only 0.08 and 0.06, respectively, suggesting that these potential confounders did not play a large role.

Weight loss is the most important factor in delaying or preventing the development of diabetes in individuals with prediabetes (3). It seems possible that those participants who achieved the highest vitamin D levels in the D2d study were the most compliant with the supplementation, and therefore might also have been the most compliant with the lifestyle recommendations given to people with prediabetes. Could the authors

provide us with the effect of weight change as a potential confounder in their secondary analysis of the D2d study?

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

References

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