Abstract Importance: Chronic kidney disease (CKD) is a common complication of type 2 diabetes that can lead to end-stage kidney disease and is associated with high cardiovascular risk.There was no significant interaction between the 2 interventions.Design, setting, and participants: Randomized clinical trial with a 2 x 2 factorial design conducted among 1312 adults with type 2 diabetes recruited between November 2011 and March 2014 from all 50 US states as an ancillary study to the Vitamin D and Omega-3 Trial (VITAL), coordinated by a single center in Massachusetts.Interventions: Participants were randomized to receive vitamin D3 (2000 IU/d) and omega-3 fatty acids (eicosapentaenoic acid and docosahexaenoic acid; 1 g/d) (n = 370), vitamin D3 and placebo (n = 333), placebo and omega-3 fatty acids (n = 289), or 2 placebos (n = 320) for 5 years.Main outcomes and measures: The primary outcome was change in glomerular filtration rate estimated from serum creatinine and cystatin C (eGFR) from .baseline to year 5.Follow-up was completed in December 2017