

Table 3. Pooled Multivariable-Adjusted Relationships of Changes in Dietary Habits with Change in BMI among 120,977 U.S. Woman and Men in Three Prospective Cohorts with 12-20 Years Follow-up¹

Dietary Targets, serving/d	Multivariable-Adjusted Change in BMI (95% CI), ² kg/m ²					
	All participants	P value	Participants with BMI < 25 kg/m ²	P value	Participants with BMI ≥25 kg/m ²	P value
Fruits	-0.08 (-0.11, -0.05)	<0.001	-0.06 (-0.08, -0.04)	<0.001	-0.11 (-0.16, -0.06)	<0.001
Non-starch vegetables	-0.04 (-0.06, -0.02)	<0.001	-0.03 (-0.04, -0.01)	<0.001	-0.06 (-0.09, -0.02)	0.001
Whole grains ³	-0.06 (-0.08, -0.04)	<0.001	-0.05 (-0.07, -0.03)	<0.001	-0.08 (-0.10, -0.06)	<0.001
Processed meats	0.16 (0.11, 0.10)	<0.001	0.13 (0.07-0.19)	<0.001	0.16 (0.11, 0.21)	<0.001
Unprocessed red meats	0.17 (0.11, 0.23)	<0.001	0.13 (0.07, 0.20)	<0.001	0.23 (0.14, 0.32)	<0.001
Sugar sweetened beverages	0.14 (0.09, 0.19)	<0.001	0.09 (0.05, 0.14)	<0.001	0.23 (0.14, 0.32)	<0.001

Abbreviation: BMI, body mass index

1. Based on pooled results from 3 separate prospective cohort studies, including 50,422 women in the Nurses' Health Study (1986-2006), 47,898 women in the Nurses Health Study2 (1991-2003), and 22,557 men in the Health Professionals Follow-up Study (1986-2006) who were free of obesity or chronic diseases and with complete data on weight and lifestyle habits at baseline. Women who became pregnant during follow-up were excluded from the analysis. Independent relations of changes in dietary habits with BMI change were assessed in 4-year periods over 20 years in the Nurses' Health Study, 12 years in the Nurses Health Study2, and 20 years in the Health Professionals Follow-up Study, using linear regression with robust variance and accounting for within-person repeated measures.
2. BMI changes shown are for increased consumption; decreased consumption would be associated with the inverse BMI change. All results are adjusted for all of the dietary factors in the Table simultaneously as well as for age, baseline body mass index at the beginning of each 4-year period, sleep duration, and changes in physical activity, alcohol use, television watching, and smoking.
3. Findings were similar when either total dietary fiber or cereal fiber were evaluated in the analysis instead of whole grains.