



Source: *Journal of Nutrition*, October 2009

## Nutritional Epidemiology

# Whole-Grain Intake and Cereal Fiber Are Associated with Lower Abdominal Adiposity in Older Adults<sup>1-3</sup>,

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Foods high in dietary fiber may play an important role in regulating body weight. Few observational studies have examined the relationship between dietary fiber from different sources and body fat in older adults. Our objectives were to examine the associations among grain intake (whole and refined), dietary fiber and fiber sources, and body fat among older adults. We used data from 434 free-living adults (177 men and 257 women) aged between 60 and 80 y. Dietary intake was estimated from a 126-item semiquantitative FFQ. Percent body fat and percent trunk fat mass were measured by whole-body dual-energy X-ray absorptiometry. After adjustment for covariates, whole-grain intake was inversely associated with BMI [26.8 kg/m<sup>2</sup> (25.7–28.1) vs. 25.8 kg/m<sup>2</sup> (24.6–27.1), (95% CI); *P*-trend = 0.08], percent body fat [34.5% (32.7–36.3) vs. 32.1% (30.1–34.1); *P*-trend = 0.02], and percent trunk fat mass [43.0% (40.4–45.5) vs. 39.4% (36.7–42.1); *P*-trend = 0.02] in the lowest compared with the highest quartile category of whole-grain intake. Refined grain intake was not associated with any measure of body fat distribution. Cereal fiber was inversely associated with BMI [27.3 kg/m<sup>2</sup> (26.1–28.6) vs. 25.4 kg/m<sup>2</sup> (24.3–26.7); *P*-trend = 0.012], percent body fat [34.7% (32.8–36.6) vs. 31.5% (29.4–33.5); *P*-trend = 0.004], and percent trunk fat mass [42.8% (40.2–45.4) vs. 37.8% (35.0–40.6); *P*-trend = 0.001]. No significant association was observed between intakes of total fiber, vegetable or fruit fiber, and body composition measurements. Higher intakes of cereal fiber, particularly from whole-grain sources, are associated with lower total percent body fat and percent trunk fat mass in older adults.

