Milk, Body Mass and Composition

Cross-sectional and intervention data suggest that milk may have a beneficial role in body mass control and body composition in children

The majority of data suggests milk does not adversely affect body mass or body composition in children. In some cases, milk even appears to offer a protective effect against unfavourable changes in body mass and body composition, whereas the opposite appears to be true of fruit-juice and sugar-sweetened beverages (SSB).

From 27 available studies, 11 support an association between milk and body composition. 15 show no effect, and only 1 showed milk increased body weight.

5 of these studies were robust intervention studies. From these, 2 showed increased lean mass and beneficial changes in body composition, whereas 3 showed a neutral effect of milk on body mass and body composition.

Key Scientific Papers

Lu et al. (2016) Eu J Clin Nutr. 70: 414-423. Dror (2014) Obes Rev. 15: 516-527. Dror & Allen (2014). Nutr Rev. 72: 68-81. Noet et al. (2011) J Nutr. 141: 2035-2041 Cool Mille



Milk lowers body mass, BMI, percentage body fat and waist circumference. Fruit-juice and SSB raises body mass, BMI, percentage body fat and waist circumference.

*The present infographic is based on evidence from twenty-seven available studies in 5-11-year-old children. While additional research is needed to better understand the relationship between milk consumption and body mass maintenance in children, the current research continues to show that milk provides important nutrients to the diets of children. Although there is a host of literature concerning milk consumption on body mass and composition, there remains scope for further controlled intervention studies.

