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## Australian children who drink milk (plain or flavored) have higher milk and micronutrient intakes but similar body mass index to those who do not drink milk

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### ABSTRACT

In Australia, 60% of children (9–16 years) are not meeting the estimated average requirement (EAR) for calcium, and milk is an important dietary source of calcium. We hypothesized that milk drinking (plain or flavored) would be associated with higher milk and nutrient intake among Australian children. Nutrient intakes reported via 24-hour recalls and anthropometric measurements collected from the 2007 Australian National Children's Nutrition and Physical Activity Survey were analyzed. Children and adolescents (cross sectional,  $n = 4487$ , 2–16 years) were classified into 4 categories according to milk intake: (i) exclusively plain milk drinkers, (ii) flavored (flavored and plain) milk drinkers, (iii) nondrinkers of milk (no plain or flavored milk as beverage), and (iv) nonconsumers of milk (total milk intake is 0 g). Total daily milk, energy and nutrient intake, body mass index, and waist circumference were compared between categories of milk drinking by analysis of variance models. Results of this study show that milk drinkers (plain or flavored) had a significantly higher total milk intake than did nondrinkers of milk. Milk drinking was associated with higher intakes of calcium, phosphorus, magnesium, potassium, and iodine in comparison with nondrinkers of milk and nonconsumers of milk ( $P < .05$ ). Milk drinkers (exclusively plain or flavored) were more likely to meet the EAR for calcium than nondrinkers and nonconsumers of milk, whereas flavored milk drinkers were more likely to meet the EAR for calcium than exclusively plain milk drinkers. In particular, among children aged 9 to 16 years, flavored milk drinkers were 1.7 times more likely to meet the EAR for calcium than plain milk drinkers ( $P < .001$ ). Although flavored milk drinkers had higher total sugar and energy intakes than did exclusively plain milk drinkers and nonconsumers of milk ( $P < .05$ ), no between-group differences were observed in body mass index, waist circumference, or physical activity level. In conclusion, drinking milk was associated with higher total milk and micronutrient intake, and drinking both plain and flavored milk may help children meet their calcium requirements without negatively impacting body weight measures.

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Abbreviations: EAR, estimated average requirement; BMI, body mass index; PAL, physical activity level.

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