



Smart Snacking for Kids: *what does the research tell us?*

Do children need to snack?

Healthy, growing children require two to three nutritious snacks a day in addition to three balanced meals, in order to get all the energy, vitamins and minerals they need for optimal growth and development.¹

Snacking – how much is too much?

Providing children with nutritionally balanced snack food choices is crucial to ensure they avoid consuming energy dense, nutrient-poor snack options that can contribute to excessive kilojoule consumption. The National Children's Nutrition Survey revealed that the overall food intake of some groups of children did not provide enough calcium, vitamin A, iodine, selenium and iron, while often providing a reasonable or high level of kilojoules.²

Information collected during the Children's National Nutrition Survey also indicated that snack foods such as crisps and corn chips, fruit, biscuits and sandwiches were the most commonly consumed foods by school children during morning break on school days.³ About half of New Zealand school children bought some of the food they consumed at school from a canteen or tuckshop, with older children more likely than younger children to do so.²

The same nationwide survey showed that most New Zealand children are a healthy body weight, but about 20 percent are overweight and a further 10 percent obese.² Frequent snacking on high energy, nutrient poor foods could contribute to overweight in children.

Healthy snacking is essential to every child's diet, and it's a great way of topping up their intakes of important vitamins and minerals, as well as energy.

What is the ideal nutrient composition of snack foods for children?

Portion size

The portion size of snack foods for children is of crucial importance. Evidence suggest that the more food children are served, the more they will eat, particularly when it comes to single serve, energy-dense food items such as cakes and pastries.^{4,5,6} Portion and kilojoule controlled options are therefore recommended when it comes to making nutritionally balanced snack food choices.

The Food and Nutrition Guidelines for healthy children aged 2-12 years highlights the importance of nutritious mid-morning and mid-afternoon snacks during childhood, but suggests these should be carefully planned to complement meals, be “tooth-friendly” and provide good nutrition.¹ The Food and Beverage Classification System for Years 1-13 also recommends that snack foods be nutritious and low in fat, salt and sugar, while providing guidance on whether snack foods can be considered everyday, sometimes or occasional foods, depending on their levels of energy, fat, saturated fat and salt.⁷



Nutrient density

Snack choices high in dietary fibre and protein are likely to support a lower glycaemic load and satiety,⁸ whilst the addition of key nutrients including calcium is linked to lower body weights and also serves to support bone health.⁹ Ideally snack choices should offer some or all of these nutritional benefits.

Low glycaemic load

Currently there are no formal recommendations on what the ideal macronutrient profile and kilojoule load of children’s snacks should be. Considering recent recommendations that suggest low glycaemic load diets support weight management for children¹⁰ and addressing the fact that up to one in three New Zealand children are overweight or obese,² it’s imperative that snack food choices support a low-glycaemic load dietary model. In the case of snack foods, choosing dairy and wholegrain options, in addition to controlled quantities of carbohydrates relative to other macronutrients supports a low-glycaemic load dietary plan.

Appealing for children

Research indicates that food consumption in children is influenced by a number of factors including peer and social influence.^{11,12} As data indicates that the consumption of multiple snack foods at school is common,¹² it is important that nutritionally superior snack choices are also appealing to children both in terms of their appearance and taste to ensure consumption is supported within peer dominated environments.

Summary of evidence:

Smart Snack Index

1. A good source of nutrients other than energy
2. Has a low Glycaemic Index (GI)
3. Contains dietary fibre, protein or calcium
4. Is portion controlled
5. Is appealing to kids

Smart Snacks for Kids

- A wholegrain cracker and slice of reduced fat cheese
- Small, wholegrain snack bar
- 100g reduced fat yoghurt
- Glass of low fat milk
- Piece of fruit
- Packet of popcorn
- Corn cakes with spread
- Cheese stick
- Wholegrain crackers and hummus
- Streets Paddle Pop Moo



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