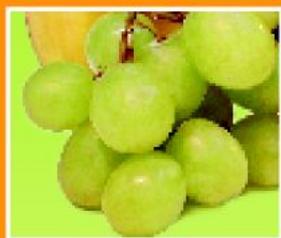


Nutritional Guidelines on Snacks for Primary School Students



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1. Background

1.1 Healthy eating is essential for the growth of school-aged children and prevention of diet-related health problems including obesity, heart disease, cancer and diabetes. However, for a number of reasons, healthy eating is not commonly practised among local students¹. The Department of Health has recorded a rising trend of obesity among primary school students, from 16.4% in 1997/98 to 18.7% in 2004/05². That is to say, students are facing a health crisis and almost one in five schoolchildren in Hong Kong is obese.

1.2 Schools teach and shape children's lifelong habits, including those relating to eating and food choices. This is particularly true as children spend on average up to half of their daily waking hours in the school environment. Unfortunately, snacks sold in school tuck shops are often unhealthy¹. This could hinder children's ability in obtaining adequate amount of nutrients for growth and development, and adversely affect health. Equally important is the role of parents in educating children about healthy food choices and practising healthy eating so that children learn from and model on.

1.3 With the aim to avert the childhood obesity problem, the Department of Health is working with the Education and Manpower Bureau, the Food and Environmental Hygiene Department, education sector, professional bodies and parent groups to initiate a healthy eating movement in primary schools from the 2006/07 school year. The movement aims to cultivate healthy eating practices, to facilitate the provision of healthy lunch and snacks at schools and to

strengthen nutritional education so that children may develop in a healthy way and learn effectively.

2. Healthy Eating at School

2.1 As a pioneering move to promote healthy eating at school, the Department of Health has launched the Nutritional Guidelines on School Lunch for Primary School Students in April 2006 to improve the nutritional quality of a school lunch. The guidelines serve as a reference for school administrators to define food requirements and a core component in business contracts signed between schools and lunch caterers.

2.2 In addition to school meals, snacks consumed at school including those sold at school tuck shops or by vending machines can have strong influence on eating behaviours, and hence the health of school-aged children.

2.3 'Snack' is defined as a small amount of food taken between main meals. It is fair to say that healthy snacking can be a part of a child's dietary pattern and contribute positively to growth and development. Due to their small stomach capacity and high activity level, some children may not obtain adequate energy and nutrients for compensating their daily expenditure from the three main meals of the day. Nutritious mid-meals or snacks, hence, can help supplement energy and nutrient requirements. Instead of prohibiting snacking, healthy and wise choices should be learned and exercised in respect of the quality and quantity of the snacks consumed. Aptly taken, healthy snacks

should not spoil the appetite of children for the next main meal.

2.4 In the drive to promote healthy snacks at school, it is critical to educate children about healthy food choices as well as provide a healthy eating environment which makes healthy choices easier. Overseas experiences have shown that through the concerted effort of school administrators, teachers, parents and tuck shop operators, children's consumption of healthy snacks³⁻⁷ could be increased.

2.5 The Department of Health is issuing this *Nutritional Guidelines on Snacks for Primary School Students* to guide principals, teachers, parents and tuck shop operators to make instrumental decisions to provide healthier food choices for children at school.

3. About the Guidelines

3.1 Making reference to overseas experiences⁸⁻¹⁷ and local situations, the Guidelines are developed in consultation with various government departments, professional bodies, the school sector and parent representatives. The Guidelines focus on the **nutritional value** of food and beverage items to be taken by students in the school setting either brought from home, from the streets, sold in school tuck shops or by vending machines. They provide practical **guidance** for tuck shop operators, parents and school personnel in determining the types of food and beverage items to be allowed and promoted in the school environment for the benefit of children's health.

3.2 These Guidelines will be reviewed and revised in the light of experience gained and feedback collected from users.

4. Purpose of the Guidelines

4.1 By referring to the Guidelines, parents and school administrators will have a better understanding of healthful snack choices that promote children's growth and development. In line with the recommendations made by the World Health Organization, the objectives of the Guidelines are -

- To achieve energy balance
- To increase consumption of fruit and vegetables
- To limit energy intake from fat
- To limit intake of free sugar
- To limit salt consumption

5. Users of the Guidelines

5.1 There are three target user groups of these Guidelines. They are:

- Tuck shop/ vending machine operators
- School administrators, principals and teachers
- Parents

6. Guidelines on Choosing Snacks

6.1 Having a tuck shop is not an essential feature of schools. For **schools that operate a tuck shop and/or vending machine**, this section serves as a reference for school administrators and tuck shop operators to scrutinize and decide on the food and beverage items to be sold to students. For **schools not operating a tuck shop or vending machine**, this section provides more ideas on snack choices for principals, teachers and parents who have the greatest influence over food consumption patterns of small children. Parents are urged to refer to the following snack categorization when buying and preparing food for children to bring to schools as snacks, if necessary.

6.2 This section provides a framework for categorizing food and beverages in terms of their health effect. Food and beverages are classified into three groups according to their nutritional value. The nutritional value of the food items will determine the extent to which they should be encouraged or discouraged as a snack. The grouping consists of -

- Snacks to Choose More
- Snacks to Choose in Moderation
- Snacks to Choose Less.

6.3 It is recognized that changes in dietary behaviour and environment take time. As the ultimate goal, ‘Snacks to Choose More’ should eventually replace ‘Snacks to Choose in Moderation’ and ‘Snacks to Choose Less’ in the school environment.

Snacks to Choose More

6.4 Nutrients such as carbohydrate, protein, dietary fibre, calcium and other minerals or vitamins are vital to students' health and growth. Food and beverages rich in one or more of the nutrients while low in fat, added sugar and salt should be encouraged as the major choices in tuck shops and vending machines. Items belonging to this group can supply optimal amounts of energy and nutrients, prevent over-consumption of fat, sugar and salt, or can supplement certain nutrients (e.g. fibre and calcium) that are frequently lacking from a child's diet. For instance, food with a high fibre content can prevent overeating by giving children a sense of fullness. It also reduces obesity and cardiovascular risks. Food rich in calcium is essential for growth and fortification of bones and teeth.

Table 1. Healthy snacks to be encouraged for sale from school tuck shops.

Bread and cereals low in fat, sugar or salt content
<ul style="list-style-type: none">● Fresh bread or toast e.g. white bread, whole wheat bread (including whole wheat bread with nuts), wholemeal bread and raisin bread● Bread stick● Unsweetened breakfast cereals and cereal bars● High-fibre or plain biscuits and crackers● Baked or boiled potato and sweet potato● Boiled corn or corn kernels (served without butter or margarine)

Fresh vegetables

- Fresh vegetables (e.g. cucumbers, carrots, cherry tomatoes)
- Green salad (with minimal amount of low-fat salad dressing added or substitute salad dressing with low fat plain yoghurt)

Fresh or dried fruit without added sugar

- Fresh fruit
- Dried fruit without added sugar (e.g. apricots, prunes and raisins)
- Baked dried fruit chips e.g. apple chips
- Fruit platter or salad (with minimal amount of salad dressing)
- Frozen fruit (e.g. bananas, apples, pears and pineapples)

Low-fat/skimmed dairy products

- Low-fat or skimmed milk
- Low-fat yoghurt e.g. plain yoghurt or fruit yoghurt without added sugar
- Low-fat cheese e.g. cheddar cheese

Lean meat, and its alternatives

- Lean fresh meat e.g. beef, chicken breast, turkey slices (for sandwiches)
- Canned tuna soaked in spring water without added salt (for sandwiches)
- Boiled egg
- Bean curd dessert without added sugar
- Unsalted nuts e.g. almonds, peanuts and cashew nuts
- Unsalted beans e.g. peas

Beverages low in added sugar

- Water
- Freshly blended fruit juice without sugar added, 100% natural fruit juice
- Unsweetened soy milk
- Unsweetened oat drinks

* Tuck shop operators are encouraged to serve the above food items to school children. They should serve them in the smallest package size possible in order not to spoil the appetite of children for the next main meal.

Snacks to Choose in Moderation

6.5 Tuck shop operators should limit the supply and promotion of these food and beverage items which, despite the presence of one or more major nutrients (e.g. calcium and dietary fibre), contain moderate amounts of fat, added sugar or salt. To limit their consumption, these food items should not be abundantly supplied to or conveniently accessible by school children.

6.6 Supply of snack choices in this category can be checked by limiting the number of provision days in a week or capping the amount of such food items to be sold. Where snacks in this category are offered for sale, tuck shop operators should clearly distinguish ‘Snacks to Choose More’ from ‘Snacks to Choose in Moderation’, for instance by posting clear signage at the point of purchase. Moreover, customers should be advised to consume these snacks in moderation and small package sizes should only be used.

6.7 Furthermore, school administrators and tuck shop operators owe a duty to parents and students by not allowing activities or actions that promote ‘Snacks to Choose in Moderation’ in the school environment. For food items that should be chosen in moderation or less, the following promotional activities should be prohibited at school-

- Promotional activities organized by food companies
- Sponsorship of school materials achieving an indirect advertising intention
- Verbal encouragement of consumption of certain food items
- Placing of food items/promotional messages/brand names and logos at prominent locations
- Selling the food items in vending machines
- Using the food items as awards or prizes.

Table 2. Snacks that should be limited for sale at school.

Bread and cereals with added fat, sugar or salt
<ul style="list-style-type: none"> ● Refined breakfast cereals with added sugars or processed vegetable oil (e.g. cocoa bubbles and frosted corn flakes) ● Plain sponge cakes
Processed and preserved vegetables
<ul style="list-style-type: none"> ● Pickled or preserved vegetables, salted seaweeds
Fruit with added sugar
<ul style="list-style-type: none"> ● Dried fruit with added sugar or canned fruit in syrup (even if served without syrup)
Whole fat dairy products
<ul style="list-style-type: none"> ● Whole fat milk, yoghurt and cheese

Fat, processed or preserved meat and alternatives
<ul style="list-style-type: none">● Chicken wings● Processed meat e.g. ham and sausages● Pan-fried or steamed dumplings● Fish meat ‘siu mai’, fish ball● Salted roasted nuts and beans● Bean curd dessert
Beverages with added sugar but contain nutritional value
<ul style="list-style-type: none">● Sweetened fruit juices● Sweetened soy milk

Snacks to Choose Less

6.8 The following items are strongly discouraged in the school setting as they are low in nutritional value or high in fat, added sugar and salt. Frequent consumption of these food items may increase the risk of obesity, heart disease, diabetes and high blood pressure. These items should not be brought to school, or made available for sale from school tuck shops or vending machines.

Table 3. Snacks that should not be sold at school.

Energy dense food
<ul style="list-style-type: none">● Biscuits coated with chocolate or other sandwich biscuits● Cream-filled buns and cakes● Chocolate muffins, pastry, cookies

Food high in fat

- All deep-fried food items (e.g. deep-fried chicken wings, fish fillets, French fries, sweet potatoes)
- Crisps and chips
- Beef or pork jerky
- Salad with whole fat salad dressings

Food high in sugar

- Canned fruit in syrup (if served with syrup)
- Confectionery (e.g. candies, chocolate)
- Ice cream, ice blocks

Food high in salt

- Instant noodles
- Sauces e.g. curry sauce, black pepper sauce, soy sauce

Beverages high in sugar and/or with minimal nutritional value

- All sugary soft drinks or cartoned beverages
- Cordials
- Black tea
- Coffee, milk tea
- 3-in-1 instant drinks

7. Guidance for Target Users

7.1 To enable school children to adopt good dietary practices at school, tuck shop operators, parents and school personnel are encouraged to work closely together to build a supportive school environment. This section of the Guidelines provides practical tips for stakeholders concerned to improve the school environment and help children cultivate good eating habits.

7.2 As part of their key roles in supporting healthy eating patterns among children, the stakeholders are encouraged to monitor the quality of snacks consumed by students by making use of the checklist in the Appendix. The checklist serves as a tangible tool for the school to monitor its progress in building and sustaining a healthy eating environment in the school.

Guidance for Tuck Shop Operators

7.3 To support healthy eating environment in schools, tuck shop operators should:

- Always refer to these Guidelines and evaluate food quality and quantity before stocking up food items.
- Select healthy snacks and avoid sale of processed food with high fat, sugar or salt contents.
- Select food items that are convenient to carry, easy to store and more durable, such as individually packaged biscuit sticks, soda crackers, cartoned UHT (ultra-high temperature) milk and paper-packed dried

fruit, e.g. raisins, pitted prunes and apricots. Coincidentally, they often come in smaller serving sizes which are more suitable for students.

- Read food labels (nutritional content, ingredients, shelf-life and storage methods) carefully before placing your order. This helps you to source healthier snacks to put on the sales counter.
- Pay attention to variation in students' preferences. Make frequent changes in the variety of healthy snacks sold at the tuck shop and try to appeal to students with diversified choices.
- Only provide snacks at recess to avoid students skipping lunch and ensure the portion of snack provided is not large enough to replace a normal main meal.
- Offer snacks that come in small, individual servings so that the appetite of students for next meal will not be affected.
- Follow the *Nutritional Guidelines on School Lunch for Primary School Students* issued by the Department of Health if the portion size of a snack is comparable to a lunch or the snack is intended to replace a main meal.
- Price 'Snacks to Choose More' lower than 'Snacks to Choose in Moderation' or use temporary discounts to motivate students to try new healthy products.
- Refer to relevant food handling guidelines¹⁸ when preparing, storing or selling self-made food.
- Regularly communicate with school personnel, parents (Parents and Teachers Associations (PTAs)) and students to work together for the

sake of children's health.

- Provide consumers, namely schools, parents and students, with updated information on the nutritional value (in the least, the categorization specified in section 6) of all food and beverage items on sale in the school setting.
- Try deploying marketing means and promotional activities to attract children to consume healthy snacks.
- Help and encourage students to choose healthy food choices by placing healthy choices more prominently and /or putting up messages to promote 'Snacks to Choose More' / discourage 'Snacks to Choose in Moderation' / or using different containers/stickers to distinguish 'Snacks to Choose More' from 'Snacks to Choose in Moderation'.
- Organize sampling sessions for students to try healthful choices.
- Be accountable for the nutritional content of food items sold and seek professional advice and consult with the school community whenever in doubt.

Guidance for Parents

7.4 To help children eat healthily at schools during snack time, parents should:

- Be a good role model and enjoy 'Snacks to Choose More' with children at home.
- Be patient and keep practising healthy eating with children at home.
- Provide children with a bottle of drinkable water and healthy snacks to

consume at schools when packing snack box for them.

- Educate children about the right portion (usually small portion which cannot replace a main meal) and the right time for snacks (at least a time lag of 1.5-2 hours in between two intakes because frequent snacking may spoil the appetite of children for the next main meal and lead to tooth decay).
- Encourage children to choose snacks from a variety of food groups, such as 2–3 pieces of plain biscuits with a glass of low-fat milk, a piece of fruit or a small tub of low-fat yoghurt.
- Help your child set a regular time for snacks throughout the day to prevent constant nibbling.
- Encourage children to be more physically active during recess to shorten snacking time and avoid overeating.
- Cooperate with tuck shop operators and school administration who follow the Guidelines and reinforce children's positive eating behaviours.
- Avoid using food as reward.

Guidance for School Personnel

7.5 To establish a healthy eating environment at school, principals and teachers should direct their efforts to the following:

- Work with parents and, where appropriate, consult nutrition experts to develop and promulgate a healthy eating policy for the school.
- Involve parents in determining healthy eating policy and practices.

- Require tuck shop operators to follow the Guidelines and offer healthful choices.
- Inform and educate parents of the importance of healthy snacks.
- Build nutrition into school curricula to educate students about healthy choices.
- Advertise ‘Snacks to Choose More’ during school assembly and activities.
- Recruit students as ‘Health Ambassadors’ for promoting healthy snacks at school.
- Avoid using food as reward.
- Communicate with parents to ensure students are provided with accurate knowledge and a supportive home environment to cultivate healthy eating habits.
- Prohibit promotional activities in schools for food items that are less healthy, namely ‘Snacks to Choose in Moderation’ and ‘Snacks to Choose Less’ (see section 6.7).
- Consider mounting promotional campaigns to raise children’s awareness and receptiveness of healthy food items e.g. cereal week, soy week, fresh fruit week, freshly squashed fruit juice week, and give recognition to healthy snacking behaviour among students.

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- Union of Government Primary School Headmasters and Headmistresses
- Union of Heads of Aided Primary Schools of Hong Kong

For any enquiries or suggestions on the Guidelines, please email us at health_cheuweb@dh.gov.hk. For more health information, please call the Health Education Hotline of the Department of Health 2833 0111 or visit the website of the Central Health Education Unit at <http://www.cheu.gov.hk> .

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10. Appendix

Healthy Snacks Monitoring Checklist

This checklist helps you to monitor the quality of snacks provided from the tuck shop or vending machines and the progress of setting up a healthy eating environment at your school. The more 'YES' you answer in Part 2 and 3 of this checklist, the better your school performs in promoting healthy snacks.

1. Please **TICK** the appropriate box:

Students can buy snacks at school from: The school tuck shop Vending machines Both

Please **TICK** the appropriate box and consider any **ACTIONS** required to improve current situation if you answer 'No'.

2. Accessibility of Healthy Snack	Yes	No	Don't know	Actions to be taken (Please refer to Section 7.3 of the Guidelines)
a. Are healthy snacks ONLY available at recess to avoid students skipping lunch?				
b. Are 'Snacks to Choose More' available from your school tuck shop or vending machine? (i.e. snacks low in fat, salt and sugar but high in fibre)				
c. Is the tuck shop or vending machine NOT selling any 'Snacks to Choose Less'?				
d. Are 'Snacks to Choose in Moderation' only provided on a limited number of days a week or limited in supply?				
e. Is there any clear signage posted at the point of purchase to remind customers to consume 'Snacks to Choose in Moderation' in moderation?				
f. Are the prices of 'Snacks to Choose More' generally lower than those of 'Snacks to Choose in Moderation' ?				
g. Are all snacks packed in small serving sizes (i.e. not large enough to affect students' appetite for next main meal or replace a main meal)?				

Healthy Snacks Monitoring Checklist (Continued)

3. School/Tuck Shop Activity	Yes	No	Don't know	Actions to be taken (Please refer to Section 7.3 and 7.5 of the Guidelines)
a. Are parents and students involved in setting healthy eating policies for your school?				
b. Are all promotional activities or events for 'Snacks to Choose Less' and 'Snacks to Choose in Moderation' prohibited at your school (please see Section 6.7 of the Guidelines)?				
c. Is there any recognition given to students for choosing 'Snacks to Choose More'?				
d. Does the tuck shop distinguish 'Snacks to Choose More' from 'Snacks to Choose in Moderation' to help students opt for healthier choices?				
e. Are there any promotional campaigns to raise students' awareness and receptiveness of healthy snacks e.g. cereal week, soy week, fresh fruit week, freshly squashed fruit juice week etc.?				
f. Have your school built nutrition into school curricula to educate students about healthy food choices?				