

Baseline Assessment of Promoting Healthy Eating in Primary Schools

Supplementary Report on Snacks



小學小食附加報告

小學推行健康飲食基線研究



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1. Background

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.

The Department of Health (DH) has recorded a rising trend of obesity among primary school students, from 16.4% in 1997/98 to 18.7% in 2004/05. That is to say, almost one in five schoolchildren is obese. In this light, initiatives which aim at preventing childhood obesity should be implemented.

Promoting healthy eating habit among school children is one of the new initiatives in the 2005 - 2006 Policy Address. To prepare for the territory-wide “EatSmart@school.hk” campaign organized by DH, a Baseline Assessment of Promoting Healthy Eating in Primary Schools has been conducted in the first quarter of 2006. The results of this study would be used as a reference in developing relevant health promotion resources and for subsequent evaluation.

The assessment consisted of three separate sets of self-administered questionnaires which were prepared for the Primary 4 (P4) and Primary 5 (P5) students, their parents, and the school principals/ representatives. Apart from these three sets of questionnaires, information on school lunch menus, tuck shops and vending machines were also collected from the school principals/ representatives as appendices:

- Appendix 1: the one-week lunch menu of school lunch
- Appendix 2: the standardized recipe on the most popular daily lunch menu selection
- Appendix 3: the list of food and beverage available in school tuck shops**
- Appendix 4: the list of food and beverage available in school vending machines**

This supplementary report would describe the availability of snacks in schools and so only results obtained from appendices 3 and 4 were presented.

2. Snacks Available in School Tuck Shops

2.1 Study Design

Forty-four schools were recruited in the study. A self-administered questionnaire, which contained a data collection form on food and beverages available in the school tuck shops, was distributed to the school representatives in collecting information on the school eating environment.

“Nutritional Guidelines on Snacks for Primary School Students” (hereafter referred as “the Snacks Guidelines”) produced by DH in 2006^a were used to assess the healthiness of food and beverage items sold in the school tuck shops. Assessment was conducted by inferring from the product names and classified them into three snack groups specified in the Snack Guidelines (Table 1).

Table 1. Classification used to assess the healthiness of snacks

A. Snacks to choose more	B. Snacks to choose in moderation	C. Snacks to choose less
A1. Bread and cereals low in fat, sugar or salt content A2. Fresh vegetables A3. Fresh or dried fruit without added sugar A4. Low-fat/skimmed dairy products A5. Lean meat, and its alternatives A6. Beverages low in added sugar	B1. Bread and cereals with added fat, sugar or salt B2. Processed and preserved vegetables B3. Fruit with added sugar B4. Whole fat dairy products B5. Fat, processed or preserved meat and alternatives B6. Beverages with added sugar but contain nutritional value	C1. Energy dense food C2. Food high in fat C3. Food high in sugar C4. Food high in salt C5. Beverages high in sugar and/or with minimal nutritional value

^a Department of Health (2006). “Nutritional Guidelines on Snacks for Primary School Students”. Retrieved from http://www.cheu.gov.hk/files/professional/snacks_20060630_Eng.pdf

2.2 Results

Among the 44 participating schools, 50% of them replied that they had school tuck shops. Nineteen and 20 schools had returned their food and beverage list offered by the tuck shops respectively. After excluding three food and five beverage items which had incomplete information, a total of 113 food and 72 beverage items were available for analysis. The lists were given in Annex 1 and 2.

2.2.1 Food and beverages available in school tuck shops

Half (50.8%) and 35.7% of the food and beverage items belonged to the “snacks to choose less” and “snacks to choose in moderation” groups respectively, reflecting that healthy snacks were scarce in school tuck shops (Table 2).

Table 2. Distribution of food and beverages by snack groups specified in the Snacks Guidelines

Classification	Number	Percentage
A. Snacks to choose more	25	13.5%
B. Snacks to choose in moderation	66	35.7%
C. Snacks to choose less	94	50.8%
Total	185	100%

2.2.2 Food available in school tuck shops

2.2.2.1 Food being sold in individual schools

Among the 19 schools which had returned their tuck shop food list, the total number of food items sold in each school ranged from six to 12. On average, each school sold two, four and five items of “snacks to choose more”, “snacks to choose in moderation” and “snacks to choose less” respectively. However, seven schools (36.8%) did not provide any food item in the “snacks to choose more” category, and about seven tenth of snacks sold in these schools belonged to “snacks to choose less”.

On average, each school sold 17.3% of “snacks to choose more”, 40.1% of “snacks to choose in moderation” and 42.6% of “snacks to choose less” in the tuck shop. The distribution of the three groups of snacks available in each school was presented in Table 3.

Table 3. Distribution of food items being sold in school tuck shops by school and classification of snacks

School code	Snacks to choose more	% within school	Snacks to choose in moderation	% within school	Snacks to choose less	% within school	Total
School 36	7	58.3%	5	41.7%	-	-	12
School 23	5	41.7%	6	50.0%	1	8.3%	12
School 17	3	25.0%	8	66.7%	1	8.3%	12
School 21	3	25.0%	2	16.7%	7	58.3%	12
School 8	2	16.7%	8	66.7%	2	16.7%	12
School 20	2	16.7%	2	16.7%	8	66.7%	12
School 22	1	8.3%	8	66.7%	3	25.0%	12
School 19	-	-	5	41.7%	7	58.3%	12
School 27	-	-	3	25.0%	9	75.0%	12
School 16	-	-	1	8.3%	11	91.7%	12
School 35	-	-	1	8.3%	11	91.7%	12
School 24	3	27.3%	6	54.5%	2	18.2%	11
School 39	2	20.0%	-	-	8	80.0%	10
School 29	-	-	5	50.0%	5	50.0%	10
School 5	1	11.1%	5	55.6%	3	33.3%	9
School 18	4	50.0%	4	50.0%	-	-	8
School 4	2	25.0%	6	75.0%	-	-	8
School 28	-	-	4	50.0%	4	50.0%	8
School 12	-	-	2	33.3%	4	66.7%	6
Total	35	17.3%	81	40.1%	86	42.6%	202
Mean	1.8 (SD 2.0)		4.3 (SD 2.5)		4.5 (SD 3.7)		

2.2.2.2 Distribution of food items in the three snack groups

Among all food items that were analyzed, more than half of them belonged to “snacks to choose less”, most of them were food with high fat or sugar content. The remaining 14.2% and 31% of the food items were classified as “snacks to choose more” and “snacks to choose in moderation” respectively. Table 4 showed the overall distribution of the three groups of snacks. Their breakdowns were given in Table 5 to Table 7. It was noted that 17.1% of the food items in the “snacks to choose in moderation” and 4.8% of those in “snacks to choose less” group had more than one reason why they should not be taken in excess.

Table 4. Distribution of food items being sold in school tuck shops by the three snack groups

Classification	Number	Percentage
A. Snacks to choose more	16	14.2%
B. Snacks to choose in moderation	35	31.0%
C. Snacks to choose less	62	54.9%
Total	113	100%

Table 5. Breakdown of food items being sold in school tuck shops that were classified as “snacks to choose more”

Classification	Number	Percentage
A1. Bread and cereals low in fat, sugar or salt content	8	50.0%
A2. Fresh vegetables	1	6.3%
A3. Fresh or dried fruit without added sugar	2	12.5%
A4. Low-fat/skimmed dairy products	1	6.3%
A5. Lean meat, and its alternatives	1	6.3%
Belonging to both A1 & A5	3	18.8%
Total	16	100%

Table 6. Breakdown of food items being sold in school tuck shops that were classified as “snacks to choose in moderation”

Classification	Number	Percentage
B1. Bread and cereals with added fat, sugar or salt	9	25.7
B2. Processed and preserved vegetables	2	5.7
B4. Whole fat dairy products	3	8.6
B5. Fat, processed or preserved meat and alternatives	15	42.9
Belonging to both B1 & B5	6	17.1
Total	35	100%

Table 7. Breakdown of food items being sold in school tuck shops that were classified as “snacks to choose less”

Classification	Number	Percentage
C1. Energy dense food	8	12.9%
C2. Food high in fat	28	45.2%
C3. Food high in sugar	19	30.6%
C4. Food high in salt	4	6.5%
Belonging to both C1 & C3	1	1.6%
Belonging to both C2 & C4	2	3.2%
Total	62	100%

2.2.2.3 *The most popular food*

Schools were asked to provide the three most popular food items sold in their tuck shops over the past one week preceding the survey. A total of four food types were received. One item belonged to “snacks to choose in moderation” and three items belonged to “snacks to choose less” (Table 8).

Table 8. The top three favourable food types being sold in school tuck shops and the number of schools selling the items

Rank	Food	Classification	Number of time appeared in the top three list	Number of schools selling the item
1 st	Potato chips (various flavours)	Snacks to choose less	6	13
2 nd	Sweets (various types)	Snacks to choose less	5	21
2 nd	Fish meat ‘siu mai’	Snacks to choose in moderation	5	6
3 rd	Snack noodles (various brands)	Snacks to choose less	4	6

2.2.3 **Beverages available in school tuck shops**

2.2.3.1 *Beverages being sold in individual school*

Among the 20 schools which had returned their beverage list, the total number of beverages sold in each school ranged from two to 16. On average, each school sold two, five and four beverages in “snacks to choose more”, “snacks to choose in moderation” and “snacks to choose less” categories respectively. Except one school, all of the other schools had at least one beverage item belonging to “snacks to choose more” for sale. Those items mostly were distilled water, high-calcium low-fat milk or fresh fruit juice. Similar to the findings for food items sold in school tuck shops, less than 15% of beverages sold in each school belonged to “snacks to choose more”. The distribution of the three groups of beverages available in each school was presented in Table 9.

Table 9. Distribution of beverages being sold in school tuck shops by school and classification of snacks

School code	Snacks to choose more	% within school	Snacks to choose in moderation	% within school	Snacks to choose less	% within school	Total
School 26	1	6.3%	9	56.3%	6	37.5%	16
School 36	4	33.3%	5	41.7%	3	25.0%	12
School 24	2	16.7%	5	41.7%	5	41.7%	12
School 21	2	16.7%	4	33.3%	6	50.0%	12
School 35	2	16.7%	3	25.0%	7	58.3%	12
School 16	1	8.3%	6	50.0%	5	41.7%	12
School 29	1	8.3%	6	50.0%	5	41.7%	12
School 17	2	18.2%	4	36.4%	5	45.5%	11
School 19	1	9.1%	8	72.7%	2	18.2%	11
School 27	1	9.1%	6	54.5%	4	36.4%	11
School 32	1	10.0%	2	20.0%	7	70.0%	10
School 20	2	22.2%	5	55.6%	2	22.2%	9
School 23	1	11.1%	6	66.7%	2	22.2%	9
School 39	1	11.1%	5	55.6%	3	33.3%	9
School 12	1	12.5%	6	75.0%	1	12.5%	8
School 4	2	28.6%	4	57.1%	1	14.3%	7
School 8	1	14.3%	1	14.3%	5	71.4%	7
School 22	2	33.3%	3	50.0%	1	16.7%	6
School 18	-	-	3	60.0%	2	40.0%	5
School 28	1	50.0%	1	50.0%	-	-	2
Total	29	15.0%	92	47.7%	72	37.3%	193
Mean	1.5 (SD 0.8)		4.6 (SD 2.1)		3.6 (SD 2.2)		

2.2.3.2 Distribution of beverages in the three snack groups

Among all beverages that were analyzed, over 85% belonged to “snacks to choose in moderation” and “snacks to choose less”. They were mostly sugar-added drinks. Table 10 showed the distribution of the three groups of beverages. Their breakdowns were given in Table 11 to Table 13.

Table 10. Distribution of beverages being sold in school tuck shops by the three snack groups

Classification	Number	Percentage
A. Snacks to choose more	9	12.5%
B. Snacks to choose in moderation	31	43.1%
C. Snacks to choose less	32	44.4%
Total	72	100%

Table 11. Breakdown of beverages being sold in school tuck shops that were classified as “snacks to choose more”

Classification	Number	Percentage
A4. Low-fat/skimmed dairy products	2	22.2%
A6. Beverages low in added sugar	7	77.8%
Total	9	100%

Table 12. Breakdown of beverages being sold in school tuck shops that were classified as “snacks to choose in moderation”

Classification	Number	Percentage
B6. Beverages with added sugar but contain nutritional value	31	100.0%
Total	31	100%

Table 13. Breakdown of beverages being sold in school tuck shops that were classified as “snacks to choose less”

Classification	Number	Percentage
C3. Food high in sugar	1	3.1%
C5. Beverages high in sugar and/or with minimal nutritional value	31	96.9%
Total	32	100%

2.2.3.3 *The most popular beverages*

Schools were asked to provide the three most popular beverages sold in their tuck shops over the past one week preceding the survey. Three types of drinks were mentioned, none of them belonged to “snacks to choose more” (Table 14).

Table 14. The top three favourable beverages being sold in school tuck shops and the number of schools selling the items

Rank	Beverage	Grouping	Number of time appeared in the top three list	Number of schools selling the item
1 st	Chocolate milk	Snacks to choose in moderation	11	16
2 nd	Soy milk	Snacks to choose in moderation	10	21
3 rd	Lemon tea	Snacks to choose less	9	19

3. Snacks Available in School Vending Machines

3.1 Study Design

A self-administered questionnaire, which included a data collection form on food and beverages available in the vending machines, was distributed to the school representative in collecting information on the school eating environment.

The Snacks Guidelines were used to assess the healthiness of food and beverage items sold in the vending machines. Assessment was conducted by inferring from the product names. Three groups stated in the Snack Guidelines were applied (Table 1).

3.2 Results

Among the 44 participating schools, 54% of them (24 schools) replied that they had vending machine(s). Twenty-two schools returned their beverage list provided by vending machines. According to the returned lists, no food but only 80 beverage items were found. A full list of the beverages available in school vending machines were given in Annex 3.

3.2.1 Beverages available in school vending machines

3.2.1.1 Beverages being sold in individual school

Among the 22 schools which had returned their vending machine beverage list, the total number of beverages sold in each school varied from three to 18. On average, the number of beverages which were classified as “snacks to choose more”, “snacks to choose in moderation” and “snacks to choose less” being sold in each school were one, three and five respectively. When compared to beverages sold in school tuck shops (15%), even less beverages sold in vending machine (only 8.9%) of each school belonged to “snacks to choose more”. It was noted that nine schools (40.9%) did not provide healthy beverages for sale (i.e. no beverage item was classified as “snack to choose more”). The distribution of the three groups of beverages available in each school was presented in Table 15.

Table 15. Distribution of beverages being sold in school vending machines by school and classification of snacks

School code	Snacks to choose more	% within school	Snacks to choose in moderation	% within school	Snacks to choose less	% within school	Total
School 43	1	5.6%	4	22.2%	13	72.2%	18
School 13	1	8.3%	2	16.7%	9	75.0%	12
School 16	1	8.3%	2	16.7%	9	75.0%	12
School 44	1	9.1%	6	54.5%	4	36.4%	11
School 2	1	10.0%	4	40.0%	5	50.0%	10
School 14	-	-	6	60.0%	4	40.0%	10
School 7	-	-	5	50.0%	5	50.0%	10
School 12	1	11.1%	1	11.1%	7	77.8%	9
School 35	-	-	2	22.2%	7	77.8%	9
School 24	1	12.5%	4	50.0%	3	37.5%	8
School 22	-	-	6	75.0%	2	25.0%	8
School 4	-	-	5	62.5%	3	37.5%	8
School 23	-	-	5	62.5%	3	37.5%	8
School 20	-	-	4	50.0%	4	50.0%	8
School 18	-	-	2	25.0%	6	75.0%	8
School 34	5	71.4%	-	-	2	28.6%	7
School 39	1	14.3%	2	28.6%	4	57.1%	7
School 30	-	-	2	28.6%	5	71.4%	7
School 5	1	16.7%	4	66.7%	1	16.7%	6
School 17	1	16.7%	2	33.3%	3	50.0%	6
School 32	1	20.0%	-	-	4	80.0%	5
School 25	1	33.3%	2	66.7%	-	-	3
Total	17	8.9%	70	36.8%	103	54.2%	190
Mean	0.8 (SD 1.1)		3.2 (SD 1.9)		4.7 (SD 3.0)		

3.2.1.2 Distribution of beverages in the three snack groups

Among all beverages that were analyzed, only 7.5% of them belonged to “snacks to choose more”. Similar with beverages sold in tuck shops, most “not recommended” beverages were sugar-added drinks. Table 16 illustrated the distribution of the three groups of beverages. The breakdowns of each group were shown in Table 17 to Table 19.

Table 16. Distribution of beverages being sold in school vending machines by the three snack groups

Classification	Number	Percentage
A. Snacks to choose more	6	7.5%
B. Snacks to choose in moderation	25	31.3%
C. Snacks to choose less	49	61.3%
<i>Total</i>	80	100%

Table 17. Breakdown of beverages being sold in school vending machines that were classified as “snacks to choose more”

Classification	Number	Percentage
A4. Low-fat / skimmed dairy products	1	16.7%
A6. Beverages low in added sugar	5	83.3%
<i>Total</i>	6	100%

Table 18. Breakdown of beverages being sold in school vending machines that were classified as “snacks to choose in moderation”

Classification	Number	Percentage
B6. Beverages with added sugar and with a higher nutritional value	25	100%
Total	25	100%

Table 19. Breakdown of beverages being sold in school vending machines that were classified as “snacks to choose less”

Classification	Number	Percentage
C5. Beverages high in sugar and/or with minimal nutritional value	49	100%
Total	49	100%

3.2.1.3 *The most popular beverages*

Schools were asked to provide the three most popular beverages sold in their vending machines over the past one week preceding the survey (Table 20). No item belonging to “snacks to choose more” was found among the most popular beverages.

Table 20. The top three favourable beverages sold in school vending machines and the number of schools selling the items

Rank	Beverage	Grouping	Number of time appeared in the top three list	Number of schools selling the item
1 st	Lemon tea	Snacks to choose in less	11	27
2 nd	Soy milk	Snacks to choose in moderation	9	20
3 rd	Coke (various flavours)	Snacks to choose in less	5	13

4. Conclusion

Among the 44 participating schools, half of them reported that they had tuck shops where lots of sweetened drinks and unhealthy snacks were sold. Among 113 food and 72 beverage items collected for analysis, about 85% of them were not encouraged according to the “Nutritional Guidelines on Snacks for Primary School Students” produced by the Department of Health. There was not much difference in terms of the proportion of healthy choice between food and beverages found in school tuck shops.

The analysis also found that many food and beverage items in “snacks to choose less” group being sold in school tuck shops had apparently high fat or high sugar content and/or with minimal nutritional value. Some snacks had even more than one reason for not eating in excess. A number of them, such as potato chips, sweets, ‘siu-mai’, snack noodles and sugar-added drinks, were very popular snacks and drinks.

About half of the participating schools (24 schools) reported that they had vending machines with only drinks were sold. Similar to snacks available in tuck shops, only 7.5% of the beverages sold in the school vending machines belonged to “snacks to choose more” such as low-fat or skimmed dairy products and drinks low in added sugar. Nearly two third of the remaining beverages were “snacks to choose less”, they were sugar-added drinks with some or minimal nutritional value. Thus, it is not surprising that no beverages belonged to the “snacks to choose more” group but drinks with added sugar with either some or minimal nutritional value was found among the most popular selection of students.

Apart from educating students, school administrators, parents and tuck shop operators all have a role to provide for more recommended snacks in school tuck shops. Healthy beverages should also be made more available in the school vending machines.

5. Limitations

1. The schools might have selected some items for reporting. No school visit or other validity check was conducted to check against the actual number of snacks sold as reported.
2. The classification of snacks was based on the product name only. In case of doubt, advice from dietician and further information from internet search of local superstores' websites was sought for products with inadequate descriptions. Thus, some products might be misclassified even though effort was made to ensure the accuracy.
3. Initially, product price was asked to be provided along the form. Collected information showed that there was missing information on the food portion or beverages volume (i.e. product quantity) which caused comparison on product price meaningless. Thus, no analysis on price was conducted.

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7. F.D.B.W.A. CHOW CHIN YAU SCHOOL (P.M.)
8. G.C.C.I.T.K.D. CHEONG WONG WAI PRIMARY SCHOOL
9. GIGAMIND ENGLISH PRIMARY SCHOOL
10. GOOD COUNSEL CATHOLIC PRIMARY SCHOOL
11. HHCKLA BUDDHIST CHAN SHI WAN PRIMARY SCHOOL
12. HHCKLA BUDDHIST WISDOM PRIMARY SCHOOL
13. HK ENG CLANSMAN ASSOCIATION WU SI CHONG MEMORIAL SCHOOL (P.M.)
14. HKFEW WONG CHO BAU SCHOOL
15. HONG KONG RED SWASTIKA SOCIETY TUEN MUN PRIMARY SCHOOL
16. JORDAN ROAD GOVERNMENT PRIMARY SCHOOL
17. KIANGSU & CHEKIANG PRIMARY SCHOOL
18. KOWLOON TRUE LIGHT MIDDLE SCHOOL PRIMARY SECTION
19. KWONG YUET TONG EXCEL FOUNDATION PRIMARY SCHOOL
20. LINGNAN PRIMARY SCHOOL
21. LOK SIN TONG PRIMARY SCHOOL
22. NG WAH CATHOLIC PRIMARY SCHOOL
23. PO KOK PRIMARY SCHOOL
24. S.K.H. FUNG KEI MILLENNIUM PRIMARY SCHOOL
25. SALESIAN YIP HON MILLENNIUM PRIMARY SCHOOL
26. SHA TIN METHODIST PRIMARY SCHOOL
27. SHANGHAI ALUMNI PRIMARY SCHOOL
28. SHUN TAK FRATERNAL ASSOCIATION WU MIEN TUEN PRIMARY SCHOOL
29. SINGAPORE INTERNATIONAL SCHOOL (HONG KONG)
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32. ST. STEPHEN'S CHURCH PRIMARY SCHOOL
33. STEWARDS POOI YIN PRIMARY SCHOOL PM
34. T.W.G.Hs. WONG SEE SUM PRIMARY SCHOOL
35. TACK CHING PRIMARY SCHOOL
36. TAI PO OLD MARKET PUBLIC SCHOOL
37. THE TRUE LIGHT MIDDLE SCHOOL OF HONG KONG PRIMARY SECTION
38. TSEUNG KWAN O GOVERNMENT PRIMARY SCHOOL
39. TSUEN WAN GOVERNMENT PRIMARY SCHOOL
40. TUNG WAH GROUP OF HOSPITALS LEE CHI HUNG MEMORIAL PRIMARY SCHOOL (CHAIWAN)
41. TWS ST. BONAVENTURE CATHOLIC PRIMARY SCHOOL
42. YAUMATI KAIFONG ASSOCIATION SCHOOL
43. YING YIN CATHOLIC PRIMARY SCHOOL
44. YUEN LONG PUBLIC MIDDLE SCHOOL ALUMNI ASSOCIATION PRIMARY SCHOOL

Annex 1: Details of the 113 food items available in the school tuck shops

(Information was provided by schools mostly in Chinese)

Snacks to choose more:

Food items	Number of school selling such item	%	Food items	Number of school selling such item	%
(1) 雞蛋	6	17.1%	(9) 班戟 (無糖)	2	5.7%
(2) 三文治	4	11.4%	(10) 雜菜湯	1	2.9%
(3) 吞拿魚三文治	4	11.4%	(11) 粥	1	2.9%
(4) 餅	3	8.6%	(12) 湯麵	1	2.9%
(5) 香蕉	3	8.6%	(13) 雞蛋三文治	1	2.9%
(6) 蘋果	2	5.7%	(14) 麥包吞拿魚治	1	2.9%
(7) 薯茸	2	5.7%	(15) 麵包	1	2.9%
(8) Edo 天然麥餅	2	5.7%	(16) 乳酪 (低脂)	1	2.9%

Snacks to choose in moderation:

Food items	Number of school selling such item	%	Food items	Number of school selling such item	%
(1) 香腸	7	9.5%	(17) 肉醬意粉	2	2.7%
(2) 乾海苔	7	9.5%	(18) 魚仔餅	2	2.7%
(3) 燒賣 (魚蓉)	6	8.1%	(19) 旺旺仙貝	2	2.7%
(4) 火腿三文治	5	6.8%	(20) 牛丸	1	1.4%
(5) 芝士火腿三文治	5	6.8%	(21) 鷄翼 (非炸)	1	1.4%
(6) 熱狗	5	6.8%	(22) 小豬柳	1	1.4%
(7) 菜肉包	4	5.4%	(23) 蘿蔔糕	1	1.4%
(8) 珍珠鷄	3	4.1%	(24) 炒麵	1	1.4%
(9) 腿蛋三文治	3	4.1%	(25) 炒飯	1	1.4%
(10) 魚蛋	2	2.7%	(26) 奶油三文治	1	1.4%
(11) 牛肉 (點心)	2	2.7%	(27) 餐蛋三文治	1	1.4%
(12) 鷄脾 (非炸)	2	2.7%	(28) 芝士豬柳漢堡包	1	1.4%
(13) 鹵水蛋	2	2.7%	(29) 叉燒包	1	1.4%
(14) 火腿	2	2.7%	(30) 奶油多士	1	1.4%
(15) 大洋腸	2	2.7%	(31) 奶醬多士	1	1.4%
(16) 牛油粟米杯	2	2.7%	(32) 旺旺小小鷄樂	1	1.4%

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Snacks to choose in moderation (cont'):

Food items	Number of school selling such item	%	Food items	Number of school selling such item	%
(33) 海綿蛋糕	1	1.4%	(35) EDO 紫菜	1	1.4%
(34) 提子蛋糕	1	1.4%			

Snacks to choose less:

Food items	Number of school selling such item	%	Food items	Number of school selling such item	%	Food items	Number of school selling such item	%
(1) 薯片	5	5.8%	(22) 能得利橡皮軟糖	1	1.2%	(43) 蕃茄片(薯片)	1	1.2%
(2) 媽咪麵	4	4.7%	(23) 小飛俠橡皮糖	1	1.2%	(44) 金雞片	1	1.2%
(3) 泡泡樂糖	3	3.5%	(24) Pizza 橡皮糖	1	1.2%	(45) 粟米條	1	1.2%
(4) 什菜沙律棒	3	3.5%	(25) 123 果汁糖	1	1.2%	(46) 粟一燒	1	1.2%
(5) 芝士圈	3	3.5%	(26) 迷你彩虹糖	1	1.2%	(47) 卡樂 B 蝦條	1	1.2%
(6) 熱浪薯片	3	3.5%	(27) Edo 軟糖	1	1.2%	(48) 辣味卷	1	1.2%
(7) 可樂糖	2	2.3%	(28) 小萬樂珠	1	1.2%	(49) 咖哩卷	1	1.2%
(8) 薯餅	2	2.3%	(29) 軟心糖	1	1.2%	(50) 芝士卷	1	1.2%
(9) Oreo	2	2.3%	(30) 腰豆糖	1	1.2%	(51) 三支卷	1	1.2%
(10) 百力支	2	2.3%	(31) 飛龍糖	1	1.2%	(52) 恐龍谷	1	1.2%
(11) 珍珍薯圈	2	2.3%	(32) 啲嗒糖	1	1.2%	(53) 小王子麵	1	1.2%
(12) 蝦條	2	2.3%	(33) 糖	1	1.2%	(54) 好勁道麵	1	1.2%
(13) 蝦餅	2	2.3%	(34) 薯圈	1	1.2%	(55) 蛋糕	1	1.2%
(14) 朱古力	2	2.3%	(35) 沙力百力支	1	1.2%	(56) 皇冠朱古力批	1	1.2%
(15) 魷魚絲	2	2.3%	(36) 洋葱圈	1	1.2%	(57) 朱古力批	1	1.2%
(16) 豬扒包	1	1.2%	(37) 珍珍牛仔片	1	1.2%	(58) 樂天朱古力	1	1.2%
(17) 奶黃包	1	1.2%	(38) 珍珍薯片	1	1.2%	(59) 機智豆	1	1.2%
(18) 爆炸糖	1	1.2%	(39) 恐龍薯片	1	1.2%	(60) 迷你 Ki Ki	1	1.2%
(19) 棒糖	1	1.2%	(40) 紫菜薯片	1	1.2%	(61) 超人魚絲	1	1.2%
(20) 旺旺 QQ 糖	1	1.2%	(41) 卡樂 B BBQ	1	1.2%	(62) 金梅片	1	1.2%
(21) 橡皮軟糖	1	1.2%	(42) 蕃茄薯片	1	1.2%			

Annex 2: Details of the 72 beverage items available in the school tuck shops

(Information was provided by schools mostly in Chinese)

Snacks to choose more:

Beverages	Number of school selling such item	%	Beverages	Number of school selling such item	%
(1) 蒸餾水	13	44.8%	(6) 維他高鈣低脂奶	1	3.4%
(2) 鮮橙汁	5	17.2%	(7) 維他蒸餾水	2	6.9%
(3) 燕麥鈣思寶	2	6.9%	(8) 屈臣氏蒸餾水	1	3.4%
(4) 牛奶 (低脂)	2	6.9%	(9) 鮮果汁	1	3.4%
(5) 高鈣奶	2	6.9%			

Snacks to choose in moderation:

Beverages	Number of school selling such item	%	Beverages	Number of school selling such item	%
(1) 朱古力奶	14	15.4%	(17) 維他蜜瓜豆奶	1	1.1%
(2) 維他奶	12	13.2%	(18) 黑荳奶	1	1.1%
(3) 麥精維他奶	10	11.0%	(19) 蜜瓜奶	1	1.1%
(4) 蘋果汁	8	8.8%	(20) 士多啤梨奶	1	1.1%
(5) 芒果汁	6	6.6%	(21) 豆漿 (加糖)	1	1.1%
(6) 提子汁	6	6.6%	(22) 山水高鈣麥香豆漿 (加糖)	1	1.1%
(7) 鈣思寶	4	4.4%	(23) 柚子汁	1	1.1%
(8) 益力多	3	3.3%	(24) 石榴汁	1	1.1%
(9) 乳酸	2	2.2%	(25) 樽裝芒果汁	1	1.1%
(10) 維他朱古力奶	2	2.2%	(26) 荔枝汁	1	1.1%
(11) 荳奶	2	2.2%	(27) 蜜桃汁	1	1.1%
(12) 麥精荳奶	2	2.2%	(28) 菓汁先生	1	1.1%
(13) 寶礦力	2	2.2%	(29) 新奇士橙汁	1	1.1%
(14) 蜜瓜豆奶	1	1.1%	(30) 美綠	1	1.1%
(15) Q 版維他奶	1	1.1%	(31) 乳酪味	1	1.1%
(16) 罐裝維他奶	1	1.1%			

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Snacks to choose less:

Beverages	Number of school selling such item	%	Beverages	Number of school selling such item	%
(1) 檸檬茶	10	13.9%	(17) Superley 檸檬茶	1	1.4%
(2) 菊花茶	9	12.5%	(18) 蜂蜜綠茶	1	1.4%
(3) 蘋果綠茶	5	6.9%	(19) 芒果冰紅茶	1	1.4%
(4) 竹蔗茅根 (添加糖)	5	6.9%	(20) 西柚茶	1	1.4%
(5) 茶字典	5	6.9%	(21) 花旗參茶 (添加糖)	1	1.4%
(6) 可樂	4	5.6%	(22) 蜜桃茶	1	1.4%
(7) 綠茶	3	4.2%	(23) 維他菓汁	1	1.4%
(8) 汽水	3	4.2%	(24) 雀巢茶罐裝系列	1	1.4%
(9) 忌廉	2	2.8%	(25) 雀巢茶支裝系列	1	1.4%
(10) 維他檸檬茶	2	2.8%	(26) 維他茶字典	1	1.4%
(11) 雀巢檸檬茶	2	2.8%	(27) 維他紙包飲品	1	1.4%
(12) 檸檬綠茶	2	2.8%	(28) 啱啱啫喱	1	1.4%
(13) 茶字典檸檬茶	1	1.4%	(29) 芬達橙汁(汽水)	1	1.4%
(14) Light 檸檬茶	1	1.4%	(30) 雪碧	1	1.4%
(15) 罐裝檸檬茶	1	1.4%	(31) 減肥可樂	1	1.4%
(16) 茶餐廳檸茶	1	1.4%	(32) 太古汽水	1	1.4%

Annex 3: Details of the 80 beverage items available in school vending machines

(Information was provided by schools mostly in Chinese)

Snacks to choose more:

Beverages	Number of school selling such item	%	Beverages	Number of school selling such item	%
(1) 飛雪礦泉水	5	41.7%	(4) 屈臣氏蒸餾水	1	8.3%
(2) 蒸餾水	3	25.0%	(5) 維他蒸餾水	1	8.3%
(3) 燕麥鈣思寶	1	8.3%	(6) 牛奶 (低脂)	1	8.3%

Snacks to choose in moderation:

Beverages	Number of school selling such item	%	Beverages	Number of school selling such item	%
(1) 維他奶	13	17.3%	(14) 蜜瓜奶	1	1.3%
(2) 麥精維他奶	11	14.7%	(15) 罐裝維他奶	1	1.3%
(3) 芒果汁	7	9.3%	(16) 蔗汁	1	1.3%
(4) 朱古力奶	6	8.0%	(17) 清心棧竹蔗茅根	1	1.3%
(5) 提子汁	6	8.0%	(18) Grape fruit	1	1.3%
(6) 蘋果汁	5	6.7%	(19) 白提子汁	1	1.3%
(7) 朱古力維他奶	3	4.0%	(20) CoCo Grape	1	1.3%
(8) 橙汁	3	4.0%	(21) OJ 提子汁	1	1.3%
(9) 菠蘿橙汁	2	2.7%	(22) OJ 橙汁	1	1.3%
(10) 鈣思寶	2	2.7%	(23) 菓然系西柚汁	1	1.3%
(11) 罐裝麥精維他奶	2	2.7%	(24) 芬達乳酸	1	1.3%
(12) 蜜瓜豆奶	2	2.7%	(25) 芬達白提子乳酸	1	1.3%
(13) 維他蜜瓜豆奶	1	1.3%			

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Snacks to choose less:

Beverages	Number of school selling such item	%	Beverages	Number of school selling such item	%
(1) 檸檬茶	12	11.7%	(26) 維他蜜桃茶	1	1.0%
(2) 蘋果綠茶	6	5.8%	(27) 碧泉蜜桃茶	1	1.0%
(3) 可樂	6	5.8%	(28) 黃桃水蜜桃茶	1	1.0%
(4) 菊花茶	5	4.9%	(29) 柚子茶	1	1.0%
(5) 維他檸檬茶	4	3.9%	(30) 菓然系冰震西柚茶	1	1.0%
(6) 雪碧	4	3.9%	(31) 熱情果茶	1	1.0%
(7) 雪梨茶	3	2.9%	(32) 奇異果茶	1	1.0%
(8) 蜜桃茶	3	2.9%	(33) 陽光白提子茶	1	1.0%
(9) 維他 Superley 檸檬茶	3	2.9%	(34) 綠茶 (加糖)	1	1.0%
(10) 維他菊花茶	3	2.9%	(35) 維他蘋果綠茶	1	1.0%
(11) 檸檬可樂	3	2.9%	(36) 陽光果汁 tea	1	1.0%
(12) 健怡可樂	3	2.9%	(37) 清心棧柑桔檸檬	1	1.0%
(13) 忌廉	3	2.9%	(38) 新奇士檸檬	1	1.0%
(14) Cream Soda	3	2.9%	(39) 芬達橙汁汽水	1	1.0%
(15) 汽水	2	1.9%	(40) 芬達提子汽水	1	1.0%
(16) 橙汁汽水	2	1.9%	(41) 玉泉忌廉	1	1.0%
(17) 罐裝檸檬茶	2	1.9%	(42) 提子乳酸味汽水	1	1.0%
(18) 雀巢檸檬茶	2	1.9%	(43) 芬達桃汽水	1	1.0%
(19) 冰震檸檬茶	2	1.9%	(44) Lemon-Lime	1	1.0%
(20) 冰震紅西柚茶	2	1.9%	(45) Grape Soda	1	1.0%
(21) 維他芒果汁	2	1.9%	(46) Soda lemon	1	1.0%
(22) 芒果茶	1	1.0%	(47) Ice 雪碧	1	1.0%
(23) 新奇士檸檬茶	1	1.0%	(48) Qoo	1	1.0%
(24) 碧泉檸檬茶	1	1.0%	(49) 雀巢咖啡	1	1.0%
(25) 冰震桃茶	1	1.0%			