

A Survey of Young Child Feeding in Hong Kong (2016)



衛生署

Department of Health

**Family Health Service
Department of Health**

2018

© All rights reserved



TABLE OF CONTENTS

| Item | Page No. |
|--|-----------------|
| Executive Summary..... | i |
| 1. Introduction | 1 |
| 2. Survey Methodology | 3 |
| 3. Main Findings..... | 8 |
| 4. Discussion | 47 |
| 5. Conclusions and Recommendations..... | 54 |
| 6. Reference..... | 56 |
| Appendix 1 – Questionnaire..... | 59 |
| Appendix 2 – Picture Guide | 100 |



Executive Summary

Background

A diet consisting of variety of nutrient dense foods is not only essential to meet the nutritional requirement of young children, but it is also necessary for them to develop their feeding skills as well as establishing a healthy eating pattern.

In 2011, Family Health Service (FHS) of the Department of Health developed and disseminated a parent education resource with the title “Healthy eating for 6-24 month old children”. The resource promotes parents to feed children responsively and in a developmentally appropriate way. It recommends young children consuming a diet of a variety of foods, an adequate intake of fruit and vegetable, and an appropriate amount of milk intake, 360 to 480 ml a day. Children are recommended to stop consuming milk in feeding bottles by 18-month of age. In addition to distribution of health education materials, relevant key messages are also disseminated via various channels including individual advice provided to parents attending Maternal and Child Health Centre, information on website of FHS, and health talks.

To provide an update on local situation of food consumption pattern of children and parental feeding practice and to evaluate the effectiveness of the health promotion actions mentioned above, FHS commissioned a private research agency to conduct a survey on young children and their parents attending maternal and child health centres.

Survey Objectives

The objectives of the Survey are to study the following aspects of children aged 1 to 4 years:

- i) their pattern of milk consumption, including type of milk and milk product consumed, quantity of milk consumed, milk drinking behaviours, parental attitude on choice of milk and formula milk and use of feeding bottle;
- ii) their consumption of fruits, vegetables, and use of nutritional supplements;
- iii) the feeding practices of the parents;
- iv) the source of information of child feeding obtained by parents; and
- v) the breastfeeding experiences of the mothers of 1-year-old children.

Methods

The survey was conducted at 29 Maternal and Child Health Centres (MCHCs) in Hong Kong from 22 July to 29 September 2016.



The target respondents of the survey were parents with children of four age-intervals, namely, 12 to <15 months old (12-month group), 18 to <21 months old (18-month group), 24 to <30 months old (24-month group) and 48-<60 months old (4-year group). Parents were excluded if they could not read or write Chinese, or if their children having any of the following characteristics : (1) being born preterm (before 37 weeks of gestation); (2) suspected or diagnosed having developmental delay or abnormalities, or (3) chronic medical problem or congenital abnormalities requiring regular specialists' care and follow up.

A face to face interview was conducted by trained interviewers, using Cantonese or Putonghua, to administer the survey questionnaire. Computer Assisted Personal Interviewing approach (CAPI) was adopted in the survey.

Among 2447 eligible parents being invited, 1639 parents completed the survey. The overall response rate was 67.0%. Majority of the respondents (88.4%) were mothers.

Key findings

(a) Type of milk consumed by children

- i) Nearly all children of the 12-, 18-, 24-month groups, 99.8%, 99.3% and 99.5% respectively, consumed either breastmilk, formula, cow's milk or milk products alone or in combination during the 7 days prior to the survey. In the 4-year group, 93.7% children were consumers and 6.3% children did not receive breastmilk nor consume any milk or milk products.
- ii) The proportion of children received breastmilk was 31.2% in the 12-month group, 15.7% in the 18-month group and 9.6% in the 24-month group.
- iii) Follow-up formula was the most common choice of milk among the children of one and two years of age. It was consumed by 72.9%, 82.9% and 83.6% of children in the 12-, 18- and 24-month groups respectively.
- iv) Consumption of cow's milk was increasingly popular with age. The percentage of children consumed cow's milk increased from 7.3% in the 12-month group to 63.9% in the 4-year group. More preschool children in older age group chose fruit flavoured/chocolate milk and calcium- fortified soy milk.
- v) Milk products, including yoghurt and cheese, were popular in the 18-month, 24-month and 4-year groups, about 30% consumed yoghurt and about 60% had consumed cheese in the 7 days prior to the survey.



(b) Frequency and amount of milk consumed

- i) Of the children who did not receive breastmilk, 37.6% in the 18-month group, 37.0% in the 24-month group and 12.3% in the 4-year group consumed the recommended quantity of 360 to 480 ml of milk a day.
- ii) Excessive intake of milk, defined as daily quantity more than 480 ml, was not prevalent. The percentage of children with excess intake of milk decreased from 25.9% of children in the 18-month group to 16.7% in 24-month group and 4.2% in the 4-year group.
- iii) Non-consumers and those consumed milk less than 360 ml a day accounted for 36.5% in the 18-month group, 46.2% in the 24-month group and 83.5% in the 4-year group.
- iv) Non-consumers of milk and those consumed milk less than 360 ml a day accounted for 36.5%, 46.2% and 83.5% of children not receiving breastmilk in the 18-, 24-month and 4-year groups respectively. Preschool children also consumed milk less regularly. About 2.2% of children in the 24-month group and 13.8 % in the 4-year group did not consume any milk during the 7 days prior to the survey. Eight percent (7.5%) of the children in the 24-month group and 36.0% in the 4-year group consumed milk but they did not consume milk daily.

(c) Drinking milk from feeding bottles

- i) Persistently drinking milk from feeding bottles was still common and was reported by 84.4%, 68.5%, and 31.6% of children in the 18- and 24-month and 4-year groups respectively.
- ii) A significant proportion of parents, 62.6%, in the 18-month group did not attempt to wean their children from bottles. The corresponding proportion was 39.8 % and 13.1% among the parents of the 24-month and 4-year groups.

(d) Parental perception about formula milk

- i) Although both follow-up formula and cow's milk provide important dietary source of calcium for young children, significantly more parents of children below 24 months (51.3%, 46.9% and 47.6% of parents of the 12-, 18- and 24-month groups respectively) agreed or strongly agreed that follow-up formulae had better nutritional value for calcium than cow's milk, comparing to 39.8% of parents in the 4-year group. A higher percentage of parents of children below 24 months (40.9%, 41.1% and 41.1% of parents of the 12-, 18- and 24-month groups respectively) agreed or strongly agreed that the follow-up formulae having better effect on enhancing children's immunity than cow's milk, comparing to 31.8% of parents in the 4-year group.
- ii) Similarly, more parents of younger children (31.2%, 32.6% and 36.8% of the 12-, 18- and 24-month groups respectively) compared to 25.8% parents of the 4-year group agreed or strongly agreed that follow-up formulae have more nutritional values in the



development of children's brain than other foods in diet.

(e) Consumption of vegetables and fruits

- i) Overall, more than 80% of children consumed vegetables every day. More than 70% children ate fruit daily.
- ii) About 37% of the 12-month group and 43.7% of the 18-month group consumed the recommended quantity, at least 80 g (one serving), of vegetables daily. More children met the recommended intake of fruits, 67.8% in the 12-month group and 79.0% in the 18-month group consumed at least 40 g (half serving) fruit daily.
- iii) Of the 24-month group, 19.6% children met the recommended intake of vegetables (at least 120 g daily), and 46.3% children had fruit consumption meeting the recommended at least 80 g of fruits per day.

(f) Use of nutrient supplements

- i) About 25% of the studied children had taken nutrient supplements in the 7 days prior to survey.
- ii) Cod liver oil, fish oil, calcium and vitamin C supplements were the most common supplements consumed.

(g) Parental feeding practice and children's behavior at mealtime

- i) Almost one third of the children in the 12-month group and about 20% of the 18- and 24-month groups never or seldom dined with parents or their family members. Offering children the same foods as other family member and allowing children to self-feed was uncommon among the parents in the 12-month group. Allowing children watching TV or electronic device during mealtime was a common practice in parents with preschool children. These mealtime settings were not conducive for toddlers to establish good eating behaviour.
- ii) Prolonged meal time, or the duration of mealtime was always or often more than 30 minutes, was increasingly reported by parents as children became older, from 17.2% in the 12-month group to 30.2%, 38.3% and 55.2% in the 18-month, 24-month and 4-year groups respectively. Nearly one in ten parents (8.7%) with the 4-year-olds reported that their children often or always took more than 60 minutes for a meal.
- iii) About one fourth of parents of the 18-month, 24-month and 4-year group expressed concern that their children were eating too little. These parents were also more likely having children with a prolonged meal time.
- iv) Use of food as reward was common in toddlers and preschool children, while offering foods to sooth a fussy child was common in the 12-, 18-, 24-month groups.



(h) Source of information of child feeding

- i) Most parents, 91.2%, reported they had read the child feeding booklets provided by Department of Health (DH) and about 30.1% browsed the DH webpage on child feeding.
- ii) Family, relatives and friends, health professionals and websites on parenting were the top 3 most reported sources of child feeding information that the respondents referred to.
- iii) About one-third of parents had received feeding message from the mothers' clubs of the formula milk companies. Of the respondents in the 4-year group, 38.8% reported the child's school as the source of information.

(i) Breastfeeding experiences of the mothers

- i) More than 90% mothers of the 1-year-olds had initiated breastfeeding after childbirth. One-third (33.3%) of them breastfed for at least 12 months.
- ii) "Not having enough milk" was the most common reason for the mothers stopping breastfeeding, quoted by 58.3% of respondents. It was the most frequently reported reason by the mothers, regardless of the time when they stopped breastfeeding. About 30% cited "having the need to be back to work" as their reason to stop breastfeeding. Other common reasons were, "breastmilk alone did not satisfy their children", "breastfeeding was too tiring" and "breastfeeding was too inconvenient", as reported by 14.2%, 13.6% and 13.0% of mothers respectively.

Comparison with the findings of the survey in 2010

(a) Type of milk consumed by children

- i) There was a significant increase in children receiving breastmilk in this survey. The proportion of children received breastmilk in the 12-, 18- and 24-month groups increased sharply, from 9.8%, 5.4% and 2.9 % respectively in 2010 to 31.2%, 15.7% and 9.6% in 2016.

(b) Frequency and amount of milk consumed

- i) Regarding the quantity of milk consumed, a higher percentage of the 12-month and 18-month groups consumed milk of the recommended quantity, 360 to 480 ml per day, 28.9% and 37.6% respectively in this survey compared with 18.5% and 33.3% respectively in 2010. The proportion of children consuming more than 480 ml per day decreased significantly in all groups. In the 24-month and 4-year groups, it decreased from 40.5% and 15.4% in 2010 to 16.7 and 4.2% in 2016 respectively. On the other hand, the proportion of children consuming less than 360 ml a day increased in the



24-month and 4-year groups in 2016.

- ii) The percentage of non consumers remained similar in the two surveys. However, there was a substantial increase in the proportion of children who did not consume milk daily in 2016. In 2010, 0.8% and 7.9% of the 24-month and the 4-year groups did not consumed milk daily respectively and these increased to 7.5% in 24-month and 36.0% in the 4-year groups in 2016 respectively.

(c) Drinking milk from feeding bottles

- i) There was a significant drop in the percentage of persistent feeding bottle users compared to the survey in 2010. The percentage of children drinking milk from feeding bottle among the 18-month-olds reduced from 95.2% in 2010 to 84.4% in 2016. Among the 24-month-olds and the 4-year-olds, it dropped from 89.4% and 55.2% in 2010 to 68.5% and 31.6% in 2016 respectively.

(d) Consumption of vegetables and fruits

- i) Children aged 1 to 2 years who participated in this survey consumed more vegetables than their peers in the 2010 survey. Based on the 3-day food record, 29.1%, 36.1% and 35.0% children of 12-, 18- and 24-month groups in 2010 consumed at least 80 g (a serving) of vegetables a day. In 2016, a higher percentage of children consumed at least one serving of vegetables daily based on parents' report, 37.0%, 43.7% and 53.1% of 12-, 18- and 24-month groups respectively. The percentage of 4-year-olds consumed at least 160 g (two servings) of vegetables were 8.9% in both surveys.
- ii) Compared to the survey in 2010, 1 to 2- year-old children also consumed more fruits than their counterparts in the 2010 survey. In 2010, 54.4%, 61.8%, 67.5% of 12-, 18-, 24-month groups consumed at least 40 g (half serving) of fruits a day based on their 3-day food record. A higher percentage, 67.8%, 79.0%, 79.5% in 12-, 18-, 24-month groups in 2016 respectively, took at least 40 g fruit a day based on parent's report. The percentage of 4-year-olds consumed at least 80 g (one serving) of fruits in 2016 were 53.5% which was similar to 49.8% in 2010.

Conclusion & Recommendations

This Survey showed that a considerable proportion of toddlers were not allowed to feed themselves and rarely dined with their parents or other family members. Allowing children watching TV or electronic device during mealtime was common among the parents in preschool children. These parental feeding practices were not appropriate for the development of young children and hampered young children adopting a healthy eating behavior.



Parents of older children may encountered more difficulties in feeding which were reflected by their concern of children's appetite and prolonged meal time. Parental concerns of their children eating too little indicated that their expectation of children appetite might not be appropriate. Explicit information of age appropriate portion size should be provided so that parents could have a more realistic expectation of children's intake. This may help reducing their anxiety on feeding children and promoting more developmentally appropriate feeding behaviour.

This survey showed that a large proportion of children still did not consume adequate amount of fruit and vegetables. Effective feeding strategies, including availability, repeated exposure and parents as role model should be further promoted as part of developmental appropriate feeding practices.

The frequency and amount of milk consumption dropped as children's age increased. Low and infrequent milk intake was prominent among the preschool children of 2 and 4 years old. This was similar to the eating habits of adults in Hong Kong reported by the Behavioural Risk Survey 2013 and the Population based Food Consumption Survey 2005-2007 also reported a low intake of milk and milk products in local adults.

Parents have a pivotal role in modelling food intake for their toddlers and preschoolers. Parent education resources on feeding for toddlers and preschool children should be strengthened and address the diet of both the children and their parents. Parents should be encouraged to provide adequate amount of milk and milk alternatives for both themselves and their children. Information including calcium rich food source, guidance on portion size, the exchange serving size for milk and milk products with traditional calcium rich foods, could help them in making food choices. Practical information, such as cooking tips and recipes, are indispensable to help parents to include these calcium rich foods into the family meal. By improving the availability of milk, milk products and other calcium rich foods in the family meal, it can also improve the calcium intake in parents which would likely be low.

Lastly, the compliance of stop drinking milk from feeding bottle after 18 months of age was poor. The parental barrier in bottle weaning should be further studied.



1. Introduction

1.1. Background

Adequate nutrition during early childhood is fundamental to the physical growth, cognitive development, and optimal wellbeing of every child. The World Health Organization (WHO) recommends all infants to be breastfed exclusively in the first 6 months and continue to be breastfed up to 2 years and above after they receive complementary food or solid food at 6 months of age.

During this period, a diet consisting of a variety of nutrient dense foods is not only essential to meet the nutritional requirement of young children, but is also necessary for them to develop their feeding skills as well as establishing a healthy eating pattern. The food preference established in early childhood, to a great extent, tracks from childhood to early adulthood.¹ Early feeding is a foundation for preventing childhood obesity and non-communicable diseases.

In 2010, the Family Health Service (FHS) of the Department of Health (DH) conducted a survey on the child feeding behaviours of parents and the food consumption pattern of 1 to 4 year old children attending Maternal and Child Health Centres (MCHCs). It showed that the young children had an inadequate intake of fruits and vegetables.² Consumption of formula milk was popular in children aged 12 months and older. A large proportion of 1 to 2 year olds consumed a large amount of formula milk.³ Despite the local guideline of change to drinking from cups after 14 months of age; vast majority of young children persistently drank milk from bottles beyond this age. At 4 years of age, 55% children still drank from bottles. This might also contribute to the high milk consumption. Their parents had some misconception about the nutritional benefit of formula milk. Parents tended not to trust their children's self-regulation in food intake and commonly reported their children having meal time behaviour problems.⁴

In 2011, the Family Health Service, Department of Health developed and disseminated a parent education resource with the title "Healthy eating for 6-24 month old children". The resource promotes parents to feed children responsively and in a developmentally appropriate way. It recommends young children consuming a diet of a variety of foods, an adequate intake of fruit and vegetable, and an appropriate amount of milk intake, 360 to 480 ml a day. Children are recommended to stop consuming milk in feeding bottles by 18-month of age. In addition to distribution of health education materials, relevant key messages are also disseminated via various channels including individual advices provided to parents attending Maternal and Child Health Centre, information in website of FHS, and



health talks.

To provide an update on local situation of food consumption pattern of children and parental feeding practices, and to evaluate the effectiveness of health promotion actions delivered regarding infant and young child feeding mentioned above, FHS conducted a survey on young children and their parents attending maternal and child health centres in 2016 (the Survey).

1.2. Survey Objectives

The objectives of the Survey are to study the following aspects of children aged 1 to 4 years:

- i) their pattern of milk consumption, including the type of milk and milk product consumed, the quantity of milk consumed, milk drinking behaviours, the parental attitude on choice of milk and formula milk, and use of feeding bottle;
- ii) their consumption of fruits, vegetables, other food groups, and nutritional supplements;
- iii) the feeding practices of their parents;
- iv) the source of information of child feeding obtained by parents; and
- v) the breastfeeding experiences of the mothers of 1-year-old children.



2. Survey Methodology

2.1. Survey Design

This was a cross-sectional study carried out in 29 MCHCs in Hong Kong. Six MCHCs in the Hong Kong Island, 9 MCHCs in Kowloon region, 5 MCHCs in New Territories East and Tseung Kwan O, 8 MCHCs in New Territories West and Tung Chung MCHC in Lantau Island were included. The Survey was conducted in different MCHCs according to the survey schedule during 22 July to 29 September 2016.

2.2. Participants

The Survey aimed to study Chinese children aged 1 to 4 years, as well as their parents, who attended MCHCs. Parents with children of four age-intervals were recruited, namely, 12 to <15 months old (12-month group), 18 to <21 months old (18-month group), 24 to <30 months old (24-month group) and 48 to <60 months old (4-year group). At these age intervals, most children attended MCHCs for routine services, e.g. vaccination at 12 and 18 months, vision screening at 4 years of age, and developmental surveillance at around 24 to 30 months for some children.

Parents, mother or fathers, attending MCHCs with their 1 to 4 year old children were invited by the attending nurses to participate in the survey if their children were within one of the four age groups. The participants should be ethnic Chinese who speak Cantonese or Putonghua and read Chinese. Parents were not invited if their children were born preterm (before 37 weeks of gestation), suspected or diagnosed having developmental delay or abnormalities, chronic medical problem or congenital abnormalities requiring regular specialists' care and follow up.

2.3. Data Collection

The respondent parents then attended a face-to-face interview by trained interviewers. The interview focused on the target children's diet and the parent's feeding practices. The duration of a typical interview lasted for 15 to 20 minutes. At the interview, the interviewer administered the survey questionnaire. Data were collected and recorded through the Computer Aid Personal Interviewing (CAPI) method using tablet computers.

2.3.1. Survey Questionnaire

A bilingual (Cantonese and Putonghua) questionnaire was used for the Survey. The questionnaire (Appendix 1) was developed based on the questionnaire used in the 2010, questions on milk consumption and parental feeding practices were modified. The



questionnaire was validated in face-to-face interview with parents at MCHCs in the preparation phase in January to April 2016.

(a) Pattern of milk consumption and milk drinking behaviours of children

Parents were requested to report the types of milk consumed by their children in the 7 days prior to the survey, including direct breastfeeding, expressed breast milk, infant formulae, follow up formulae, cow's milk (including cow's milk powder, cow's milk), as well as whether milk products like cheese, yogurt and calcium fortified soymilk were consumed. The frequency and quantity of cow's milk and formula milk consumed were collected. Parents also reported the utensil(s) their children used for consuming milk and their practice of drinking from feeding bottles.

(b) Children's consumption of different food groups and dietary supplements

Parents reported the number of days their children consumed the different food groups, number of types and quantity of fruits and vegetables eaten in the 7 days prior to the survey, as well as the children's intake of dietary supplements.

The quantity of fruits and vegetables consumed in one day were reported according to a scale consisted of 9 different quantities for fruits and 11 different quantities for vegetables. A picture guide showing different quantities of fruits and vegetables presented in standard size spoons and bowls were presented to attending parents to unify the reporting (Appendix 2). The portion sizes of fruits shown were equivalent to 20 g, 40 g, 60 g and 80 g. Vegetables in serving sizes were displayed at 20 g, 40 g, 80 g, 120 g and 160 g. The true size of bowl and spoon were shown during the interview. The picture guide also included a list of fruits and vegetables commonly available in local markets.

(c) Parental feeding practice and children's behaviours at mealtime

Parents reported the frequency of eating with their children, allowing their children to watch TV or play mobile device while they ate, giving food rewards or food to sooth their children, providing their children with added sugar beverages, facilitating their children to finger feed themselves or feed themselves with spoon, as well as how frequent their children running around during meal times in the one month prior to the survey. The answers were reported in a scale of 5 responses: "Never", "Seldom", "Sometimes", "Often" and "Always".

Parents of the 12-month, 18-month, and 24-month groups also reported their children's self-feeding skills, including finger feeding, use of spoon and use of cups.



(d) Parent’s perception of formula milk, and source of information about child feeding

Parents reported their believes in formula milk with regard to its nutritional values and health benefit in a scale of 5 responses, “strongly disagree”, “disagree”, “no comment or don’t know”, “agree”, and “strongly agree”. The interviewers also asked the parents to report their source of information on infant and young child feeding, which included the parental educational resources provided by MCHCs. Their opinions on the preferred channels and means for DH to disseminate related information were also collected.

(e) Breastfeeding experiences of the mothers

Mothers of the 12-month and 18-month groups were asked whether they had breastfed and when they stopped breastfeeding. Mothers who had stopped breastfeeding or had not breastfed were asked to report the reasons from a list. The list was adapted from the Infant Feeding Practices Survey II of the Center of Disease Control of the United States.⁵

(f) Demographic information of the parents and children

Parents reported their demographic information, which included age, education level, status of employment of themselves and their spouse/partner, marital status and family income. Information on the main carer of the children and the person who was in charge of feeding the children were also asked in the questionnaire.

(g) Measurement of body weight and Height of children

The weight and height/ length of children were measured according to standard procedures. The body weight of children below 24 months was measured by electronic infant scales to the nearest 0.001kg. Supine length was measured for children below 24 months of age using the measuring mat with graduation of 0.5 cm. Standing height of children of the 24-month old group and 4-year old group were measured to the nearest 0.1 cm using stadiometers. Their body weight was measured to the nearest 0.1 kg using electronic scales

2.3.2. Training of Interviewers

A survey manual was developed for guiding the interviewers in administering the questionnaire. All interviewers received training on interview skills and briefing on the survey details according to the manual. Debriefing was carried out with the interviewers after their first survey session.



2.3.3. Sample Size

The target sample size was 1510 and was stratified according to the attendance of maternal and child health centres in each region.

The sample size was estimated to detect a 10% reduction in the proportion of children with high milk consumption and prevalence of consuming milk using feeding bottle in the 2010 survey.

2.3.4. Quality Control Measures

All completed questionnaires had passed the independent quality control process. An average proportion of 15.4% of the completed questionnaires administered by each interviewer were randomly selected for back-checking purpose. The checking was conducted by independent checkers (who were not interviewers themselves).

2.4. Data Management and Analysis

2.4.1. Data Management

All data were entered directly to the tablet computer by interviewers during the interviews. Unclear and missing answers were verified during the face-to-face interview using CAPI. All completed questionnaires were properly edited, coded and validated. The flow of the questionnaire and logistics of the fieldwork execution were tested during the pilot study and revised before the main survey.

2.4.2. Data Analysis

The weight, height and BMI of the index children were converted to z-scores using the WHO Child Growth Standard using WHO ANTHRO v3.2.2.⁶ The WHO definition of nutritional status of the children, including overweight, obesity, wasting and stunting, was adopted in reporting the nutritional status of children.

In analysing the quantities of fruits and vegetables consumed by children, new variables on “average daily intake” were derived to include the response of non-consumers. The average daily intake was calculated based on reported daily intake of the food and the number of days the food consumed divided by seven days. The average daily intake of fruit and vegetables per day was further categorised according to the recommended portion size, namely, less than 40 g (half a portion), 80 g (1 serving), 120 g (1.5 servings) and 160 g (2 servings).



Table 1: The daily recommended intake of fruits and vegetables of 1 to 2 year old children by the Department of Health

| Age | Quantity of Recommended Daily Intake | |
|--------------------------|--------------------------------------|------------------------------|
| | Fruit | Vegetables |
| 1-year-olds ⁷ | 40 to 80 g (½ to 1 serving) | At least 80 g (1 serving) |
| 2-year-olds ⁸ | At least 80 g (1 serving) | At least 120 g (1½ servings) |

The independent samples t-test was used to compare the means of milk intake between users of bottle feeding and non-bottle users. Pearson's chi-square tests were used for comparison of proportions, including associations between duration of meal and parents' concern on appetite of the children, between parents' perception on the nutritional benefits of formula milk and statements, and between demographics and breastfeeding history. The significance level was set at 5% ($p \leq 0.05$) and the analyses were performed in the Statistical Package for the Social Sciences (SPSS), version 21.0.

2.5. Ethics Approval

The Survey was approved by the Ethics Committee of Department of Health in May 2016.



3. Main Findings

3.1. The Sample

During the survey period (22 July to 29 September 2016), nurses in MCHCs invited 2447 eligible parents to participate in the survey. Among them, 1639 parents responded and completed the survey. The response rate was 67.0%. Majority (88.4%) of the respondents were mothers and over half of the target children were boys (52.2%). (Table 2)

Demographic characteristics of the respondents and the target children were shown in Table 3. Across all age groups, over 90% of children lived with parents daily. Regarding the age of the respondents, 54.5% of mothers were aged 25-34 while 52.9% of fathers were aged 35-44. Majority (56.9%) of respondents attained post-secondary level of education. About half of the mothers (48.0%) were full-time homemakers and almost all fathers (96.7%) were full-time workers. Close to 60% of the respondents reported having a monthly household income more than \$30,000.

Table 2: Characteristics of the respondents and the age of the target children

| | 12-month | | 18-month | | 24-month | | 4-year | | Overall | |
|---|-----------|---------|-----------|---------|-----------|---------|-----------|---------|------------|---------|
| | (n = 413) | | (n = 414) | | (n = 397) | | (n = 415) | | (N = 1639) | |
| | n | (%) | n | (%) | n | (%) | n | (%) | n | (%) |
| Age of the target children (month) | | | | | | | | | | |
| Mean (S.D.) | 12.1 | (0.35) | 18.1 | (0.27) | 24.3 | (0.96) | 50.7 | (2.69) | - | - |
| Sex of the target children | | | | | | | | | | |
| Male | 216 | (52.3%) | 213 | (51.4%) | 219 | (55.2%) | 207 | (49.9%) | 855 | (52.2%) |
| Female | 197 | (47.7%) | 201 | (48.6%) | 178 | (44.8%) | 208 | (50.1%) | 784 | (47.8%) |
| Respondent | | | | | | | | | | |
| Mother | 382 | (92.5%) | 366 | (88.4%) | 347 | (87.4%) | 354 | (85.3%) | 1449 | (88.4%) |
| Father | 31 | (7.5%) | 48 | (11.6%) | 50 | (12.6%) | 61 | (14.7%) | 190 | (11.6%) |

Base: All respondents (1639)



Table 3: Demographic characteristics of the parents

| | 12-month | | 18-month | | 24-month | | 4-year | | Overall | |
|---|-----------|---------|-----------|---------|-----------|---------|-----------|---------|------------|---------|
| | (n = 413) | | (n = 414) | | (n = 397) | | (n = 415) | | (N = 1639) | |
| | n | (%) | n | (%) | n | (%) | n | (%) | n | (%) |
| Both parents living with the child daily | 386 | (93.5%) | 382 | (92.3%) | 372 | (93.7%) | 397 | (95.7%) | 1537 | (93.8%) |
| Mother's age in year | | | | | | | | | | |
| 18-24 years old | 19 | (4.6%) | 12 | (2.9%) | 9 | (2.3%) | 2 | (0.5%) | 42 | (2.6%) |
| 25-34 years old | 250 | (60.5%) | 254 | (61.4%) | 230 | (57.9%) | 159 | (38.3%) | 893 | (54.5%) |
| 35-44 years old | 141 | (34.1%) | 146 | (35.3%) | 153 | (38.5%) | 244 | (58.8%) | 684 | (41.7%) |
| 45 or above | 3 | (0.7%) | 2 | (0.5%) | 5 | (1.3%) | 10 | (2.4%) | 20 | (1.2%) |
| Mother's education attainment | | | | | | | | | | |
| Form 3 or below | 49 | (11.9%) | 66 | (15.9%) | 60 | (15.1%) | 63 | (15.2%) | 238 | (14.5%) |
| Form 4 to 7 | 160 | (38.7%) | 154 | (37.2%) | 176 | (44.3%) | 171 | (41.2%) | 661 | (40.4%) |
| Post-secondary | 204 | (49.4%) | 194 | (46.9%) | 161 | (40.5%) | 181 | (43.6%) | 740 | (45.2%) |
| Mother's occupation | | | | | | | | | | |
| Full-time / Self-employed | 186 | (45.0%) | 200 | (48.3%) | 178 | (44.8%) | 175 | (42.2%) | 739 | (45.1%) |
| Part-time | 27 | (6.5%) | 18 | (4.3%) | 25 | (6.3%) | 35 | (8.4%) | 105 | (6.4%) |
| Retired or unemployed | 3 | (0.7%) | 0 | (0.0%) | 3 | (0.8%) | 2 | (0.5%) | 8 | (0.5%) |
| Full-time homemaker | 197 | (47.7%) | 196 | (47.3%) | 191 | (48.1%) | 203 | (48.9%) | 787 | (48.0%) |
| Father's age in year | | | | | | | | | | |
| 18-24 years old | 7 | (1.7%) | 3 | (0.7%) | 4 | (1.0%) | 0 | (0%) | 14 | (0.9%) |
| 25-34 years old | 164 | (39.7%) | 166 | (40.1%) | 150 | (37.8%) | 86 | (20.7%) | 566 | (34.5%) |
| 35-44 years old | 216 | (52.3%) | 200 | (48.3%) | 197 | (49.6%) | 254 | (61.2%) | 867 | (52.9%) |
| 45 or above | 26 | (6.3%) | 45 | (10.9%) | 46 | (11.6%) | 75 | (18.1%) | 192 | (11.7%) |
| Father's education attainment | | | | | | | | | | |
| Form 3 or below | 54 | (13.1%) | 63 | (15.3%) | 59 | (14.9%) | 53 | (12.8%) | 229 | (14.0%) |
| Form 4 to 7 | 159 | (38.5%) | 158 | (38.3%) | 162 | (40.8%) | 171 | (41.4%) | 650 | (39.7%) |
| Post-secondary | 200 | (48.4%) | 192 | (46.4%) | 176 | (44.4%) | 189 | (45.8%) | 757 | (46.3%) |
| Father's occupation | | | | | | | | | | |
| Full-time / Self-employed | 406 | (98.3%) | 404 | (97.6%) | 374 | (94.2%) | 401 | (96.6%) | 1585 | (96.7%) |
| Part-time | 3 | (0.7%) | 6 | (1.4%) | 16 | (4.0%) | 7 | (1.7%) | 32 | (2.0%) |
| Retired or unemployed | 3 | (0.7%) | 3 | (0.7%) | 7 | (1.8%) | 6 | (1.4%) | 19 | (1.2%) |
| Full-time homemaker | 1 | (0.2%) | 1 | (0.2%) | 0 | (0.0%) | 1 | (0.2%) | 3 | (0.2%) |
| Monthly household income | | | | | | | | | | |
| Less than 10,000 | 8 | (2.0%) | 10 | (2.4%) | 10 | (2.6%) | 12 | (2.9%) | 40 | (2.5%) |
| \$10,000 - \$29,999 | 138 | (33.6%) | 153 | (37.3%) | 155 | (39.8%) | 172 | (42.1%) | 618 | (38.2%) |
| \$30,000 - \$49,999 | 144 | (35.1%) | 119 | (29.0%) | 124 | (31.9%) | 109 | (26.7%) | 496 | (30.7%) |
| \$50,000 or above | 120 | (29.3%) | 128 | (31.2%) | 100 | (25.7%) | 116 | (28.4%) | 464 | (28.7%) |

Base: All respondents (1639)



In the majority of the families, mother was the main person who was responsible for choosing food for her child (79.0%) and supervising or feeding her child (53.9%), followed by grandparent and domestic helper. (Table 4)

Table 4: Persons responsible for caring the target child

| | 12-month | | 18-month | | 24-month | | 4-year | | Overall | |
|------------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|---------------|---------|----------------|---------|
| | (n = 413) | | (n = 414) | | (n = 397) | | (n = 415) | | (N = 1639) | |
| | n | (%) | n | (%) | n | (%) | n | (%) | n | (%) |
| Choosing food for the child | | | | | | | | | | |
| Mother | 332 | (80.4%) | 340 | (82.1%) | 302 | (76.1%) | 321 | (77.3%) | 1295 | (79.0%) |
| Father | 10 | (2.4%) | 10 | (2.4%) | 13 | (3.3%) | 15 | (3.6%) | 48 | (2.9%) |
| Grandparent | 58 | (14.0%) | 51 | (12.3%) | 67 | (16.9%) | 65 | (15.7%) | 241 | (14.7%) |
| Domestic helper | 12 | (2.9%) | 12 | (2.9%) | 12 | (3.0%) | 11 | (2.7%) | 47 | (2.9%) |
| Supervise or feed the child | | | | | | | | | | |
| Mother | 214 | (51.8%) | 221 | (53.4%) | 197 | (49.6%) | 251 | (60.5%) | 883 | (53.9%) |
| Father | 7 | (1.7%) | 5 | (1.2%) | 8 | (2.0%) | 6 | (1.4%) | 26 | (1.6%) |
| Grandparent | 116 | (28.1%) | 108 | (26.1%) | 112 | (28.2%) | 82 | (19.8%) | 418 | (25.5%) |
| Domestic helper | 73 | (17.7%) | 77 | (18.6%) | 74 | (18.6%) | 68 | (16.4%) | 292 | (17.8%) |

Base: All respondents (1639)



3.2. Nutritional Status of the Target Children

The mean weight, height and body mass index (BMI) and the respective z-scores based on the World Health Organization Child Growth Standard of the target children are shown in Table 5.

Table 5: The average weight and height of the target children

| | 12-month | 18-month | 24-month | 4-year |
|--------------------------|-----------------|-----------------|-----------------|---------------|
| | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) |
| Boys | | | | |
| Number of children | 216 | 213 | 219 | 207 |
| Weight (kg) | 9.6 (0.99) | 10.8 (1.02) | 12.1 (1.26) | 16.4 (2.14) |
| Height (cm) | 75.8 (2.70) | 81.5 (3.17) | 86.6 (3.00) | 103.7 (4.52) |
| BMI (kg/m ²) | 16.8 (1.37) | 16.3 (1.30) | 16.1 (1.29) | 15.2 (1.24) |
| Z score of weight | -0.11 (0.93) | -0.16 (0.85) | -0.14 (0.90) | -0.26 (0.93) |
| Z score of height | -0.10 (1.10) | -0.36 (1.16) | -0.30 (0.97) | -0.29 (0.97) |
| Z score of BMI | -0.63 (1.02) | 0.092 (1.01) | 0.04 (1.01) | -0.12 (0.94) |
| Girls | | | | |
| Number of children | 197 | 201 | 178 | 208 |
| Weight in kg | 9.1 (1.01) | 10.3 (0.94) | 11.4 (1.29) | 16.0 (2.50) |
| Height in cm | 74.4 (2.64) | 80.1 (3.17) | 85.0 (3.16) | 102.6 (4.79) |
| BMI in kg/m ² | 16.4 (1.31) | 16.0 (1.42) | 15.8 (1.42) | 15.1 (1.49) |
| Z score of weight | -0.01 (0.86) | -0.27 (0.74) | -0.16 (0.86) | -0.40 (1.00) |
| Z score of height | 0.02 (0.97) | -0.28 (1.08) | -0.35 (0.92) | -0.47 (0.99) |
| Z score of BMI | -0.03 (0.88) | 0.20 (0.88) | 0.04 (1.02) | -0.17 (0.99) |

Base: All respondents (1639)

Based on the WHO Child Growth Standard, 1.3% of the children were wasting (BMI for age z-score <-2.0) and 2.3% of the children were obese or overweight (BMI for age z-score >2.0). Overall, 4.1% of the children were stunted in height (height for age z-score <-2.0). (Table 6)

Table 6: Nutritional status of the target children*

| | 12-month | | 18-month | | 24-month | | 4-year | | Overall | |
|------------------------|-----------------|------|-----------------|------|-----------------|------|---------------|------|----------------|------|
| | (n = 413) | | (n = 414) | | (n = 397) | | (n = 415) | | (N = 1639) | |
| | n | (%) | n | (%) | n | (%) | n | (%) | n | (%) |
| Wasting | 5 | 1.2% | 3 | 0.7% | 8 | 2.0% | 6 | 1.4% | 22 | 1.3% |
| Overweight and obesity | 7 | 1.7% | 7 | 1.7% | 12 | 3.0% | 11 | 2.7% | 37 | 2.3% |
| Stunting | 14 | 3.4% | 19 | 4.6% | 18 | 4.5% | 16 | 3.9% | 67 | 4.1% |

Base: All respondents (1639) * Definition based on the World Health Organization Child Growth Standard 2006



3.3. Pattern of Milk Consumption

3.3.1. Types of milk consumed by children

Nearly all children of the 12-, 18- and 24-month groups, 99.8%, 99.3% and 99.5% respectively, consumed either breastmilk, formula milk, cow's milk or milk products alone or in combination during the 7 days prior to the survey. In the 4-year group, 93.7% of children were milk consumers and 6.3% of children did not receive breastmilk or consumed any milk or milk products.

Of the 1639 target children, 14.6% children received breastmilk. The proportion of children received breastmilk dropped from 31.2% in the 12-month group to 15.9% in the 18-month group and 9.6% in the 24-month group. Very few children (1.7%) of the 4-year group were receiving breastmilk. (Table 7)

Follow-up formula was the most common type of formula milk consumed by the target children; 72.9%, 82.9%, 83.6%, and 43.1% in the 12-, 18-, 24-month, and 4-year groups drank follow-up formula respectively. About 6.3% in the 12-month and 4.1% in the 18-month group consumed infant formula. While the use of formula milk decreased with age, it was noteworthy that 5.1% (21 out of 415 children) in the 4-year group consumed formula of other types, among them 19 children consumed the nutritional supplement formulae.

The popularity of cow's milk increased with age and it is consistent with a transition to an adult diet. The percentage of children consumed cow's milk increased from 7.3% in the 12-month group to 63.9% in the 4-year group. Children taking calcium fortified soymilk increased from 9.3% in the 24-month group to 14.5% in the 4-year group.

A substantial proportion of children in all age groups consumed cheese, with 40.4% of the 12-month group increased to 58.1% of 4-year group. Yogurt was consumed by about 30% of children of the 18-, 24-month and 4-year groups.



Table 7: Type of milk and milk products consumed in the 7 days prior to the survey

| | 12-month (n=413) n (%) | 18-month (n=414) n (%) | 24-month (n=397) n (%) | 4-year (n=415) n (%) | Overall (N=1639) n (%) |
|-------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
| Breastmilk | 129 (31.2) | 65 (15.7) | 38 (9.6) | 7 (1.7) | 239 (14.6) |
| Infant formula | 26 (6.3) | 17 (4.1) | 1 (0.3) | 2 (0.5) | 46 (2.8) |
| Follow-up formula | 301 (72.9) | 343 (82.9) | 332 (83.6) | 179 (43.1) | 1155 (70.5) |
| Other types of formula | 2 (0.5) | 2 (0.5) | 4 (1.0) | 21 (5.1) | 29 (1.8) |
| Cow milk | 30 (7.3) | 135 (32.6) | 19 (47.9) | 265 (63.9) | 620 (37.8) |
| Calcium added soy milk | 9 (2.2) | 29 (7.0) | 37 (9.3) | 62 (14.9) | 137 (8.4) |
| Yogurt | 76 (18.4) | 123 (29.7) | 120 (30.2) | 147 (35.4) | 466 (28.4) |
| Cheese | 167 (40.4) | 252 (60.9) | 224 (56.4) | 241 (58.1) | 884 (53.9) |

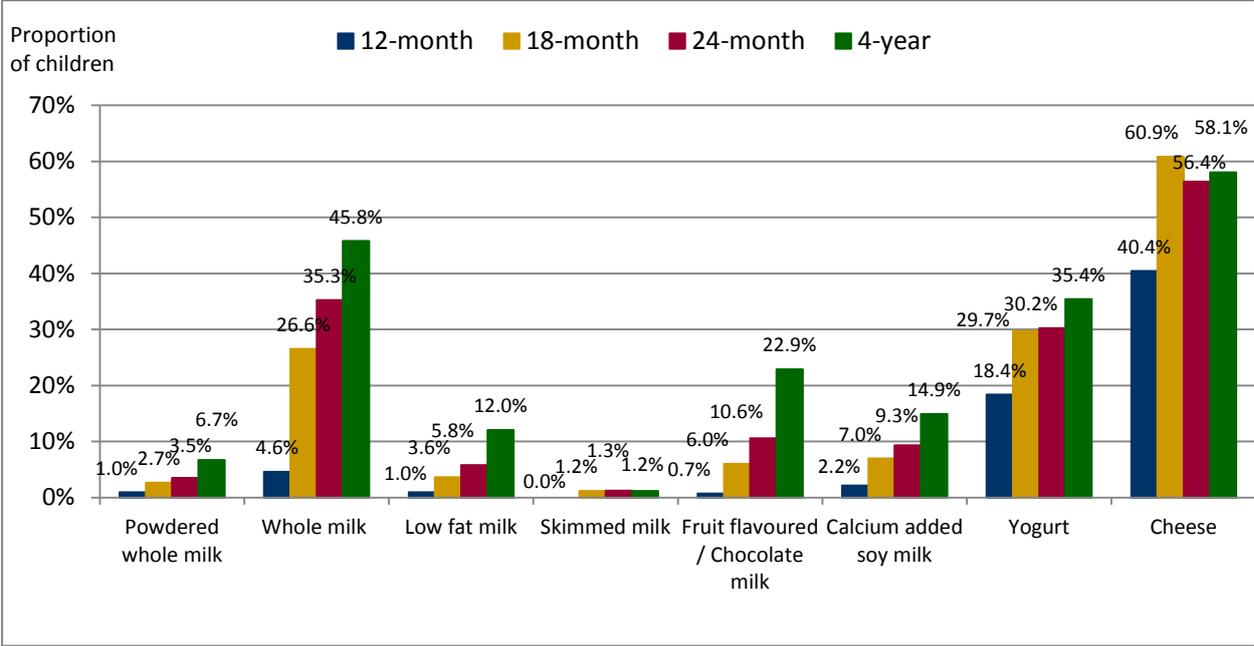
Base: All respondents (1639)

Among different types of cow's milk, milk products and alternatives, cheese was the most popular item consumed by the children of all age groups (Figure 1). Yogurt was more commonly consumed than cow's milk in the 12- and 18-month groups than older children.

Of the different types of cow's milk, whole milk was the most chosen type. Although low fat milk was recommended for children above 2 years of age, it was not commonly consumed among the 24-month and 4-year groups, with the proportion at 5.8% and 12.0% respectively. Very few children chose skimmed milk. On the other hand, more children in the older age groups chose fruit flavoured or chocolate cow's milk, from 10.6% in the 24-month group to 22.9% in the 4-year group. This drew concern on extra intake of free sugar or added sugar.



Figure 1: Proportion of children of the four age groups consuming different types of cow’s milk, soy milk and milk products



Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)

3.3.2. The major type of milk consumed

According to the participant’s report, breastmilk as the major type of milk consumed was seen in 26.9% in the 12-month group, 10.9% in the 18-month group, and 6.0% in the 24-month group.

Formula milk was the major type of milk consumed in 72.9%, 84.1%, and 81.9% of children in the 12-, 18-, and 24-month groups respectively. Of the 4-year group, 43.1% of children mainly consumed formula milk, 38.3% and 4.6% mainly consumed cow’s milk and calcium added soy milk respectively.

Overall, about 4.1% children did not consume any milk (including breastmilk) in the 7 days prior to the survey. The proportion of children not consuming any milk increased with age. It increased from 0.7% in the 18-month group to 2.0% in the 24-month group, and surged to 13.5% in the 4-year group. (Table 8)



Table 8: The major type of milk that the children consumed

| | 12-month (n=413) n (%) | 18-month (n=414) n (%) | 24-month (n=397) n (%) | 4-year (n=415) n (%) | Overall (N=1639) n (%) |
|---------------------------------|------------------------------|------------------------------|------------------------------|----------------------------|------------------------------|
| Did not consume any milk | 1(0.2) | 3 (0.7) | 8 (2.0) | 56(13.5) | 68(4.1) |
| Breastmilk | 111 (26.9) | 45 (10.9) | 24 (6.0) | 2 (0.5) | 182 (11.1) |
| Formula milk | 301 (72.9) | 348 (84.1) | 325 (81.9) | 179 (43.1) | 1153 (70.3) |
| Cow milk | 0 (0.0) | 17 (4.1) | 40. (10.1) | 159 (38.3) | 216 (13.2) |
| Calcium added soy milk | 0 (0.0) | 1 (0.2) | 0 (0.0) | 19 (4.6) | 20 (1.2) |

Base: All respondents (1639)

3.3.3. Pattern of types of milk consumed by children

The majority of children consumed more than one type of milk. The proportion of children with the different combination of milk consumed is shown in Figure 2.

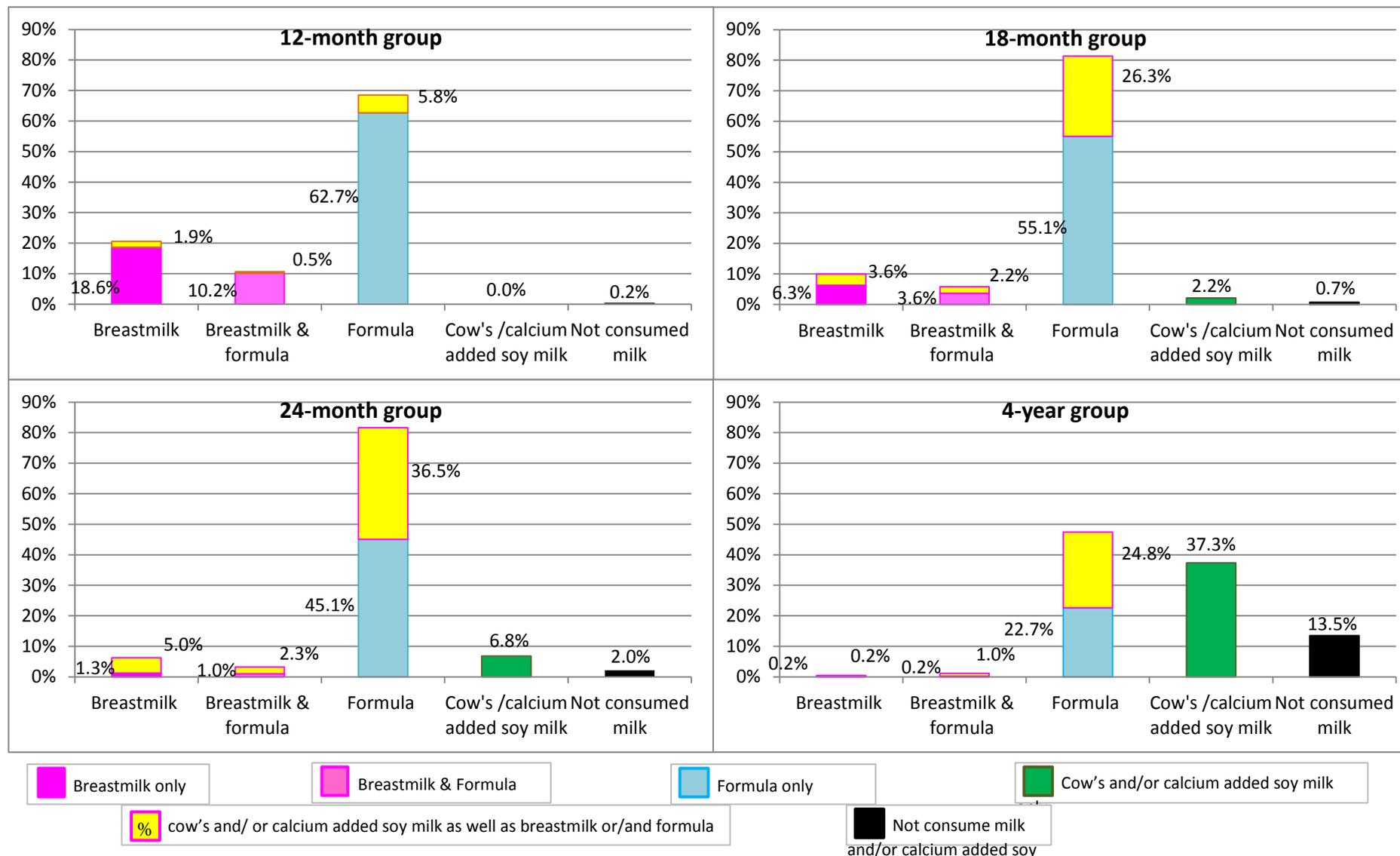
Consuming formula milk only was the most common pattern among the children in the 12-, 18- and 24-month groups; the respective percentage was 62.7%, 55.1% and 45.1%. Consuming cow's milk/calcium fortified soy milk only was the most common pattern among the target children (37.3%) in the 4-year group.

Across the 12-, 18- and 24-month groups, increasing proportion of children consuming both breastmilk or formula milk and cow's or calcium fortified soy milk reflected the recommendation of introducing cow's milk after the first year. The pattern of consuming formula milk and cow's milk/ calcium fortified soy milk was the second most common in the 18-month, 24-month and 4-year groups, with the proportions of 26.3%, 36.5% and 24.8% respectively.

Some children in the 12-month and 18-month groups received breastmilk only and did not include cow's milk in their diet.



Figure 2: Pattern of the type(s) of milk consumed by children



Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)



3.3.4. Frequency of consuming cow's milk and formula milk

The frequency of milk drinking (including formula milk, cow's milk calcium added soy milk) of the children who did not receive any breastmilk is shown in Table 9. Overall, frequent milk drinking was not common. Drinking milk four times or more a day was reported by 21.1% in the 12-month group, 4.3% in the 18-month group and 3.6% in the 24-month group. The majority of 1 to 2-year-old children in these three groups consumed milk 2 or 3 times a day.

There is a trend of reducing frequency of milk intake and non-milk consumption moving from 1-year-old to 4-year-old to children. Two percent of the 24-month group and 13.8% of 4-year group did not consume milk during the 7 days prior to the survey. Eight percent of the 24-month group and 36.0% of the 4-year group did not consume milk daily.

Table 9: Frequency of milk drinking (including formula milk, cow's milk calcium added soy milk) of children not taking breastmilk

| | 12-month (n = 284) n (%) | 18-month (n = 348) n (%) | 24-month (n = 359) n (%) | 4-year (n = 405) n (%) | Overall (N = 1396) n (%) |
|------------------------------------|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Did not consume any milk | 1 (0.4) | 3 (0.9) | 8 (2.2) | 56 (13.7) | 68 (4.9) |
| Milk was not consumed daily | 1 (0.4) | 5 (1.4) | 27 (7.5) | 146 (36.0) | 179 (12.8) |
| Once daily | 5 (1.8) | 37 (10.6) | 56 (15.6) | 82 (20.2) | 180 (12.9) |
| Twice daily | 72 (25.4) | 184 (52.9) | 193 (53.8) | 107 (26.4) | 556 (39.8) |
| 3 times a day | 145 (51.1) | 104 (29.8) | 62 (17.3) | 12 (3.0) | 323 (23.1) |
| 4 times or more a day | 60 (21.1) | 15 (4.3) | 13 (3.6) | 2 (0.5) | 90 (6.4) |

Base: The children who did not receive breastmilk (1396). Four children were excluded because of the amount of milk consumed was not unknown to their parents.

Among the children who received breastmilk, 59.7%, 39.1% and 13.2% of 12-month, 18-month and 24-month groups respectively did not consume any other types of milk other than breastmilk. About 11.6%, 21.6% and 44.7% of children in the 12-month, 18-month and 24-month group respectively consume cow's milk or formula milk but they did not consume it daily. Consuming cow's milk or formula milk daily was reported by 28.7% of children in 12-month group, 39.1% of children in 18-month group, and 42.1% in 24-month group.



3.3.5. Amount of cow's milk and formula milk consumed

The average quantity of milk taken by children who did not receive breastmilk was 533 ml (s.d. 181) in the 12-month group, 416 ml (s.d. 169) in the 18-month group and 365 ml (s.d. 165) in the 24-month group. In the 4-year group, the intake of milk was 230 ml (s.d. 145).

Among children who did not receive breastmilk, 37.5%, 37.0% and 12.3% of children in the 18-month, 24-month and 4-year groups respectively consumed milk within the recommended quantity 360 to 480 ml a day. (Table 10)

Intake of milk above the daily recommended quantity was not common. About one-quarter (25.9%) of children of the 18-month group and 16.7% in the 24-month group consumed milk more than 480 ml per day. Very few (4.2%) children in the 4-year group consumed milk more than 480 ml.

Overall, more children consumed less than the recommended quantity than those consuming milk within the recommended range among the 18-month, 24-month and 4-year groups. More than one-third of the 18-month group (36.5%) either did not consume any milk or took milk less than 360 ml a day. The proportion of non-consumers and those consumed milk less than 360 ml a day accounted for 46.2% in the 24-month group and increased to 83.5% in the 4-year group.

Table 10: Quantity of milk intake (including formula milk, cow's milk calcium added soy milk) in the past 7 days among the children who did not receive breastmilk

| | 12-month (n = 284) | 18-month (n = 348) | 24-month (n = 359) | 4-year (n = 405) | Overall (N = 1396) |
|--|------------------------------|------------------------------|------------------------------|----------------------------|------------------------------|
| Quantity of milk taken in a day | n (%) | n (%) | n (%) | n (%) | n (%) |
| Average (SD) (ml) | 533 (181) | 416 (169) | 365 (167) | 230 (145) | 373 (197) |
| Consumed milk less than 360 ml* | 42 (14.8) | 127 (36.5) | 166 (46.2) | 338 (83.5) | 673 (48.2) |
| Consumed 360-480 ml | 82 (28.9) | 131 (37.6) | 133 (37.0) | 50 (12.3) | 396 (28.4) |
| Consumed more than 480 ml | 160 (56.3) | 90 (25.9) | 60 (16.7) | 17 (4.2) | 327 (23.4) |

Base: The children who did not receive breastmilk (1396). Four children were excluded because of the amount of milk consumed was not unknown to their parents. *Included those did not consume milk.

Compared to children not receiving breastmilk, children who received breastmilk had a lower intake of cow's and formula milk. Their average quantity of milk taken in a day was 101 ml (s.d. 161 ml) in the 12-month group, 161 ml (s.d. 152 ml) in the 18-month group and 198 ml (s.d. 137 ml) in the 24-month group, and 220 ml (s.d. 134) in the 4-year-group



3.3.6. Parental perception of their children's amount of milk taken

The majority (77.0%) of parents perceived their children's amount of milk intake as appropriate. There were more parents who thought their children's milk intake was inadequate (13.9%) than those who thought their children were drinking too much milk (9.2%). The details are shown in Table 11.

Table 11: Parents' perception of the adequacy of their children's milk intake of children

| | 12-month (n = 283) n (%) | 18-month (n = 346) n (%) | 24-month (n = 351) n (%) | 4-year (n = 352) n (%) | Overall (N = 1332) n (%) |
|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|
| Inadequate | 34 (12.0) | 35 (10.1) | 35 (10.0) | 81 (23.0) | 185 (13.9) |
| Appropriate | 221 (78.1) | 280 (80.9) | 275 (78.3) | 249 (70.7) | 1025 (77.0) |
| Too much | 28 (9.9) | 31 (9.0) | 41 (11.7) | 22 (6.3) | 122 (9.2) |

Base: Respondents with children who did not receive breastmilk (1332)

3.3.7. Utensils for milk drinking

Many children persistently consumed milk from feeding bottle beyond the recommended age of 18 months. There were 84.4% in the 18-month group and 68.5% in the 24-month group who consumed milk from feeding bottle. Less than one-third (31.6%) of the children in the 4-year group were still using bottle to drink milk. (Table 12)

Drinking from cups with straw was more popular than drinking from training cup or regular cup among toddlers. Using regular cup for milk drinking was reported by 22.7% of children in the 24-month and 56.4% of the 4-year group.

Table 12: Utensil for milk drinking used by the child in the past 7 days

| | 12-month (n = 335) n (%) | 18-month (n = 385) n (%) | 24-month (n = 384) n (%) | 4-year (n = 358) n (%) | Overall (N = 1462) n (%) |
|-------------------------|---------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|
| Feeding bottle | 321 (95.8) | 325 (84.4) | 263 (68.5) | 113 (31.6) | 1022 (69.9) |
| Cup with a straw | 80 (23.9) | 146 (37.9) | 153 (39.8) | 104 (29.1) | 483 (33.0) |
| Training cup | 24 (7.2) | 34 (8.8) | 35 (9.1) | 11(3.1) | 104 (7.1) |
| Regular cup | 14 (4.2) | 52 (13.5) | 87 (22.7) | 202 (56.4) | 355 (24.3) |

Base: Respondents with children who consumed milk (1462). # Multiple response was allowed.



Amount of milk consumed by bottle users and non-bottle users

Bottle users consumed significantly more milk than non-bottle users ($p < 0.001$). The mean milk intake per day of bottle users and non-bottle users in the 18-month group was 432 ml and 320 ml respectively, and 400 ml and 299 ml in the 24-month group. (Table 13)

Table 13: Amount of milk consumption per day by bottle users and non-bottle users

| Age group | Users of feeding bottles | | Non-bottle users | | Test Statistics |
|-----------|--------------------------|---------------------------------------|--------------------|---------------------------------------|-----------------|
| | Number of children | Milk intake per day (ml) Mean (SD) | Number of children | Milk intake per day (ml) Mean (SD) | |
| 18-month | 306 | 432 (162) | 40 | 320 (155) | 4.13* |
| 24-month | 257 | 400 (158) | 94 | 299 (138) | 5.48* |

Base: Respondents of 18-month and 24-month group whose children consumed cow's milk or formula but no breastmilk in the 7 days prior to the survey (697)

* p -value < 0.001

3.3.8. Parental practice of weaning children from using feeding bottles

The practice of weaning children from bottles was reported by the respondents of the 18-month, 24-month and 4-year groups. More than 60% of parents in each group were aware of DH's recommendation on stopping the use of feeding bottles in children. However, much fewer parents could recall the recommended age to stop using bottle by 18 months, namely 30.5% of the 18-month group, 19.7% in the 24-month group and 9.5% in the 4-year group.

Although all of the children in the 18- and 24-month groups were able to drink from cups (refer to Section 3.5.4 and Table 25 about self-feeding skills of the target children), a significant proportion of parents in these groups did not attempt to wean them from feeding bottles, 62.6% and 39.8% in the 18- and 24-month groups respectively. (Table 14) About one-third of parents in the 18-month group attempted to wean their children from bottles, with 11.9% being successful but 21.8% failed. In the 24-month group, 27.6% of parents successfully weaned their children from bottles, while 28.6% of parents attempted but failed.

Among parents of children in the 4-year group, 13.1 % had never attempted weaning, and 18.4% reported unsuccessful attempts.



Table 14: Parental awareness and attempt of weaning children from feeding bottles for drinking milk

| | 18-month (n = 385) n (%) | 24-month (n = 384) n(%) | 4-year (n = 358) n(%) |
|--|---------------------------------------|--------------------------------------|------------------------------------|
| History of weaning from feeding bottle | | | |
| Never users | 14 (3.6) | 15 (3.9) | 14 (3.9) |
| Successfully weaned | 46 (11.9) | 106 (27.6) | 231 (64.5) |
| Attempted but unsuccessful | 84 (21.8) | 110 (28.6) | 66 (18.4) |
| No attempt | 241 (62.6) | 153 (39.8) | 47 (13.1) |
| DH message of stopping the use of feeding bottle at 18 months | | | |
| Parents aware of the message | 254 (66.0) | 260 (67.7) | 224 (62.6) |
| Parents recalled the recommended age correctly | 117 (30.5) | 76 (19.7) | 34 (9.5) |

Base: Respondents with children above 18 months who consumed formula or cow's milk (1127)

3.3.9. Behaviours associated with offering milk in feeding bottles

Falling asleep with feeding bottle causes sleep association problem and this may become a barrier for weaning. Among the children who drank milk from bottles, 16.5% of parents reported their children had always or often fallen asleep while drinking milk from bottle. There were much fewer bottle users in the 4-year group who had the habit of falling asleep with feeding bottles than bottle user of younger age groups: 11.5% of the 4-year group compared to 15.6%, 16.6% and 19.8% in the 12-month, 18-month and 24-month group respectively. (Table 15)

The practice of offering children a bottle of milk when they got up in the morning was common in all age groups, but even more common among the persistent bottle users in the older age groups (24-month and 4-year group). About 40% children in the 12-month group had drunk milk in bed with feeding bottle when they got up in the morning, compared to 53.6% and 52.2% children of the 24-month and 4-year group respectively. This observation may indicate that this practice is a risk factor for failure in weaning from feeding bottles. Offering milk in feeding bottle to sooth children was uncommon for bottle users in all age groups.



Table 15: Using or offering feeding bottles in daily situations

| | 12-month (n = 321) n (%) | 18-month (n = 325) n (%) | 24-month (n = 263) n (%) | 4-year (n = 113) n (%) | Overall (N = 1022) n (%) |
|---|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Children fallen asleep while drinking milk from bottle (孩子喝着奶瓶入睡 (邊喝邊睡)) | | | | | |
| Always / Usually | 50 (15.6) | 54 (16.6) | 52 (19.8) | 13 (11.5) | 169 (16.5) |
| Sometimes | 49 (15.3) | 39 (12.0) | 22 (8.4) | 9 (8.0) | 119 (11.6) |
| Never / Seldom | 222 (69.2) | 232 (71.4) | 189 (71.9) | 91 (80.5) | 734 (71.8) |
| Children drank milk in bed from bottle when they get up in the morning (早上起床時·孩子在床上用奶瓶喝奶) | | | | | |
| Always / Usually | 129 (40.2) | 163 (50.2) | 141 (53.6) | 59 (52.2) | 492 (48.1) |
| Sometimes | 15 (4.7) | 26 (8.0) | 19 (7.2) | 7 (6.2) | 67 (6.6) |
| Never / Seldom | 177 (55.1) | 136 (41.8) | 103 (39.2) | 47 (41.6) | 463 (45.3) |
| Parent offers milk in the feeding bottle to sooth their child when he is fussy (孩子發脾氣時·您用奶瓶安撫他/她) | | | | | |
| Always / Usually | 11 (3.4) | 8 (2.5) | 6 (2.3) | 2 (1.8) | 27 (2.6) |
| Sometimes | 14 (4.4) | 6 (1.8) | 7 (2.7) | 0 (0.0) | 27 (2.6) |
| Never / Seldom | 296 (92.2) | 311 (95.7) | 250 (95.1) | 111 (98.2) | 968 (94.7) |

Base: Respondents with children who drank milk from feeding bottles (1022)

3.3.10. Parents' perception about the formula milk

Parents' agreement with four statements of follow up formula was assessed. Overall, 18.8% of parents agreed or strongly agreed that "follow-up formula could replace other food to provide nutrients". More parents, 31.5%, were of the opinion that "follow-up formulae were added with nutrients that promoted children's brain development, which could not be found in other food". (Table 16) Parents of the 12-, 18- and 24-month groups were more likely to agree with the nutritional benefits of formula milk than parents in the 4-year group ($p < 0.05$). More parents of younger children (31.2%, 32.6% and 36.8% of the 12-, 18- and 24-month groups respectively), compared to 25.8% parents of the 4-year group, agreed or strongly agreed that follow-up formulae have more nutritional values in the development of children's brain than other foods in diet.

The myth about nutritional value or health effect of follow up formula over cow's milk was widespread among parents. Overall, 46.6% of parents agreed or strongly agreed that "follow up formula provides more calcium than cow's milk", and 38.7% parents agreed that "follow-up formula is better in enhancing children's immunity". Although both follow-up formula and cow's milk provide important dietary source of calcium for young children, significantly more parent of children below 24 months (51.3%, 46.9% and 47.6% of parents



of the 12-, 18- and 24-month groups respectively) agreed or strongly agreed that follow-up formulae had better nutritional value for calcium than cow's milk, comparing to 39.8% of parents in the 4-year group. ($p=0.037$) A higher percentage of parent of children below 24 months (40.9%, 41.1% and 41.1% of parents of the 12-, 18- and 24-month groups respectively) agreed or strongly agreed that the follow-up formulae having better effect on enhancing children's immunity than cow's milk, comparing to 31.8% of parents in the 4-year group. ($p=0.026$)

Table 16: Parents' perception on the nutritional benefits of follow up formulae

| Statement about formula milk | Parents agreed /strongly agreed | | | | | Test Statistics (p -value) |
|--|---------------------------------|--------------------|--------------------|--------------------|---------------------|----------------------------------|
| | 12-month | 18-month | 24-month | 4-year | Overall | |
| | (n = 413) n (%) | (n = 414) n (%) | (n = 397) n (%) | (n = 415) n (%) | (N = 1639) n (%) | |
| "Follow-up formulae can replace other food to provide nutrients" (較大嬰兒及幼兒配方奶粉能代替其他食物，提供孩子所需的營養。) | 79 (19.1) | 81 (19.6) | 91 (22.9) | 57 (13.7) | 308 (18.8) | 12.94 (0.044) |
| "Follow-up formula are added with nutrients that promote children's brain development, which cannot be found in other food" (較大嬰兒及幼兒配方奶粉含有添加的營養能促進腦部發展，是其他食物沒有的。) | 129 (31.2) | 135 (32.6) | 146 (36.8) | 107 (25.8) | 517 (31.5) | 15.25 (0.018) |
| "Calcium content of follow-up formula is higher than that in cow milk" (較大嬰兒及幼兒配方奶粉，比普通牛奶，較能提供更多鈣質。) | 212 (51.3) | 194 (46.9) | 189 (47.6) | 165 (39.8) | 760 (46.4) | 13.41 (0.037) |
| "Follow-up formula is better than cow's milk in enhancing children's immunity" (較大嬰兒及幼兒配方奶粉，比普通牛奶，較能增強孩子的抵抗力。) | 169 (40.9) | 170 (41.1) | 163 (41.1) | 132 (31.8) | 634 (38.7) | 14.39 (0.026) |

Base: All respondents (1639)



3.4. Foods consumed by Children

3.4.1. Consumption of different types of foods other than milk

The participants were asked to report the number of days the target children consumed the different food groups, number of types and quantity of fruits and vegetables eaten in the 7 days prior to the survey.

More children in the 24-month group than the 12-month group consumed food of different groups (meat, fish and seafood, eggs, legumes and soy products, vegetables, fruits, and grains and cereals) . (Table 17) The pattern of the 24-month and 4-year groups was similar.

Grains and cereals were the most consumed food group. Nearly all children in the 18-, 24-month and 4-year group consumed food of this group every day.

Vast majority of children consumed vegetables every day in the 7 days prior to the survey, with 83.1% in the 12-month group, 88.6% in the 18-month group, 86.9% in the 24-month group and 84.1% in the 4-year group. Two percent of the 4-year group did not consume vegetables in the 7 days prior to the survey; this proportion was higher than that of children in the younger age groups.

More than two-thirds of children in each age group consumed fruits every day in the 7 days prior to the survey. Two percent of the 24-month and 4-year groups did not consume any fruits; this was higher than 1% of children in the younger age groups.

Meat and fish, sources of haem iron, were consumed by most children. In the 12-month group, 60% consumed meat every day. The percentage increased to 69.8% in the 18-month group, 81.6% in the 24-month group and 81.0% in the 4-year group. Sixty percent of the 12-month group and more than 70% in the other age groups consumed fish for 3 days or more in the 7 days prior to the survey. Infrequent intake of meat and fish was more a problem of the children in the 12-month group -- 1.0% did not consume meat or fish and 4.1% consumed meat and fish for 2 days or less. In the 18-, 24-month and 4-year groups, 2.4%, 2.5% and 1.9% of children consumed fish and meat for 2 days or less respectively.

In all age groups, the children consumed eggs and legumes and soy products much less often than other food. Nearly half (46.5%) of the 12-month group did not consume legumes and soy products. Of the 18-, 24-month and 4-year groups, about one-quarter did not consume this food group in their diet.



Table 17: Frequency of consuming major food groups in the 7 days prior to the survey by age group

| | Did not consume | 1 to 2 days | 3 to 4 days | 5 to 6 days | Every day |
|---------------------------|----------------------------|--------------------|--------------------|--------------------|------------------|
| | n (%) | n (%) | n (%) | n (%) | n (%) |
| 12-month (n = 413) | | | | | |
| Meat | 9 (2.2) | 37 (9.0) | 89 (21.5) | 32 (7.7) | 246 (59.6) |
| Fish and seafood | 31 (7.5) | 127 (30.8) | 134 (32.4) | 31 (7.5) | 90 (21.8) |
| Eggs | 69 (16.7) | 191 (46.2) | 88 (21.3) | 17 (4.1) | 48 (11.6) |
| Legumes and soy products | 192 (46.5) | 183 (44.3) | 29 (7.0) | 0 (0.0) | 9 (2.2) |
| Vegetables | 5 (1.2) | 15 (3.6) | 32 (7.7) | 18 (4.4) | 343 (83.1) |
| Fruits | 6 (1.5) | 26 (6.3) | 62 (15.0) | 54 (13.1) | 265 (64.2) |
| Grains and cereals | 0 (0.0) | 10 (2.4) | 13 (3.1) | 8 (1.9) | 382 (92.5) |
| 18-month (n = 414) | | | | | |
| Meat | 5 (1.2) | 22 (5.3) | 74 (17.9) | 24 (5.8) | 289 (69.8) |
| Fish and seafood | 16 (3.9) | 104 (25.1) | 132 (31.9) | 21 (5.1) | 141 (34.1) |
| Eggs | 40 (9.7) | 145 (35.0) | 139 (33.6) | 17 (4.1) | 73 (17.6) |
| Legumes and soy products | 121 (29.2) | 214 (51.7) | 55 (13.3) | 10 (2.4) | 14 (3.4) |
| Vegetables | 2 (0.5) | 5 (1.2) | 23 (5.6) | 17 (4.1) | 367 (88.6) |
| Fruits | 5 (1.2) | 17 (4.1) | 53 (12.8) | 29 (7.0) | 310 (74.9) |
| Grains and cereals | 0 (0.0) | 3 (0.7) | 10 (2.4) | 4 (1.0) | 397 (95.9) |
| 24-month (n = 397) | | | | | |
| Meat | 2 (0.5) | 16 (4.0) | 30 (7.6) | 25 (6.3) | 324 (81.6) |
| Fish and seafood | 13 (3.3) | 88 (22.2) | 108 (27.2) | 30 (7.6) | 158 (39.8) |
| Eggs | 44 (11.1) | 127 (32.0) | 134 (33.8) | 27 (6.8) | 65 (16.4) |
| Legumes and soy products | 101 (25.4) | 220 (55.4) | 59 (14.9) | 1 (0.3) | 16 (4.0) |
| Vegetables | 4 (1.0) | 7 (1.8) | 22 (5.5) | 19 (4.8) | 345 (86.9) |
| Fruits | 8 (2.0) | 19 (4.8) | 50 (12.6) | 35 (8.8) | 285 (71.8) |
| Grains and cereals | 0 (0.0) | 0 (0.0) | 2 (0.5) | 12 (3.0) | 383 (96.5) |
| 4-year (n = 415) | | | | | |
| Meat | 3 (0.7) | 16 (3.9) | 42 (10.1) | 18 (4.3) | 336 (81.0) |
| Fish and seafood | 11 (2.7) | 94 (22.7) | 119 (28.7) | 37 (8.9) | 154 (37.1) |
| Eggs | 20 (4.8) | 108 (26.0) | 163 (39.3) | 45 (10.8) | 79 (19.0) |
| Legumes and soy products | 98 (23.6) | 214 (51.6) | 86 (20.7) | 6 (1.4) | 11 (2.7) |
| Vegetables | 10 (2.4) | 13 (3.1) | 21 (5.1) | 22 (5.3) | 349 (84.1) |
| Fruits | 10 (2.4) | 12 (2.9) | 58 (14.0) | 51 (12.3) | 284 (68.4) |
| Grains and cereals | 0 (0.0) | 0 (0.0) | 0 (0.0) | 8 (1.9) | 407 (98.1) |

Base: All respondents (1639)



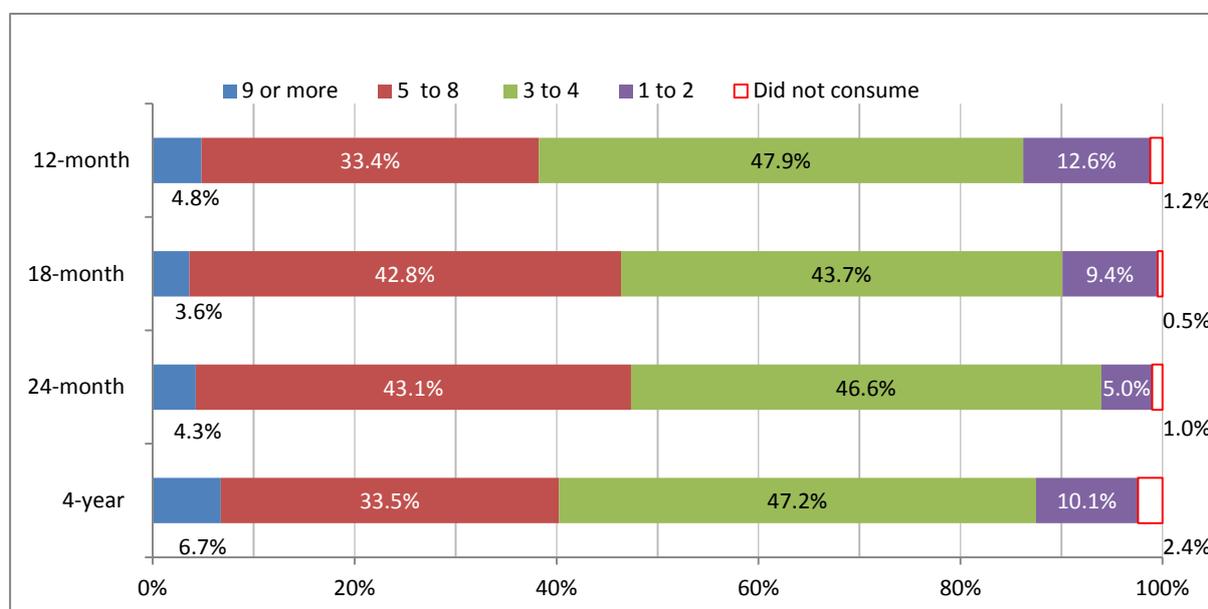
3.4.2. Consumption of vegetables

(a) Variety of vegetables consumed

The number of types of vegetables consumed in the 7 days prior to the survey was shown in Figure 3.

The number of types of vegetables consumed was similar across the four age groups. Overall, most children (46%) consumed 3 to 4 types of vegetables in a week. About 43.0% of children consumed at least 5 types of vegetables and 4.9% of children consumed more than 9 types of vegetables in a week. On the other hand, about 10% of children were limited to consuming one or 2 types of vegetables in a week.

Figure 3: Number of types of vegetables consumed by the target children



Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)

(b) Quantity of vegetables consumed

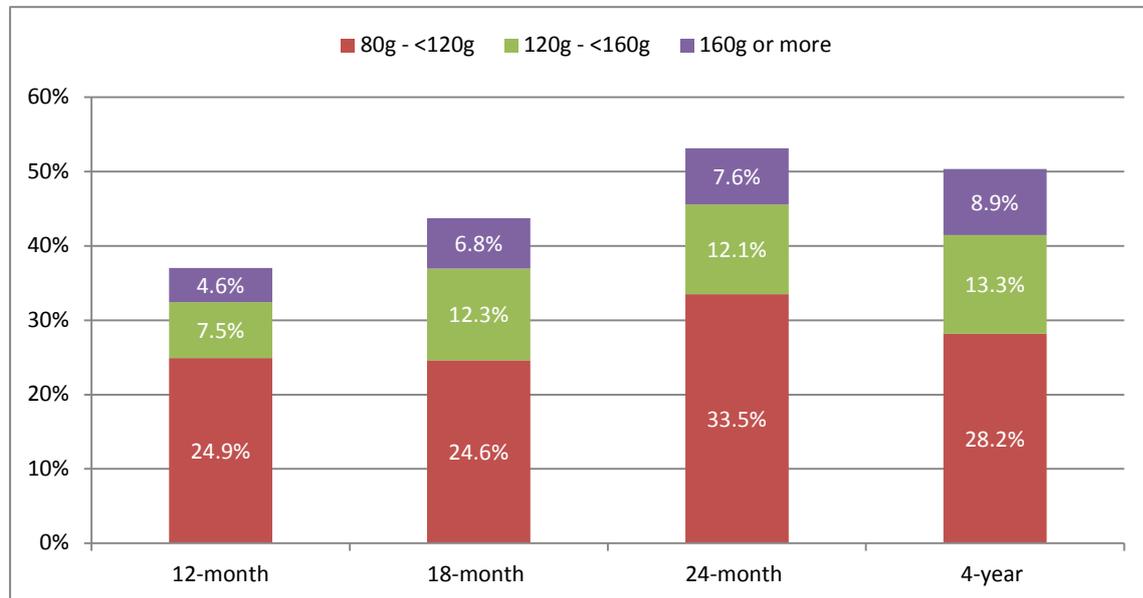
Figure 4 shows that the percentage of children consumed one serving (80 g) or more a day. The average daily quantity of vegetables consumed by children increased with age.

In the 12-month and 18-month groups, 37.0% and 43.7% of children consumed at least one serving or 80 g of vegetables a day. In the 24-month and 4-year groups, 53.1% and 50.4% of children consumed at least one serving a day. About 20% of the 24-month group consumed at least 120 g of vegetables a day and 8.9% of the 4-year group consumed more



than 160 g of vegetables a day. The proportion of children consumed 2 servings or 160 g vegetables per day increased from 4.6% in the 12-month group to 6.8%, 7.6% and 8.9% in the 18-, 24-month and 4-year groups respectively.

Figure 4: Proportion of the children consumed one serving (80 g) or more vegetable a day in each group



Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)

3.4.3. Consumption of fruits

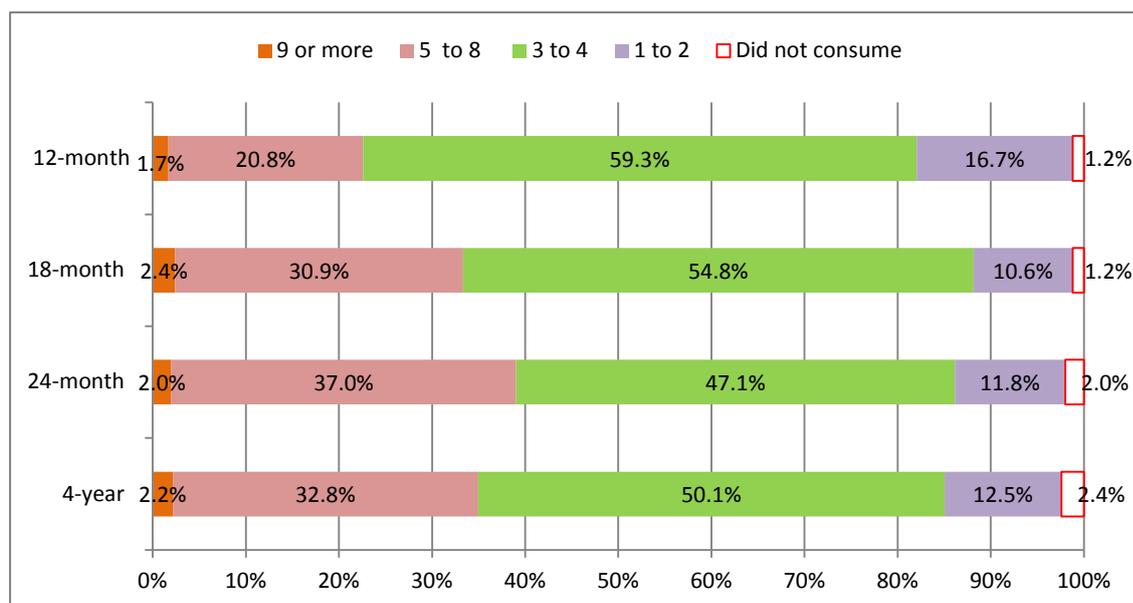
(a) Variety of fruits that children consumed

The number of types of fruits consumed in the 7 days prior to the survey is displayed in Figure 5.

The children in the 12-month group consumed less variety of fruits than children of the older age groups. Overall, 52.9% of children consumed 3 to 4 types of fruits in a week. About one-third (32.4%) of all target children consumed at least 5 types of fruits. About 10% of children had intake of fruits limited to one to 2 types of fruits in a week. Very few (2.1%) consumed more than 9 types of fruits in a week.



Figure 5: Number of types of fruit consumed by the target children

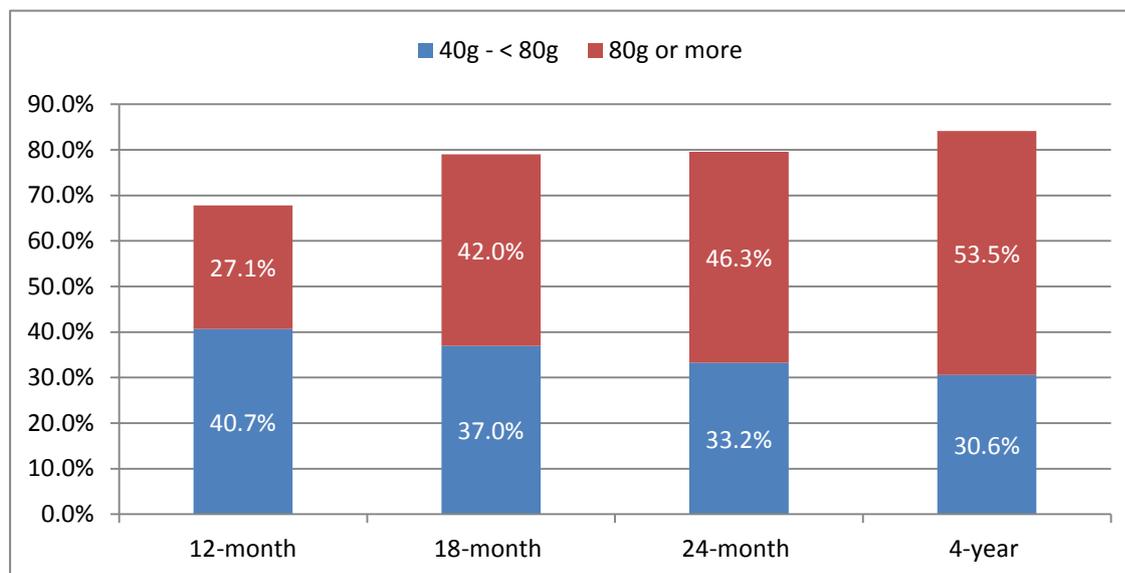


Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)

(b) Quantity of fruits consumed

The daily average quantity of fruits consumed by children increased with age. Children of the 12 to 24-month groups are recommended to consume at least 40 g of fruits (half a serving) a day. In the 12-month and 18-month groups, 67.8% and 79.0% of children consumed at least 40 g of fruits a day. In the 24-month and 4-year groups, 46.3% and 53.5% of children consumed 80 g or more fruits (at least one serving) a day. (Figure 6)

Figure 6: Proportion of children consumed a half serving (40 g) or more fruit a day in each group.



Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)



3.4.4. Vegetables and fruits consumption compared to recommended intakes

The average intakes of vegetables and fruits of children in the 12-, 18- and 24-month groups were compared to the recommendation of DH. (Table 18)

About 37% of the 12-month group and 43.7% of the 18 month group met the recommended vegetable intake of at least 80 g per day. More children met the recommended fruit intake of at least 40 g per day, with 67.8% in the 12-month group and 79.0% in the 18-month group respectively.

In the 24-month group, about 20% met the recommended vegetable intake of at least 120 g daily and 46.3% consumed the recommended quantity of at least 80 g of fruits per day.

Table 18: Proportion of 1- to 2-year-old-children meeting the recommended daily intake of vegetable and fruit

| | Recommended quantity | Total number of children | Children with intake met recommendation | |
|-------------------|----------------------|-----------------------------|--|-------|
| | | | n | % |
| Vegetables | 12-month | 413 | 153 | 37.0% |
| | 18-month | 414 | 181 | 43.7% |
| | 24-month | 397 | 78 | 19.6% |
| Fruits | 12-month | 413 | 280 | 67.8% |
| | 18-month | 414 | 327 | 79.0% |
| | 24-month | 397 | 184 | 46.3% |

Recommendation for 1 to 2 year old children on booklet: Vegetables: 4 to 8 tablespoon (1 tablespoon =20g). Fruits: ¼ to ½ bowl (½ bowl=1 serving /80g)

*Recommendation quantity of StartSmart@School.hk: Vegetable: 1½servings. Fruits: 1 serving. (1 serving=80g)



3.4.5. Use of nutrient supplements

Approximately 25% of the studied children had taken nutrient supplements in the 7 days prior to the survey. The use of nutrient supplements increased with age, from about 10% in the 12-month group to one-third of children in the 4-year group. (Table 19)

Cod liver oil was the most common type of supplement used by the studied children, followed by fish oil. Among the pure vitamin and mineral supplements, calcium and vitamin C tablet were used by more than 5% of children in the 18-, 24-month and 4-year groups. Pure iron or vitamin D tablets were used by less than 1% of children.

Cod fish oil contains vitamin D. Among the breastfed children in the 12-month and 18-month groups, 8.5% (11 out of 129 children) and 12.7% (8 out of 65 children) consumed cod liver oil or vitamin D respectively.

Table 19: Consumption of nutritional supplements

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) | 4-year (n = 415) n (%) | Overall (N = 1639) n (%) |
|---|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Children consumed nutrient supplement(s) | 41 (9.9) | 101 (24.4) | 120 (30.2) | 139 (33.5) | 401 (24.5) |
| Type of nutrient supplement | | | | | |
| Cod liver oil | 17 (4.1) | 50 (12.1) | 64 (16.1) | 58 (14.0) | 189 (11.5) |
| Fish oil | 8 (1.9) | 36 (8.7) | 32 (8.1) | 41 (9.9) | 117 (7.1) |
| Vitamins and minerals | 18 (4.4) | 46 (11.1) | 54 (13.6) | 73 (17.6) | 191 (11.7) |
| ▪ Multivitamins and minerals | 6 (1.5) | 10 (2.4) | 12 (3.0) | 13 (3.1) | 41 (2.5) |
| ▪ Vitamin B | 1 (0.2) | 2 (0.5) | 2 (0.5) | 1 (0.2) | 6 (0.4) |
| ▪ Vitamin C | 2 (0.5) | 12 (2.9) | 25 (6.3) | 43 (10.4) | 82 (5.0) |
| ▪ Vitamin D | 5 (1.2) | 4 (1.0) | 1 (0.3) | 4 (1.0) | 14 (0.9) |
| ▪ Calcium | 6 (1.5) | 26 (6.3) | 31 (7.8) | 25 (6.0) | 88 (5.4) |
| ▪ Iron | 1 (0.2) | 0 (0.0) | 3 (0.8) | 0 (0.0) | 4 (0.2) |
| ▪ Zinc | 1 (0.2) | 0 (0.0) | 5 (1.3) | 3 (0.7) | 9 (0.5) |
| Other supplements | 3 (0.7) | 5 (1.2) | 10 (2.5) | 13 (3.1) | 31 (1.9) |

Base: All respondents (1639)

Other supplements: colostrum, probiotics, bilberry extracts, lingzhi honey, polycal



3.5. Parental Feeding Practices and Children's Mealtime Behaviours

To help child eat well, parents are to allow children to decide how much and what on the dining table to eat. Parents are responsible on when, where and what food to present at meals. By having a mealtime routine and maintaining mealtime structure, parents help young children establish healthy eating behaviours and preventing mealtime fussiness. These include serving meals at a predicable schedule which includes 3 main meals and 2 to 3 between meal snacks, limiting a meal to a reasonable period (30 minutes are generally regarded adequate for most toddlers and preschool children. Parents or adult family members should eat with children such that parents can model healthy eating food and help children overcome food neophobia. A conducive environment for healthy eating includes minimization of distraction, provision of a regular and comfortable seat and suitable eating utensil, as well as parents talking with their children.

3.5.1. Arrangement ion of mealtime environment

A conducive environment includes eating with family members, minimization of distraction, provision of a regular and comfortable seat and suitable eating utensil, as well as parents talking with their children.

About half (47.0%) of the 12-month group always or often dined with their parent in the past month prior to the survey. (Table 20) This increased to 58.7% in the 18-month group, 69.8% in the 24-month group, and 83.9% in the 4-year group. On the other hand, almost one-third of the 12-month group and about 20% of the 18- and 24-month groups never/seldom dined with their family members. Eating the same foods as other family members was uncommon in the 12-month group (19.4%). The majority of children in the 18-, 24-month and 4-year groups adopted this practice.

A fair proportion of parents allowed children watching TV or mobile device during meal times. This practice became more common in older age groups, with 24.9% in the 24-month group and 28.2% in the 4-year group. An increasing trend of children running around during meal time was observed. The respective percentages were 14.5% in the 18-month group and 20% in the 4-year group.



Table 20: Mealtime environment and mealtime behaviours of the index children in the past month prior to the survey

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) | 4-year (n = 415) n (%) | Overall (N = 1639) n (%) |
|---|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| The child dined with parent/ family members (您的孩子和您或家人同枱吃飯。) | | | | | |
| Always / Often | 194 (47.0) | 243 (58.7) | 277 (69.8) | 348 (83.9) | 1062 (64.8) |
| Sometimes | 77 (18.6) | 81 (19.6) | 47 (11.8) | 33 (8.0) | 238 (14.5) |
| Never / Seldom | 142 (34.4) | 90 (21.7) | 73 (18.4) | 34 (8.2) | 339 (20.7) |
| The child ate the same foods as family members (孩子吃的菜和其他家人的一樣。) | | | | | |
| Always / Often | 80 (19.4) | 205 (49.5) | 276 (69.5) | 363 (87.5) | 924 (56.4) |
| Sometimes | 91 (22.0) | 95 (22.9) | 62 (15.6) | 23 (5.5) | 271 (16.5) |
| Never / Seldom | 242 (58.6) | 114 (27.5) | 59 (14.9) | 29 (7.0) | 444 (27.1) |
| The child watched TV or mobile device (您讓孩子一邊吃飯一邊看電視或手機。) | | | | | |
| Always / Often | 62 (15.0) | 87 (21.0) | 99 (24.9) | 117 (28.2) | 365 (22.3) |
| Sometimes | 64 (15.5) | 79 (19.1) | 105 (26.4) | 82 (19.8) | 330 (20.1) |
| Never / Seldom | 287 (69.5) | 248 (59.9) | 193 (48.6) | 216 (52.0) | 944 (57.6) |
| The child was running around (孩子吃飯時走來走去。) | | | | | |
| Always / Often | 51 (12.3) | 60 (14.5) | 72 (18.1) | 83 (20.0) | 266 (16.2) |
| Sometimes | 37 (9.0) | 95 (22.9) | 82 (20.7) | 96 (23.1) | 310 (18.9) |
| Never / Seldom | 325 (78.7) | 259 (62.6) | 243 (61.2) | 236 (56.9) | 1063 (64.9) |

Base: All respondents (1639)

3.5.2. Duration of children's meal

Both the reported meal time duration and the parental perceived length of meal time increased in older age groups. (Table 21) More than half of the parents, 52.3%, in the 4-year group, felt that their children's meal time was too long, comparing with 15.3% in the 12-month group.

Prolonged meal time, or the duration of mealtime is always or often more than 30 minutes, was increasingly reported by parents as children became older, from 17.2% in the 12-month group to 30.2%, 38.3% and 55.2% in the 18-month, 24-month and 4-year groups respectively. Nearly one in ten parents (8.7%) with the 4-year-olds reported that their children often or always took more than 60 minutes for a meal.

In the older age group, more parents showed concern on their child eating too little. The



proportion of parents reporting their children eating too little was 16.2% in the 12-month group. It increased to 23.4% in the 18-month group, 30.0% in the 24-month group and 26.5% in the 4-year group.

Table 21: Duration of children's meal in the past month and parental perception of children's mealtime

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) | 4-year (n = 415) n (%) | Overall (N = 1639) n (%) |
|--|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Duration | | | | | |
| 15 minutes or less | 124 (30.0) | 64 (15.5) | 41 (10.3) | 30 (7.2) | 259 (15.8) |
| 16 to 30 minutes | 218 (52.8) | 225 (54.3) | 204 (51.4) | 156 (37.6) | 803 (49.0) |
| 31 to 45 minutes | 42 (10.2) | 74 (17.9) | 101 (25.4) | 124 (29.9) | 341 (20.8) |
| 46 to 60 minutes | 23 (5.6) | 39 (9.4) | 34 (8.6) | 69 (16.6) | 165 (10.1) |
| More than 60 minutes | 6 (1.5) | 12 (2.9) | 17 (4.3) | 36 (8.7) | 71 (4.3) |
| Parent's perception of duration | | | | | |
| Too short | 16 (3.9) | 5 (1.2) | 15 (3.8) | 3 (0.7) | 39 (2.4) |
| Appropriate | 334 (80.9) | 305 (73.7) | 262 (66.0) | 195 (47.0) | 1096 (66.9) |
| Too long | 63 (15.3) | 104 (25.1) | 120 (30.2) | 217 (52.3) | 504 (30.8) |
| Parents' concern on children's intake | | | | | |
| No concern | 335 (81.1) | 306 (73.9) | 271 (68.3) | 297 (71.6) | 1209 (73.8) |
| Eating too little | 67 (16.2) | 97 (23.4) | 119 (30.0) | 110 (26.5) | 393 (24.0) |
| Eating too much | 11 (2.7) | 11 (2.7) | 7 (1.8) | 8 (1.9) | 37 (2.3) |

Base: All respondents (1639)

Overall, one in four parents (24.0%) was concerned about their children eating too little (Table 21). Parents who were concerned about their child eating too little were more likely to be parents with children taking over 30 minutes for a meal. (Chi-sq = 51.2, $p < 0.001$) (Table 22) About 50% of parents who were concerned about their children eating too little reported their children took more than 30 minutes for a meal, compared to 30.8% of the parents who reported no concern on the children's appetite.

Table 22: Association between duration of meal and parents' concern on appetite of the children

| | Parents' concern on appetite of the children | | |
|---------------------------|--|-----------------------------------|---|
| | Eating too much (n = 37) n (%) | No concern (n = 1209) n (%) | Eating too little (n = 393) n (%) |
| Duration of a meal | | | |
| 30 minutes or less | 29 (78.4) | 839 (69.2) | 196 (50.0) |
| More than 30 minutes | 8 (21.6) | 372 (30.8) | 197 (50.0) |

Base: All respondents (1639)



3.5.3. Undesirable parenting behaviour related to food

Use of food in behaviour management of children was not uncommon. Rewarding children with food was more common in the older age groups. About one-third of parents (31.6%) in the 4-year group reported they “always /often reward children with food” in the past month prior to the survey, while 18.6% of parents in the 12-month group did so. The proportion of parents of the 4-year group, 13.3%, who reported that they “always /often provide children with sugar added beverage” was higher than the proportion of the young age groups. (Table 23)

In contrast, offering favourite food to sooth children when they were fussy was more common in younger children. Over 20% of parents in the 12-, 18- and 24-month groups reported “always or often offering children with favourite food when they are fussy”, but only 14.0% of parents in the 4-year group did so.

Table 23: Parental behaviours in offering children foods in the past one month prior to the survey

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) | 4-year (n = 415) n (%) | Overall (N = 1639) n (%) |
|---|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Rewarded the child with food (您用孩子喜歡的食物來獎賞他／她的好行為。) | | | | | |
| Always / Often | 77 (18.6) | 102 (24.6) | 101 (25.4) | 131 (31.6) | 411 (25.1) |
| Sometimes | 92 (22.3) | 128 (30.9) | 115 (29.0) | 127 (30.6) | 462 (28.2) |
| Never / Seldom | 244 (59.1) | 184 (44.4) | 181 (45.6) | 157 (37.8) | 766 (46.7) |
| Offered favorite foods when the child was fussy (當孩子發脾氣或不開心時，您給他／她食物安慰他／她。) | | | | | |
| Always / Often | 95 (23.0) | 85 (20.5) | 84 (21.2) | 58 (14.0) | 322 (19.6) |
| Sometimes | 119 (28.8) | 147 (35.5) | 141 (35.5) | 138 (33.3) | 545 (33.3) |
| Never / Seldom | 199 (48.2) | 182 (44.0) | 172 (43.3) | 219 (52.8) | 772 (47.1) |
| Provided sugar added beverage (您給孩子喝加糖飲品。) | | | | | |
| Always / Often | 9 (2.2) | 16 (3.9) | 24 (6.0) | 55 (13.3) | 104 (6.3) |
| Sometimes | 19 (4.6) | 49 (11.8) | 90 (22.7) | 132 (31.8) | 290 (17.7) |
| Never / Seldom | 385 (93.2) | 349 (84.3) | 283 (71.3) | 228 (54.9) | 1245 (76.0) |

Base: All respondents (1639)



3.5.4. Parental facilitation and assistance to children in self-feeding

(a) Parental facilitation and assistance

Apart from transition to eating family meal, children move from being fed by parents, through parallel feeding, to independent self-feeding during 6 months to 2 years of age. Parental facilitation, including providing utensils, assistance, suitable foods, environment and assistance, is essential for children to acquire self-feeding and ability in eating with suitable utensils.

Facilitation for finger feeding and using spoons were not always provided for children in the 12-month group. Over 40% of children in this age group were occasionally allowed to finger feed themselves or given a spoon at mealtime. (Table 24) Of children in the 18- and 24-month group, more than 50% were always allowed to feed themselves with spoon. Despite this is the age interval most children can eat independently, a significant proportion of children, 21.7% in the 18-month group and 12.1% in the 24-month group, were not allowed to use a spoon at mealtime.

Nearly all children were provided a cup for drinking fluid. More than 90% of parents gave their children cup with a straw which was easier to handle.



Table 24: Parental facilitation for the children to self-feed during mealtimes

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) |
|--|---------------------------------------|---------------------------------------|---------------------------------------|
| Allowed the child finger feeding during mealtimes (吃飯時，您有多經常會容許他／她自己抓着食物來吃?) | | | |
| Always or often | 123 (29.8) | 207 (50.0) | 175 (44.1) |
| Sometimes | 109 (26.4) | 114 (27.5) | 104 (26.2) |
| Occasionally or very occasionally | 181 (43.8) | 93 (22.5) | 118 (29.7) |
| Allowing children to use spoon at mealtime (您有多經常會讓孩子拿調羹／勺子自己吃飯?) | | | |
| Always or often | 46 (11.1) | 209 (50.5) | 282 (71.0) |
| Sometimes | 71 (17.2) | 104 (25.1) | 65 (16.4) |
| Occasionally or very occasionally | 197 (47.7) | 90 (21.7) | 48 (12.1) |
| Providing cups to drink | | | |
| Provided children one or more type of cups | 397 (96.1) | 414 (100.0) | 397 (100.0) |
| Had not provided cups yet | 16 (3.9) | 0 (0.0) | 0 (0.0) |
| Type of cup provided to children | | | |
| Regular cup | 283 (68.5) | 372 (89.9) | 388 (97.7) |
| Training cup | 253 (61.3) | 283 (68.4) | 295 (74.3) |
| Cup with a straw | 378 (91.5) | 407 (98.3) | 394 (99.2) |

Base: Respondents with children in 12-month, 18-month and 24-month groups (1224)

(b) Self-feeding skills of children

Table 25 shows the percentage of children who were able to eat with spoon and drink from cups. About 50% of children in the 12-month group were able to eat with spoon in some way. The proficiency of using spoon advanced with age. Using spoon tidily was reported by 5.3% and 17.4% of children in the 18- and 24-month groups respectively.

With the use of cup, more than 90% of the 12-month groups and nearly all of 18-month groups and 24-month groups were able to drink from cups. Most children, 80.1%, in the 12-month group, were able to use cup with straw to drink independently. Using regular cup independently was reported by nearly one-third of children in the 12-month group. The percentage increased to 61.6% in the 18-month group and 87.9% in the 24-month group.



Table 25: Self-feeding skills of the children

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) |
|---|---------------------------------------|---------------------------------------|---------------------------------------|
| Using spoon | | | |
| Self-feed using spoon | 206 (49.9) | 393 (94.9) | 395 (99.5) |
| Use spoon tidily | 6 (1.5) | 22 (5.3) | 69 (17.4) |
| Use spoon with some spillage | 49 (11.9) | 268 (64.7) | 287 (72.3) |
| Use spoon with assistance | 151 (36.6) | 103 (24.9) | 39 (9.8) |
| Using cups to drink | | | |
| Able to use cups for drinking | 375 (90.8) | 412 (99.5) | 397 (100.0) |
| Able to use regular cups | 135 (32.7) | 255 (61.6) | 349 (87.9) |
| Able to use training cups | 187 (45.3) | 249 (60.1) | 264 (66.5) |
| Able to drink from cups with straw (sippy cups) | 331 (80.1) | 398 (96.4) | 392 (94.9) |

Base: Respondents with children in 12-month, 18-month and 24-month groups (1224)



3.6. Source of Information on Infant and Young Child Feeding

3.6.1. Exposure to the parent education resources of DH

Among all the health education resources on infant and young child feeding, parents were most commonly exposed to booklets (91.2%). About 30.1% of parents got the information from DH webpage and 21.6% were exposed to child feeding messages via the Parent-Child e-Link, an online membership email system of the Family Health Service. (Table 26)

Relatively lower proportion of parents, 8.8%, got health information from DVD or health promotion video produced by DH.

Table 26: Exposure to the health education resources on infant and young child feeding of Department of Health

| | 12-month (n = 413) n (%) | 18-month (n = 414) n (%) | 24-month (n = 397) n (%) | 4-year (n = 415) n (%) | Overall (N = 1639) n (%) |
|---------------------|--------------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Booklet | 391 (94.7) | 389 (94.0) | 370 (93.2) | 345 (83.1) | 1495 (91.2) |
| DH webpages | 126 (30.5) | 132 (31.9) | 109 (27.5) | 127 (30.6) | 494 (30.1) |
| Parent-Child e-Link | 97 (23.5) | 90 (21.7) | 77 (19.4) | 90 (21.7) | 354 (21.6) |
| DVD or video | 37 (9.0) | 26 (6.3) | 80 (20.2) | 2 (0.5) | 145 (8.8) |

Base: All respondents (1639)

3.6.2. Other information sources

Apart from DH health education resources, the most popular source of obtaining information on infant and young child feeding was through family, relatives and friends (71.0%), followed by health professionals (50.7%). (Figure 7)

Almost half of the parents also obtained information on infant and young child feeding through websites on parenting (47.2%). About one-third (36.7%) obtained information through social media.

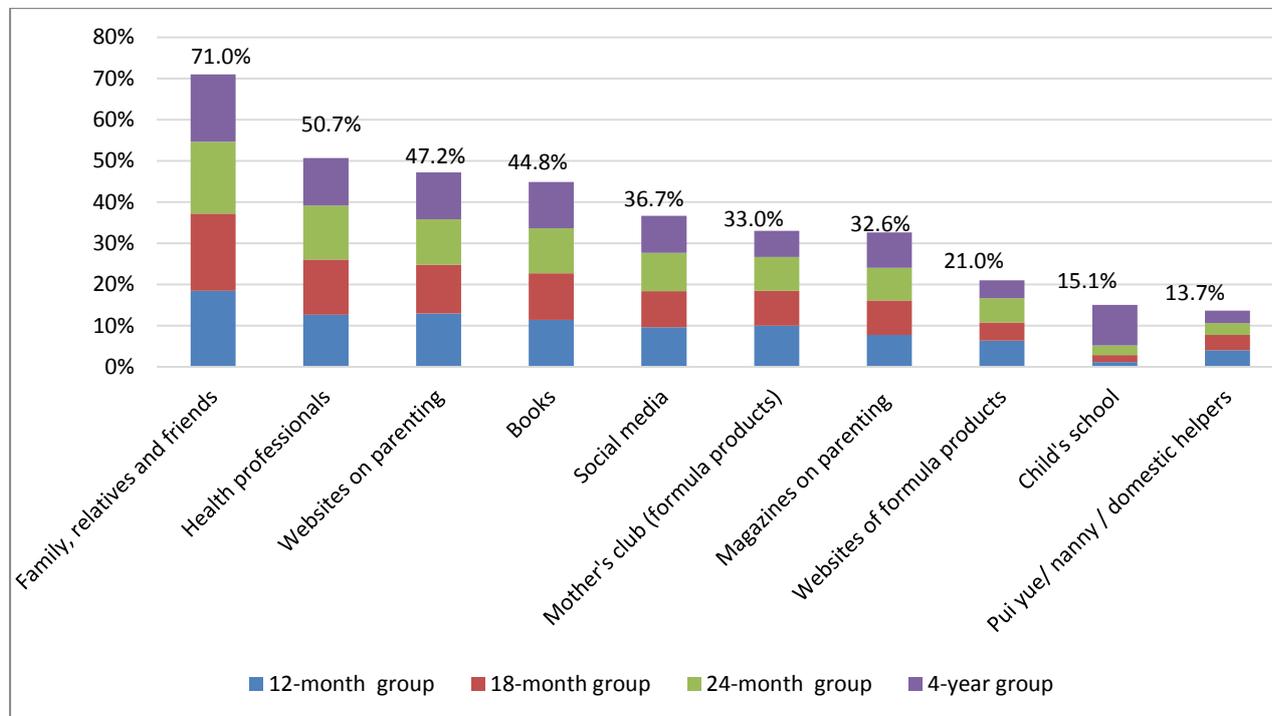
Traditional print media was still popular. 44.8% of parents reported they obtained information from books and 32.6% read parenting magazines.

About one-third (33.0%) of parents obtained information from mothers' clubs of the formula milk products and 20.1% reported they also obtained information from the websites of formula milk products.



In the 4-year old group, 38.8% of the respondents obtained child feeding information from their children’s schools.

Figure 7: Parent's source of information on infant and young child feeding



Base: All respondents: 12-month(413) 18-month(414) 24-month(397) 4-year(415)

3.6.3. Parents’ preferred channel for receiving child feeding information from DH

Parents’ most preferred channel of receiving health information and materials on infant and young child feeding from DH was through personalised mobile phone application (66.1%), followed by leaflet/ booklet (55.5%). Other channels included e-mails (42.5%), videos, DVD or promotional videos (36.3%) and parent-child seminar/ workshop (33.7%).

Almost all parents (99.5%) did not choose social media as the channel to receive health information and materials on infant and young child feeding from DH.



Table 27: Parent's preference of the channel of DH disseminating child feeding information

| | 12-month | 18-month | 24-month | 4-year | Overall |
|---------------------------------------|-----------------|-----------------|-----------------|---------------|----------------|
| | (n = 413) | (n = 414) | (n = 397) | (n = 415) | (N = 1639) |
| | n (%) | n (%) | n (%) | n (%) | n (%) |
| Personalised mobile phone application | 295 (71.4) | 271 (65.5) | 265 (66.8) | 252 (60.7) | 1083 (66.1) |
| Leaflet / booklet | 230 (55.7) | 242 (58.5) | 222 (55.9) | 216 (52.0) | 909 (55.5) |
| Email | 193 (46.7) | 175 (42.3) | 165 (41.6) | 163 (39.3) | 696 (42.5) |
| Videos, DVD or promotional video | 146 (35.4) | 144 (34.8) | 141 (35.5) | 164 (39.5) | 595 (36.3) |
| Parent-child seminar / workshop | 134 (32.4) | 132 (31.9) | 136 (34.3) | 151 (36.4) | 553 (33.7) |
| Social media | 2 (0.5) | 1 (0.1) | 3 (0.8) | 2 (0.5) | 8 (0.5) |

Base: All respondents (1639)

3.7. Maternal Breastfeeding Experience

3.7.1. Breastfeeding history of the mothers

Out of the 827 participants of the 12- and 18-month groups, 748 were mothers (382 in the 12-month group; 366 in the 18-month group). Sixty-five mothers (8.7%) had never breastfed and 182 (24.3%) mothers were still breastfeeding. (Table 28) There were 501 (67.0%) mothers who had breastfed but stopped. The time interval when these mothers stopped breastfeeding is shown in Table 29.

Table 28: Maternal breastfeeding history

| | 12-month | 18-month | Total |
|---------------------------|-----------------|-----------------|--------------|
| | (n = 382) | (n = 366) | (n = 748) |
| | n (%) | n (%) | n (%) |
| Did not breastfeed | 34 (8.9) | 31 (8.5) | 65 (8.7) |
| Had breastfed but stopped | 227 (59.4) | 274 (74.9) | 501 (67.0) |
| Still breastfeeding | 121 (31.7) | 61 (16.7) | 182 (24.3) |

Base: Mother respondents with children in 12-month or 18-month groups (748)



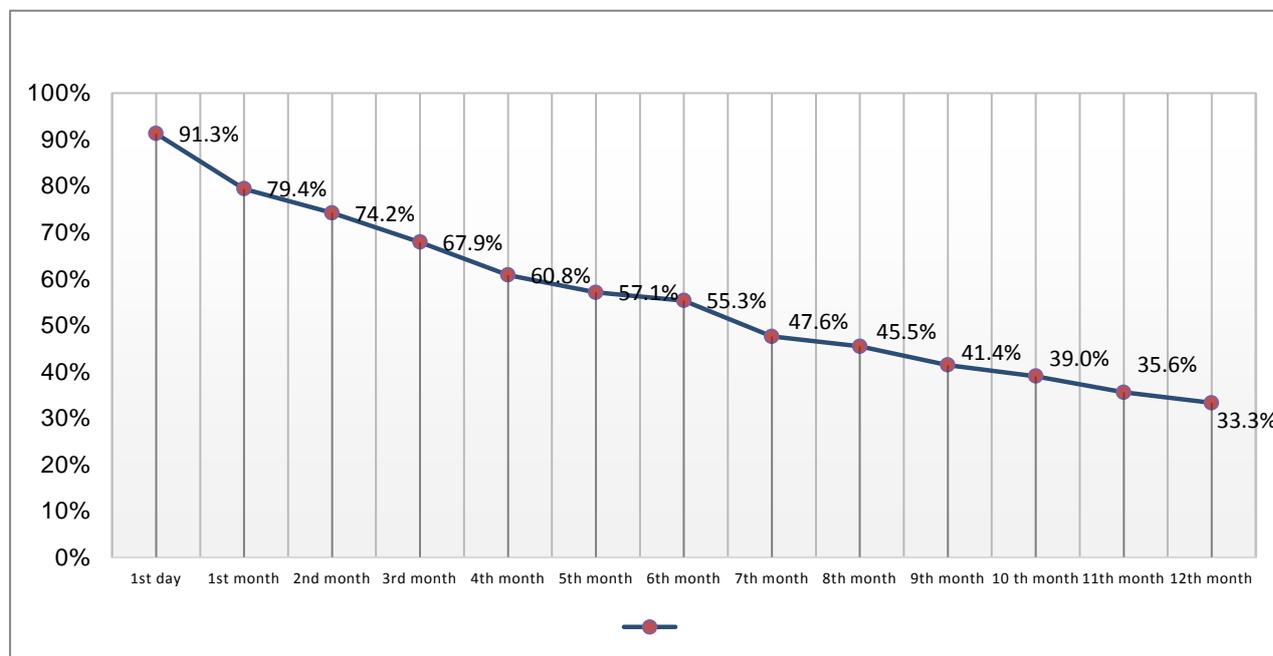
Table 29: The time intervals when the mothers stopped breastfeeding

| Age of infant when breastfeeding stopped | Mothers who had stopped breastfeeding (n = 501) | |
|--|--|--------|
| | n | (%) |
| Within the 1st month | 89 | (17.8) |
| 1 to 2 month | 86 | (17.2) |
| 3 to 5 months | 94 | (18.8) |
| 6 to 8 months | 104 | (20.8) |
| 9 to 11 months | 61 | (12.2) |
| 12 months or after | 67 | (13.4) |

Base: Mother respondent mothers of the 12- & 18-month groups who had stopped breastfeeding (501)

Overall the proportion of breastfeeding mothers dropped steadily over the first year after childbirth as shown in Figure 8. There were 91.3% of mothers who started breastfeeding after childbirth. About two-thirds of mothers (67.9%) had breastfed for at least 3 months. More than half (55.3%) of the mothers had breastfed for at least 6 months while one-third (33.3%) of the mothers had breastfed for at least 12 months.

Figure 8: Proportion of breastfeeding mothers in the first year after childbirth



Base: Mother respondents with children in 12-month or 18-month groups (748)



3.7.2. Demographic characteristics of mothers and their breastfeeding history

Table 30 shows the demographic characteristics of the mothers according to their breastfeeding history. Family income and age of the mothers were not associated with their breastfeeding history. More mothers who were home-makers or who were not having a paid employment at the time of interview (28.4%) were still breastfeeding than mothers who had returned to work (20.2%).

Breastfeeding history was associated with the education attainment of both the mothers and the children's father ($p < 0.001$). A higher percentage of mothers with educational attainment of Form 3 or below did not breastfeed. More mothers who attained Form 4 to Form 7 education (45.7%) and Form 3 or below education (34.0%) stopped breastfeeding before their children reached 6 months of age than mothers with post-secondary education (28.6%).

Many more mothers with post-secondary education (30.0%) were still breastfeeding compared to those completed F.4 to F.7 (19.7%) and F.3 or below (17.9%). Similar patterns were also found with their spouses.



Table 30: Demographic characteristics of the mothers according to their breastfeeding history and duration.

| Demographic characteristics | Total number of respondents | Had not breastfed n (%) | Breastfeeding history | | | Test statistics (p-value) |
|--|-----------------------------|----------------------------|--|---|------------------------------|------------------------------|
| | | | Stopped breastfeeding before 6 months n (%) | Stopped breastfeeding after 6 months n (%) | Still breastfeeding n (%) | |
| All respondents | 748 | 65 (8.7) | 269 (36.0) | 232 (31.0) | 182 (24.3) | |
| Mother's age in year | | | | | | |
| 18 to 29 | 163 | 18 (11.0) | 61 (37.4) | 46 (28.2) | 38 (23.3) | |
| 30 to 39 | 515 | 41 (8.0) | 182 (35.3) | 164 (31.8) | 128 (24.9) | 2.25 |
| 40 or above | 70 | 6 (8.6) | 26 (37.1) | 22 (31.4) | 16 (22.9) | (0.90) |
| Mother's education attainment | | | | | | |
| Form 3 or below | 106 | 24 (22.6) | 36 (34.0) | 27 (25.5) | 19 (17.9) | |
| Form 4 to 7 | 289 | 28 (9.7) | 132 (45.7) | 72 (24.9) | 57 (19.7) | 65.85 |
| Post-secondary | 353 | 13 (3.7) | 101 (28.6) | 133 (37.7) | 106 (30.0) | (<0.001) |
| Mother's employment status at interview | | | | | | |
| Working full/part-time | 371 | 34 (9.2) | 150 (40.4) | 112 (30.2) | 75 (20.2) | 9.57 |
| Home-maker/unemployed | 377 | 31 (8.2) | 119 (31.6) | 120 (31.8) | 107 (28.4) | (0.02) |
| Father's age in year | | | | | | |
| 18 to 29 | 67 | 4 (6.0) | 25 (37.3) | 16 (23.9) | 22 (32.8) | |
| 30 to 39 | 487 | 44 (9.0) | 178 (36.6) | 153 (31.4) | 112 (23.0) | 4.54 |
| 40 or above | 194 | 17 (8.8) | 66 (34.0) | 63 (32.5) | 48 (24.7) | (0.60) |
| Father's education attainment | | | | | | |
| Form 3 or below | 106 | 18 (17.0) | 47 (44.3) | 22 (20.8) | 19 (17.9) | |
| Form 4 to 7 | 293 | 32 (10.9) | 123 (42.0) | 86 (29.4) | 52 (17.7) | 49.1 |
| Post-secondary | 348 | 15 (4.3) | 99 (28.4) | 124 (35.6) | 110 (31.6) | (<0.001) |
| Monthly household income | | | | | | |
| Less than \$30,000 | 289 | 30 (10.4) | 101 (34.9) | 91 (31.5) | 67 (23.2) | |
| \$30,000 - \$49,999 | 232 | 21 (9.1) | 93 (40.1) | 61 (26.3) | 57 (24.6) | 9.07 |
| \$50,000 or above | 220 | 13 (5.9) | 70 (31.8) | 79 (35.9) | 58 (26.4) | (0.17) |

Base: Mother respondents with children in 12-month or 18-month groups (748)



3.7.3. Mothers' reasons for stopping breastfeeding

The most frequently reported reasons at various age intervals were listed in Table 31. Overall, the top 5 reasons were “not having enough milk” (58.3%), “Returning to work” (29.5%), “breastmilk alone did not satisfy their children” (14.2%), “breastfeeding was too tiring” (13.6%) and “breastfeeding was too inconvenient” (13.0%).

Regardless of the timing of breastfeeding cessation, “not having enough milk” was the commonest reason quoted by mothers. There was little variation in the percentages of mothers among different age groups of children who reported “breastmilk alone did not satisfy their children” and “breastfeeding was too tiring”.

“Returning to work” was the second commonest reason among mothers who stopped breastfeeding during one month to 9 months after child birth. Overall, 18.0% of mothers specified that they “could not pump or breastfeed at work” while 13.0% reported that they “did not want to pump or breastfeed at work”.

Experiencing breast problems in breastfeeding, infants having trouble sucking or latching on, or infants having trouble in taking breastmilk were more frequently reported by the mothers who stopped breastfeeding before the child reached 3 months of age than those who breastfed for a longer period. Among mothers who stopped breastfeeding by 2 months, 12% of mothers stopped breastfeeding because they experienced breast problems in breastfeeding, and 16% of mothers stopped because their infants had trouble in taking breastmilk.

“Suitable time to stop breastfeeding” was only reported by those who stopped breastfeeding after their infants reached 6 months or older. More than 10% of these groups of mothers cited “I wanted to return to their lifestyle” as one of the reasons of stopping breastfeeding, which was much higher than those who stopped breastfeeding earlier.



Table 31: Mothers' reasons for stopping breastfeeding according to the time interval breastfeeding ceased.

| Reasons reported by mothers ^{Note} | Children' age when mother stopped breastfeeding | | | | | | All (N = 501) |
|---|---|--------------|--------------|--------------|---------------|----------------|------------------|
| | <1 month | 1 to 2 month | 3 to 5 month | 6 to 8 month | 8 to 11 month | 12 to 18 month | |
| | (n = 89) | (n = 86) | (n = 94) | (n = 104) | (n = 61) | (n = 67) | |
| | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) |
| I didn't have enough milk | 56 (62.9) | 56 (65.1) | 57 (60.6) | 56 (53.8) | 33 (54.1) | 34 (50.7) | 292 (58.3) |
| I needed to work | 7 (7.9) | 29 (33.7) | 43 (45.7) | 48 (46.2) | 13 (21.3) | 8 (11.9) | 148 (29.5) |
| I could not pump or breastfeed at work | 6 (6.7) | 20 (23.3) | 26 (27.7) | 29 (27.9) | 7 (11.5) | 2 (3.0) | 90 (18.0) |
| I did not want to pump or breastfeed at work | 1 (1.1) | 12 (14.0) | 17 (18.1) | 21 (20.0) | 7 (11.5) | 7 (10.4) | 65 (13.0) |
| Breastmilk alone did not satisfy my child (My child is always hungry) | 14 (15.7) | 14 (16.3) | 14 (14.9) | 7 (6.7) | 10 (16.4) | 12 (17.9) | 71 (14.2) |
| Breastfeeding was too tiring | 12 (13.5) | 14 (16.3) | 10 (10.6) | 14 (13.5) | 8 (13.1) | 10 (14.9) | 68 (13.6) |
| Breastfeeding was too inconvenient | 6 (6.7) | 6 (7.0) | 12 (12.8) | 18 (17.3) | 10 (16.4) | 13 (19.4) | 65 (13.0) |
| My child had trouble in taking breast milk | 13 (14.6) | 15 (17.4) | 5 (5.3) | 10 (9.6) | 8 (13.1) | 1 (1.5) | 52 (10.4) |
| I was sick | 12 (13.5) | 7 (8.1) | 7 (7.4) | 12 (11.5) | 6 (9.8) | 4 (6.0) | 48 (9.6) |
| I thought I was not suitable to breastfeed because I was sick | 12 (13.5) | 6 (7.0) | 4 (4.3) | 9 (8.7) | 5 (8.2) | 3 (4.5) | 39 (7.8) |
| A health professional did not recommend I breastfed | 0 (0.0%) | 2 (2.3%) | 3 (3.2%) | 3 (2.9%) | 2 (3.3%) | 1 (1.5%) | 11 (2.2%) |
| I thought it was a suitable time to stop breastfeeding | 0 (0.0) | 0 (0.0) | 0 (0.0) | 13 (12.5) | 14 (23.0) | 20 (29.9) | 47 (9.4) |
| My child had trouble sucking or latching on | 4 (4.5) | 11 (12.8) | 1 (1.1) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 16 (3.2) |
| My child lost interest in breastmilk | 8 (9.0) | 3 (3.5) | 5 (5.3) | 7 (6.7) | 6 (9.8) | 0 (0.0) | 29 (5.8) |
| I wanted to go back to my lifestyle | 2 (2.2) | 3 (3.5) | 4 (4.3) | 11 (10.6) | 7 (11.5) | 7 (10.4) | 34 (6.8) |
| Experienced breasts problems in breastfeeding | 13 (14.6) | 8 (9.3) | 5 (5.3) | 2 (1.9) | 1 (1.6) | 1 (1.5) | 30 (6.0) |
| I felt pain when breastfeeding | 7 (7.9) | 2 (2.3) | 2 (2.1) | 1 (1.0) | 0 (0.0) | 0 (0.0) | 12 (2.4) |
| My nipples were sore, cracked, or bleeding | 5 (5.6%) | 3 (3.5%) | 2 (2.1%) | 0 (0.0%) | 1 (1.6%) | 1 (1.5%) | 12 (2.4%) |
| My breasts were infected or abscessed | 2 (2.2%) | 4 (4.7%) | 3 (3.2%) | 2 (1.9%) | 0 (0.0%) | 0 (0.0%) | 11 (2.2%) |
| My breasts were overfull or engorged | 0 (0.0%) | 1 (1.2%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (0.2%) |
| My breasts leaked too much | 1 (1.1%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (0.2%) |
| I needed someone else to feed my child | 0 (0.0) | 5 (5.8) | 4 (4.3) | 5 (4.8) | 0 (0.0) | 3 (4.5) | 17 (3.4) |
| My child was not gaining enough weight | 2 (2.2) | 1 (1.2) | 1 (1.1) | 3 (2.9) | 2 (3.3) | 4 (6.0) | 13 (2.6) |
| My child became sick | 6 (6.7) | 2 (2.3) | 0 (0.0) | 1 (1.0) | 2 (3.3) | 1 (1.5) | 12 (2.4) |
| I became pregnant or wanted to become pregnant again | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (1.0) | 1 (1.6) | 6 (9.0) | 8 (1.6) |

Base: Mother respondents of the 12- & 18-month groups who had stopped breastfeeding (501)

Note: Respondents were asked to provide a maximum of 3 reasons



3.7.4. Mothers' reasons for not choosing breastfeeding

Sixty-five mothers did not breastfeed their studied children. Their reasons were listed in Table 32.

The top 2 reasons for mothers who did not breastfeed the studied children were “they thought that they would not have adequate milk” (41.5%) and “they needed to work” (30.8%). About 20.0% of mothers thought they were unsuitable to breastfeed because they were sick. Other reasons were followed by “breastfeeding was too inconvenient” (15.4%) and “they had trouble getting the milk flow to start/ they did not like breastfeeding” (12.3%).

Table 32: Mother's reasons for not breastfeeding

| | (n = 65) |
|---|-----------|
| | n (%) |
| I thought I would not have adequate milk | 27 (41.5) |
| I needed to work | 20 (30.8) |
| I was sick and I thought I was not suitable to breastfeed | 13 (20.0) |
| Breastfeeding was too inconvenient | 10 (15.4) |
| I had trouble getting the milk flow to start / I did not like breastfeeding | 8 (12.3) |
| I needed someone else to feed my child | 6 (9.2) |
| I wanted to go back to my lifestyle | 6 (9.2) |
| Breastmilk and formula milk were similar | 5 (7.7) |
| I had too many household duties | 5 (7.7) |
| I wanted to be able to leave my child for several hours at a time | 3 (4.6) |
| I wanted to go back to my usual diet | 3 (4.6) |
| My child became sick | 2 (3.1) |
| I wanted to go on a weight-loss diet | 1 (1.5) |
| Family members did not want me to breastfeed | 1 (1.5) |
| A health professional did not recommend I breastfed | 0 (0.0) |

Base: Mother respondents with children in 12-month or 18-month groups who had never breastfed (65)

Note: Respondents were asked to provide a maximum of 3 reasons



4. Discussion

This Survey aimed to study the food consumption pattern of young children and parental feeding practices. The vast majority (88.4%) of the respondents were mothers who were mostly involved in their children's diet and feeding. Among nearly 80% of the target children, mothers were the main carers for choosing foods as well as the key persons in supervising their children's eating.

4.1. Breastfeeding and Choice of Milk

The Survey showed that a significant proportion of children consumed breastmilk beyond their first birthday. A considerable number of children received breastmilk beyond 2 years old. Follow up formula milk was the predominant type of milk consumed by young children from 1 to 2 years of age. Cow's milk was increasingly being consumed from 1-2 years old and became the most popular choice of milk among preschool age children at 4 years of age. Milk products, yogurt and cheese, were commonly consumed in the diet of the young children after 1 year old. There was a significant change in the pattern of milk choices compared with the findings of the 2010 Survey. (Table 33) Among 1 to 2 year olds, the proportion of children persistently received breastmilk increased sharply. There was a significant increase in the proportion of 4-year olds consumed cow' increased significantly. Vast majority of children consumed formula. In this survey, a considerable proportion of children either consumed both formula and cow's milk or consumed cow's milk only after 18-month of age. This reflects children diversify their choices and were less dependent on formula milk.

Table 33: Type of milk consumed in the 7 days prior to the survey in 2010 and 2016

| Type of milk | 12-month | | 18-month | | 24-month | | 4-year | |
|-------------------|----------|-------|----------|-------|----------|-------|--------|-------|
| | 2010 | 2016 | 2010 | 2016 | 2010 | 2016 | 2010 | 2016 |
| Breastmilk | 9.8% | 31.2% | 5.4% | 15.7% | 2.9% | 9.6% | 0.9% | 1.7% |
| Infant formula | 23.7% | 6.3% | 11.2% | 4.1% | 1.6% | 0.3% | 0.5% | 0.5% |
| Follow-up formula | 71.6% | 72.9% | 84.8% | 82.9% | 94.4% | 83.6% | 79.6% | 43.1% |
| Other formula | 0.5% | 0.5% | 0.7% | 0.5% | 0.3% | 1.0% | 0.0% | 5.1% |
| Cow's milk | 3.1% | 7.3% | 14.5% | 32.6% | 21.0% | 47.9% | 38.0% | 63.6% |

4.2. Quantity of milk consumed

Excessive milk intake in young children poses risk of developing obesity and may displace their appropriate eating of a diversified diet. A daily milk intake of 360 to 480 ml is recommended to meet their nutrient needs. Compared to the survey in 2010, a higher



percentage of 12- and 18-month groups consumed milk of the recommended quantity in this survey. On the contrary, the percentage in 4-year group that consumed the appropriate amount of milk decreased in 2016. (Table 34) The proportion of high consumers, those who consumed more than 480 ml per day, decreased significantly in 2016. Larger proportion of children consumed milk less than 360 ml a day. The percentage of non-consumers of milk in this survey was similar to that in 2010. However, among the 24-month and 4-year groups, there was a substantial increase in children who did not consume milk daily.

Table 34: Quantity and frequency of milk consumption of children in 2010 and 2016 survey

| | 12-month | | 18-month | | 24-month | | 4-year | |
|--|----------|-------|----------|-------|----------|-------|--------|-------|
| | 2010 | 2016 | 2010 | 2016 | 2010 | 2016 | 2010 | 2016 |
| Quantity of milk taken in a day | | | | | | | | |
| 360 to 480 ml a day | 18.5% | 28.9% | 33.3% | 37.6% | 37.5% | 37.0% | 24.3% | 12.3% |
| More than 480 ml a day | 71.7% | 56.3% | 47.8% | 25.8% | 40.5% | 16.7% | 15.4% | 4.2% |
| Less than 360 ml a day | 5.4% | 14.8% | 18.5% | 36.5% | 22.0% | 46.2% | 60.3% | 83.5% |
| Frequency of milk drinking | | | | | | | | |
| Did not consumed any milk | 1.0% | 0.4% | 1.1% | 1.1% | 1.9% | 2.2% | 11.2% | 13.8% |
| Did not consumed milk daily | 0.5% | 0.4% | 1.1% | 1.4% | 0.8% | 7.5% | 7.9% | 36.0% |

The frequency and quantity of milk consumption reduced in children from 1 to 4 years of age, as shown in Tables 9 and 10. Intake of milk below recommended quantity causes a concern over inadequate dietary calcium intake in children if their diet did not contain adequate quantity of milk products and other calcium rich foods. Although cheese and yogurt were popular in the children's diet, the quantity consumed was uncertain and the total dietary calcium cannot be estimated. Nevertheless, the Survey indicated that the intake of calcium rich foods in Hong Kong children needs improvement.

The infrequent and low milk intake among the preschool children, 24-month and 4-year groups in this survey, was pretty similar to the eating habits of adults in Hong Kong.⁹ The Behavioural Risk Survey 2013 showed that 15.6% of respondents did not consume any milk and 48.6% consumed less than one serving a day. The population-based food consumption survey 2005-2007 also reported a low intake of milk and milk products in local adults.¹⁰

Lower dietary intake of calcium and vitamin D was reported in toddlers when they shifted to a solid based diet as well as lower intake of fluid.¹¹ Toddlers are adapting to eat a family food. It is a challenge for parents to help young children to adapt to a new dietary pattern that provide them with adequate calcium while keeping a balance of energy intake from solid



part and fluid part (principally milk) of the diet. Parents play a crucial role in terms of serving, providing milk for children as well as acting as their role models. Parents' consumption of milk and milk alternatives has a significant impact on the amount of milk and alternatives served to children.¹²

The parent education resources on feeding for toddlers and preschool children should focus on meeting the calcium requirement by diet, leading a bone healthy lifestyle. Parents need to have information on adequate intake of milk and milk alternatives for both themselves and their children. This includes calcium rich foods, guidance on the portion size, the exchange serving size for milk and milk products as well as traditional calcium rich foods. Practical information, such as cooking tips and recipes are indispensable to help parents include these calcium rich foods into the family meals.¹³ By improving the availability of milk, milk products and other calcium rich foods in the family meals, it can also improve the calcium intake in parents which would likely be low.¹⁴

The Survey showed that parents were much concerned about the calcium intake of their children. Calcium supplement is the one of the most common supplements consumed, about 6% of the 4-year old children. Fruit flavoured or chocolate milk was consumed by more than 20% of the 4-year group. Being a more palatable beverage choice, parents might have offered children flavoured cow's milk to help them improve calcium intake. A systemic review showed that the differences of the overall sugar intake in the diet of the consumers and non consumers of flavoured cow's milk was small (<1.5 teaspoons per day).¹⁵ However, promoting flavoured milk as a means to improve calcium intake is controversial.¹⁶ While fruit flavoured or chocolate milk would be a workable alternative to improve the calcium intake in children, the long term adverse health effect of sugary beverage should not be ignored.¹⁷ This potential risk should be communicated to parents.

4.3. Persistent use of feeding bottle for drinking milk

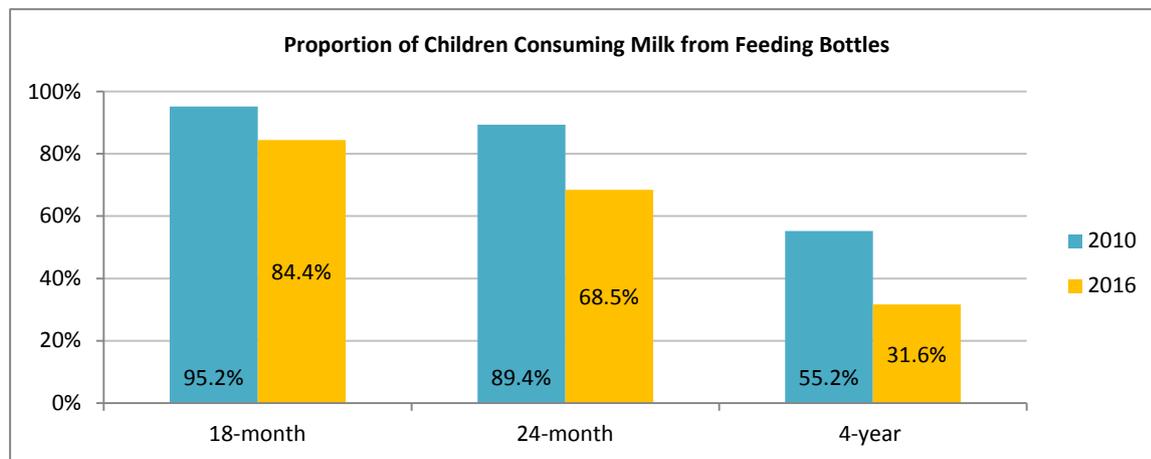
There was a drop in the percentage of persistent feeding bottle users compared to the survey in 2010. (Figure 10)

Timely stop drinking milk from bottles by 18-month of age was observed only in a minority of children. The majority of parents of the 18-month and 24-month groups had not attempted to wean children from feeding bottles. It may be explained by relative lack of awareness among parents and the barriers experienced by parents when weaning from bottles. Despite the fact that majority of the parents were exposed to the parent education resources of feeding young children, relatively few parents were clear about the recommended age of weaning from bottles. (Table 14) Parents perceived the appropriate



age for weaning from feeding bottles was above 24 months.

Figure 10: Proportion of children consumed milk from feeding bottles in the 2010 and 2016 survey.



The barrier or failure encountered by parents attempted should be further studied. Drinking milk from feeding bottle was associated with higher milk consumption. Refusal to using cups for milk and therefore reduced milk intake may occur when changing to drinking milk from cup.¹⁸ This could lead to parental concern about compromising children's dietary quality and nutrient intake, especially calcium intake and thus may reduce parental motivation to wean their children from feeding bottles.

Allowing children to sleep with milk bottles in their mouths in bed at night was reported as one of the barriers on stopping use of feeding bottles.¹⁹ This practice was also commonly reported among the persistent bottle users. However, the practice of allowing milk bottle when children getting up in the morning was even much more reported in the persistent bottle users beyond 24 months or preschoolers as shown in Table 15. In Hong Kong, many preschoolers sleep late and have a short sleep duration.²⁰ Giving bottles to toddlers when they just awake may be a measure taken by parents to sooth them back to sleep. A local survey of 2-5 years old children showed that about 20 % of children did not have breakfast regularly. Such practice could also compromise a proper breakfast.²¹ The significance of the practice of allowing children drinking milk in bed on getting up in the morning should be further studied in order to help parents overcome their barrier to wean children from feeding bottle.

On stopping feeding bottle, parents need support to ensure adequate calcium intake in children. Dietary tips and guidelines to increase the availability and accessibility of milk and milk products as well as other calcium rich foods in the mealtime and as snacks and at home is crucial. In addition, being a role model for children in eating is equally important.



Parents and caregivers should be encouraged to consume the same calcium rich foods with their children. This will help improve the dietary calcium intake of both parents and children.

4.4. Vegetable and Fruit Intake

Compared with the findings in 2010 survey, more children of the 12-, 18- and 24-month groups consumed at least 80 g (or one serving) of vegetables or at least 40 g (half serving) of fruits daily. (Table 35) In the 4-year group, slightly more children consumed at least 80 g (one serving) of fruits in this survey than in 2010. However, the percentage of children who consumed at least 160 g (two servings) of vegetables remained 8.9%.

Table 35: Proportion of children consumed vegetables and fruit above cut-off in 2010 and 2016 survey

| | 12-month | | 18-month | | 24-month | | 4-year | |
|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 2010 [★] | 2016 [†] |
| Consumption of vegetables | | | | | | | | |
| At least 80 g (one serving) daily | 29.1% | 37.0% | 36.1% | 43.7% | 35.0% | 53.1% | --- | --- |
| At least 160 g (two servings) daily | --- | --- | --- | --- | --- | --- | 8.9% | 8.9% |
| Consumption of fruits | | | | | | | | |
| At least 40 g (half serving) daily | 54.4% | 67.8% | 61.8% | 79.0% | 67.5% | 79.5% | --- | --- |
| At least 80 g (one servings) daily | --- | --- | --- | --- | --- | --- | 49.8% | 53.5% |

★ Quantity consumed was based on the 3-day food record provided by parents in 2010 †The quantity consumed was based on parents' report on the questionnaire in 2016

The proportions of children who consumed more than 1 serving (80 g) of vegetables or a half serving (40 g) of fruit increase with age. (Figures 4 and 6) The proportions of preschool children who had recommended intake of vegetables and fruit were still low. Children in the preschool stage are at the height of food neophobia. Preschool children are likely to be evolving their own food preferences and it would be difficult to increase their intake or adding a new food. Effective feeding strategies for increasing vegetables and fruits intake have been reported in a series of randomized control trials. Offering non-tangible rewards presenting of vegetables with a healthy dip was shown to be effective to increase children's liking and intake.^{22, 23, 24, 25} This can be introduced to parents together with the current recommendation of feeding skills, including availability, repeated exposure and modeling intake, are the effective strategies.²⁶



4.5. Mealtime Environment

Structured mealtime environment, removal of distraction, self-feeding, family meals and responsive feeding practice are salient strategies in establishing and maintaining diet of good quality and mealtime routine. Responsive feeding and structured mealtime have been shown to effectively reduce food fussiness and increase food enjoyment, both by parental report and observation of mealtime behaviour.^{27, 28} However, a substantial percentage of the young age groups of 12-, 18- and 24-month children did not eat with the parents and were offered a separate meal from family foods in this survey. (Table 20) Support for toddler to self-feeding was not common. Distraction during meals, such as use of TV and mobile device, was shown to increase in older age group. Overall, the finding indicates there were obstacles for our young children to learn to eat properly.

The Survey also revealed that prolonged mealtime duration was not uncommon in our children. (Table 21) More than half of the 4-year group reported a mealtime longer than 30 minutes. Meanwhile, parents showed concern that their children were eating too little. Parenting difficulties and picky eating behaviours were associated with prolonged meal duration.^{29,30} It is understandable that parents' concern in children's intake would prolong their mealtime unnecessarily. The concern of children eating little and prolonged mealtime may also be related to limited knowledge of portion size among parents.¹³ The over-expectation of the portion size may result in feeding problems. Lack of knowledge on portion size was one of the common barriers for parents to choose healthful behaviours.³¹ To help parents have a realistic expectation of the food intake of their children, the parents' educational resources on feeding young children should be enhanced to include information of children's appetite and the portion sizes of this age group. This may release parents' stress in feeding and facilitate them feeding children in a more responsive way.

4.6. Breastfeeding Experience of the Mother

The Survey showed that higher education level was associated with continuing breastfeeding in the first year and beyond. However, the Survey revealed that family income did not associate with the duration of breastfeeding, which is consistent with the findings of a prospective study of local breastfeeding mothers in 2006-7.³²

“Not having enough milk” was the top reason for breastfeeding cessation regardless on when the mothers stop breastfeeding. (Table 30) This was also observed among mothers in the United States.³³ In Gatti's integrative review of literature on breastfeeding and milk supply, she reported insufficient milk supply was the most common problem with



breastfeeding and the primary reason for early cessation.³⁴ Very often, overt but non-specific infant feeding cues, namely fussiness and crying, were reported by mothers as an indicator of insufficient milk supply.^{34,35} This also explains why perceived insufficient milk is a continued risk throughout lactation after breastfeeding was established. “Going back to work” was one of the top reasons for breastfeeding cessation; however, the impact on the breastfeeding duration was not examined in this survey.

Breastfeeding is a demanding task for mothers. The “cost of breastfeeding” whether tangible and intangible, is largely paid by the mothers.³⁶ The stress associated with breastfeeding may contribute to early cessation of breastfeeding, especially to those mothers who are at work, lack of social support from family and social network, or lack of assistance in household chores or child care. Better support from the family and the community is warranted to share the mothers’ burden as well as the “cost of breastfeeding”. For instance, assistance from other family members to take up housework and caring of children, provision of breastfeeding friendly workplace measures such as lactating breaks, private space and storage facilities for milk expression, and provision of more child care facilities in the community.

4.7. Limitations

This was a cross-sectional study, age trends could be due to differences between groups of parents, rather than actual age differences. Also, any association found from the results cannot infer causality.

Respondents were recruited at the time of their MCHC visits. The results may not be generalised to non-MCHC users. The participation of the Survey was voluntary. Parents of children with feeding problems or those are more health conscious might be more likely to participate in the Survey.

The food and milk intake were recalled by parents at the interview. The accuracy and precision would be subject to recall bias. Food or milk intake in the preschool group may be underreported as these intakes at school might be unknown or had not been reported to the parents. However, the Survey was conducted during summer holidays, the effect of under reporting was minimised. The proportion of children with adequate intake of milk (about 2 cups or more) was similar to this Survey.¹⁹



5. Conclusions and Recommendations

The Survey showed that a considerable proportion of toddlers were not allowed to feed themselves and rarely dined with their parents or other family members. Allowing children watching TV or electronic device during mealtime was common among the parents in preschool children. These parental feeding practices were not appropriate for the development of young children and hampered young children adopting a healthy eating behaviour.

Parents of older children may encountered more difficulties in feeding which were reflected by their concern of children's appetite and prolonged meal time. Parental concerns of their children eating too little indicated that their expectation of children appetite might not be appropriate. Explicit information of age appropriate portion size should be provided so that parents could have a more realistic expectation of children's intake. This may help reducing their anxiety on feeding children and promote more developmentally appropriate feeding behaviour.

This survey showed that a large proportion of children still did not consume adequate amount of fruit and vegetables. Effective feeding strategies, including availability, repeated exposure and parents as role model should be further promoted as part of developmental appropriate feeding practices.

The frequency and amount of milk consumption dropped as children's age increased. Low and infrequent milk intake was prominent among the preschool children of 2 and 4 years old. This was similar to the eating habits of adults in Hong Kong reported by the Behavioural Risk Survey 2013 and the Population based Food consumption Survey 2005-2007 also reported a low intake of milk and milk products in local adults.

Parents have a pivotal role in modelling food intake for their toddlers and preschoolers. Parent education resources on feeding for toddlers and preschool children should be strengthened and address the diet of both the children and their parents. Parents should be encouraged to provide adequate amount of milk and milk alternatives for both themselves and their children. Information including calcium rich food sources, guidance on the portion size, the exchange serving size for milk and milk products with traditional calcium rich foods, could help them in making food choices. Practical information, such as cooking tips and recipes are indispensable to help parents to include these calcium rich foods into the family meal. By improving the availability of milk, milk products and other calcium rich foods in the family meal, it can also improve the calcium intake in parents which would likely be low.



Lastly, the compliance of stop drinking milk from feeding bottle after 18 month of age was poor. The parental barrier in bottle weaning should be further studied



6. Reference

1. Nicklaus s, Boggio v, Chabanet C, Issanchou S. A prospective study of food variety seeking in childhood, adolescence and early adult life. *Appetite* 2005;44:289-297.
2. Department of Medicine and Therapeutics, Centre of Nutritional Studies, the Chinese University of Hong Kong, and Family Health Service, Department of Health, HKSARG 2012. A Survey of Infant and Young Child Feeding in Hong Kong: Diet and Nutrient Intake.
http://www.fhs.gov.hk/english/archive/files/reports/Survey_IYCF_Dietnutrient%20intake.pdf
3. Family Health Service, Department of Health, HKSARG 2012. A Survey of Infant and Young Child Feeding in Hong Kong: Milk Consumption. http://www.fhs.gov.hk/english/archive/files/reports/Survey_IYCF_milkconsumption_1904.pdf
4. Department of Applied Social Sciences, the Hong Kong Polytechnic University, and Family Health Service, Department of Health, HKSARG 2012. Survey of infant and young Child Feeding in Hong Kong: Parental Perception and Practice. http://www.fhs.gov.hk/english/archive/files/reports/Survey_IYCF_parents%20perception.pdf
5. Centers for Disease Control and Prevention. USA. Infant Feeding Practices Study II and its year six follow up. Questionnaires. <http://www.cdc.gov/breastfeeding/data/ifps/questionnaires.htm> (last accessed January 2016)
6. World Health Organization. WHO Anthro (version 3.2.2, January 2011) and macros (2011). <http://www.who.int/childgrowth/software/en/> (accessed September 2017)
7. Family Health Service, Department of Health, HKSAR. 7-day healthy meal planning guide for 6 to 24 month old children.
8. Central Health Education Unit, Department of Health, HKSAR. Nutrition Guidelines for Children aged 2 to 6 y for pre-primary institutions. Revised 2014.
9. Centre for Health Protection, Department of Health, Hong Kong SAR Government. Statistics on Behavioural Risk Factors. Consumption of milk products. April 2013. <http://www.chp.gov.hk/en/data/1/10/280/2235.html> (accessed September 2017)
10. Centre for Food Safety, Food and Environmental Hygiene Department. Hong Kong Population-Based Food Consumption Survey 2005-2007. Final Report. April 2010. http://www.cfs.gov.hk/english/programme/programme_firm/files/FCS_final_report.pdf (accessed September 2017)
11. Ben-Avraham S,Hyden CJ,Fletcher J,Bonuck KA. Bottle and sippy cup use is associated with diet and energy intake in toddlers. *Matern Child Nutr.* 2015 Oct;11(4):845-58.
12. Brett NR, Vanstone C, Maguire JL, Rauch F, Weiler HA. Parental knowledge, perceptions and consumption of milk and alternatives relates to intakes of young children 2-8 y of age. *The FASEB Journal* 2016, 30(1): S295



13. Martin-Biggers J, Spaccarotella K, Hongu N, Alleman F, Worobey J, Byrd-Bredbenner J. Translating it into real life: a qualitative study of the cognitions, barriers and supports for key obesogenic behaviors of parents of preschoolers. *BMC Public Health* (2015) 15:189
14. Centre for Food Safety, Food and Environmental Hygiene Department. The First Hong Kong Total Diet Study Report No. 9. The First Hong Kong Total Diet Study: Minerals. December 2014
http://www.cfs.gov.hk/english/programme/programme_firm/files/Report_on_the_1st_HK_Total_Diet_Study_Minerals_e.pdf
15. Fayet-Moore F. Effect of flavored milk vs plain milk on total milk intake and nutrient provision in children. *Nutr Rev* (2016) 74 (1): 1-17.
16. Dooley D, Patel A, Schmidt LA. Chocolate Milk in Schools. *Pediatrics* 2015;136:e1680 DOI: 10.1542/peds.2015-3202A
17. Noel SE, Ness AR, Northstoe K, Emmett P, Newby PK. Association between flavored milk consumption and changes in weight and body composition over time: differences among normal and overweight children. *Eur J Clin Nutr.* 2013; 67(3): 295-300. doi: 10.1038/ejcn.2012.123.
18. Kahn R, Bonuck K, Trombley M. Randomized controlled trial of bottle weaning intervention: a pilot study. *Clin Pediatr* 2007; 46(2):163-74.
19. Frazier JP1, Countie D, Elerian L. Parental barriers to weaning infants from the bottle. *Arch Pediatr Adolesc Med.* 1998 Sep;152(9):889-92.
20. Lo K, Cheung C, Lee A, Tam WWS, Keung V (2015) Associations between Parental Feeding Styles and Childhood Eating Habits: A Survey of Hong Kong Pre-School Children. *PLoS ONE* 10(4): e0124753. doi:10.1371/journal.pone.0124753
21. Tso W, Rao N, Jiang F, Li AM, Lee SL, Ho FK, Li SL, Ip P. Sleep Duration and School Readiness of Chinese Preschool Children. *J Pediatr.* 2016 Feb;169:266-71. doi: 10.1016/j.jpeds.2015.10.064.
22. Savage JS, Peterson J, Marini M, Bordi PL Jr, Birch LL. The addition of a plain or herb-flavored reduced-fat dip is associated with improved preschoolers' intake of vegetables. *J Acad Nutr Diet.* 2013 Aug;113(8):1090-5.
23. Anzman-Frasca S, Savage JS, Marini ME, Fisher JO, Birch LL. Repeated exposure and associative conditioning promote preschool children's liking of vegetables. *Appetite.* 2012 Apr;58(2):543-53. doi: 10.1016/j.appet.2011.11.012.
24. Fildes A, van Jaarsveld CH, Wardle J, Cooke L. Parent-administered exposure to increase children's vegetable acceptance: a randomized controlled trial. *J Acad Nutr Diet.* 2014 Jun;114(6):881-8. doi: 10.1016/j.jand.2013.07.040.
25. Añez E1, Remington A, Wardle J, Cooke L. The impact of instrumental feeding on children's responses to taste exposure. *J Hum Nutr Diet.* 2013;26(5):415-20. doi:



- 10.1111/jhn.12028.
26. Holley CE, Farrow C, Haycraft E. A Systematic Review of Methods for Increasing Vegetable Consumption in Early Childhood. *Curr Nutr Rep.* 2017;6(2):157-170. doi: 10.1007/s13668-017-0202-1.
 27. Finnane JM, Jansen E, Mallan KM, Daniels LA. Mealtime Structure and Responsive Feeding Practices Are Associated With Less Food Fussiness and More Food Enjoyment in Children. *J Nutr Educ Behav.* 2017 Jan;49(1):11-18.e1. doi: 10.1016/j.jneb.2016.08.007.
 28. Powell F, Farrow C, Meyer C, Haycraft E. The importance of mealtime structure for reducing child food fussiness. *Matern Child Nutr.* 2017 Apr;13(2). doi: 10.1111/mcn.12296.
 29. Reau NR, Senturia YD, Lebailly SA, Christoffel KK. Infant and toddler feeding patterns and problems: normative data and a new direction. Pediatric Practice Research Group. *J Dev Behav Pediatr.* 1996 Jun;17(3):149-53.
 30. Adamson M, Morawska A, Wigginton B. Mealtime duration in problem and non-problem eaters. *Appetite* 2015, 84;228-234.
 31. Rylatt L, Cartwright T. Parental feeding behavior and motivations regarding preschool age children: A thematic synthesis of qualitative studies. *Appetite* 2016; 99:25-297
 32. Tarrant M, Fong DYT, Wu KM, Lee ILY, Wong EMY, Sham A, Lam C, Dodgson JE. Breastfeeding and weaning practices among Hong Kong mothers: a prospective study. *BMC Pregnancy and Childbirth* 2010, 10:27
 33. Li R1, Fein SB, Chen J, Grummer-Strawn LM. Why mothers stop breastfeeding: mothers' self-reported reasons for stopping during the first year. *Pediatrics.* 2008;122 Suppl 2:S69-76. doi: 10.1542/peds.2008-1315i.
 34. Lisa Gatti, RN, MSN, Xi. Maternal Perceptions of Insufficient Milk Supply in Breastfeeding. *J Nurs Scholarsh.* 2008 ; 40(4): 355–363. doi:10.1111/j.1547-5069.2008.00234.x
 35. Lou Z, Zeng G, Huang L, Wang Y, Zhou L, Kavanagh KF. Maternal Reported Indicators and Causes of Insufficient Milk Supply. *J Hum Lact.* 2014 Nov;30(4):466-73;
 36. Hodges EA, Hughes SO, Hoptkinson J, Fisher JO. Maternal decision about the initiation and termination of infant feeding. *Appetite* 2008;50:333-339
Smith JP, Forrester R. Who pays for the health benefits of exclusive breastfeeding? An analysis of maternal time costs. *J Hum Lact.* 2013 Nov;29(4):547-55. doi: 10.1177/0890334413495450. Epub 2013 Jul 17.



Appendix 1 – Questionnaire

A. Cantonese version

香港家長餵養幼兒問卷

| | |
|---|-------------------|
| R1. 健康院縮寫： | R2. 目標兒童嘅姓名嘅英文縮寫： |
| B1. 年齡組別： <input type="checkbox"/> ₁ 12m <input type="checkbox"/> ₂ 18m <input type="checkbox"/> ₃ 24m <input type="checkbox"/> ₄ 4y | B2. 訪問日期： / / |

第一部分：目標兒童及受訪者資料

| | |
|----|---|
| 1. | 你係孩子嘅： 【單選】 <input type="checkbox"/> ₁ 父 <input type="checkbox"/> ₂ 母 |
| 2. | 孩子嘅性別： <input type="checkbox"/> ₁ 男 <input type="checkbox"/> ₂ 女 |
| 3. | 孩子嘅出生日期： _____年 ____月 ____日 |
| 4. | 孩子嘅體重：_____公斤（取至小數點後一位） <input type="checkbox"/> ₉₉ 唔知道／拒絕量度 |
| 5. | 孩子嘅身高：_____厘米（取至小數點後一位） <input type="checkbox"/> ₉₉₉ 唔知道／拒絕量度 |
| 6. | 係邊位 最主要 幫孩子選擇食物同埋奶？ 【單選】 <input type="checkbox"/> ₁ 孩子嘅父親 <input type="checkbox"/> ₃ 家傭 <input type="checkbox"/> ₅ 其他親戚 <input type="checkbox"/> ₉ 其他：_____ <input type="checkbox"/> ₂ 孩子嘅母親 <input type="checkbox"/> ₄ （外）祖父母 <input type="checkbox"/> ₆ 褓姆 |
| 7. | 係邊位 最主要 睇孩子嘅正餐、茶點、飲奶嘅時候餵孩子或者看顧孩子？ 【單選】 <input type="checkbox"/> ₁ 孩子嘅父親 <input type="checkbox"/> ₃ 家傭 <input type="checkbox"/> ₅ 其他親戚 <input type="checkbox"/> ₉ 其他：_____ <input type="checkbox"/> ₂ 孩子嘅母親 <input type="checkbox"/> ₄ （外）祖父母 <input type="checkbox"/> ₆ 褓姆 |



第二部分：幼兒飲用奶品情況

第二部分係有關孩子喺過去一星期（7日）內嘅飲奶情況。

11. (a) 孩子喺過去一星期（7日）有無食過母乳？[單選]

| | |
|---|--------------|
| <input type="checkbox"/> ₁ 有 | → 答第 11(b) 題 |
| <input type="checkbox"/> ₀ 無 | → 跳答第 12 題 |

11. (b) 孩子喺過去一星期（7日）食母乳嘅方法係？[單選]

| | |
|--|--------------|
| <input type="checkbox"/> ₁ 完全直接餵哺（全親餵／埋身餵） | → 跳答第 12 題 |
| <input type="checkbox"/> ₂ 食泵出嚟嘅母乳 | → 答第 11(c) 題 |
| <input type="checkbox"/> ₃ 完全直接餵哺（全親餵／埋身餵） 同埋食泵出嚟嘅母乳兩種方法都有 | → 答第 11(c) 題 |

11. (c) 孩子平均每日大概食幾多泵出嚟嘅母乳？_____ 毫升（cc/ ml） / _____ 安士（oz）（整數）

12. 孩子喺過去一星期（7日）有無飲過配方奶粉？[單選]

| | |
|---|------------|
| <input type="checkbox"/> ₁ 有 | → 答第 13 題 |
| <input type="checkbox"/> ₀ 無 | → 跳答第 15 題 |

以下係有關孩子飲配方奶粉嘅情況：

13. 孩子喺過去一星期（7日）飲嘅配方奶粉係？

| | |
|----------------------------------|---|
| (a) 1 號（嬰兒配方／細仔）[包括奶粉、即用液體奶][單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (b) 2 號（較大嬰兒配方）[單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (c) 3 號（較大幼兒配方）[單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (d) 4 號／學前（兒童配方）[單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (e) 其他配方奶粉 [單選] | <input type="checkbox"/> ₁ 有 → 答第 13(ei) 題 <input type="checkbox"/> ₀ 無 → 跳答第 14 題 |
| (ei) 孩子係飲邊種其他配方奶粉？ | |
| i. 特別醫用配方奶粉（例如：全水解配方）[單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| ii. 營養補充配方奶粉（例如：兒童佳膳，保兒加營養）[單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| iii. 其他，請註明：_____ [單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |

14. 孩子喺過去一星期（7日）所飲嘅配方奶粉有無含有以下成份？

| | | | |
|---------------|---|---|---|
| (a) 羊奶[單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 無 | <input type="checkbox"/> ₂ 唔知道 |
| (b) 大豆／豆奶[單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 無 | <input type="checkbox"/> ₂ 唔知道 |



以下係有關孩子飲奶類製品嘅情況：

15. 孩子喺過去一星期（7日）有無飲過即溶全脂牛奶粉？【單選】

₁ 有 ₀ 無

16. (a) 孩子喺過去一星期（7日）有無飲過盒裝或樽裝嘅牛奶？【單選】

₁ 有 → 答第 16(b) 題

₀ 無 → 跳答第 17 題

16. (b) 孩子飲嘅盒裝或樽裝嘅牛奶係？

i. 全脂牛奶／純牛奶【單選】 ₁ 有 ₀ 無

ii. 低脂牛奶【單選】 ₁ 有 ₀ 無

iii. 脫脂牛奶【單選】 ₁ 有 ₀ 無

iv. 朱古力味／果味牛奶【單選】 ₁ 有 ₀ 無

v. 唔清楚係邊種盒裝／樽裝嘅牛奶【單選】 ₁ 有 ₀ 無

17. 孩子喺過去一星期（7日）有無飲過或食過以下嘅食品？【示圖】

(a) 乳酪（唔包括乳酸味飲品，例如益力多）【單選】 ₁ 有 ₀ 無

(b) 包裝上寫有「加鈣」或「高鈣」嘅豆奶【單選】 ₁ 有 ₀ 無

(c) 芝士【單選】 ₁ 有 ₀ 無

18. 孩子喺過去一星期（7日）嘅奶量係以咩為主？【單選】

₀ 無飲奶 ₁ 母乳 ₂ 配方奶粉 ₃ 牛奶或即溶全脂牛奶粉 ₄ 加鈣／高鈣豆奶

全直接餵哺及餵泵出嚟嘅母乳，而且無飲過配方奶粉／牛奶或即溶全脂牛奶粉／加鈣／高鈣豆奶

→ 跳答第三部份



以下係有關孩子飲配方奶粉同埋牛奶或即溶全脂牛奶粉同埋加鈣／高鈣豆奶嘅飲奶量嘅情況：

19. 孩子喺過去一星期（7日）：

(a) 除人奶以外，總共有幾多日係飲過奶？

過去一星期飲過 _____ 日（整數）

(b) 喺飲奶嘅日子中，每日飲奶幾多次（除人奶以外）？

每日飲奶 _____ 次（整數）

(c) 喺飲奶嘅日子中，每日總共飲幾多奶（除人奶以外）？【單選】

₁ 清楚知道所有奶類嘅容量：_____ 毫升 / _____ 安士（整數）→ 跳答第20題

₂ 只清楚知道部分奶類嘅容量，記錄所知道嘅容量：_____ 毫升 / _____ 安士（整數）

→ 答第19(c)題

₉ 唔清楚所有奶類嘅容量 → 答第19(c)題

(ci) 孩子飲嘅奶嘅牌子係？ _____

(cii) 孩子飲嘅奶係咩包裝？【多選】【示圖】

₁ 盒裝／屋仔奶 - 普通裝

₂ 盒裝／屋仔奶 - 家庭裝

₃ 紙包 - 普通裝

₄ 紙包 - 家庭裝

₅ 紙包 - 迷你裝

₆ 玻璃樽

₉ 其他，請註明： _____

(ciii) 孩子總共飲幾多盒／包／樽奶？ _____

20. 你認為孩子目前（除人奶以外）嘅飲奶量係：【單選】

₁ 太少

₂ 適當

₃ 太多

以下係有關孩子使用奶樽嘅情況：

21. 孩子喺過去一星期（7日）有無用以下嘅器皿飲奶（除人奶以外）？【示圖】

(a) 用學習杯／訓練杯【單選】

₁ 有

₀ 無

(b) 直接用普通杯【單選】

₁ 有

₀ 無

(c) 用飲管／飲管杯吸吮【單選】

₁ 有

₀ 無

(d) 用奶樽【單選】

₁ 有

₀ 已經停用／戒咗，由 _____ 個月大
（整數，四捨五入）已經停用／戒咗

₂ 從來無用奶樽

→ 答第22(a)題

→ 跳答第23題



22. (a) 孩子喺過去一星期（7日），有幾經常出現以下嘅情況，係「完全無」、「較少」、「有時」、「經常」抑或「通常」（次次）？

| | 完全無 | 較少 | 有時 (平均一半時間) | 經常 | 通常 (每次、每日) |
|-----------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| i. 飲住奶樽入睡（邊飲邊瞓）。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| ii. 朝早起身時，孩子喺床上用奶樽飲奶。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| ii. 孩子扭計時，你用奶樽安撫佢。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

(b) 你有無嘗試過幫孩子戒用奶樽飲奶？

₁ 有，_____個月大（整數，四捨五入）開始／嘗試戒用奶樽

₀ 無

(c) 你認為孩子喺幾多個月大嘅時候停用奶樽飲奶最為適合？_____個月大（整數，四捨五入）

23. 你有無聽過而家母嬰健康院建議孩子應該喺幾多個月大嘅時候**完全停用奶樽飲奶**？

₁ 有聽過，喺_____個月大（整數，四捨五入）

₃ 有聽過，但唔記得建議係由幾個月大完全停用奶樽飲奶

₂ 無聽過



第三部分：孩子進食除奶以外食物嘅情況

第三部分係有關孩子喺過去一星期（7日）內進食固體食物及營養補充劑嘅情況。

24. 過去一星期（7日）期間，孩子有幾多日進食以下類別嘅食物？【示圖】【單選】

| | 無進食 | 一日 | 兩日 | 三日 | 四日 | 五日 | 六日 | 每日進食 |
|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| (a) 肉類（家禽、豬、牛、羊） | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (b) 魚、水產 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (c) 蛋類 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (d) 豆類及豆製品（豆腐、乾豆等） | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (e) 蔬菜 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (f) 水果 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (g) 穀物類 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |

25. 喺孩子有食蔬菜嘅日子，孩子平均每日食蔬菜嘅分量係？（包括所有唔同顏色及種類嘅蔬菜，例如：葉菜、瓜類、菇菌及藻類等）【示圖】【單選】

- ₁ 比圖 A 少 (<20g)
 ₂ 約圖 A 分量 (~20g)
 ₃ 圖 A 與 B 分量之間
 ₄ 約圖 B 分量 (~40g)
₅ 圖 B 與 C 分量之間
 ₆ 約圖 C 分量 (~80g)
 ₇ 圖 C 與 D 分量之間
 ₈ 約圖 D 分量 (~120g)
₉ 圖 D 與 E 分量之間
 ₁₀ 約圖 E 分量
 ₁₁ 比圖 E 分量多 (~160g)

26. 孩子過去一星期（7日），食過幾多種蔬菜？【單選】

- ₁ 1種 ₂ 2種 ₃ 3種 ₄ 4種 ₅ 5種
₆ 6種 ₇ 7種 ₈ 8種 ₉ 9種 ₁₀ 10種或以上

27. 喺孩子有食水果嘅日子，孩子平均每日食水果嘅分量係？（果汁唔計算在內）【示圖】【單選】

- ₁ 比圖 A 少 (<20g)
 ₂ 約圖 A 分量 (~20g)
 ₃ 圖 A 與 B 分量之間
 ₄ 約圖 B 分量 (~40g)
₅ 圖 B 與 C 分量之間
 ₆ 約圖 C 分量 (~60g)
 ₇ 圖 C 與 D 分量之間
 ₈ 約圖 D 分量 (~80g)
₉ 比圖 D 分量多

28. 孩子喺過去一星期（7日），食過幾多種水果？【單選】

- ₁ 1種 ₂ 2種 ₃ 3種 ₄ 4種 ₅ 5種
₆ 6種 ₇ 7種 ₈ 8種 ₉ 9種 ₁₀ 10種或以上

29. 喺過去一星期（7日）期間，孩子有無食過或飲過營養補充劑？【單選】

- ₁ 有 → 答第 30 題
₀ 無 → 跳答第四部分



30. 孩子有無食過或飲過以下營養補充劑？

- | | |
|-------------------------------------|---|
| (a) 魚肝油 [單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (b) 奧米加 3 魚油或 DHA [單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (c) 維他命或礦物質 [單選] | <input type="checkbox"/> ₁ 有 → 答第 30(c)題 <input type="checkbox"/> ₀ 無 → 跳答第 30(d)題 |
| (ci) 孩子係食過或飲過邊種維他命或礦物質？ [多選] | <input type="checkbox"/> ₁ 多種維他命或礦物質 <input type="checkbox"/> ₂ 維他命 B <input type="checkbox"/> ₃ 維他命 C <input type="checkbox"/> ₄ 維他命 D <input type="checkbox"/> ₅ 鈣 <input type="checkbox"/> ₆ 鐵 <input type="checkbox"/> ₇ 鋅 <input type="checkbox"/> ₈ 唔清楚係邊種維他命或礦物質 <input type="checkbox"/> ₉ 其他維他命或礦物質，請註明：_____ |
| (d) 其他營養補充劑 [單選] | <input type="checkbox"/> ₁ 有 → 答第 30(di)題 <input type="checkbox"/> ₀ 無 → 跳答第 31 題 |
| (di) 孩子係食過或飲過邊種其他營養補充劑？ [多選] | <input type="checkbox"/> ₁ 牛初乳 <input type="checkbox"/> ₂ 益生菌 <input type="checkbox"/> ₃ 藍梅素 <input type="checkbox"/> ₄ 視葉黃素 (Lutein) <input type="checkbox"/> ₅ 蜂皇漿 <input type="checkbox"/> ₆ 加能素 Polycal <input type="checkbox"/> ₈ 唔清楚食過或飲過嘅其他營養補充劑嘅性質 <input type="checkbox"/> ₉ 其他營養補充劑，請註明：_____ |



41b. 以下邊項最能貼切形容佢用匙羹嘅情況？【單選】

- ₂ 佢能夠用匙羹餵自己，但仍有食物漏出嚟。
- ₃ 喺協助下，佢能夠用匙羹。
- ₄ 佢未能夠用匙羹。
- ₅ 你唔會／未曾俾孩子用匙羹。

42. 食飯時，你有幾經常會容許佢自己拎住食物嚟食？【單選】

- ₁ 好少
- ₂ 較少
- ₃ 有時
- ₄ 經常
- ₅ 通常(每次吃飯)

43. 你有幾經常會俾孩子拎匙羹自己食飯？【單選】

- ₁ 好少
- ₂ 較少
- ₃ 有時
- ₄ 經常
- ₅ 通常(每次吃飯)

孩子能唔能夠用以下器皿飲除咗奶以外嘅流質飲品？【示圖】【單選】

| | 能夠 | 未能夠 | 孩子拒絕使用 | 未曾俾孩子試用 |
|-------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 44. 用普通水杯 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |
| 45. 用訓練杯 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |
| 46. 用飲管／飲管杯 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |

第五部分：其他

47. 你同唔同意以下嘅句子？

| | 極唔同意 | 唔同意 | 無意見／唔知道 | 同意 | 極同意 |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| (a) 2 號、3 號、4 號或學前（較大嬰兒及幼兒配方）奶粉能代替其他食物，提供孩子所需嘅營養。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (b) 2 號、3 號、4 號或學前（較大嬰兒及幼兒配方）奶粉含有添加嘅營養能促進腦部發展，係其他食物無嘅。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (c) 2 號、3 號、4 號或學前（較大嬰兒及幼兒配方）奶粉，比普通牛奶，較能提供更多鈣質。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (d) 2 號、3 號、4 號或學前（較大嬰兒及幼兒配方）奶粉，比普通牛奶，較能增強孩子嘅抵抗力。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

48. 你有無曾經喺以下途徑，得到過有關嬰幼兒飲食同埋營養嘅資料？【示圖】

| | | |
|--------------------------------|---|---|
| (a) 6 至 24 個月嬰幼兒健康飲食小冊子【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 無 |
| (b) 6 至 24 個月嬰幼兒健康飲食嘅影片／光碟【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 無 |
| (c) 「親子一點通」電郵【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 無 |
| (d) 衛生署網頁【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 無 |



49. 你有無喺以下地方、人士或其他途徑，得到過有關嬰幼兒飲食同埋營養嘅資料？【示卡】

- | | | | |
|----------------------|---|--|---|
| (a) 親人、朋友【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 | (b) 育兒網頁【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (c) 醫護人員【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 | (d) 奶粉產品網頁【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (e) 育兒雜誌【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 | (f) 奶粉媽咪會【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (g) 陪月／褓姆／家 傭【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 | (h) 書籍【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |
| (i) 學校【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 | (j) 社交媒體群組 (如: Facebook/WhatsApp) 【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 無 |

50. 你認為衛生署應透過以下邊嘅途徑，提供嬰幼兒飲食同埋營養、進食行為嘅資料俾你？仲有呢？【示卡】【多選】

- ₁ 單張／小冊子
- ₂ 短片、光碟或宣傳片
- ₃ 親子講座／研習班
- ₄ 個人化嘅手機應用程式
- ₅ 電子郵件
- ₉ 其他：_____

【若孩子現為兩歲以下，請續問第六部分。若孩子為兩歲或以上，請跳至到第七部分。】



第六部分：母乳餵哺

【只限 12 至不大於 24 個月大孩子嘅母親本人作答】51. 你（孩子嘅母親）而家有無俾 呢個孩子 食母乳（包括泵出嚟嘅母乳）？【單選】□₁ 你 而家仍餵緊 佢食母乳。→ 跳答第七部分□₂ 你曾經餵佢食過母乳，喺孩子□₀ 細過一個月 / □₁ ____ 個月大（整數，四捨五入）時完全停止餵哺。
→ 答第 52 題□₃ 你 從來無餵過 呢個孩子食母乳。→ 跳答第 53 題

52. 以下邊啲係你最主要停止餵哺母乳（包括泵出嚟嘅母乳）嘅原因？第二重要原因？第三重要原因？【最多選擇三個重要原因】【示卡】

| | 三個原因 | 其他原因 / 與你無關 |
|------------------------------|----------------|----------------|
| (a) 我認為這是合適停餵母乳的時間 | □ ₁ | □ ₂ |
| (b) 母乳不足夠 | □ ₁ | □ ₂ |
| (c) 母乳不能滿足孩子 (孩子經常肚子餓) | □ ₁ | □ ₂ |
| (d) 孩子含乳 / 吸啜母乳困難 / 對母乳不感興趣 | □ ₁ | □ ₂ |
| i. 孩子不會吸啜母乳 | □ ₁ | □ ₂ |
| ii. 孩子咬乳頭 | □ ₁ | □ ₂ |
| iii. 孩子對母乳不感興趣 | □ ₁ | □ ₂ |
| (e) 我的乳頭 / 乳房問題 | □ ₁ | □ ₂ |
| i. 餵哺母乳時，我感到痛楚 | □ ₁ | □ ₂ |
| ii. 乳頭痛、破損裂、或出血 | □ ₁ | □ ₂ |
| iii. 乳房過份脹奶 / 谷奶 | □ ₁ | □ ₂ |
| iv. 乳房發炎或含膿 | □ ₁ | □ ₂ |
| v. 乳房過份漏奶 | □ ₁ | □ ₂ |
| (f) 孩子生病或出現健康問題 | □ ₁ | □ ₂ |
| (g) 孩子的體重增加得太少 | □ ₁ | □ ₂ |
| i. 醫護人員說，孩子體重增加太少 | □ ₁ | □ ₂ |
| ii. 我認為孩子體重增加太少 | □ ₁ | □ ₂ |
| (h) 我自己的健康問題 | □ ₁ | □ ₂ |
| i. 醫護人員不建議我餵哺母乳 | □ ₁ | □ ₂ |
| ii. 自己認為不適合餵哺母乳 | □ ₁ | □ ₂ |
| (i) 餵母乳令我疲累或感到壓力 | □ ₁ | □ ₂ |
| (j) 餵哺母乳不方便 / 太花時間 | □ ₁ | □ ₂ |
| (k) 我要上班 | □ ₁ | □ ₂ |
| i. 我不能夠在工作時泵奶或餵母乳 | □ ₁ | □ ₂ |
| ii. 我不想在工作時泵奶或餵母乳 | □ ₁ | □ ₂ |
| (l) 工作以外的因素，我需要其他的照顧者餵孩子吃奶 | □ ₁ | □ ₂ |
| (m) 我想回復自己的生活方式、飲食習慣 / 不想再戒口 | □ ₁ | □ ₂ |
| (n) 我再次懷孕了或計劃懷孕 | □ ₁ | □ ₂ |
| (o) 其他，請註明：_____ | □ ₁ | □ ₂ |



53. 以下邊啲係你最主要無餵哺呢個孩子母乳（包括泵出嚟嘅母乳）嘅原因？第二重要原因？第三重要原因？【最多選擇三個重要原因】【示卡】

| | 三個原因 | 其他原因 / 與你無關 |
|----------------------------|---------------------------------------|---------------------------------------|
| (a) 孩子生病或出現健康問題 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (b) 我認為我的母乳不足夠 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (c) 醫護人員不建議我餵哺母乳 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (d) 我生病，自己認為不適合餵哺母乳 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (e) 我認為配方奶和母乳差不多 / 比母乳好 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (f) 我認為餵哺母乳太不方便 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (g) 我曾經嘗試餵哺母乳，但不喜歡或沒有成功 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (h) 我想可以放下孩子一段時間 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (i) 我想節食 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (j) 我想回復我平時的飲食習慣 / 不想再戒口 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (k) 我有太多的家務要做 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (l) 我要上班 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (m) 工作以外的因素，我需要其他的照顧者餵孩子吃奶 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (n) 我想回復自己的生活方式 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (o) 家人不想我餵哺母乳 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (p) 其他，請註明： _____ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |



第七部分：孩子父母嘅資料

54. 孩子母親嘅年齡係：【單選】

- ₁ 17 歲或以下
 ₂ 18-24 歲
 ₃ 25-29 歲
 ₄ 30-34 歲
 ₅ 35-39 歲
₆ 40-44 歲
 ₇ 45-49 歲
 ₈ 50 歲或以上
 ₉₈ 唔知道
 ₉₉ 拒答

55. 孩子父親嘅年齡係：【單選】

- ₁ 17 歲或以下
 ₂ 18-24 歲
 ₃ 25-29 歲
 ₄ 30-34 歲
 ₅ 35-39 歲
₆ 40-44 歲
 ₇ 45-49 歲
 ₈ 50 歲或以上
 ₉₈ 唔知道
 ₉₉ 拒答

56. 母親嘅教育程度係：【單選】

- ₁ 小學或以下
 ₂ 中一至中三
 ₃ 中四至中五
 ₄ 中六至中七
₅ 專上教育(文憑／證書課程／副學士課程)
₆ 大學或以上
₉₈ 唔知道
₉₉ 拒答

57. 父親嘅教育程度係：【單選】

- ₁ 小學或以下
 ₂ 中一至中三
 ₃ 中四至中五
 ₄ 中六至中七
₅ 專上教育(文憑／證書課程／副學士課程)
₆ 大學或以上
₉₈ 唔知道
₉₉ 拒答

58. 母親有無工作？【單選】

- ₁ 全職受僱／自僱
₂ 兼職
₃ 退休人仕
₄ 待業
₅ 全職家務料理者
₉₈ 唔知道
₉₉ 拒答

60. 父親有無工作？【單選】

- ₁ 全職受僱／自僱
₂ 兼職
₃ 退休人仕
₄ 待業
₅ 全職家務料理者
₉₈ 唔知道
₉₉ 拒答

61. 孩子係唔係同父母同住：【單選】

- ₁ 每日同住
₂ 每星期 5 日至 6 日
₃ 每星期 1 至 4 日
₄ 唔係同住

62. 你嘅每月家庭總收入（包括所有工作獲得嘅收入）係：【單選】【示卡】

- ₁ 少於 \$5,000
₂ \$5,000 - \$9,999
₃ \$10,000 - \$19,999
₄ \$20,000 - \$29,999
₅ \$30,000 - \$39,999
₆ \$40,000 - \$49,999
₇ \$50,000 - \$59,999
₈ \$60,000 或更多
₉₈ 唔知道
₉₉ 拒答

訪問已經完成，多謝你嘅參與。



B. Putonghua version

香港家長餵養幼兒問卷

| | |
|---|-------------------|
| R1. 健康院縮寫： | R2. 目標兒童的姓名的英文縮寫： |
| B1. 年齡組別： <input type="checkbox"/> ₁ 12m <input type="checkbox"/> ₂ 18m <input type="checkbox"/> ₃ 24m <input type="checkbox"/> ₄ 4y | B2. 訪問日期： / / |

您好！我姓_____，是 CSG 的訪問員，我們受衛生署委託進行一項關於香港家長餵養幼兒的問卷調查，想了解您的孩子的飲食的情況。整個訪問大概 15-20 分鐘，收集得到的資料會絕對保密，只會作整體統計分析用途，並會在完成分析後完全銷毀。

第一部分：目標兒童及受訪者的資料

| | |
|----|--|
| 1. | 您是孩子的： [單選] <input type="checkbox"/> ₁ 父 <input type="checkbox"/> ₂ 母 |
| 2. | 孩子的性別： <input type="checkbox"/> ₁ 男 <input type="checkbox"/> ₂ 女 |
| 3. | 孩子的出生日期： _____年 ____月 ____日 |
| 4. | 孩子的體重：_____公斤（取至小數點後一位） <input type="checkbox"/> ₉₉ 不知道／拒絕量度 |
| 5. | 孩子的身高：_____厘米（取至小數點後一位） <input type="checkbox"/> ₉₉₉ 不知道／拒絕量度 |
| 6. | 是誰 <u>最主要</u> 給孩子選擇食物和奶？ [單選] <input type="checkbox"/> ₁ 孩子的父親 <input type="checkbox"/> ₃ 家傭 <input type="checkbox"/> ₅ 其他親戚 <input type="checkbox"/> ₉ 其他：_____ <input type="checkbox"/> ₂ 孩子的母親 <input type="checkbox"/> ₄ (外) 祖父母 <input type="checkbox"/> ₆ 褓姆 |
| 7. | 是誰 <u>最主要</u> 在孩子的正餐、茶點、喝奶的時候餵孩子或看顧孩子？ [單選] <input type="checkbox"/> ₁ 孩子的父親 <input type="checkbox"/> ₃ 家傭 <input type="checkbox"/> ₅ 其他親戚 <input type="checkbox"/> ₉ 其他：_____ <input type="checkbox"/> ₂ 孩子的母親 <input type="checkbox"/> ₄ (外) 祖父母 <input type="checkbox"/> ₆ 褓姆 |



第二部分：幼兒飲用奶品的情況

第二部分是有關孩子於**在過去一星期（7天）內**的喝奶情況。

11. (a) 孩子在過去一星期（7天）有沒有吃母乳？**[單選]**

- | | |
|--|-------------|
| <input type="checkbox"/> ₁ 有 | → 答第 11(b)題 |
| <input type="checkbox"/> ₀ 沒 有 | → 跳答第 12 題 |

11. (b) 孩子在過去一星期（7天）吃母乳的方法是？**[單選]**

- | | |
|--|-------------|
| <input type="checkbox"/> ₁ 完全直接餵哺（全親餵） | → 跳答第 12 題 |
| <input type="checkbox"/> ₂ 吃擠出的母乳 | → 答第 11(c)題 |
| <input type="checkbox"/> ₃ 完全直接餵哺（全親餵）及吃擠出的 母乳兩種方法也有 | → 答第 11(c)題 |

11. (c) 平均每天大概吃多少擠出的母乳？_____ 毫升（cc/ml） / _____ 安士（oz） （整數）

12. 孩子在過去一星期（7天）有沒有喝配方奶粉？**[單選]**

- | | |
|--|------------|
| <input type="checkbox"/> ₁ 有 | → 答第 13 題 |
| <input type="checkbox"/> ₀ 沒 有 | → 跳答第 15 題 |

以下是有關孩子喝**配方奶粉**的情況：

13. 孩子在過去一星期（7天）喝的**配方奶粉**是？

- | | | |
|--|---|--|
| (a) 1 號（嬰兒配方／細仔） [包括奶粉、即用液體奶] [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (b) 2 號（較大嬰兒配方） [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (c) 3 號（較大幼兒配方） [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (d) 4 號／學前（兒童配方） [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (e) 其他配方奶 [單選] | <input type="checkbox"/> ₁ 有 | → 答第 13(ei)題 |
| | <input type="checkbox"/> ₀ 無 | → 跳答第 14 題 |
| (ei) 孩子是喝什麼其他配方奶粉？ | | |
| i. 特別醫用配方奶粉（例如：全水解配方） [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| ii. 營養補充配方奶粉（例如：兒童佳膳，保兒加營養） [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| iii. 其他，請註明：_____ [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |

14. 孩子在過去一星期（7天）所喝的**配方奶粉**有沒有含有以下成份？

- | | | |
|-----------------------|---|--|
| (a) 羊奶 [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| | <input type="checkbox"/> ₂ 不知道 | |
| (b) 大豆／豆奶 [單選] | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| | <input type="checkbox"/> ₂ 不知道 | |





以下是有關孩子喝奶類製品的情況：

15. 孩子在過去一星期（7天）有沒有喝即溶全脂牛奶粉？【單選】

₁ 有 ₀ 沒有

16. (a) 孩子在過去一星期（7天）有沒有喝盒裝或樽裝的牛奶？【單選】

₁ 有 → 答第 16(b) 題

₀ 沒有 → 跳答第 17 題

16. (b) 孩子喝的盒裝或樽裝的牛奶是？

i. 全脂牛奶／純牛奶【單選】 ₁ 有 ₀ 沒有

ii. 低脂牛奶【單選】 ₁ 有 ₀ 沒有

iii. 脫脂牛奶【單選】 ₁ 有 ₀ 沒有

iv. 巧克力味／果味牛奶【單選】 ₁ 有 ₀ 沒有

v. 不清楚是那一種盒裝／樽裝的牛奶【單選】 ₁ 有 ₀ 沒有

17. 孩子在過去一星期（7天）有沒有喝過或吃過以下的食品？【示圖】

(a) 酸奶（不包括乳酸味飲料，如益力多）【單選】 ₁ 有 ₀ 沒有

(b) 包裝上寫有「加鈣」或「高鈣」的豆奶【單選】 ₁ 有 ₀ 沒有

(c) 奶酪（芝士）【單選】 ₁ 有 ₀ 沒有

18. 孩子在過去一星期（7天）的奶量是以什麼為主？【單選】

₀ 沒有喝奶 ₁ 母乳 ₂ 配方奶粉 ₃ 牛奶或即溶全脂牛奶粉 ₄ 加鈣／高鈣豆奶

全直接餵哺及餵擠出的母乳，而且沒有喝配方奶粉／牛奶或即溶全脂牛奶粉／加鈣／高鈣豆奶 →
跳答第三部份



以下是有關孩子喝配方奶粉及牛奶或即溶全脂牛奶粉及加鈣／高鈣豆奶的喝奶量的情況：

19. 孩子在過去一星期（7天）：
- (a) 除人奶以外，總共喝奶多少天？
過去一星期喝 _____ 天（整數）
- (b) 在喝奶的日子中，每天喝奶多少次（除人奶以外）？
每天喝奶 _____ 次（整數）
- (c) 在喝奶的日子中，每天共喝多少奶（除人奶以外）？【單選】
- ₁ 清楚知道所有奶類的容量：_____ 毫升/ _____ 安士（整數）→ 跳答第20題
- ₂ 只清楚部分奶類的容量，記錄所知道的容量：_____ 毫升/ _____ 安士（整數）
→ 答第19(c)題
- ₉ 不清楚所有奶類的容量 → 答第19(c)題
- (ci) 孩子喝的奶的牌子是？ _____
- (cii) 孩子喝的奶是什麼包裝？【多選】【示圖】
- ₁ 盒裝 - 普通裝
- ₂ 盒裝 - 家庭裝
- ₃ 紙包 - 普通裝
- ₄ 紙包 - 家庭裝
- ₅ 紙包 - 迷你裝
- ₆ 玻璃樽
- ₉ 其他，請註明： _____
- (ciii) 孩子總共喝奶多少盒／包／樽？ _____
20. 您認為孩子目前（除人奶以外）的喝奶量是：【單選】
- ₁ 太少 ₂ 適當 ₃ 太多

以下是有關孩子使用奶瓶的情況：

21. 孩子在過去一星期（7天）有沒有用以下的器具喝奶（除人奶以外）？【示圖】
- | | | | |
|-------------------|--|--|------------|
| (a) 用學習杯／訓練杯【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 | |
| (b) 直接用普通杯【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 | |
| (c) 用吸管／吸管杯吸吮【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 | |
| (d) 用奶瓶【單選】 | <input type="checkbox"/> ₁ 有 | | → 答第22(a)題 |
| | <input type="checkbox"/> ₀ 已停用／戒掉，由_____個月（整數，四捨五入）已停用／戒掉 | | → 跳答第23題 |
| | <input type="checkbox"/> ₂ 從來沒有使用奶瓶 | | |



22. (a) 孩子在過去一星期（7天），有多經常出現以下的情況，是「完全沒有」、「較少」、「有時」、「經常」抑或「通常」（每次）？**[單選]** **【示卡】**

| | 完全沒有 | 較少 | 有時 (平均一半時間) | 經常 | 通常 (每次、每天) |
|------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| i. 喝着奶瓶入睡（邊喝邊睡）。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| ii. 早上起床時，孩子在床上用奶瓶喝奶。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| iii. 孩子發脾氣時，您用奶瓶安撫他／她。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

- (b) 您有沒有嘗試過幫孩子戒用奶瓶喝奶？**[單選]**

₁ 有，_____個月（整數，四捨五入）開始／嘗試戒用奶瓶
₀ 沒有

- (c) 您認為孩子在多少個月時停用奶瓶喝奶最為適合？_____個月（整數，四捨五入）

23. 您有沒有聽過現時母嬰健康院建議孩子應在多少個月時完全停用奶瓶喝奶？**[單選]**

₁ 有聽過，在_____個月（整數，四捨五入）
₃ 有聽過，但不記得建議是由多少個月時完全停用奶瓶喝奶
₂ 沒有聽過



第三部分：孩子進食除奶以外食物的情況

第三部分是有關孩子於在過去一星期（7天）內進食固體食物及營養補充劑的情況。

24. 過去的一星期（7天）期間，孩子有多少天進食以下類別的食物？【示圖】【單選】

| | 沒有 進食 | 一天 | 兩天 | 三天 | 四天 | 五天 | 六天 | 每天 進食 |
|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| (a) 肉類（家禽、豬、牛、羊） | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (b) 魚、水產 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (c) 蛋類 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (d) 豆類及豆製品（豆腐、乾豆等） | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (e) 蔬菜 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (f) 水果 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (g) 穀物類 | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |

25. 在孩子有吃蔬菜的日子中，孩子平均每天吃蔬菜的分量是？（包括所有不同顏色及種類的蔬菜，例如：葉菜、瓜類、菇菌及藻類等）【示圖】【單選】

- ₁ 比圖 A 少 (<20g)
 ₂ 約圖 A 分量 (~20g)
 ₃ 圖 A 與 B 分量之間
 ₄ 約圖 B 分量 (~40g)
₅ 圖 B 與 C 分量之間
 ₆ 約圖 C 分量 (~80g)
 ₇ 圖 C 與 D 分量之間
 ₈ 約圖 D 分量 (~120g)
₉ 圖 D 與 E 分量之間
 ₁₀ 約圖 E 分量
 ₁₁ 比圖 E 分量多
 (~160g)

26. 孩子過去一星期（7天），吃過多少種蔬菜？【單選】

- ₁ 1種 ₂ 2種 ₃ 3種 ₄ 4種 ₅ 5種
₆ 6種 ₇ 7種 ₈ 8種 ₉ 9種 ₁₀ 10種或以上

27. 在孩子有吃水果的日子中，孩子平均每天吃水果的分量是？（果汁不計算在內）【示圖】【單選】

- ₁ 比圖 A 少 (<20g)
 ₂ 約圖 A 分量 (~20g)
 ₃ 圖 A 與 B 分量之間
 ₄ 約圖 B 分量 (~40g)
₅ 圖 B 與 C 分量之間
 ₆ 約圖 C 分量 (~60g)
 ₇ 圖 C 與 D 分量之間
 ₈ 約圖 D 分量 (~80g)
₉ 比圖 D 分量多

28. 孩子過去一星期（7天），吃過多少種水果？【單選】

- ₁ 1種 ₂ 2種 ₃ 3種 ₄ 4種 ₅ 5種
₆ 6種 ₇ 7種 ₈ 8種 ₉ 9種 ₁₀ 10種或以上

29. 過去一星期（7天）期間，孩子有沒有吃過或喝過營養補充劑？【單選】

- ₁ 有 → 答第30題
₀ 沒有 → 跳答第四部分



30. 孩子有沒有吃過或喝過以下營養補充劑？

| | |
|-------------------------------------|--|
| (a) 魚肝油 [單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |
| (b) 奧米加 3 魚油或 DHA [單選] | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |
| (c) 維他命或礦物質 [單選] | <input type="checkbox"/> ₁ 有 → 答第 30(c)i) 題 |
| | <input type="checkbox"/> ₀ 沒有 → 跳答第 30(d) 題 |
| (ci) 孩子是吃過或喝過那種維他命或礦物質？ [多選] | <input type="checkbox"/> ₁ 多種維他命或礦物質 |
| | <input type="checkbox"/> ₂ 維他命 B |
| | <input type="checkbox"/> ₃ 維他命 C |
| | <input type="checkbox"/> ₄ 維他命 D |
| | <input type="checkbox"/> ₅ 鈣 |
| | <input type="checkbox"/> ₆ 鐵 |
| | <input type="checkbox"/> ₇ 鋅 |
| | <input type="checkbox"/> ₈ 不清楚是那種維他命或礦物質 |
| | <input type="checkbox"/> ₉ 其他維他命或礦物質，請註明：_____ |
| (d) 其他營養補充劑 [單選] | <input type="checkbox"/> ₁ 有 → 答第 30(di) 題 |
| | <input type="checkbox"/> ₀ 沒有 → 跳答第 31 題 |
| (di) 孩子是吃過或喝過什麼其他營養補充劑？ [多選] | <input type="checkbox"/> ₁ 牛初乳 |
| | <input type="checkbox"/> ₂ 益生菌 |
| | <input type="checkbox"/> ₃ 藍梅素 |
| | <input type="checkbox"/> ₄ 視葉黃素 (Lutein) |
| | <input type="checkbox"/> ₅ 蜂皇漿 |
| | <input type="checkbox"/> ₆ 加能素 Polycal |
| | <input type="checkbox"/> ₈ 不清楚吃過或喝過的其他營養補充劑的性質 |
| | <input type="checkbox"/> ₉ 其他營養補充劑，請註明：_____ |



41b. 以下哪項最能貼切形容他／她用調羹／勺子的情況？【單選】

- ₂ 他／她能夠用調羹／勺子餵自己，但仍有食物漏出來。
- ₃ 在協助下，他／她能夠用調羹／勺子。
- ₄ 他／她未能夠用調羹／勺子。
- ₅ 不知道，因您不會／未曾讓孩子拿調羹／勺子。

42. 吃飯時，您有多經常會容許他／她自己抓着食物來吃？【單選】

- ₁ 很少
- ₂ 較少
- ₃ 有時
- ₄ 經常
- ₅ 通常(每次吃飯)

43. 您有多經常會讓孩子拿調羹／勺子自己吃飯？【單選】

- ₁ 很少
- ₂ 較少
- ₃ 有時
- ₄ 經常
- ₅ 通常(每次吃飯)

孩子能夠用以下器具喝除奶以外的流質飲品嗎？【示圖】【單選】

| | 能夠 | 未能夠 | 孩子拒絕使用 | 未曾俾孩子試用 |
|-------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 44. 用普通水杯 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |
| 45. 用訓練杯 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |
| 46. 用吸管／吸管杯 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |

第五部分：其他

47. 您是否同意以下的句子？【單選】

| | 極不同意 | 不同意 | 沒有意見／不知道 | 同意 | 極同意 |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| (a) 2號、3號、4號或學前（較大嬰兒及幼兒配方）奶粉能代替其他食物，提供孩子所需的營養。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (b) 2號、3號、4號或學前（較大嬰兒及幼兒配方）奶粉含有添加的營養能促進腦部發展，是其他食物沒有的。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (c) 2號、3號、4號或學前（較大嬰兒及幼兒配方）奶粉，比普通牛奶，較能提供更多鈣質。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (d) 2號、3號、4號或學前（較大嬰兒及幼兒配方）奶粉，比普通牛奶，較能增強孩子的抵抗力。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

48. 您有沒有從以下途徑，得到過有關嬰幼兒飲食和營養的資料？【示圖】

| | | |
|-----------------------------|---|--|
| (a) 6至24個月嬰幼兒健康飲食小冊子【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (b) 6至24個月嬰幼兒健康飲食的影片／光碟【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (c) 「親子一點通」電郵【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |
| (d) 衛生署網頁【單選】 | <input type="checkbox"/> ₁ 有 | <input type="checkbox"/> ₀ 沒有 |



49. 您有沒有從以下地方、人士或其他途徑，得到過有關嬰幼兒飲食和營養的資料？【示卡】

- | | | | |
|----------------------|--|--|--|
| (a) 親人、朋友【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 | (b) 育兒網頁【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |
| (c) 醫護人員【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 | (d) 奶粉產品網頁【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |
| (e) 育兒雜誌【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 | (f) 奶粉媽咪會【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |
| (g) 陪月／褓姆／家 傭【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 | (h) 書籍【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |
| (i) 學校【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 | (j) 社交媒體群組 (如: Facebook/WhatsApp) 【單選】 | <input type="checkbox"/> ₁ 有 <input type="checkbox"/> ₀ 沒有 |

50. 您認為衛生署應透過以下哪些途徑，提供嬰幼兒飲食和營養、進食行為的資料給您呢？還有呢？【示卡】【多選】

- ₁ 單張／小冊子
- ₂ 短片、光碟或宣傳片
- ₃ 親子講座／研習班
- ₄ 個人化的手機應用程式
- ₅ 電子郵件
- ₉ 其他：_____

【若孩子現為兩歲以下，請續問第六部分。若孩子為兩歲或以上，請跳至到第七部分。】



第六部分：母乳餵哺

【只限 12 至不大於 24 個月大孩子的母親本人作答】51. 您（孩子的母親）現在有沒有給 這個孩子 吃母乳（包括擠出母乳）？【**單選**】□₁ 您 **現在仍餵** 他／她吃母乳。→ 跳答第七部分□₂ 您曾經餵他／她吃母乳，在孩子□₀ 少過一個月／□₁ _____ 個月（整數，四捨五入）時完全停止餵哺。
→ 答第 52 題□₃ 您 **從來沒有餵** 這個孩子吃母乳。→ 跳答第 53 題52. 以下哪些是您最主要停止餵哺母乳（包括擠出母乳）的原因？第二重要原因？第三重要原因？【**最多選擇三個重要原因**】【示卡】

| | 三個原因 | 其他原因 / 與您無關 |
|------------------------------|----------------|----------------|
| (a) 我認為這是合適停餵母乳的時間 | □ ₁ | □ ₂ |
| (b) 我的母乳不足夠 | □ ₁ | □ ₂ |
| (c) 母乳不能滿足孩子（孩子經常肚子餓） | □ ₁ | □ ₂ |
| (d) 孩子含乳 / 吸啜母乳困難 / 對母乳不感興趣 | □ ₁ | □ ₂ |
| i. 孩子不會吸啜母乳 | □ ₁ | □ ₂ |
| ii. 孩子咬乳頭 | □ ₁ | □ ₂ |
| iii. 孩子對母乳不感興趣 | □ ₁ | □ ₂ |
| (e) 我的乳頭 / 乳房問題 | □ ₁ | □ ₂ |
| i. 餵哺母乳時，我感到痛楚 | □ ₁ | □ ₂ |
| ii. 乳頭痛、破損裂、或出血 | □ ₁ | □ ₂ |
| iii. 乳房過份脹奶 / 谷奶 | □ ₁ | □ ₂ |
| iv. 乳房發炎或含膿 | □ ₁ | □ ₂ |
| v. 乳房過份漏奶 | □ ₁ | □ ₂ |
| (f) 孩子生病或出現健康問題 | □ ₁ | □ ₂ |
| (g) 孩子的體重增加得太少 | □ ₁ | □ ₂ |
| i. 醫護人員說，孩子體重增加太少 | □ ₁ | □ ₂ |
| ii. 我認為孩子體重增加太少 | □ ₁ | □ ₂ |
| (h) 我自己的健康問題 | □ ₁ | □ ₂ |
| i. 醫護人員不建議我餵哺母乳 | □ ₁ | □ ₂ |
| ii. 自己認為不適合餵哺母乳 | □ ₁ | □ ₂ |
| (i) 餵母乳令我疲累或感到壓力 | □ ₁ | □ ₂ |
| (j) 餵哺母乳不方便 / 太花時間 | □ ₁ | □ ₂ |
| (k) 我要上班 | □ ₁ | □ ₂ |
| i. 我不能夠在工作時泵奶或餵母乳 | □ ₁ | □ ₂ |
| ii. 我不想在工作時泵奶或餵母乳 | □ ₁ | □ ₂ |
| (l) 工作以外的因素，我需要其他的照顧者餵孩子吃奶 | □ ₁ | □ ₂ |
| (m) 我想回復自己的生活方式、飲食習慣 / 不想再戒口 | □ ₁ | □ ₂ |
| (n) 我再次懷孕了或計劃懷孕 | □ ₁ | □ ₂ |
| (o) 其他，請註明：_____ | □ ₁ | □ ₂ |



53. 以下哪些是您最主要沒有給這孩子餵哺母乳（包括擠出母乳）的原因？第二重要原因？第三重要原因？【最多選擇三個重要原因】【示卡】

| | 三個原因 | 其他原因 / 與您無關 |
|----------------------------|---------------------------------------|---------------------------------------|
| (a) 孩子生病或出現健康問題 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (b) 我認為我的母乳不足夠 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (c) 醫護人員不建議我餵哺母乳 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (d) 我生病，自己認為不適合餵哺母乳 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (e) 我認為配方奶和母乳差不多／比母乳好 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (f) 我認為餵哺母乳太不方便 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (g) 我曾經嘗試餵哺母乳，但不喜歡或沒有成功 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (h) 我想可以放下孩子一段時間 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (i) 我想節食 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (j) 我想回復我平時的飲食習慣／不想再戒口 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (k) 我有太多的家務要做 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (l) 我要上班 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (m) 工作以外的因素，我需要其他的照顧者餵孩子吃奶 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (n) 我想回復自己的生活方式 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (o) 家人不想我餵哺母乳 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (p) 其他，請註明：_____ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |



第七部分：孩子父母的資料

54. 孩子母親的年齡是：**[單選]**

- ₁ 17 歲或以下 ₂ 18-24 歲 ₃ 25-29 歲 ₄ 30-34 歲 ₅ 35-39 歲
₆ 40-44 歲 ₇ 45-49 歲 ₈ 50 歲或以上 ₉₈ 不知道 ₉₉ 拒答

55. 孩子父親的年齡是：**[單選]**

- ₁ 17 歲或以下 ₂ 18-24 歲 ₃ 25-29 歲 ₄ 30-34 歲 ₅ 35-39 歲
₆ 40-44 歲 ₇ 45-49 歲 ₈ 50 歲或以上 ₉₈ 不知道 ₉₉ 拒答

56. 母親的教育程度是：**[單選]**

- ₁ 小學或以下 ₂ 中一至中三 ₃ 中四至中五 ₄ 中六至中七
₅ 專上教育(文憑／證書課程／副學士課程) ₆ 大學或以上 ₉₈ 不知道 ₉₉ 拒答

57. 父親的教育程度是：**[單選]**

- ₁ 小學或以下 ₂ 中一至中三 ₃ 中四至中五 ₄ 中六至中七
₅ 專上教育(文憑／證書課程／副學士課程) ₆ 大學或以上 ₉₈ 不知道 ₉₉ 拒答

58. 母親有沒有工作？**[單選]**

- ₁ 全職受僱／自僱 ₂ 兼職 ₃ 退休人仕 ₄ 待業
₅ 全職家務料理者 ₉₈ 不知道 ₉₉ 拒答

59. 父親有沒有工作？**[單選]**

- ₁ 全職受僱／自僱 ₂ 兼職 ₃ 退休人仕 ₄ 待業
₅ 全職家務料理者 ₉₈ 不知道 ₉₉ 拒答

60. 孩子是否與父母同住：**[單選]**

- ₁ 每天同住 ₂ 每星期 5 天至 6 天 ₃ 每星期 1 至 4 天 ₄ 不是同住

61. 您的每月家庭總收入（包括所有工作獲得的收入）是：**[單選]**

- ₁ 少於 \$5,000 ₂ \$5,000 - \$9,999 ₃ \$10,000 - \$19,999 ₄ \$20,000 - \$29,999
₅ \$30,000 - \$39,999 ₆ \$40,000 - \$49,999 ₇ \$50,000 - \$59,999 ₈ \$60,000 或更多
₉₈ 不知道 ₉₉ 拒答

訪問已經完成，謝謝您的參與。



C. The Questionnaire Translated in English

Survey on Young Child Feeding

| | |
|---|--|
| R1. Maternal and Child Health Centre: | R2. Initials of child's name: |
| | |
| B1. Age range of child: <input type="checkbox"/> ₁ 12m <input type="checkbox"/> ₂ 18m <input type="checkbox"/> ₃ 24m <input type="checkbox"/> ₄ 4y | B2. Date of interview: / / |

Good morning/ evening! My name is _____ and I am an interviewer from CSG. We are commissioned by the Department of Health to conduct a survey on young child feeding and would like to know more about your child's feeding behaviours. The interview is about 15-20 minutes. All information is confidential, it will only be used for collective analysis and will be destroyed after data analysis.

Part 1: Target child and respondent's information

| | |
|----|---|
| 1. | Relationship with the child: [SA] <input type="checkbox"/> ₁ Father <input type="checkbox"/> ₂ Mother |
| 2. | Gender of the child: <input type="checkbox"/> ₁ Male <input type="checkbox"/> ₂ Female |
| 3. | Date of birth of the child : _____/_____/_____(DD/MM/YYYY) |
| 4. | Weight of the child: _____kg (Round off to one decimal place) <input type="checkbox"/> ₉₉ Don't know / Refuse to measure |
| 5. | Height of the child: _____cm (Round off to one decimal place) <input type="checkbox"/> ₉₉₉ Don't know / Refuse to measure |
| 6. | Who is mainly responsible for choosing food and milk? [SA] <input type="checkbox"/> ₁ Child's father <input type="checkbox"/> ₃ Domestic helper <input type="checkbox"/> ₅ Other relatives <input type="checkbox"/> ₉ Others: _____ <input type="checkbox"/> ₂ Child's mother <input type="checkbox"/> ₄ Grandparent <input type="checkbox"/> ₆ Nanny |
| 7. | Who is mainly responsible for child care? [SA] <input type="checkbox"/> ₁ Child's father <input type="checkbox"/> ₃ Domestic helper <input type="checkbox"/> ₅ Other relatives <input type="checkbox"/> ₉ Others: _____ <input type="checkbox"/> ₂ Child's mother <input type="checkbox"/> ₄ Grandparent <input type="checkbox"/> ₆ Nanny |



Part 2: Milk consumption

Part 2 is about the child's milk consumption **in the past 7 days**.

11. (a) Had the child been **breastfed** in the past 7 days? **[SA]**

- | | |
|---|-------------------|
| <input type="checkbox"/> ₁ Yes | → Continue Q11(b) |
| <input type="checkbox"/> ₀ No | → Jump to Q12 |

11. (b) What is the **method of breastfeeding** in the past 7 days? **[SA]**

- | | |
|--|-------------------|
| <input type="checkbox"/> ₁ Breastfed directly | → Jump to Q12 |
| <input type="checkbox"/> ₂ Drank pumped breastmilk | → Continue Q11(c) |
| <input type="checkbox"/> ₃ Breastfed directly and drank pumped breastmilk | → Continue Q11(c) |

11. (c) What is the average quantity of pumped breastmilk consumed by the child per day?
 _____(cc/ml) / _____(oz) (Integer)

12. Had the child **drunk formula milk** in the past 7 days? **[SA]**

- | | |
|---|----------------|
| <input type="checkbox"/> ₁ Yes | → Continue Q13 |
| <input type="checkbox"/> ₀ No | → Jump to Q15 |

The following is about the child's **formula milk** consumption:

13. What is the type of **formula milk** that the child had drunk in the past 7 days?

| | | |
|---|--|--|
| (a) Infant formula [including milk powder, instant liquid milk] [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (b) Follow-up formula 2 [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (c) Follow-up formula 3 [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (d) Follow-up formula 4 [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (e) Other formula milk [SA] | <input type="checkbox"/> ₁ Yes → Continue Q13(ei) | <input type="checkbox"/> ₀ No → Jump to Q14 |
| (ei) What is the type of other formula milk that the child had drunk? | | |
| i. Special formula milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| ii. Nutritional supplement formula milk (e.g. Nutren Junior, PediaSure) [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| iii. Others, please specify: _____ [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |

14. Does the **formula milk** the child drank in the past 7 days contain the following ingredients?

- | | | | |
|---------------------------|---|--|--|
| (a) Goat milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | <input type="checkbox"/> ₂ Don't know |
| (b) Soy milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | <input type="checkbox"/> ₂ Don't know |



The following is about the child's **milk products** consumption:

15. Had the child drunk **instant powdered whole milk** in the past 7 days? **[SA]**

| | |
|---|--|
| <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
|---|--|

16. (a) Had the child drunk **cow milk** in the past 7 days? **[SA]**

| | |
|---|-------------------|
| <input type="checkbox"/> ₁ Yes | → Continue Q16(b) |
| <input type="checkbox"/> ₀ No | → Jump to Q17 |

16. (b) What is the type of **cow milk** that the child had drunk?

| | | |
|--|---|--|
| i. Whole milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| ii. Low-fat milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| iii. Skim milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| iv. Chocolate/ fruit-flavored milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| v. Don't know the type of milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |

17. Had the child drunk/ eaten the following **food** in the past 7 days? **[showcard]**

| | | |
|---|---|--|
| (a) Yogurt (Lactic acid beverage not included, e.g. Yakult) [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (b) Calcium-rich soy milk [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (c) Cheese [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |

18. What is the major type of milk that the child had drunk in the past 7 days? **[SA]**

- ₀ Didn't drink any type of milk
 ₁ Breastmilk
 ₂ Formula milk
₃ Milk or instant full cream milk powder
 ₄ Calcium-added / High calcium soya milk

Breastfeed directly and Feed pumped breastmilk, and **did not** drink Formula milk/ Milk or instant full cream milk powder/ Calcium-added / High calcium soya milk → **Jump to Part 3**



The following is about **the amount of milk consumed** by the child in formula milk, cow milk or instant powdered whole milk and calcium-rich soy milk:

19. In the past 7 days:

- (a) Except breastmilk, how many days in total the child drank milk?
 _____ day(s) (Integer) in the past 7 days
- (b) What is the frequency of drinking milk per day (**except breastmilk**)?
 _____ time(s) (Integer) per day on the days drinking milk
- (c) What is the amount of milk consumed by the child per day (**except breastmilk**)? **[SA]**
- ₁ Know clearly the quantity of all types of milk:
 _____ ml / _____ oz (Integer) → *Jump to Q20*
- ₂ Only know the quantity of some types of milk, record the quantity known:
 _____ ml / _____ oz (Integer) → *Continue Q19(ci)*
- ₉ Don't know the quantity of any type of milk → *Continue Q19(ci)*
- (ci) What is the brand of milk taken by the child? _____
- (cii) What is the pack type of milk taken by the child? **[MA] [Showcard]**
- ₁ Carton - standard pack
- ₂ Carton - family pack
- ₃ Packaged - standard pack
- ₄ Packaged - family pack
- ₅ Packaged - mini pack
- ₆ Glass bottle
- ₉ Others, please specify: _____
- (ciii) What is the number of pack/ bottle of milk taken by the child? _____

20. What do you think about the adequacy of the child's milk intake (**except breastmilk**): **[SA]**

- ₁ Too low ₂ Appropriate ₃ Too much

The following is about the child's **use of feeding bottle**:

21. Had the child used the following utensils to **drink milk** in the past 7 days (**except breastmilk**)?

[Showcard]

- | | | |
|----------------------------------|---|------------------|
| (a) Training cup [SA] | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₀ No | |
| (b) Regular cup [SA] | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₀ No | |
| (c) Cup with a straw [SA] | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₀ No | |
| (d) Feeding bottle [SA] | <input type="checkbox"/> ₁ Yes | →Continue Q22(a) |
| | <input type="checkbox"/> ₀ Ceased already, from _____ months old (Round off to integer) | |
| | <input type="checkbox"/> ₂ Had never used feeding bottle | |



22. (a) What is the frequency of the following situations in the past 7 days? “Never”, “seldom”, “sometimes”, “usually” or “always” (every time)? **[SA] [Showcard]**

| | Never | Seldom | Sometimes (average 50% of the time) | Usually | Always (every time, every day) |
|--|---------------------------------------|---------------------------------------|---|---------------------------------------|---------------------------------------|
| i. Falling asleep while drinking milk | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| ii. Using feeding bottle in bed in the morning | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| iii. Using feeding bottle to manage the child's emotion problems | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

(b) Have you tried to help the child to stop using feeding bottle? **[SA]**

- ₁ Yes, _____-month old (Round off to integer) start to stop using / try to stop using feeding bottle
- ₀ No

(c) When do you think the child should stop using feeding bottle? _____-month old (Round off to integer)

23. Have you ever heard of the age recommended by MCHC for **stop using feeding bottle**? **[SA]**

- ₁ Yes, and the recommended age is _____-month old (Round off to integer)
- ₃ Yes, but don't remember the recommended age to stop using feeding bottles
- ₂ No



Part 3: Child's consumption of food other than milk

Part 3 is about child's consumption of solid food and health supplements **in the past 7 days**.

24. **In the past 7 days**, how many **days** had the child eaten the following types of food? **【Showcard】 [SA]**

| | Did not eat | 1 day | 2 days | 3 days | 4 days | 5 days | 6 days | Eat everyday |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| (a) Meat | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (b) Fish and seafood | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (c) Egg | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (d) Legume (Bean curd, dried beans, etc.) | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (e) Vegetable | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (f) Fruit | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| (g) Cereal | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |

25. What is the **average amount** of vegetable the child eaten on the days eating vegetables? (Including all colours and types of vegetable, e.g. leafy, gourd, mushroom and algae etc.) **【Showcard】 [SA]**

- ₁ Less than the amount in Figure A (<20g)
- ₂ Around the amount in Figure A (~20g)
- ₃ Between the amount in Figure A and Figure B
- ₄ Around the amount in Figure B (~40g)
- ₅ Between the amount in Figure B and Figure C
- ₆ Around the amount in Figure C (~80g)
- ₇ Between the amount in Figure C and figure D
- ₈ Around the amount in Figure D (~120g)
- ₉ Between the amount in Figure D and Figure E
- ₁₀ Around the amount in Figure E (~160g)
- ₁₁ More than the amount in Figure E

26. How many types of vegetable the child eaten in the past 7 days? **【SA】**

- ₁ 1 type
- ₂ 2 types
- ₃ 3 types
- ₄ 4 types
- ₅ 5 types
- ₆ 6 types
- ₇ 7 types
- ₈ 8 types
- ₉ 9 types
- ₁₀ 10 types or above

27. What is the **average amount** of fruit the child eaten on the days eating fruits? (Fruit juice is not included)

【Showcard】 [SA]

- ₁ Less than the amount in Figure A (<20g)
- ₂ Around the amount in Figure A (~20g)
- ₃ Between the amount in Figure A and Figure B
- ₄ Around the amount in Figure B (~40g)
- ₅ Between the amount in Figure B and Figure C
- ₆ Around the amount in Figure C (~60g)
- ₇ Between the amount in Figure C and figure D
- ₈ Around the amount in Figure D (~80g)
- ₉ More than the amount in Figure D

28. How many types of fruit the child eaten in the past 7 days? **【SA】**

- ₁ 1 type
- ₂ 2 types
- ₃ 3 types
- ₄ 4 types
- ₅ 5 types
- ₆ 6 types
- ₇ 7 types
- ₈ 8 types
- ₉ 9 types
- ₁₀ 10 types or above



29. Had the child taken health supplements **in the past 7 days?** [SA]

₁ Yes

→ Continue Q30

₀ No

→ Jump to Part 4

30. Had the child taken the following health supplements?

| | |
|--|---|
| (a) Cod liver oil [SA] | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₀ No |
| (b) Omega 3 fish oil or DHA [SA] | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₀ No |
| (c) Vitamins or minerals [SA] | <input type="checkbox"/> ₁ Yes → Continue Q30(ci) |
| | <input type="checkbox"/> ₀ No → Jump to Q30(d) |
| (ci) Which type(s) of vitamins or minerals had the child taken? [MA] | <input type="checkbox"/> ₁ Multiple vitamins or minerals |
| | <input type="checkbox"/> ₂ Vitamin B |
| | <input type="checkbox"/> ₃ Vitamin C |
| | <input type="checkbox"/> ₄ Vitamin D |
| | <input type="checkbox"/> ₅ Calcium |
| | <input type="checkbox"/> ₆ Iron |
| | <input type="checkbox"/> ₇ Zinc |
| | <input type="checkbox"/> ₈ Don't know which type of vitamins or minerals |
| | <input type="checkbox"/> ₉ Other vitamins or minerals, please specify: _____ |
| (d) Other health supplements [SA] | <input type="checkbox"/> ₁ Yes → Continue Q30(di) |
| | <input type="checkbox"/> ₀ No → Jump to Q31 |
| (di) Which type(s) of health supplements had the child taken? [MA] | <input type="checkbox"/> ₁ Colostrum |
| | <input type="checkbox"/> ₂ Probiotics |
| | <input type="checkbox"/> ₃ Bilberry extract |
| | <input type="checkbox"/> ₄ Lutein |
| | <input type="checkbox"/> ₅ Royal jelly |
| | <input type="checkbox"/> ₆ Polycal |
| | <input type="checkbox"/> ₈ Don't know which type of health supplement |
| | <input type="checkbox"/> ₉ Other health supplements, please specify: _____ |



Part 4: Child's eating behaviour

Part 4 is about child's eating behaviour **in the past month**.

Please describe the frequency of the following situations, "never", "seldom", "sometimes", "usually" or "always" (every time)? **[SA] [Showcard]**

| | Never | Seldom | Sometimes (average 50% of the time) | Usually | Always (every time, every day) |
|--|---------------------------------------|---------------------------------------|---|---------------------------------------|---------------------------------------|
| 31. The child is having meals with family members. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 32. You are letting the child to watch television or play mobile phone while having meals. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 33. The child is running around while having meals. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 34. The child is having the same food in the meals as that of family members. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 35. You are giving child's favourite food to reward his/ her good behaviour. 【Read out if necessary: e.g. reward the child for tidying up toys or getting good grades】 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 36. You are giving child's favourite food to manage his/ her emotions or behaviour problems. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 37. You are letting the child take sugar-added drinks. 【Read out if necessary: e.g. carbonated drinks, sugar-added juice, yogurt drinks, lactic acid beverages, sports drinks, sugar-added packed beverages, fruit-flavoured/ chocolate milk, etc.】 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

38. In general, how long did the child take in having a meal? **[SA]**
₁ 15 minutes or less ₂ 16 to 30 minutes ₃ 31 to 45 minutes ₄ 46 to 60 minutes ₅ More than 60 minutes

39. What do you think about the appropriateness of length of time of taking a meal by the child: **[SA]**
₁ Too short ₂ Appropriate ₃ Too long

40. Do you concern about the quantity of the child's meal intake? **[SA]**
₁ No, I don't worry ₂ I worry that he / she eats too little ₃ I worry that he / she eats too much



【 If the child is below 4 years old, continue Q41 to Q46. If the child is 4 years old or above, jump to Part 5. 】

41. Is the child able to use spoon? **[SA]**

- ₁ Can → *Continue Q41a*
- ₂ Cannot → *Go to Q41b*

41a. Which sentence best describes the situation of the child using spoon? **[SA]**

- ₁ The child can use a spoon in a tidy manner
- ₂ The child can use a spoon by himself/ herself, but there is spilt food
- ₃ The child can use a spoon with help

41b. Which sentence best describes the situation of the child using spoon? **[SA]**

- ₂ The child can use spoon by himself / herself, but there is spilt food
- ₃ The child can use spoon with help
- ₄ The child cannot use a spoon yet
- ₅ The child has never used a spoon

42. How often do you allow the child to grab food to eat? **[SA]**

- ₁ Rarely
- ₂ Seldom
- ₃ Sometimes
- ₄ Usually
- ₅ Always (every meal)

43. How often do you allow the child to use spoon to eat? **[SA]**

- ₁ Rarely
- ₂ Seldom
- ₃ Sometimes
- ₄ Usually
- ₅ Always (every meal)

Is the child able to use the following utensils in drinking? **【 Showcard 】 [SA]**

| | Can | Cannot | The child refuses to use it | Has not yet let the child try it |
|----------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 44. Regular cup | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |
| 45. Training cup | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |
| 46. Cup with a straw | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ |



Part 5: Others

47. Do you agree with the following statements? **[SA]**

| | Strongly disagree | Disagree | No comment / Don't know | Agree | Strongly agree |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| (a) Follow-up formula can replace other food to provide nutrients. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (b) Follow-up formula is added with nutrients that promote children's brain development, which cannot be found in other food. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (c) The calcium content of follow-up formula is higher than that in cow milk. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| (d) Follow-up formula is more able to enhance immunity of the child than cow milk. | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

48. Had you ever received health information and materials on infant and young child feeding through the following channels? **【Showcard】**

| | | |
|--|---|--|
| (a) Booklets of healthy eating for 6 to 24-month old children [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (b) DVD or promotional video about healthy eating for 6 to 24-month old children [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (c) Email from Parent-Child e-Link [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (d) Website of Department of Health [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |

49. Had you ever received health information and materials on infant and young child feeding through the following places, people or other channels? **【Showcard】**

- | | | | | | |
|---|---|--|--|---|--|
| (a) Family / relative / friend [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (b) Parent website [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (c) Health professional | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (d) Website of formula milk manufacturer [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (e) Parent magazine | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (f) Mother's club [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (g) Post-natal care helper/ nanny / domestic helper [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (h) Book [SA] | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |
| (i) School [SA] | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₀ No | (j) Social media (e.g. | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No |



Yes

Facebook/WhatsApp)[SA]

50. Which channel(s) do you prefer the Department of Health using to provide health information and materials on infant and young child feeding? **【Showcard】** **【MA】**

- ₁ Leaflet / Booklet
- ₂ Short film, CD or promotional video
- ₃ Parent-child seminar / workshop
- ₄ Personalised mobile phone application
- ₅ Email
- ₉ Others: _____

【If the child is below 2 years old, continue Part 6.If the child is 2 years old or above, jump to Part 7.】



Part 6: Breastfeeding

【Only for mother who has 12 to 24-month old child】

51. Is the child currently **breastfed** (including pumped breastmilk)? **[SA]**

₁ You are **still feeding** the child with breastmilk. → *Jump to Part 7*

₂ You fed the child with breastmilk but **have stopped the breastfeeding when the child is** ₀ **below one-month old/** ₁ _____-month old (Round off to integer)→ *Continue Q52*

₃ You **have never breastfed the child.** → *Jump to Q53*

52. Which of the following are the main reasons for you to stop breastfeeding (including pumped breastmilk)?

【Choose at most 3 main reasons】 【Showcard】

| | 3 main reasons | Other reasons/ not my reason |
|---|---------------------------------------|---------------------------------------|
| (a) I thought it was a suitable time to stop breastfeeding | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (b) I didn't have enough milk | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (c) Breast milk alone did not satisfy my child (Child always feel hungry) | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (d) My child had trouble in taking breast milk | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| i. My child had trouble sucking or latching on | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| ii. My child began to bite | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| iii. My child lost interest in breast milk | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (e) Lactational factor | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| i. I felt pain when breastfeeding | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| ii. My nipples were sore, cracked, or bleeding | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| iii. My breasts were overfull or engorged | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| iv. My breasts were infected or abscessed | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| v. My breasts leaked too much | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (f) My child became sick | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (g) My child was not gaining enough weight | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| i. A health professional said my child was not gaining enough weight | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| ii. I thought that my child was not gaining enough weight | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (h) I was sick | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| i. A health professional did not recommend I breastfed | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| ii. I thought I was not suitable to breastfeed | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (i) Breastfeeding was too tiring | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (j) Breastfeeding was too inconvenient | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (k) I needed to work | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| i. I could not pump or breastfeed at work | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| ii. I did not want to pump or breastfeed at work | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (l) I needed someone else to feed my child | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (m) I wanted to go back to my lifestyle | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (n) I became pregnant or wanted to become pregnant again | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (o) Others, please specify: _____ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |



53. Which of the following are the main reasons for you not to breastfeed your child (including pumped breastmilk)? **[Choose at most 3 main reasons] [Showcard]**

| | 3 main reasons | Other reasons/ not my reason |
|---|---------------------------------------|---------------------------------------|
| (a) My child became sick | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (b) I thought I didn't have enough milk | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (c) A health professional did not recommend I breastfed | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (d) I was sick and I thought I was not suitable to breastfeed | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (e) Breast milk and formula milk were similar | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (f) Breastfeeding was too inconvenient | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (g) I had trouble getting the milk flow to start / I did not like breastfeeding | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (h) I wanted to be able to leave my child for several hours at a time | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (i) I wanted to go on a weight-loss diet | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (j) I wanted to go back to my usual diet | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (k) I had too many household duties | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (l) I needed to work | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (m) I needed someone else to feed my child | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (n) I wanted to go back to my lifestyle | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (o) Family members did not want me to breastfeed | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |
| (p) Others, please specify: | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ |



Part 7: Parents' information

54. How old is the mother: **[SA]** **[Showcard]**

- ₁ 17 years old or below
 ₂ 18-24 years old
 ₃ 25-29 years old
 ₄ 30-34 years old
 ₅ 35-39 years old
₆ 40-44 years old
 ₇ 45-49 years old
 ₈ 50 years old or above
 ₉₈ Don't know
 ₉₉ Refuse to answer

55. How old is the father : **[SA]**

- ₁ 17 years old or below
 ₂ 18-24 years old
 ₃ 25-29 years old
 ₄ 30-34 years old
 ₅ 35-39 years old
₆ 40-44 years old
 ₇ 45-49 years old
 ₈ 50 years old or above
 ₉₈ Don't know
 ₉₉ Refuse to answer

56. What is the education level of mother: **[SA]**

- ₁ Primary or below
 ₂ Form 1 - 3
 ₃ Form 4 - 5
 ₄ Form 6 - 7
₅ Post secondary (diploma / certificate programme / associate degree programme)
 ₆ Tertiary or above
 ₉₈ Don't know
 ₉₉ Refuse to answer

57. What is the education level of father: **[SA]**

- ₁ Primary or below
 ₂ Form 1 - 3
 ₃ Form 4 - 5
 ₄ Form 6 - 7
₅ Post secondary (diploma / certificate programme / associate degree programme)
 ₆ Tertiary or above
 ₉₈ Don't know
 ₉₉ Refuse to answer

58. Is the mother currently employed? **[SA]**

- ₁ Full-time / Self-employed
 ₂ Part-time
 ₃ Retired
 ₄ Unemployed
₅ Full-time home-maker
 ₉₈ Don't know
 ₉₉ Refuse to answer

59. Is the father currently employed? **[SA]**

- ₁ Full-time / Self-employed
 ₂ Part-time
 ₃ Retired
 ₄ Unemployed
₅ Full-time home-maker
 ₉₈ Don't know
 ₉₉ Refuse to answer

60. Is the child living with parent: **[SA]**

- ₁ Live together every day
 ₂ 5 - 6 days per week
 ₃ 1 - 4 days per week
 ₄ Not living together

61. What is your monthly household income (including all sources of income): **[SA]**

- ₁ Less than \$5,000
 ₂ \$5,000 - \$9,999
 ₃ \$10,000 - \$19,999
 ₄ \$20,000 - \$29,999
₅ \$30,000 - \$39,999
 ₆ \$40,000 - \$49,999
 ₇ \$50,000 - \$59,999
 ₈ \$60,000 or above
₉₈ Don't know
 ₉₉ Refuse to answer

This interview is completed. Thank you very much for your participation.



Appendix 2 – Picture Guide

The picture guide is printed and presented in A3 size

香港家長餵養幼兒問卷調查

水果食物圖例


衛生署
Department of Health


家庭健康服務
Family Health Service

圖 A ~20g 水果

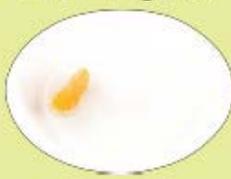
 或  或  或 

圖 B ~40g 水果

 或  或  或 

約 1/4 個橙 約 1/4 個蘋果 約 1/2 隻細香蕉

圖 C ~60g 水果

 或  或  或 

圖 D ~80g 水果

 或  或  或 

約 1/2 個橙 約 1/2 個蘋果

圖像版權屬衛生署家庭健康服務所擁有



香港家長餵養幼兒問卷調查



蔬菜食物圖例



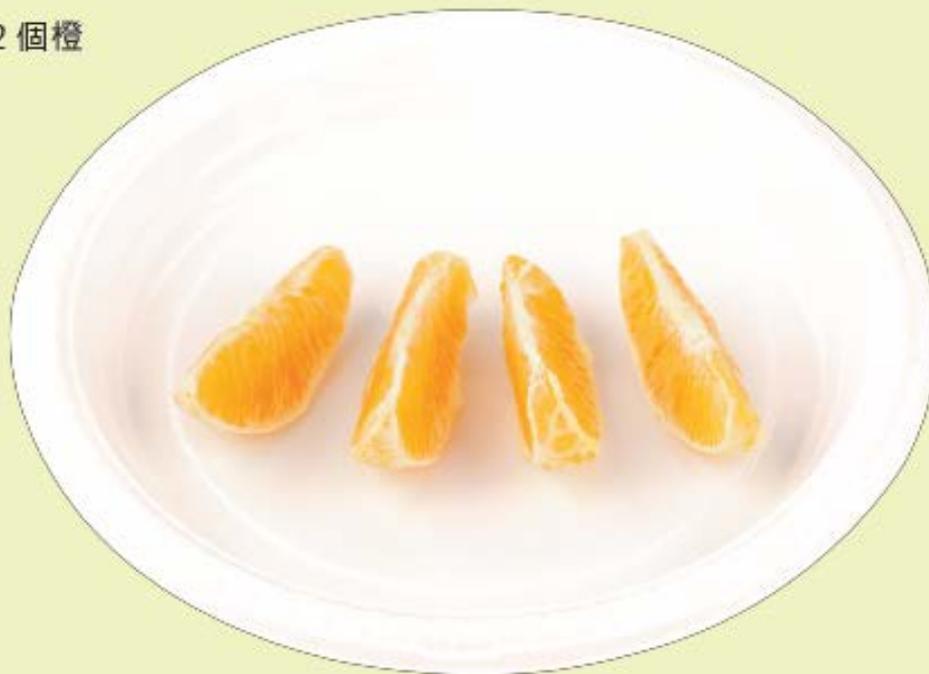
| |
|---|
| <p>圖 A ~20g 瓜菜(熟)</p> <p> 或  或  或 </p> <p>1 湯匙菜心(熟) 約 1/8 碗瓜菜(熟)</p> |
| <p>圖 B ~40g 瓜菜(熟)</p> <p> 或 </p> <p>約 1/4 碗瓜菜(熟)</p> |
| <p>圖 C ~80g 瓜菜(熟)</p> <p> 或 </p> <p>約 1/2 碗瓜菜(熟)</p> |
| <p>圖 D ~120g 瓜菜(熟)</p> <p> 或 </p> <p>約 3/4 碗瓜菜(熟)</p> |
| <p>圖 E ~160g 瓜菜(熟)</p> <p> 或 </p> <p>1 平碗瓜菜(熟)</p> |

圖像版權屬衛生署家庭健康服務所擁有

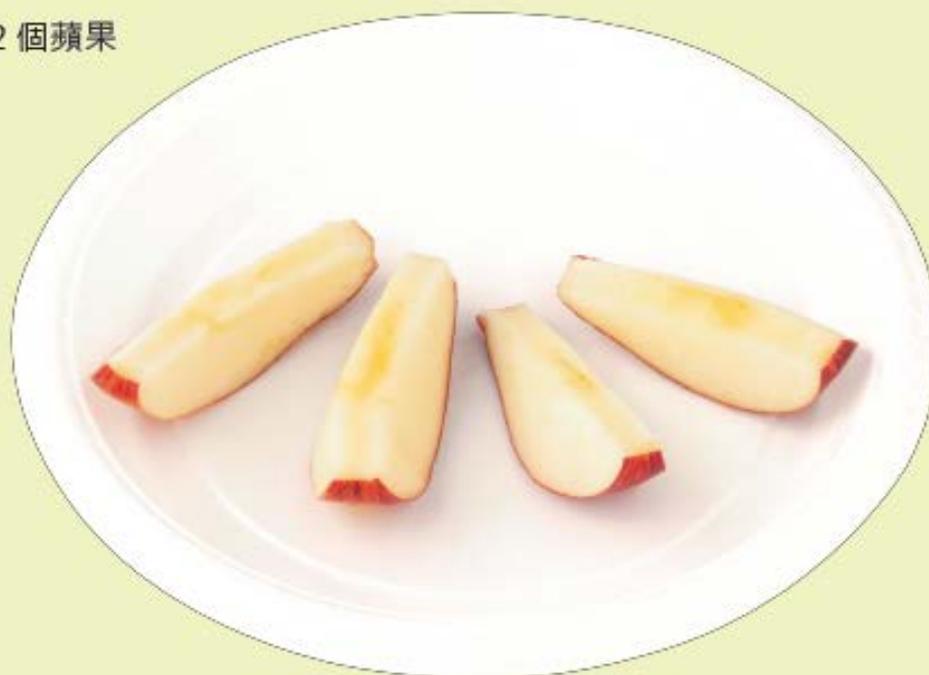


水果實物大小圖例

約 1/2 個橙



約 1/2 個蘋果



圖像版權屬衛生署家庭健康服務所擁有



不同杯子例子



圖像版權屬衛生署家庭健康服務所擁有