學生膳食安排的研究 Feeding the Future A Study on Students' Eating Arrangements

青少年問題研究系列(九) Youth Study Series No.9

香港青年協會
The Hong Kong Federation of Youth Groups
3.1996

Youth Study No, 9:

Feeding rite Future: A Study on Students' Eating Arrangements

SUMMARY REPORT

1. INTRODUCTION

The diet and health of the current generation of children is obviously a major concern for any society primary and secondary schools. Those under study range from Primary 4 to secondary Form 6 students in Hong Kong school administration.

The major objectives of this study are to understand what the key issues are in the eating arrangements of students, the existing school facilities, and thereby to explore the implications in terms of services and policy options.

2. METHODOLOGY

A questionnaire survey approach was adopted so that researchers could collect extensively viewpoints from a wide spectrum. Stratified sampling was employed to draw samples from primary and secondary schools in the territory. With their consent, 49 secondary schools and II primary schools (full-day mode) were selected pro-rata according to district (Hong Kong, Kowloon or New Territories) and nature (public, subsidized or private). Three self-administered structured questionnaires (one for school principals, one for secondary students, and one for primary students), were used as tools for data collection. One class of around 40 students from each school was asked each Student to fill out an individual questionnaire. To obtain the point of view of the schools, questionnaires were filled out either by principals or assigned teachers who were involved in students eating arrangements. Questionnaires were distributed and collected by social workers of the Federation based in the district near the schools. Data were computed and analysed by computer software (Statistical Packages for Social Sciences). Qualitative data were carefully noted and analysed as well.

Altogether 34 schools returned the school questionnaires and 1,731 students questionnaires (1,393 from secondary students and 333 from primary students) were received. Of the 54 schools, 44 were secondary and 10 were primary schools. Most (74.1%) were subsidized, the others were private (16.7%) and public (9.3%).

3. FINDINGS FROM SCHOOL RESPONDENTS

31 The time allocated for the lunch hour differed in different schools In primary schools, it ranged from 30 to 70 minutes, with an average of 43 minutes. In secondary schools, it ranged from 25 to 140 minutes, with the mode at 80 minutes.

- 3.2 Over half (55.6%) of the schools have school tuck shops and also arrange lunch boxes for the students. Thirteen percent of the schools only arrange lunch boxes for students. Another 16.7% of school have tuck shops only. There are three schools which do not have a canteen, nor a tuck shops, nor arrange lunch boxes.
- 3.3 Half of the 10 primary schools allow students to eat outside and half make them stay in school for lunch. Of the secondary schools, two schools make their students stay at school for lunch from Form I to Form 5. For the others the ratio of" eating outside school" to "staying at school for lunch" varies from 4:6 for Form 1 to 1:9 for Form 3 or above. The cut off line for this school arrangement is mostly at Form 3.
- 3.4 Reasons for this arrangement given by school administrators are mainly protection of students from triads or outside influences during lunch time (77.8%), effective use of time for extra-curricular or counselling activities (55.6%), protection of students from traffic and other road hazards (44.4%) and to save students' time (5.6%).
- 3.3 As most of the other schools have canteens. tuck shops, or arranging lunch boxes for students, it is found that the present arrangement of schools have been used for over five years (62.8%), three to four years (13.7%), one to two years (7.8%) and less than one year (15.7%).
- 3.6 In school, the places where the students eat vary. Schools use covered playgrounds (33.3%), canteen/tuck shop (25.5%), classrooms (24.5%), open-air playground (11.8%), rooms for special subjects (2.0%) and gardens or booths (2.9%).
- 3.7 In schools operating tuck shops (N--44), 79.5% are subcontracted out and managed by outside companies. Most of the remaining ones are operated by persons appointed by the school, such as caretakers.
- 3.837.4% of schools indicated that they have a working committee taking care of students' eating arrangements; 37% of the school do not; 5.6% of the school said they are planning to set one up soon.
- 3.9 The schools indicated that the working committees have representatives of the teachers (82.4%) or representatives of the students (24.2%). But none of these working committees have representatives of the parents.
- 3.10 The price of lunch boxes ranges from \$12 to \$16 for both primary and secondary students, with an average of \$14.2.
- 3.11 For schools arranging lunch boxes for students, the major consideration in selecting a catering company includes the background and size of the company (39%), a long record of using the same company, no need to change (29.3%), or because it is operated by school caretakers (14.6%).
- 3.12 Reasons given for continuing to use a catering company are that the quality of food is good (27%), that it is a reputable company run by a big corporation (24.3%), that there is no need to change the present company (18.9%), that the price of lunch boxes is lower

(16.2%) and others (13.5%).

- 3.13 School administrators are concerned about the monitoring of catering companies. Schools indicated their concern for different issues as follows: changing the menu regularly (33%), several choices of lunch box (31%), cleaning away used lunch boxes (27%), hygiene (24%) no cash transaction involved in schools (20%), vegetables in the food (13%), using recycled material for lunch containers (10%), lunch provided with tea or drinks (8%), less oil in cooking (8%) and no additives in food (7%).
- 3.14 Of the school administrators (N=53), ten schools indicated that the top priority in managing the students' lunch times was discipline, ten schools indicated the cleanliness of the eating place, eight schools chose a balanced diet, eighteen schools chose the monitoring of catering companies, two schools chose inadequate eating space in schools and four schools chose extra-curricular activities for students during lunch time.
- 3.15 Schools also expressed their opinions on the following items: 92.4% of the respondents agreed that schools should set a higher standard for quality food for lunch; 61.1% did not agree that nutrition and health of students were the prime responsibilities of parents; 78.8% agreed that students having lunch at school would Increase the workload of teachers; 83.2% agreed that it would be very helpful if the Education Department drafted guidelines for students' nutrition and health; 39.3% thought that students' lunch arrangements were nothing to do with teaching and should be subcontracted out to catering companies; 87% agreed that providing space in school for lunch would solve much of the problem; 74% indicated that at present the lack of space in school for students to eat lunch was a big problem; only half of the schools thought that using flexi-hours for lunch would be a good choice.

4.FINDINGS FROM SECONDARY SCHOOL STUDENTS

- 4.1Altogether 1,39g questionnaires were returned by Form 1 to Form 6 students from 36 secondary schools.
- 4.2 Around 80% of the respondents are allowed to eat outside school whereas 17% must stay at school for lunch. Another 3% must leave school for lunch.
- 4.3 Around half of the respondents have breakfast at home. Less than 10 per cent of the students have their breakfast at school tuck shops. Around 20 per cent of the respondents said they did not take breakfast because of not being in the habit of having breakfast or not having enough time. Some also indicated that the school tuck shops were too crowded.
- 4.4 Of the 236 respondents who must stay at schools for lunch, around 55 per cent were at school who had an arrangement for ordering lunch boxes. Of the 1,160 respondents who were eating outside school, most went to restaurants, food stalls, fast food shops and convenient shops. Around 19 per cent from this section went home for lunch.
- 4.5 For the 1,045 respondents who brought their own lunch, the taste of the food, the

company of good friends and the price of lunch are the major considerations. The average cost was \$10.6 for breakfast and \$19.8 for lunch.

- 4.6 Over 60 per cent of the respondents indicated that they bought snacks everyday'. They spent around \$8 per day on snacks.
- 4.7 For the secondary school respondents, thirty-three schools looked at have tuck shops on a scale of 0 to 5, most respondents overall rated their school tuck shops under 3.0 with some sub-items such as food choices, operation and prices under 2.5. Nutritional value was rated even at only 1.9. 4.8 For catering companies supplying their lunch boxes, most respondents rated them overall at under 2.5 on a scale
 - to 5. The lowest item was the quality of food which was only given 1.9.
- 4.9 For schools with canteens, relevant respondents rated an average of over 3.0 for food quantity, operation and price on a scale of 0 to 5. items such as food choices, food quality and hygiene were rated on or below 2.5.
- 4.10 Adequacy of space inside school for lunch purpose was rated as low as 1.9 for most respondents. Correspondingly, adequacy of chairs and tables for lunch was rated at 1.S in a scale of 0 to 5.
- 4. II When asked what were the reasons for choosing food, around 20 per cent said "doesn't matter", followed by "adequate quantity" (14.8%) and `sufficient choices" (11.1%). Among the twelve listed items, "nutritional value" and "less fat or oil in cooking" were ranked at 9 and 10 correspondingly.
- 4.12 Around 70 per cent of the respondents did not consider preparing their own lunch at home, reflecting the increasing trend of eating out.

5. FINDINGS FROM PRIMARY SCHOOL STUDENTS

- 5.1 Altogether 353 questionnaires were returned for Primary 4 to Primary 6 students from ten primary schools.
- 5.248.4% respondents stayed at school for lunch whereas 51.6% of respondents were allowed to eat outside schools.
- 5.3 Around three-quarters of the respondents had breakfast at home. Only 8.8 per cent took breakfast at school tuck shops. Another 9.1 per cent said they did not eat breakfast. About half of those who did not took breakfast claimed they did not have enough time.
- 5.4 About 45 per cent of the respondents were at schools which arranged lunch boxes, followed by another 21.5 % who packed their own lunch. However, when asked if they were free to choose what they did for lunch, only 14.2% indicated interest in having lunch boxes and 10.5% packed their own lunch. About 34.1% mentioned that they liked

eating outside school.

- 5.5 For the respondents who eat out, the average cost for breakfast was \$10.7 and \$15 for lunch. On average, most respondents spent \$3.7 for snacks.
- 5.6 About half of the respondents indicated that they like sandwiches, sushi, followed by hot meals or spaghetti (34%), egg rolls and chicken legs (7.4%). Salad and fresh fruit attracted only 5.9 per cent of the respondents.

6. DISCUSSION AND RECOMMENDATIONS

DISCUSSION

6.1 the Diversity of Eating Arrangements is Greatly Influenced by Current Policies and School's Administrative Measures.

The survey indicated that large numbers of students have lunch within or outside the school premises. A significant proportion of students who eat outside go home for lunch.

The survey also indicated that a student's priorities as regards choice of lunch are firstly, the taste of the food; secondly, eating in the company of good friends; and thirdly, the price of the food.

Over half of those who go outside school to eat patronize restaurants, food stalls and fast food outlets. A small proportion of students buy food from street hawkers or from hawkers' vans.

Over half of the respondents have breakfast at home but about one quarter of the respondents do not have any breakfast. The latter claimed either that they do not have time, or that they are not in the habit of having breakfast. Three-quarters of the primary schoolchildren have breakfast at home.

Most of the primary schoolchildren went home for lunch, either took their own lunch to school or had it brought there by a member of the family, or ate lunchboxes ordered by the school. About a third of the schoolchildren chose to eat outside the school premises.

However, these diverse arrangements are greatly influenced by the policies of the Education Department such as their guidelines for school tuck shops. In addition, students' lunch arrangements are also affected by each school's administrative measures and in particular, whether students are allowed to go out for lunch or have to stay at school.

From the survey it is observed that no matter what choices are available, the students

are not provided with a selection of food which is healthy and nutritious.

6.2 Secondary Students On Average Spend under \$20 on Lunch and Around \$8 on Snacks, Primary' Schoolchildren Spend about \$14 on Lunch and about \$3.7 on Snacks

The survey results show that neither primary nor secondary students spend a great deal on food. if they eat out, primary schoolchildren spend an average of \$10.60 for breakfast and \$14 for lunch. Secondary students spend the same amount for breakfast and \$19.80 for lunch. Daily spending on snacks averages \$7.70 for secondary students and \$3.70 for primary ones. The snacks purchased include biscuits, potato chips, sandwiches, cup noodles, afternoon tea at a fast food outlet, hamburgers, ice-cream and soft drinks. About 40% of the secondary students and 20% of primary students claimed that they did not spend anything on snacks.

There is a clear relationship between eating habits and the nutrition obtained. As we have seen most children spend a good proportion of their money on snacks of low' nutritional value and high in fat content. The management of school tuck shops in the short run and the development of a healthier eating culture in the long run are matters of great concern.

6.3 The Difficulties of Cultivating Healthy Sating Habits at School

As the survey revealed, many schools have only limited suitable space where students can eat.

The Outline Education in 1994 recommends that items for sale `should be clean and wholesome and, wherever possible, items of food should be properly wrapped.

Recommended items are soft drinks. cakes, buns, bread rolls, etc.' in order to sell `properly wrapped' items most tuck shops also sell potato chips, chocolates, biscuits, and other snacks of limited nutritional value. The limitations on the provision of a wider and more nutritious range of food items in schools make it difficult for healthy eating habits to be inculcated.

6.4 The Department of Education's Emphasis on Hygiene and Management Does Not Take Nutrition into Account

The Guideline in operating and supervising a tuck shop, and choosing items for sale. It clearly states that when food items are selected for sale `the first consideration should be given to the hygiene condition of the items to be sold'. it also states the range of foods which should not be sold. These include `items which involve too much preparation and washing up afterwards, e.g. noodles, congee, etc.' and `items of cooked food which may be easily contaminated, e.g. `fish balls or meat balls, rice rolls and rice dumplings, etc.' The result of these restrictions is that cooked

wrapped. In the end, the choice is whittled down to soft drinks, potato chips, peanuts, chocolate, etc.

As the survey indicated, most: school tuck shops do follow the Guidelines and sell a

considerable amount of properly wrapped' food of low nutritional value. The questionnaires filled in by the secondary students showed that, on a scale of 0 to 5 most of them gave the school tuck shops a rating of 2.5 in terms of choice of food, method of operation, price and nutritional value.

The emphasis on hygiene does not fit with the students' needs. It is time to review the Guidelines, taking into account the students' eating habits and their needs for hot meals, adequate quantities, balanced nutrition and a wider choice of food.

6,5 The Increasing Trend of Using a Lunch Box Service in Schools

It can be seen from the questionnaires that only three schools have canteens. Thirty-three schools who responded use a catering service to provide lunch boxes for the students. It is clear that the trend of using a lunch box catering service will increase as primary schools move towards full day operation and more and more secondary schools are tending to keep younger students in school during the lunch hour. The questionnaires completed by the student showed a rating of below 2.4 on a scale of 0 to 5 as regards the amount of food, hygiene, price and nutritional value. The quality of food was rated at less than 2.0.

The lunch box catering services affect the health and nutritional input of thousands of student varies. It is largely the school that selects which company to deal with and monitors the quality of hygiene and of the food supplied investigating is how to ensure a consistent standard of food and service from a catering company.

6.6 There are Not Enough Eating Areas in Schools

It is clear from the survey that schools lack sufficient areas where students can have lunch. Although most schools are purpose-built premises, the standard design in 1990 contained no provision for eating areas. At present, different schools handle the matter in different ways, `using classrooms, covered playgrounds, open-air playgrounds, sport areas, special project rooms, etc.

However, these arrangements can be quite unsatisfactory so that sometimes students have to eat standing up, squabble over the limited seats, have nowhere to eat out of the rain, etc. Some of the schools which responded do have their own canteens or eating areas because they did not follow the standard design when the school was built many years ago.

The questionnaires indicate that students are not satisfied with the eating areas at their school, most rating them less than 2.\$ on a scale of 0 to 5.

6.7 Schools Regard Eating Arrangements Secondary to Teaching

The findings indicate that the schools are quite concerned about eating arrangements for the students. Over 60% of the school that responded considered that the students' health

and nutrition was not solely the parents' responsibility.

They felt that schools also had a role to play. Over half of the schools in the survey also thought using lunch box catering services was a good idea. Those who were already using such a service salad that their primary concern was monitoring the catering companies as regards the quality of the food, the hygiene, punctuality in delivery of the lunch boxes and environmental issues. However, the teachers' workload has been made considerably heavier as a result of their involvement in selecting and monitoring the catering companies. Over 80% of the schools surveyed thought this to be the case. Moreover as schools are educational institutions where teaching is regarded as the primary task, issues relating to food and meals will take a lower priority where time is short..

6.8 The Education Department has no Long-term Plan in the Standard

Design for Schools to Accommodate Students' Meals - the physical layout of schools. There is also some discussion on the extent to which existing school buildings can be upgraded to reflect the most up-to-date standard, and on whether non-teaching needs are adequately catered for. The Report expresses concern with the inadequacies of even the most recent designs, and recommends that the accommodation plan for new school buildings to revised to include additional space for staff work rooms and a common room, a student activity centre and a small interview room. Yet nothing is said about eating areas for which there is an obvious need.

The Education Department deals with the issue of eating spaces through different scattered guidelines issued at different times. For instance, the Administrative Notice No 46194 (May 1994) is concerned with controlling general trading activities in schools and similar issues. The question we are asking are whether there is a need for a policy on students' eating arrangements at schools. Should active steps be taken to improve the physical layout of schools? How can a wholesome and healthy eating environment be created for students? These are all important areas.

6.9 In Addition, There are also Issues of Discipline and Safety Involved in Sating Arrangements

The questionnaires returned by the schools clearly indicated that eating arrangements also involved issues of safety and discipline. In all, nineteen schools required the students to stay at school during the lunch hour. One of the main reasons is the fear of students being threatened or assaulted by triad members. In addition, a significant curricular activities and training programs. Yet the lunch hour is usually regarded as free time and a break from school activities. It will not be easy to solve the problem of striking a balance between protecting the students, preserving their freedom and providing adequate choices for lunch within the inadequate eating areas in schools.

6.10 Parent Teacher Association Should .8e Able to Play an Active Role in Sorting Out

At present thirty of the schools that took part in the Survey have already set up a special committee to plan and monitor the students' Caring arrangements Two other schools are currently Setting up a committee. the committees largely consist of teachers and students and some of them report their progress to their Parent-Teacher Association. It would be of great benefit to all concerned if the PTA' which is an important link between parents and schools, concerned itself actively in these issues.

7. RECOMMENDATIONS

I... RECOMMENDATIONS

Since More and More Authorities Should Develop Comprehensive Strategies to Ensure that Students Can Eat Nutritious Food in Pleasant Surroundings

It is obvious that there is increasing numbers of students staying at school for lunch, and that at a significant number of schools this is obligatory. More primary schools are also moving towards full day school. More schools are using catering companies to supply lunch boxes. This Is a good time for the Education authorities to develop a comprehensive eating arrangements.

2. The Education Authorities Need to Monitor the Appropriateness Implementation of the Current Policies 50 as to Bring Students' Eating Arrangements

As already stated, the Education Department's Guidelines are not responsive to the needs of the students in their choice of food. the Federation, therefore, recommends that the Education Authorities should carefully examine the appropriateness of their present policies and