

Enjoying **Safe** School Lunches

through collaborative efforts of schools, parents, food trade and students



Introduction

In order to keep school lunches safe, schools, parents, the food trade and students should work closely to minimise risks.

While there are all sorts and kinds of food for school lunches, food safety should always remain the top priority. It is the students' health and their studies at stake after all. Except for the newly constructed campuses, most schools currently do not have purpose built premises to provide lunch for students. There is a long tradition for schools to work together with food businesses in providing meal boxes, or to outsource the operation of school canteen or tuck shop. In an effort to promote food safety, the Centre for Food Safety (CFS) has been organising food hygiene talks and developing guidelines for the trade.

Modes of school lunches

In early 1990s, whole-day schooling was introduced by the Education Bureau. In 2010, a survey covering all primary and secondary schools in Hong Kong revealed that about 550,000 students had their lunches at school.

School lunches are generally organised in one or more of the following modes:

- (a) Pre-ordered lunches delivered to schools by assigned suppliers, with or without on-site portioning;
- (b) School canteens;
- (c) Packed lunches sent by family members or brought to school by students; and
- (d) Eating out.



Store hot food in warming device during on-site meal portioning

As announced by the Chief Executive in the Policy Address in October 2009, in order to reduce food waste and disposable lunch boxes in Hong Kong, the Environment Bureau and the Education Bureau jointly launched a Green Lunch Charter in February 2010 and invited all schools to sign in. In addition, the Environment and Conservation Fund provides a subsidy for schools to install necessary equipment and carry out modification works. This new policy has motivated more schools to set up service areas for on-site meal portioning and cooking of vegetables and rice, expand dining areas and significantly increase frontline staff serving lunch to students. These initiatives aim to encourage schools to stop using disposable containers, and adopt the on-site meal portioning approach where possible. From the perspective



of food safety, the introduction of these new measures may lead to changes in lunch handling. It is therefore necessary to reassess the risk. Hence, the CFS has been working with the Education Bureau and the Environmental Protection Department to study different modes of providing school lunches, assess their risks and develop guidelines for parents and students.



Check temperature of hot food to ensure that it is kept above 60°C

Risks associated with having lunches at schools

On the whole, food safety risks associated with school lunches come in the following three categories:

- (a) From the ingredients;
- (b) During preparation; and
- (c) In the course of post-cooking handling (delivery and portioning).

Risks associated with ingredients are mostly chemical hazards (e.g. pesticides in vegetables) and biological hazards (e.g. *Salmonella* species in chicken). During food preparation, improper handling may give microorganisms the opportunity to grow (e.g. survival of *E.Coli* O157 because of inadequate cooking). In the course of post-cooking handling, there are chances of food being exposed to further contamination by chemical hazards (e.g. contamination from the internal environment of delivery vehicle), physical hazards (e.g. foreign bodies introduced during packing of lunch boxes) and biological hazards (e.g. *Staphylococcus aureus* contamination from infected food handlers).

Collaborative Efforts of Schools, Parents, Food Trade and Students to Reduce Risks

I. From the perspective of schools

1. Get the right food caterer

It is an established practice that schools have contracts with food caterers for operating school canteens, providing school lunches, with or without providing on-site portioning services. Schools have to:



- identify food caterers who care for the students' well-being and put food safety first. Eligible food caterers should fulfill the following pre-requisites, and preferably also possess the additional quality characteristics as listed below;
- establish monitoring and incident response protocols and mechanisms. Conduct random inspections of the supplier performance including staff personal hygiene, food quality, documentation and records, quality of vehicles, etc.

Desirable caterers should meet these pre-requisites:

- Licensed by the Food and Environmental Hygiene Department (FEHD) as "Food Factory (Approved to Supply Lunch Boxes)";
- Have a good food safety record. FEHD health inspectors inspect the caterers regularly. When serious contraventions are identified by the FEHD, licence may be cancelled. The updated list of licensed caterers is available at: <http://www.fehd.gov.hk/english/licensing/licence-type.html>

and preferably also meet the following quality characteristics:

- Additional implementation or even with certification of food safety management plans, such as Hazard Analysis and Critical Control Point (HACCP) or ISO 22000;
- Implement supplier management programme;
- Demonstrate monitoring and recording procedures of critical control points, such as store thoroughly cooked food above 60°C and record the reading monitored by thermometer at appropriate intervals;
- Delivery vehicle monitoring system.

5 Keys to Food Safety for school lunches

- Choose fresh and wholesome ingredients from reliable and hygienic suppliers;
- Keep clean. Keep the utensils and working areas clean. Food handlers should observe food hygiene practices;
- Separate cooked food from raw food during storage, preparation, cooking, delivery and portioning;
- Cook food thoroughly with core temperature reaching at least 75°C;
- Store food at safe temperatures, i.e. keep hot food above 60°C and cold food at 4°C or below.

2. Maintaining a hygienic environment in schools

- All facilities, equipment or other food contact surfaces should always be kept clean, as food residues and dirt may contaminate food, resulting in food poisoning;
- Keep eating areas, canteens and classrooms clean;
- Provide clean utensils and areas to receive and deliver homemade lunches.



Wear face masks and hairnets properly during food preparation

II. As Parents

Parents can get involved in the selection and monitoring of lunch suppliers, either through the Parent Teacher Association or other less formal channels. Parents may also prepare and deliver lunches to school for their children.

1. Prepare and deliver lunch safely

Observe the 5 Keys to Food Safety in the course of preparation and delivery of lunch for your children.

2. Remind your domestic helper

Give domestic helpers clear instructions on the choice of ingredients and recipes, as well as the proper way of preparation and delivery.

5 keys for safe domestic preparation of lunch box for your children:

- Choose nutritious ingredients and use recipes that allow for safe keeping in appropriate insulating container;
- Clean all utensils, worktops and containers after use;
- Cook or reheat food thoroughly with core temperature reaching at least 75°C;
- Separate cooked food from raw food during purchasing, preparation, cooking and delivery;
- Pack lunch into appropriate insulating container so that it can be kept at safe temperatures.



Wash used utensils with water and detergent

III. As Food Business Professionals

It is the food business professionals' job to provide safe and nutritious food to the students. Food safety should not be taken lightly, especially by those who are engaged in the food service business.

1. A meal box supplier should

- ensure legislative requirements and other FEHD and CFS guidelines on food safety have been properly incorporated;
- work with schools to arrange an appropriate time for meal delivery and consumption.

2. Operators of school canteens, tuck shops, or on-site portioning services in schools should further provide the following support to schools:

- work with schools on the appropriate design of establishment and facilities, as well as the control of work flow;
- take reference from existing food safety and health guidelines to prepare and organise healthy foods for sale in school canteens and tuck shops;
- maintain the hygiene and safety standards of the operation areas for on-site portioning service the same as any other form of food premises.

3. Other operators should

- take reference from HACCP to conduct critical assessment of the hazards that may be introduced during the school lunch preparation process and set up relevant control measures;
- set up supplier management programme;
- set up incident management and response protocols jointly with schools;
- ensure adequate training is provided to management and frontline staff who provide services to students.

HACCP

It is widely recognised that the application of the Hazard Analysis and Critical Control Point (HACCP) system throughout the food chain has the benefits of effectively enhancing food safety and preventing many cases of foodborne diseases. While hazards (a biological, chemical or physical agent that may cause adverse health effects) are inevitable, implementing appropriate measures can prevent, minimise, and reduce the risks associated with these hazards to a level acceptable to consumers. There are seven principles of HACCP :

Principle 1: Conduct a hazard analysis

Principle 2: Determine the Critical Control Points (CCPs)

Principle 3: Establish critical limit(s)

Principle 4: Establish a system to monitor control of the CCPs

Principle 5: Establish corrective actions to be taken when monitoring indicates that a particular CCP is not under control

Principle 6: Establish procedures for verification to confirm that the HACCP system is working effectively

Principle 7: Establish documentation concerning all procedures and records appropriate to these principles and their application

IV As Students

- Clean your hands thoroughly before eating, after coughing, sneezing and handling rubbish;
- Report to teachers if the food looks or smells bad (such as having an abnormal odour) when eating at school;
- When eating out, choose hygienic and reliable restaurants. Never buy food from illegal hawkers. Do not eat food that looks or smells bad.

More resources:

CFS website — www.cfs.gov.hk

CFS Communication Resource Unit — Tel: 2381 6096

Guidelines — Developing a school food safety plan based on HACCP system (for school lunch box caterers)



*Wash hands thoroughly
with soap and water
before eating*