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Relationship between Eating Out and Obesity among Hong Kong People

Jessy Wing Yee NG

School of Professional Education & Executive Development

The Hong Kong Polytechnic University

Kowloon, Hong Kong

jessyng0629@gmail.com

ABSTRACT

Obesity becomes a major public health problem in Hong Kong. Generally, obesity can be caused by lack of exercise or hereditary factors while unhealthy eating habits would be the major factor increasing the risk of obesity. Consumption of food with high fat, high sugars and low dietary fibre would easily cause obesity by increasing calorie intake. On the other hand, eating out is a common phenomenon in Hong Kong because of restrictions of school lunch policy, working environment and social gatherings. However, restaurants would mostly sell high energy-dense food that may easily cause obesity. Therefore, this paper aims to analyse the relationship between obesity and eating out among Hong Kong people. In this study, information of obesity and healthy eating are gathered from the literatures, as well as secondary data from local study and government websites are collected for analysis. It is found that the food consumed outside are mostly characterised as high fat, high sugar and low dietary fibre. Therefore, eating out is one of indirect ways causing obesity among Hong Kong people. In order to reduce the risk of obesity by eating out, education and local policy are the necessary and effective methods. As a result, people could stay healthy even if they always need to eat out.

KEYWORDS: Eating out, Obesity, Eating habits

1 INTRODUCTION

Obesity is a serious health problem in Hong Kong. Body mass index (BMI) is one of the common indicators for defining obesity. Hong Kong people whose BMI is 23.0 to less than 25.0 kg/m² are classified as overweight while those with BMI of 25.0 kg/m² or above are classified as obese (Centre for Health Protection, 2017a). According to the Centre for Health Protection (2012), there was about 35% people being overweight, even obese. In 2016, the figure was slightly increased to 40% (Centre for Health Protection, 2016). Obesity can be a sign of several chronic diseases such as cardiovascular diseases, diabetes mellitus and even cancer (Ko et al., 1999). To prevent these diseases, healthy diet is the major way to reduce the risks of obesity.

However, most Hong Kong people prefer eating out instead of taking meals at home due to convenience. In 2015, there were 27%, 48% and 9% Hong Kong people eating out for breakfast, lunch and dinner respectively with the frequency of 5 times or more a week (Centre for Health Protection, 2015). Moreover, the number of people who ate out for breakfast, lunch and dinner for 2 to 4 times a week were 24%, 26% and 38% respectively (Centre for Health Protection, 2015). Besides, many restaurants serve high-energy food which easily causes obesity (Tin et al., 2012). Therefore, it is assumed that eating out is one of the indirect causes of obesity among Hong Kong people.

2 AIMS AND OBJECTIVES OF THE REVIEW STUDY

This study aims to identify whether the habit of eating out is one of the causes that increases the risk of obesity among Hong Kong people. The objectives of the review are to: 1) identify the phenomenon of eating out among Hong Kong people, 2) investigate the food that Hong Kong people consume daily, 3) find out the relationship between eating out and obesity and 4) provide relevant recommendations on eating out in order to reduce the risks of obesity.

3 CAUSES OF OBESITY

Obesity can be caused by several factors, including hereditary factors, influences of illness or drugs, or behavioural factors such as sleeping duration or lack of exercises (Student Health Service, Department of Health, 2016). Dietary factors is one of the main causes of obesity because of the change of lifestyle in eating behaviours (Jebb, 2004).

3.1 Dietary Factors on Obesity

The amount of calorie intake is one of the major determinants of obesity. For a healthy person, a male adult requires 2600 kcal per day while a female adult requires 2100 kcal per day (Department of Health, 2011). Once people consume more energy than their actual energy expenditure, they may easily gain weight in the form of body fat, resulting in overweight or obesity. According to the Centre for Health Protection (2017b), consumption of high-fat, high sugar food or inadequate consumption of fibre-rich food are the common dietary factors of increased calorie intake.

3.1.1 High-Fat Food

Lipids include the compounds of triglycerides, phospholipids and sterols. Whatever the compounds of lipids are, all of them have greater energy with 9 kcal/g, compared to carbohydrates or proteins. For a healthy person, male and female adults should consume less than 100 g/day and 80 g/day of fat respectively (Centre for Food Safety, 2017). If fat intake exceeds the normal requirement, fat cells in adipose tissue would produce more fat cells for storage of the excessive fatty acids (Timmers et al., 2011). Therefore, consuming high-fat food would increase the calorie intake and cause weight gain easily.

Other than fat contents, the composition of dietary fat is also related to obesity. Lipids can be classified into saturated fat or unsaturated fat while the former is closely related to weight gain. In the diet, many products, such as meat, butter, or egg yolk, contain saturated fat (Centre for Health Protection, 2018). Saturated fat would impair the insulin action. This insulin resistance would influence the blood glucose levels by altering the insertion or translocation of glucose transporters (Vessby, 2000). Under insulin resistance, the brain would resist the effect of insulin leading to increasing appetite (Gerozissis, 2004). In addition, more insulin is secreted for regulation of glucose for insulin resistance and excess insulin increases accumulation of fat in fat cells, thereby causing obesity (Benoit et al., 2004). Therefore, no more than 50g of saturated fat can be consumed daily (Centre for Food Safety, 2017).

3.1.2 High-Sugar Food

Sugar is a part of carbohydrates that can be grouped into monosaccharides, such as glucose, fructose and galactose, and disaccharides, like sucrose, lactose, and maltose. Among the components of sugar, fructose, which is the sweetest sugar, is closely related to obesity (Aller et al., 2011). Fructose naturally occurs in fruits and honeys. Besides, sugar-sweetener beverages and high-fructose corn syrup with large amount of sucrose and fructose are the leading sources of obesity. Fructose would affect hormonal responses in the body, such as insulin, leptin or ghrelin levels, which are mainly responsible for food intake regulation and satiety (Yu, Lowndes, & Rippe, 2013).

Insulin is the hormone that controls blood glucose level. However, fructose would suppress the rise of blood glucose level with insulin resistance after food intake, thereby affecting satiety (Wylie-Rosett, Segal-Isaacson, & Segal-Isaacson, 2004). Leptin is related to the storage of body fat and regulation of food intake (Myers Jr et al., 2010). Normally, leptin rises with food intake to decrease appetite. However, leptin still reduces without decreasing appetite from fructose ingestion, thereby easily causes obesity with increasing food intake. Similar to leptin, ghrelin also stimulates appetite with controlling food intake. The rise of ghrelin is suppressed for decreasing hunger and appetite after consumption of carbohydrates-rich food. However, ghrelin is not suppressed after fructose ingestion, thereby increases appetite (Wylie-Rosett, Segal-Isaacson, & Segal-Isaacson, 2004). Hence, fructose ingestion which is related to insulin resistance, reduced leptin and suppression of ghrelin, causes weight gain or even obesity. Therefore, it is recommended that people should consume sugar less than 50 g/day (Centre for Food Safety, 2017).

3.1.3 Fibre-Rich Food

Dietary fibre, which is also a type of carbohydrates, is mostly composed of polysaccharides. It can be divided into two types: soluble fibre and insoluble fibre. Dietary fibre is mainly found in plant-derived food such as vegetables, fruits or whole grains. Since human digestive enzymes cannot break the bonds of polysaccharides easily, fibre provides little energy to the body. Diets with low energy density may not increase food intake, compared to high-energy-density food (Slavin & Green, 2007). Besides, fibre-rich food can displace energy. Fibre-rich food can increase satiety by increasing chewing and reducing the ingestion rate (Jebb, 2007). Therefore, high fibre-rich food can reduce the risk of obesity by avoiding over-consumption of food. According to Centre for Food Safety (2017), people should consume dietary fibre with more than 25 g/day. In contrast, inadequate consumption of fibre-rich food may increase food intake, thereby causes obesity.

4 HABITS OF EATING OUT AMONG HONG KONG PEOPLE

In Hong Kong, taking meals outside is a common phenomenon. People always take meals outside mainly because of social factor, school policy and working environment.

4.1 Reasons of Eating Out

As a social activity, adolescents and adults eat out for gathering with family or friends. Chan et al. (2009) have found that nearly half of the adolescents always eat out with friends one to two days a week. Centre for Health Protection (2005) also found that adults eat out for lunch because of social gathering with colleagues. Besides, eating out to celebrate festivals is also common in Hong Kong because of convenience and time saving in cooking food for the family.

Students of full-day primary and secondary schools have lunch break. Since primary school students are still young, they cannot eat out for safety reasons. Therefore, the schools cooperate with lunch suppliers to provide lunch to the students. In contrast, many secondary schools allow students to eat out for lunch. This means that the students may eat out at least five times per week.

On the other hand, adults always eat out because of working conditions. Most people work cross-districts from 9 am to 5 pm. Therefore, they may have breakfast and lunch outside because of convenience and time saving. Working overtime is also common in Hong Kong, resulting in people eating dinner outside instead of at home. Centre for Health Protection (2005) has found that workers would eat out for lunch instead of bringing their own lunch because of “bad taste” of reheated food or having no microwaves in the office. Furthermore, irregular working hours and business meetings are also the reasons of eating out (Centre for Health Protection, 2005).

4.2 Types of Restaurants

Hong Kong is a food paradise. People can taste different kinds of food including Chinese food, Western food, Japanese food or Korean food. According to the Census and Statistics Department (2018), there were 4,941 Chinese restaurants, 2,608 non-Chinese restaurants and 1,586 fast-food shops in Hong Kong in September 2018. Chinese restaurants include *cha chaan teng* (Hong Kong style) and the styles of Guangdong, Beijing, Sichuan or Shanghai. Non-Chinese restaurants include Western, Japanese, Korean, Thai or Vietnamese cuisine restaurants, as well as noodle and congee restaurants; fast-food shops included cafeterias, snack shops and stalls at food court (Census and Statistics Department, 2019).

In addition, Centre for Health Protection (2007) found that 62% of people who ate out for breakfast would consume food in Chinese restaurant included *cha chaan teng* and 30.3% of them would consume food in fast-food shops. For those eating out for lunch, 63.5% and 23.8% would consume food in Chinese restaurant included *cha chaan teng* and fast-food shops respectively (Centre for Health Protection, 2007). Besides, 67.1% and 19.4% of people eating out would consume dinner in Chinese restaurant included *cha chaan teng* and non-Chinese restaurants respectively (Centre for Health Protection, 2007). About two-third of people have their three meals in the local-style restaurants, i.e. *cha chaan teng*.

4.3 Food Consumption when Eating Out

Regarding food consumed in restaurants, people would mostly consume particular types of food such as Chinese dim sum, Hong Kong style savoury dishes, congee, rice dishes, noodles and pasta, sandwiches, burgers and bread, fast food and snacks. Some common dishes are selected randomly in this study and categorised according to its type (Appendix I). Table 1

summarises the nutrient content of different types of food. Specifically, some common Chinese dim sum are “siu mai”, steamed barbecued pork bun, or “ha gau”. The energy of 100g deep-fried Chinese bun and 100g spring roll are high, with 420 kcal and 320 kcal respectively. The energy of the Hong Kong style savoury dishes would be nearly 200 kcal on average while the energy of 100g steamed pork patty with salad egg and 100g pork pineapple with sweet and sour sauce are 250 kcal and 240 kcal respectively. Congee seems to be healthier with lower energy, as 100g boat congee with 64 kcal and 100g plain congee with 32 kcal.

For lunches in Chinese restaurants, people would be likely to consume rice dishes such as steamed rice with roasted pork, baked rice with seafood and white sauce or baked pork chop with rice. The energy of a plate of steamed rice with roasted port is 400 kcal while the energy of a portion of fried rice with pineapple and seafood is nearly 1150 kcal. In Chinese or non-Chinese restaurants, people can also consume noodles and pasta, such as “ho fan” (flat noodles) in soup with beef ball, fried flat noodles with sliced beef or spaghetti with mushroom and white sauce. The energy of plain noodles in soup is nearly 100 kcal for a bowl. In contrast, the energy of fried noodles or instant noodles is higher, for example, a bowl of instant noodle in soup with satay beef has 192 kcal or 100g “chow mein” has 527 kcal.

Moreover, people would also consume sandwich, burger or fast food and snacks for breakfast or during teatime. The energy of sandwich, burger and bread, hamburger, hot dog, or stuffed bun is nearly 280 kcal on average, while that of a piece of cocktail bun and a piece of fish burger are higher, with nearly 400 kcal. French fries, mashed potato and curry fish ball are common fast food and snacks, and the energy of such food is nearly 200 kcal/100g.

Table.1 Examples of Food Items for Eating Out (Adopted from Food Nutrient Calculator)

Category	Serving Size (g)	Average Energy (kcal)	Nutrient Content (on average)		
			Saturated Fat (g)	Sugar (g)	Dietary Fibre (g)
Chinese Dim Sum	100	257	2.97	4.58	1.90
Hong Kong Style Savoury Dishes	100	206	3.16	3.07	0.48
Congee	100	52	0.45	0.20	0
Rice Dishes	100	184	1.55	1.60	0.97
Noodles and Pasta	100	163	1.70	0.94	1.79
Sandwich, Burger and Bread	100	277	4.30	5.86	1.95
Fast Food and Snacks	100	209	2.40	1.56	2.09

(Source: Centre for Food Safety, 2017)

5 THE CONSEQUENCES

Hong Kong people appear to consume high energy-dense food when eating out, thereby causes obesity. It is shown that people most likely consume food in Chinese restaurants and fast-food shops when eating out. Chinese dim sum, Hong Kong savoury dishes, sandwich, burger and bread are the common types of food in these restaurants. These types of food contain high energy but unbalanced nutrients.

The World Health Organization recommends that saturated fat intake should be less than 10% of the daily energy intake (Food and Environmental Hygiene Department, 2005). Table 2 shows the saturated fat content in selected food with high-saturated fat. Among the Chinese dim sum, saturated fat of “siu mai” and steamed bean curd with beef ball already account for 17% and 14% respectively of the total energy intake. Most of the Hong Kong style savoury dishes contain high saturated fat, especially steamed pork patty with salted egg (24%). In contrast, the saturated fat content of rice dishes is not too high and only a few of the dishes contain high saturated fat, such as steamed rice with roasted pork (11%). The saturated fat content of instant noodles, fried noodles or noodles with sauce are high while that in plain noodles in soup is within the normal requirements. Compared to the above-mentioned food, the saturated fat contents of sandwiches, burgers, bread, fast food and snacks are relatively higher, especially cocktail bun (20%) and baked potato, topped with cheese sauce (20%). As a result, people are likely to eat high saturated fat food when they eat out, leading to obesity. Hence people who eat out often would have higher risk of obesity because of the consumption of food with high saturated fat.

Table. 2 Nutrient Content of Selected High-Saturated Food Item (Per Serving/unit)

Category	Food Items	Energy (kcal)	Saturated Fat (g)	% of Energy from Saturated Fat
Chinese Dim Sum	“Siu mai” (燒賣)	58	1.07	17%
	Steamed beancurd with beef ball (山竹牛肉)	88	1.42	14%
Hong Kong Style Savoury Dishes	Steamed pork patty with salted egg (鹹蛋蒸肉餅)	800	21.76	24%
	Eggplant casserole with salted fish and minced pork (魚香茄子煲)	714	9.18	12%
Rice Dishes	Steamed rice with roasted pork (燒肉飯)	400	5	11%
Noodles and Pasta	Instant noodles in soup with spicy minced pork (五香肉丁即食麵)	240	4.48	17%
	Spaghetti with mushroom and white sauce (白汁蘑菇意粉)	648	11.34	16%
Sandwich, Burger and Bread	Cocktail bun (雞尾包)	402	9.06	20%
	Hotdog (熱狗)	242	5.11	19%
Fast Food and Snacks	Baked potato, topped with cheese sauce (芝士醬焗薯)	474	10.6	20%
	“Stinky tofu” (臭豆腐)	105	1.68	14%

(Source: Centre for Food Safety, 2017)

Regarding the sugar content, the World Health Organization (2016) recommends that sugar intake with less than 10% of total energy can reduce the risk of obesity. Table 3 shows the sugar content of selected high-sugar food items. It was found that only few items contain high sugar content such as steamed barbecued pork bun (22%) and pork and pineapple with sweet and sour sauce (17%). “Deep-fried Chinese bun” and “spring roll” are served in at least 3 pieces and their sugar content are at least 10.68g and 7.8g respectively, already accounted for 21% and 16% of normal sugar intake per day (< 50g). Besides, fried rice with pineapple and seafood and rice with assorted sashimi contain 25.37g and 15.51g of sugar respectively and accounted for 50% and 31% of normal sugar intake per day (< 50g). Again, food consumed outside has high sugar content. It implies that the higher the frequency of eating out, the higher risk of obesity.

Table. 3 Nutrient Content of Selected High-Sugar Food Item (Per Serving/unit)

Category	Food Items	Energy (kcal)	Sugar (g)	% of Energy from Sugar
Chinese Dim Sum	Steamed barbecued pork bun (叉燒包)	143	7.7	22%
Hong Kong Style Savoury Dishes	Pork and pineapple with sweet and sour sauce (菠蘿咕嚕肉)	984	40.59	17%
Sandwich, Burger and Bread	Pork floss bun (肉鬆包)	294	8.9	12%
	Cocktail bun (雞尾包)	402	13.39	13%

(Source: Centre for Food Safety, 2017)

It has been recommended that people should consume more than 25g/day of dietary fibres. However, most of the food in restaurants contains low dietary fibres. For example, steamed pork patty with salted egg (0g), “chow mein” (1.76g), instant noodle in soup with spicy minced pork (1.6g), hamburger (1.04g) or curry fish ball (0.13g) (Appendix II). Even dishes with high dietary fibres also contain high saturated fat, for example, eggplant casserole with salted fish and minced pork, stir-fried instant noodles with beef, spaghetti with mushroom and white sauce or French fries. Only few dishes seem to be healthy with high dietary fibre, such as fried rice steamed in lotus leaf (7.64g). The risk of obesity is increased by consuming low dietary fibre food when eating out.

People’s attitudes towards healthy eating is also a factor of obesity. The University of Hong Kong (2012) has conducted a survey on Hong Kong people’s eating habits. IT was found about 10% and 13% of Hong Kong people would not consider the calorie and cholesterol content of food during eating out. Only 3.9% of them would consider the nutritional value of food when eating out. With respect to food choices, the Centre for Health Protection (2007) has found that nearly 40% of Hong Kong people seldom or never choose diet with more fruits and vegetables or with low lipids or oil when eating out. Only 30% of Hong Kong people would request for food with low sugar (Centre for Health Protection, 2007). So, most people are not aware of healthy eating when eating out.

Even though the government has implemented the “EatSmart@restaurants.hk” scheme since April 2008 to promote healthy eating, the effectiveness of this scheme has not been obvious. The Centre for Health Protection (2015) reported that 76.3% of the respondents heard about

the scheme but 86.1% of them did not consume diet in the EatSmart Restaurants. 44.3% of Hong Kong people did not consume the healthier EatSmart Dishes. Therefore, the “EatSmart@restaurants.hk” scheme is not effective in improving the public’s eating habits when eating out. People do not consider the nutritional values for food choice when eating out. People who always eat out may have higher risk of obesity because of the consumption of unhealthy food.

6 RECOMMENDATIONS

6.1 Education on Food and Nutrition

Education on food and nutrition is necessary to enhance the understanding of healthy eating among the public, thereby reducing the risks of obesity and related body health conditions. In Japan, local governments have implemented the basic law of food education (*Shokuiku*) since 2005 to promote health by improving the public’s dietary habits. This policy provides relevant food and nutrition knowledge to the public, but also changes the public’s attitudes in deciding the right choices of food (Reiher, 2012). This policy also aims to ensure the safety and quality of food in preventing food scandals. The *Shokuiku* policy is promulgated in different settings such as the communities, schools, or even homes (Miyoshi, Tsuboyama-Kasaoka, & Nishi, 2012). Therefore, the Japanese government regulates the diets and eating habits of local people with an all-rounded policy and practice.

The Hong Kong government can adopt and follow the practice of Japan by introducing food education as a local healthy policy. Basically, food education should firstly be introduced into the academic curriculum, starting from kindergarten. The objective should not be limited to providing food and nutrition knowledge to the students. It should also improve the school meals and enhance students’ experiences through planting and cooking lessons. Then students can make the right choices of food at any time, even when they eat out.

In addition to the schools, the Government can also cooperate with local organisations in implementing different practices of food consumption and eating habits. It is better to hold promotions of healthy eating in the communities through different activities such as talks or game booths. Social media is also an effective channel for providing relevant information to the general public through advertisements and campaigns. Ultimately, food and nutrition education can be effectively provided to the general public and, thereby, improving their eating habits and health, particularly in reducing the risk of obesity.

6.2 Assessment on “EatSmart@restaurant.hk” Scheme

The Government should conduct assessment regularly on the “EatSmart@restaurant.hk” scheme for its continuing improvement. The basic concept of this scheme is good for promoting healthy eating, particularly when eating out. However, the scheme has been found ineffective that only few people would take diets in the EatSmart Restaurants and consume EatSmart Dishes. Therefore, the Government should take measures to strengthen the effectiveness, general acceptance and adoption of the scheme.

Firstly, it is essential to review the reasons affecting the effectiveness of the scheme. It is already found that people seldom or never aware of the scheme because few EatSmart Restaurants are nearby or no EatSmart Dishes are provided (Centre for Health Protection, 2015). Therefore, the Government should expand the coverage of restaurants under the scheme through invitation. For example, the concerned restaurants can improve the food supply in the company’s canteen or food courts in the shopping malls to provide some healthy dishes for students and workers.

Besides, promotion of the scheme to the community is also essential to increase public attention and increase people's patronage in these restaurants. The Government should not only provide information about the scheme through advertisements, but also improve the quality of promotional materials. Centre for Health Protection (2009) reported that the "three less dishes" and "dishes with more fruit and vegetables" menu stickers are not clear in the messages and they are also not attractive, compared with other promotional materials. Therefore, the Government should re-design these promotional materials to achieve efficiency. It can also increase public consumption on the EatSmart Restaurants and promote healthy eating.

7 CONCLUSION

Since people would likely take high energy-dense food with high-fat, high-sugar and low dietary fibres in the dishes when eating out, the habits of eating out would be an indirect but major cause of obesity. However, people always need to eat out because of limitations in the workplace or schools. Even though the Hong Kong Government has implemented the "EatSmart@restaurants.hk" campaign to improve the public's eating habits and achieve healthy eating, the effectiveness of the campaign is still not obvious and far from being successful. In addition, public awareness towards healthy eating is significantly low because of their attitudes towards food choices. As a result, the Government should focus more on implementing food and nutrition education and improving the "EatSmart@restaurants.hk" campaign to promote healthy eating when eating out, thereby reducing the risk of obesity in the community.

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Appendix I Examples of Food Items for Eating Out (Per 100g) (Adopted from Food Nutrient Calculator) (Source: Centre for Food Safety, 2017)

Category	Food Item	Serving Size (g)	Energy (kcal)	Nutrient Content		
				Saturated Fat (g)	Sugar (g)	Dietary Fibre (g)
Chinese Dim Sum	Deep-fried Chinese bun (炸饅頭)	100 (1pc=66g)	420	3.9	5.4	1.8
	Spring Roll (春卷)	100 (1pc=35g)	320	3.7	2.6	1.7
	Steamed barbecued pork bun (叉燒包)	100 (1pc=55g)	260	1.8	14	1.6
	“Siu mai” (燒賣)	100 (1pc=29g)	200	3.7	2.1	1.2
	Steamed beancurd with beef ball (山竹牛肉)	100 (1pc=49g)	180	2.9	1.9	3.2
	“Ha gau” (蝦餃)	100 (1pc=31g)	160	1.8	1.5	n.d.

Hong Kong Style Savoury Dishes	Steamed pork patty with salted egg (鹹蛋蒸肉餅)	100 (1plate=320g)	250	6.8	1.5	0
	Pork and pineapple with sweet and sour sauce (菠蘿咕嚕肉)	100 (1plate=410g)	240	2.8	9.9	n.d.
	Scrambled egg with shrimp (蝦仁炒蛋)	100 (1plate=440g)	230	3.1	0.27	0
	Fish fillet with sweet corn sauce (粟米魚塊)	100 (1plate=450g)	170	1.3	0.97	0
	Eggplant casserole with salted fish and minced pork (魚香茄子煲)	100 (1plate=510g)	140	1.8	2.7	1.9
Congee	Boat congee (艇仔粥)	100 (1bowl=200g)	64	0.50	0.33	n.d.
	Congee with pig giblets (及第粥)	100 (1bowl=200g)	60	0.6	0.37	n.d.
	Congee with preserved egg and pork (皮蛋瘦肉粥)	100 (1bowl=200g)	52	0.61	0.1	n.d.
	Plain congee (白粥)	100 (1bowl=200g)	32	0.099	0	0

Rice Dishes	Glutinous rice with assorted preserved meat and Chinese sausage (臘味糯米飯)	100 (1bowl=290g; 1plate=608g)	230	1.4	1.7	n.d.
	Steamed rice with roasted pork (燒肉飯)	100 (1bowl=200g)	200	2.5	0.33	n.d.
	Fried rice (Yangzhou style) (揚州炒飯)	100 (1plate=508g)	190	1.6	0.55	n.d.
	Baked pork chop with rice (焗豬扒飯)	100 (1bowl=200g)	190	2.1	1.4	1.0
	Fried rice steamed in lotus leaf (荷葉飯)	100 (1portion=764g)	190	1.1	0.93	1
	Fried rice with pineapple and seafood (菠蘿海鮮炒飯)	100 (1portion=604g)	190	1.5	4.2	n.d.
	Rice with deep-fried breaded pork chop and curry sauce (咖喱汁吉列豬扒飯)	100 (1plate=650g)	180	1.7	0.96	n.d.

	Rice with assorted sashimi (雜錦魚生飯)	100 (1bowl=443g)	160	0.63	3.5	n.d.
	Baked rice with seafood and white sauce (白汁焗海鮮飯)	100 (1plate=646g)	160	1.4	0.86	n.d.
	Rice, white, steamed, Chinese restaurant (中式白米飯(蒸))	100 (1cup=132.18g)	151	n.d.	n.d.	0.9
Noodles and Pasta	“chow mein” (中式炒麵)	100 (1cup=45g; 1.5 oz=43 grams)	527	4.38	2.6	3.9
	Stir-fried instant noodles with beef (牛肉炒公仔面)	100 (1 plate=499 grams)	190	3	1	1.6
	Fried noodles with vegetable and sliced pork (時菜肉片炒麵)	100 (1 bowl plain noodle=160 grams)	160	1.2	0.48	1.6
	Fried flat noodles with sliced beef (乾炒牛肉河粉)	100 (1 bowl plain flat noodle=140 grams)	140	0.78	0.72	2.2

	Instant noodles in soup with spicy minced pork (五香肉丁即食麵)	100 (1 bowl plain noodle=160 grams)	150	2.8	1.2	1.0
	Spaghetti with mushroom and white sauce (白汁蘑菇意粉)	100 (1 plate=540 grams)	120	2.1	0.97	1.5
	Instant noodles in soup with satay beef (沙爹牛肉即食麵)	100 (1 bowl plain noodles=160 grams)	120	1.8	1.1	n.d.
	Macaroni with ham (火腿通粉)	100 (1 bowl plain macaroni=165 grams)	80	0.29	0.5	1.2
	Rice vermicelli in soup with preserved mustard green and shredded pork (雪菜肉絲湯米粉)	100 (1 bowl plain rice noodles=140 grams)	79	0.34	0.46	1.3
	“Ho Fan” (Flat noodles) in soup with beef ball (牛丸湯河粉)	100 (1 bowl plain flat noodles=140 grams)	65	0.31	0.37	n.d.
	Hamburger (漢堡包)	100 (1 item=86.3g)	295	3.56	5.79	1.2

Sandwiches, Burgers and Bread	Ham and cheese sandwich (火腿芝士三文治)	100 (1 sandwich =146 grams)	241	4.41	n.d.	n.d.
	Hotdog (熱狗)	100 (1 sandwich=98 grams)	247	5.21	n.d.	n.d.
	Luncheon meat and egg sandwich (午餐肉蛋三文治)	100 (1 slice of bread=192 grams)	260	4.6	1.6	1.7
	Ham and egg sandwich (火腿蛋三文治)	100 (1 slice of bread=153 grams)	240	3.3	2.5	1.5
	Pork floss bun (肉鬆包)	100 (1 piece=89 grams)	330	3.1	10	3.9
	Sausage bun (腸仔包)	100 (1 piece=96 grams)	290	3.7	7.2	1.8
	Egg salad sandwich (蛋沙律三文治)	100 (2 slices of bread=195 grams)	200	2.6	2.8	1.7
	Cocktail bun	100	390	8.8	13.0	2.4

	(雞尾包)	(1 piece=103 grams)				
	Fish burger (魚柳包)	100 (1 piece=143 grams)	280	3.7	4.0	1.4
Fast Food and Snacks	French fries (炸薯條)	100 (1 large=169 grams) (1 medium=134 grams)	319	4.0	0.69	3.5
	Pancakes with butter and syrup (牛油糖漿班戟)	100 (2 cakes=232 grams)	224	2.52	n.d.	n.d.
	Baked potato, topped with cheese sauce (芝士醬焗薯)	100 (1 piece=296 grams)	160	3.58	n.d.	n.d.
	Mashed Potato (薯蓉)	100 (0.333 cup=80 grams)	83	0.48	n.d.	n.d.
	Hashed brown potato (薯餅)	100 (1 cup=144 grams)	327	4.95	0.24	2.7
	Curry fish ball (咖喱魚蛋)	100 (1 ball=10 grams)	130	0.60	3.3	1.3
	Pan-fried gyoza (日式煎餃子)	100 (1 piece=25 grams)	240	3.3	2.3	1.9

	Deep-fried curry puff (炸咖喱角)	100 (1 piece=33 grams)	300	2.5	2	2
	“Deep-fried three treasures” (煎釀三寶)	100 (1 piece each (total 3 pieces)=102 grams)	110	1.3	2.1	1.8
	Glutinous rice roll with fried fritter (菜飯)	100 (1 piece=310 grams)	260	0.75	1.6	n.d.
	“Stinky tofu” (臭豆腐)	100 (1 piece=70 grams)	150	2.4	0.22	1.4

Appendix II

Nutrients Content of Food Items for Eating Out (Per Serving/Unit)

Category	Food Item	Serving Size (g)	Energy (kcal)	Nutrient Content			
				Saturated Fat (g)	% of Energy from Saturated Fat	Sugar (g)	Dietary Fibre (g)
Chinese Dim Sum	Deep-fried Chinese bun (炸饅頭)	66	277	2.57	8%	3.56	1.19
	Spring Roll (春卷)	100	320	3.70	10%	2.60	1.70
	Steamed barbecued pork bun (叉燒包)	55	143	0.99	6%	7.70	0.88
	“Siu mai” (燒賣)	29	58	1.07	17%	0.61	0.35
	Steamed beancurd with beef ball (山竹牛肉)	49	88	1.42	15%	0.93	1.57
	“Ha gau” (蝦餃)	31	50	0.56	10%	0.47	n.d.
Hong Kong Style Savoury Dishes	Steamed pork patty with salted egg (鹹蛋蒸肉餅)	320	800	21.76	24%	4.80	0.00

	Pork and pineapple with sweet and sour sauce (菠蘿咕嚕肉)	410	984	11.48	11%	40.59	n.d.
	Scrambled egg with shrimp (蝦仁炒蛋)	440	1012	13.64	12%	1.19	0.00
	Fish fillet with sweet corn sauce (粟米魚塊)	450	765	5.85	7%	4.37	0.00
	Eggplant casserole with salted fish and minced pork (魚香茄子煲)	510	714	9.18	12%	13.77	9.69
Congee	Boat congee (艇仔粥)	200	128	1.00	7%	0.66	n.d.
	Congee with pig giblets (及第粥)	200	120	1.20	9%	0.74	n.d.
	Congee with preserved egg and pork (皮蛋瘦肉粥)	200	104	1.22	11%	0.20	n.d.
	Plain congee (白粥)	200	64	0.20	3%	0.00	0.00

Rice Dishes	Glutinous rice with assorted preserved meat and Chinese sausage (臘味糯米飯)	608	1398	8.51	5%	10.34	n.d.
	Steamed rice with roasted pork (燒肉飯)	200	400	5.00	11%	0.66	n.d.
	Fried rice (Yangzhou style) (揚州炒飯)	508	965	8.13	8%	2.79	n.d.
	Baked pork chop with rice (焗豬扒飯)	200	380	4.20	10%	2.80	2.00
	Fried rice steamed in lotus leaf (荷葉飯)	764	1452	8.40	5%	7.11	7.64
	Fried rice with pineapple and seafood (菠蘿海鮮炒飯)	604	1148	9.06	7%	25.37	n.d.
	Rice with deep-fried breaded pork chop and curry sauce (咖喱汁吉列豬扒飯)	650	1170	11.05	9%	6.24	n.d.

	Rice with assorted sashimi (雜錦魚生飯)	443	709	2.79	4%	15.51	n.d.
	Baked rice with seafood and white sauce (白汁焗海鮮飯)	646	1034	9.04	8%	5.56	n.d.
	Rice, white, steamed, Chinese restaurant (中式白米飯(蒸))	132.18	200	n.d.	n.d.	n.d.	1.19
Noodles and Pasta	“chow mein” (中式炒麵)	45	237	1.97	7%	1.17	1.76
	Stir-fried instant noodles with beef (牛肉炒公仔面)	499	948	14.97	14%	4.99	7.98
	Fried noodles with vegetable and sliced pork (時菜肉片炒麵)	160	256	1.92	7%	0.77	2.56
	Fried flat noodles with sliced beef (乾炒牛肉河粉)	140	196	1.09	5%	1.01	3.08

Instant noodles in soup with spicy minced pork (五香肉丁即食麵)	160	240	4.48	17%	1.92	1.60
Spaghetti with mushroom and white sauce (白汁蘑菇意粉)	540	648	11.34	16%	5.24	8.10
Instant noodles in soup with satay beef (沙爹牛肉即食麵)	160	192	2.88	14%	1.76	n.d.
Macaroni with ham (火腿通粉)	165	132	0.48	3%	0.83	1.98
Rice vermicelli in soup with preserved mustard green and shredded pork (雪菜肉絲湯米粉)	140	111	0.48	4%	0.64	1.82

	“Ho Fan” (Flat noodles) in soup with beef ball (牛丸湯河粉)	140	91	0.43	4%	0.52	n.d.
Sandwich, Burger and Bread	Hamburger (漢堡包)	86.3	255	3.07	11%	5.00	1.04
	Ham and cheese sandwich (火腿芝士三文治)	146	352	6.44	16%	n.d.	n.d.
	Hotdog (熱狗)	98	242	5.11	19%	n.d.	n.d.
	Luncheon meat and egg sandwich (午餐肉蛋三文治)	192	499	8.83	16%	3.07	3.26
	Ham and egg sandwich (火腿蛋三文治)	153	367	5.05	12%	3.83	2.30
	Pork floss bun (肉鬆包)	89	294	2.76	8%	8.90	3.47
	Sausage bun (腸仔包)	96	278	3.55	11%	6.91	1.73
	Egg salad sandwich (蛋沙律三文治)	195	390	5.07	12%	5.46	3.32
	Cocktail bun (雞尾包)	103	402	9.06	20%	13.39	2.47
	Fish burger	143	400	5.29	12%	5.72	2.00

	(魚柳包)						
Fast Food and Snacks	French fries (炸薯條)	169	539	6.76	11%	1.17	5.92
	Pancakes with butter and syrup (牛油糖漿班戟)	232	520	5.85	10%	n.d.	n.d.
	Baked potato, topped with cheese sauce (芝士醬焗薯)	296	474	10.60	20%	n.d.	n.d.
	Mashed Potato (薯蓉)	80	66	0.38	5%	n.d.	n.d.
	Hashed brown potato (薯餅)	144	471	7.13	14%	0.35	3.89
	Curry fish ball (咖喱魚蛋)	10	13	0.06	4%	0.33	0.13
	Pan-fried gyoza (日式煎餃子)	25	60	0.83	12%	0.58	0.48
	Deep-fried curry puff (炸咖喱角)	33	99	0.83	8%	0.66	0.66
	“Deep-fried three treasures” (煎釀三寶)	102	112	1.33	11%	2.14	1.84
	Glutinous rice roll with fried fritter (糍飯)	310	806	2.33	3%	4.96	n.d.
	“Stinky tofu” (臭豆腐)	70	105	1.68	14%	0.15	0.98