

Guideline on meal arrangement and meal provision

Background

The International Agency for Research on Cancer (IARC), the cancer agency of the World Health Organization (WHO), released an evaluation result about the carcinogenicity of the consumption of red meat and processed meat on 26 October 2015. The result was summarised below:

- **Processed meat** was classified as “carcinogenic to humans” (Group 1), based on sufficient evidence in humans that the consumption of processed meat causes colorectal cancer. The experts concluded that each 50 gram portion of processed meat eaten daily increases the risk of colorectal cancer by 18%.
- **Red meat** was classified as “probably carcinogenic to humans” (Group 2A), based on limited evidence that the consumption of red meat causes cancer in humans and strong mechanistic evidence supporting a carcinogenic effect. This association was observed mainly for colorectal cancer, but associations were also seen for pancreatic cancer and prostate cancer.
- The risk of developing colorectal cancer for an individual because of their consumption of processed meat remains small, but this risk increases with the amount of meat consumed.

WHO issued a statement on 29 October reiterated that this latest IARC review **does not ask people to stop eating processed meats but indicates that reducing consumption of these products can reduce the risk of colorectal cancer.**

As such, this guideline aims to reinforce the healthy eating principle and provides practical tips on selecting healthier food choices to those sectors involved in arranging or providing meals to their customers or clients receiving their service.

Principles of Healthy Eating

- The “Healthy Eating Food Pyramid” is a practical tool for a balanced diet.
- As no single food could provide all the nutrients we need, the “Healthy Eating Food Pyramid” recommends eating a **variety of food** to ensure balanced nutrition.
- Foods are divided into different food groups, with the recommendation on having **grains the most, fruit and vegetables more, milk, meat and their alternatives moderately, fat/oil, salt and sugar the least.**

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- As the principles of healthy eating emphasise choosing food items that are low in fat/oil, salt and sugar and high in dietary fibre, it is recommended to **reduce the intake of processed meat** as it is considered as high in fat/oil and salt.
- **Red meat** serves as a good source of protein and also provides vitamins and minerals such as vitamin B12, iron and zinc. Apart from red meat, poultry, fish and seafood, eggs, dry bean and soybean products are other alternatives.
- As the energy and nutrient requirements vary among different age groups, the daily recommended serving for each food group is different. For details, please refer to *annex 1*.

Practical Tips on Meal Arrangement and Meal Provision

- For sectors arranging or providing meals to the pre-primary institutions, it is recommended to follow the healthy eating principles as well as to **avoid providing processed meat**. For details, please refer to the “Nutrition Guidelines for Children Aged 2 to 6”. (http://www.startsmart.gov.hk/files/pdf/nutritional_eng.pdf)
- For sectors arranging or providing meals to the primary and secondary schools, it is recommended to follow the healthy eating principles as well as to **limit the provision of processed meat for no more than two school days a week** as it is classified as “Limited Food Items”. For details, please refer to the “Nutritional Guidelines on Lunch for Students”. (http://school.eatsmart.gov.hk/files/pdf/lunch_guidelines_bi.pdf)
- For other sectors involved in meal arrangement or with catering service, it is recommended to follow the healthy eating principles as well as to **reduce the use of processed meat**. Fresh/frozen lean meat and non-fried plain bean products are healthy alternatives. Examples of healthier food ingredients and cooking methods are found in *annex 2*.
- For catering service in Residential Care Homes for the Elderly, healthy eating principles should be reinforced. It is advised to **avoid providing foods** with high salt, such as **processed food** like luncheon meat, barbecued pork. “Guidelines on Menu Planning for Residential Care Homes for the Elderly” (Chinese version only) are found in *annex 3*.

Department of Health
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Annex 1:
Healthy Eating Food Pyramid for Children 2-5 years old



Healthy Eating Food Pyramid for Children 6-11 years old



Healthy Eating Food Pyramid for Adolescents 12-17 years old



Healthy Eating Food Pyramid for Adults



Healthy Eating Food Pyramid for Elderly



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Annex 2: Examples of healthier food ingredients and cooking methods

Ingredients	Suggestions	Examples of healthier ingredients	Examples of less healthy ingredients
Grains	<ul style="list-style-type: none"> Use grains which is low in fat and without added sugar 	White bread, whole wheat bread, white rice, red rice, egg noodles, spaghetti, rice vermicelli, Chinese noodles	Croissant, pastry, “cocktail bun”, “pineapple bun”, bun with lotus seed paste, stir-fried rice and noodles, fried flat noodles, fried instant noodles, E-Fu noodles, Yu-Mein noodles
Vegetables	<ul style="list-style-type: none"> Use fresh, frozen or reduced-salt canned vegetables to replace pickles 	Fresh or frozen vegetables, canned vegetables with reduced salt or after blanching	Preserved mustard greens, pickled vegetables, dried radish, preserved mustard, salted mustard root, pickled mustard
Fruits	<ul style="list-style-type: none"> Use fresh fruit or pure fruit juice (except coconut because it is high in saturated fat) Use fruit products without added sugar 	Fresh fruit, canned fruit in juice, dried and frozen fruit without added sugar, 100% fruit juice	Canned fruit in syrup, dried fruit and juice with added sugar, coconut and its products
Meat and alternatives	<ul style="list-style-type: none"> Use fresh / frozen lean meat to replace processed meat Use non-fried plain bean products Use non-fried nuts without added salt and sugar 	Fresh or frozen lean beef, pork, fishes, seafood such as scallop, shrimp, crab, skinless poultry, canned tuna in water, tofu, soybean sheet, plain vegetarian meat, dry-roasted and plain nuts	Pork brisket, connective tissue under skin of pig (“pig neck”), fatty beef, beef brisket, chicken wings, chicken paw, canned tuna in oil, luncheon meat, sausage, ham, bacon, ready-to-use meatballs, imitation crab meat, Chinese sausage, salted fish, salted eggs, tofu puff, fried soybean stick, fried gluten, seasoned vegetarian meat, fried cashew nut, roasted nuts with added salt
Milk and alternatives	<ul style="list-style-type: none"> Use skimmed, low-fat or reduced-fat plain dairy products 	Skimmed or low-fat milk, milk powder, yoghurt, reduced-fat cheese	Full cream milk, coconut milk, cream, evaporated milk, condensed milk, creamer
Fats & Oils / Salad Dressing / Spread	<ul style="list-style-type: none"> Use healthy vegetable oil Use low- or reduced-fat salad dressing Use spread which is reduced-fat and without added sugar 	Corn oil, olive oil, canola oil, peanut oil, sunflower oil, soybean oil, reduced-fat peanut butter, jam without added sugar	Butter, lard, coconut oil, palm oil, margarine containing <i>trans</i> fat, shortening, salad dressing, condensed milk, jam with added sugar, peanut butter, chocolate spread, kaya, goose liver pate

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Beverages / Desserts	<ul style="list-style-type: none"> Pure fruit juice Beverages or desserts without added sugar (sugar or artificial sweetener can be served separately) 	Water, pure fruit juice, tea, clear soup, soy milk without added sugar, any beverages or desserts without added sugar, e.g. lemon tea, soybean curd dessert and red bean sweet soup	Cordial, soft drinks, ice cream, beverages and desserts with added sugar, e.g. coconut pudding, cheese cake
Seasonings	<ul style="list-style-type: none"> Use natural ingredients to replace seasonings or sauce which are high in salt or fat 	Garlic, ginger, spring onion, onion, lemon or lime juice, vinegar, parsley, five spices powder, mustard powder, star anise	Shrimp paste, fermented soybean curd, salted black bean, chicken powder. MSG, ready-to-use sauces (e.g. black pepper sauce, curry, satay), oyster sauce
Cooking Methods	Suggestions	Examples of healthier cooking methods	Examples of less healthy cooking methods
Methods / Mode of Serving	<ul style="list-style-type: none"> Replace quick deep-frying with blanching to prepare meat Blanch noodles before stir-frying to reduce the usage of oil Blanch canned vegetables to reduce sodium content Use low-fat cooking methods Serve low-fat salad dressing or sauce separately Serve grains dishes with sauce separately, except baked rice, baked pasta, pizza and baked potatoes Thin spread or serve spread separately for sandwiches and toasts alike Provide beverages and desserts without added sugar, sugar and sweetener can be served separately 	Boiling, steaming, grilling, baking, stewing, stir-frying or pan-frying with small amount of oil	Deep-frying (including the quick deep-frying process of meat prior to cooking), braising in heavy sauce, pour salad dressing or condiments over the dishes

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Annex 3 Guidelines on Menu Planning for Residential Care Homes for the Elderly (Chinese version only)

多採用低脂肪的食物及低脂肪烹調方法

採用低脂肪的食物及低脂肪烹調方法有助維持心血管健康。

- 多使用較少脂肪的肉類如豬柳、雞柳，並於烹調前除去皮層和脂肪。
- 選用未經油炸的豆製品：如板豆腐、豆腐乾等。
- 避免採用含高飽和脂肪的食物，例如：豬骨、臘腸、雞翼、含椰子或椰汁成分的食物。
- 減少採用含高膽固醇的食物，例如：內臟(豬肝、豬肚等)。
- 採用低脂肪烹調方法如：蒸、灼、煮和炆等。



避免採用含高鹽分的食物或調味料

減少鹽分的攝取量有助維持理想的血壓水平及血管健康。

- 避免採用含高鹽分的食物，如：午餐肉、叉燒和燒肉等。
- 避免經常使用含高鹽分的調味料，如：南乳、蠔油、麵豉醬等。
- 多採用天然調味料，如：薑、蔥、芫茜、蒜頭和胡椒粉等，可減少用鹽量和增進食慾。



減少採用含高糖分的食物

- 減少採用含高糖分的食物作小食，例如：蓮蓉包和蛋糕等。
- 多以含高纖維素的食物作小食，如新鮮水果、全麥餅乾等。

採用外觀吸引的食物

- 以色彩鮮亮的食物來配搭淡色的，如：紅蘿蔔、粟米和番茄等可增加膳食的吸引力，對胃口欠佳的院友，有助增進食慾。



採用切合季節的食物

- 供應季節合時的新鮮水果和蔬菜，既較廉宜又能在一年中有變化。



注意事項

- 對於進食量少、胃口欠佳和過輕的院友來說，供應健康而營養豐富的小食能增加院友吸收營養，例如牛奶麥皮、燉蛋、豆腐花、花生醬三文治等。
- 對於偏食的院友，可先嘗試了解院友偏食的原因，例如是否有誤解或偏見，然後以逐一嘗試的方式，每餐供應一種「新」食物，讓偏食者慢慢嘗試不同的食物，例如交替地供應魚、肉、蛋和豆類如豆腐、素雞等。
- 個別患有吞嚥困難的院友，他們所能進食的食物質感及流質的黏稠度可能各有差異，須由醫護人員作個別評估後，才作出合適的供應。
- 若發現院友的飲食問題持續或惡化，應盡早諮詢醫護人員的意見，以作出適當的跟進行動。
- 如院友患有慢性疾病，例如：糖尿病和高血壓等，宜遵循醫護人員所建議的相關飲食模式。



食物衛生

- 由於長者的身體抵抗力一般會較弱，加上院舍處理的食物種類繁多，所以在製作膳食時，須加倍留意各種風險，以保障長者的健康。
- 小心安排所需用具，確保有足夠和運作正常的爐具和雪櫃等。
- 向可靠及信譽良好的供應商採購食物。
- 冷凍櫃要保持在攝氏4度或以下，而冷藏庫則在攝氏零下18度或以下，煮食前要提早解凍。
- 食物要徹底煮熟。食物中心溫度應達攝氏75度或以上。
- 確保熱的食物於分派時仍保持在攝氏60度以上。
- 保持良好的衛生習慣。

有關長者膳食服務食物安全指引詳情，請瀏覽食物安全中心網址：
<http://www.cfs.gov.hk>

DT001(2)1010

安老院舍膳食供應指南

餐單設計篇



本單張為安老院舍員工簡介餐單設計技巧，
以協助院舍提供營養豐富的膳食予院友。



衛生署長者健康服務24小時健康資訊熱線：2121 8080
衛生署長者健康服務網址：www.elderly.gov.hk



餐單設計技巧

安老院舍的院友通常是上了年紀的一羣，他們可能因牙齒問題、偏食、或胃口欠佳等問題而減少進食。故編排餐單時，應考慮院友的身體狀況和需要。以下是一些小貼士：

均衡與多元化並重

均衡飲食和多元化是設計餐單的重要原則，目的是協助院友攝取足夠的營養素。每天應最少供應三餐(包括早、午、晚餐)，而每餐食物的供應量可參考「健康飲食金字塔」的建議，並多採用不同種類食物，以達到飲食多元化之目的。

各類食物的建議供應分量

「健康飲食金字塔」是均衡飲食的參考指引，把食物分為不同的類別。金字塔底層的食物類別是每天的主要食糧，應佔日常飲食最多的分量；位於較高層的食物進食量應相對減少，而最頂層的食物類別要吃最少。

▲ 可供應高鈣豆奶給不喝牛奶的院友。俗稱「營養奶」的營養補充品，並非奶類食品，而是經由醫生或營養師指導下為有需要的院友而設，不適合一般院友。

* 一份水果約等於一個中型橙或雪梨等

** 杯容量 = 240毫升

*** 碗容量 = 300毫升

健康飲食金字塔



多採用含較高纖維素的食物

多編排含較高纖維素的食物如蔬菜、水果、全穀麥類和乾豆類，有助舒緩便秘、控制血膽固醇和維持身體健康。

- 可利用蔬菜類和乾豆類作配料，例如：金針、雲耳、冬菇、赤小豆等。另一方面可多編排使用乾豆如黃豆、眉豆作材料的湯水。
- 可多採用新鮮水果作為小食、糖水或湯水的材料。
- 多採用全穀麥類食物，例如：紅米、麥皮、全麥麵包和全麥餅乾。
- 若院友因牙齒問題而未能進食質感較硬的蔬果，可考慮供應質感較軟的蔬果，如：節瓜、合掌瓜、莧菜、香蕉和木瓜等。



採用易於咀嚼的食物

採用易於咀嚼的食物能減輕院友用於咀嚼食物的力氣，亦能減少院友因牙齒問題而影響進食量，員工亦毋須於派餐時為個別院友剪碎食物，可減低手部關節勞損的風險。

- 多採用易於咀嚼的食物如：豆腐、雞蛋和肉碎等，部分食物可於烹煮前先處理，改為較易進食的形態，例如切薄片、切絲、切粒，甚至攪碎。
- 為了方便院友進食及避免哽噎，避免提供多骨的魚及肉類，及避免提供黏口和容易鬆散的食物，如：湯丸、蛋卷等。

