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## Slide 1

歡迎大家來到食物科學課！(介紹自己)  
我是今天的老師(名字)....  
我是今天的輔助老師(名字)

Welcome everyone to our food science class! (*Introduce yourselves*)

- I am your teacher today (*name*)
- I am your teaching assistant today (*name*)

## Slide 2

(Kara)(前五分鐘放youtube歌曲)歡迎大家來到今天的課程，我們還在等所有的小朋友來我們所以先一起唱歌曲一吧！

(*Play youtube music for the first 5 minutes*) Welcome everyone to today's lesson, since some of our friends haven't arrived yet, let's sing a song together while we wait!

## Slide 3

我們是 \_\_\_\_ 和 \_\_\_\_ (學校)的學生，今天的課程是關於食品科學的。在課程結束時，您有望了解健康飲食的重要性以及如何維持健康飲食。

We are (*school*) and (*school*)'s students, and today's lesson is about food science. Does anyone know what food science could be? (*Encourage and let students answer*)

By the end of the class, you are expected to be able to understand the importance behind eating healthy and how to maintain a healthy diet.

## Slide 4

所以什麼是食物科學？

食品科學是科學的一個分支，專注於不同類型食物的營養和不同食物对我们的身体健康有什么帮助！

So, what is food science?

Food science is a science that focuses on the nutrition of different types of food and their effects on your health!

## Slide 5

首先，讓我們玩這個破冰遊戲吧！大家拿起家裡有的任何食物，展示給我們看！（等小朋友举手）現在想一想，你認為它健康嗎？為什麼？為什麼不呢？有人想分享嗎？我們分成小組討論！

First, let's play an icebreaker game! Everyone, share any type of food from home with the class!

Now think about it, do you think it's healthy? Why? Why not? Does anyone want to share? Let's break into small groups to discuss! (Give them 5 minutes, 2 groups of 3, 1 group of 4. Go around to encourage each group, then choose someone to share).

## Slide 6

你們覺得我們應該如何保持身體健康？

健康的身體取決於飲食中的各種維生素和維生素系列。為了幫助人們正確理解食物的比例和分佈，一種常見的健康飲食指南以金字塔形式承載

所以你在這裡看到的圖片是一個食物金字塔，有 5 個食物組，包括：

1. 碳水化合物：即係我哋成日食嘅白飯、麵包同埋意粉！
2. 生果同蔬菜：例如蘋果同埋我哋好鍾意食嘅菜心～
3. 蛋白質：有肉類、花生同埋黃豆呢啲好有益嘅食物
4. 奶製品：即係芝士、牛奶同雞蛋呀
5. 最後最頂個層呢，就係「油同甜食」啦！

睇下呢個金字塔，你覺得我哋最需要食多啲邊一類食物呢？（等回答）

啱啦！每層嘅大細就話俾我哋知，邊類食物要食最多。所以呢，我哋要食多啲穀物類，少啲油同糖。呢個食物金字塔可以幫我哋保持飲食均衡同健康！

How do you guys think we should maintain a healthy body? A healthy body relies on various vitamins and nutrients in our diet. By using a food pyramid, a common health guideline, we can understand how much of each food group we should eat to stay healthy.

The picture you see here is a food pyramid. The pyramid has 5 layers, and each layer contains a food group. Those 5 categories include:

- Carbohydrates like rice, bread, and pasta

- Fruits and vegetables, like apples and choy sum
- Protein, which includes meat, nuts, and beans
- Dairy, such as cheese, milk, and eggs
- And lastly, fats, oils and sweets!

Based on this pyramid, which type of food do you think we need to eat the most of? (wait for answer)

Correct! The size of each layer shows us which food group we need to have the most of in our diet, so we need to eat a lot of grains and fewer fats and sweets. This food pyramid helps keep our diet balanced and healthy.

## Slide 7

《Eatwell 指南》向您展示飲食和整體飲食的正確平衡。它包含了全部 5 類食物，讓您樣樣俱全，讓吃飯變得有趣！正如你所看到的，每個部分都有一個食物組，如果部分較大，你應該多吃這些食物，如果部分較小，你應該少吃這些食物。

The Eatwell Guide shows you the right balance of foods for your diet. It includes all 5 food groups, so you have everything you need and makes eating fun! As you can see, each section has a food group; if the section is bigger, you should eat more of those foods, and if the section is smaller, you should eat less of those foods.

## Slide 8

那为什么我们要健康饮食呢？(看看有没有人想要回答)

健康飲食很重要有多種原因，主要是为了保重身体。首先，健康的飲食可以保護您免受癌症和心臟病等危險疾病的侵害。它仲可以提升你的心情，同放出一種叫做「內啡肽」的東西，令你開心同整體感覺好啲！它還可以改善腸道健康，也可以提高記憶力。最後但並非最不重要的一點是，您的骨骼和牙齒會變得更加強壯。

So why should we eat healthy? (Wait for someone to answer) Eating healthily is really important for many reasons, mainly to take care of our bodies. First off, a healthy diet can protect you from serious diseases, like cancer and heart disease. It can also boost your mood and release something called 'endorphins' which make you happy and feel better overall! It improves gut health and can even enhance memory. Last but not least, your bones and teeth get stronger.

## Slide 9

什麼是不健康食品？嗯，不健康的食物包括快餐和超加工食品。

快餐即係可以好快整好嘅食物～我哋成日見嘅麥當勞漢堡包同KFC炸雞，都屬於‘超加工食品’咩叫超加工呀？即係食物經過好多加工步驟，加咗大量鹽、糖同油，同原本天然嘅樣已經好唔同㗎！大家要記住：呢類食物可以間中食，但唔可以當正餐日日食㗎！如果食得太多，可能會影響健康，例如容易蛀牙、冇咁精神，甚至影響心臟健康㗎～

What are unhealthy foods?... Unhealthy foods include fast food and ultra-processed foods.

Fast food is food that can be quickly prepared and served. The McDonald burgers and KFC fried chicken we often eat are all ultra-processed. Ultra-processed foods are foods that have been changed a lot from their original state, usually by adding tons of salt, sugar, and fat! We need to be careful not to eat too much unhealthy, ultra-processed food because it can lead to health issues like obesity, tooth decay, and high blood pressure.

## Slide 10 - Food scavenger hunt

所需材料：

印有食品的卡片

步驟 1: 將裝有不同食物的食物卡洗亂，然後將其藏在房間周圍，而學生則在外面等待

步驟 2: 分成 4-5 人一組，並在紙上記下他們的名字以記錄分數

步驟 3: 指導他們：

- 他們將嘗試找到食物卡
- 該群體中的一個人找到一種食物後，他們必須將其帶回給“法官”，並說明食用該食物的好處或後果(健康或不健康+原因)
- 如果他們答對了，他們就會得到一分，如果他們答錯了，他們就不會得到一分，卡片將由志願者保留
- 時間到(約 10 分鐘)時得分最多的一組獲勝

**Materials Needed:**

- [Cards with food items printed on](#)

Step 1: Cut & Shuffle the food cards with different food and hide it around the room while the students wait outside

Step 2: Split into groups of 4-5 people each, and record down their names on a sheet of paper to keep track of points

Step 3: Instruct them that:

- They are going to try and find the food cards
- After a person from that group has found one, they have to take it back to the ‘judge’ and state a benefit or consequence of consuming that food (healthy or not healthy + why)
- If they get it right they will get a point, if they can’t get it right they will not get a point and the card will be kept by the volunteer
- The group with the most points when time’s up wins (~10 minutes)

## Slide 11

你們知道食物能為我們提供什麼嗎？

食物通常為我們提供兩種營養素：常量營養素和微量營養素。宏量營養素是維持身體結構和系統所需的大量營養素。以下是四個常量營養素的例子：

碳水化合物：富含穀物和糖；產生身體生長和修復的能量

蛋白質：富含肉類和堅果；生長；健康成年人體重的15%

脂肪：富含肉類和水果，如酪梨；對於隔熱（保持身體溫暖）很重要；保護器官

水：儘管它是一種礦物質，但它是一種常量營養素；鋼彈身體的60%！

Do you guys know what food provides us with? (wait for answer) Food usually provides us with two types of nutrients: macronutrients and micronutrients. Macronutrients are the nutrients needed to maintain body structure and systems. They are needed in large amounts. Here are four examples of macronutrients:

- Carbohydrates: These are found in grains and sugars, and they generate energy for body growth and repair.
- Proteins: These are found in meat and nuts, and they contribute to body growth. It's usually 15% of healthy adult body weight.
- Fats: These are found in meat and fruits like avocados, and they are important for insulation (keeping the body warm) and protecting your organs.

Water: Even though it's a mineral, it's a macronutrient. It makes up 60% of your body!

## Slide 12

微量營養素和少量所需的營養素，與常量營養素相反。

維生素A：富含胡蘿蔔、青花菜；在修復眼睛結構中發揮重要作用；健康視力

維生素C：富含柳橙、柚子等柑橘類水果；組織修復；例如修復撕裂或損壞的肌肉組織

鐵：礦物質；富含肝臟和堅果；對於血液攜帶氧氣很重要

鈣：礦物質；富含牛奶和起司等乳製品；健康的骨骼

Micronutrients are the opposite of macronutrients, and they are what the body needs in small amounts.

- Vitamin A: They are high in carrots and broccoli. It plays a crucial role in repairing eye structures and promotes healthy vision.
- Vitamin C: They are high in oranges, grapefruits, and other citrus fruits. They aid in tissue repair, for example, repairing torn or damaged muscle tissue.
- Iron: It's a mineral that's rich in liver and nuts. They are vital for transporting oxygen in the blood.
- Calcium: It's also a mineral mostly found in dairy products like milk and cheese. They are important for healthy bones.

## Slide 13

儘管身體雖然不需要大量微量營養素，但是小數量不等於不重要！微量營養素對於健康的身體和正常的身心功能至關重要。缺乏任何一種微量營養素都可能導致嚴重的、有時甚至危及生命的病症！

Even though the body doesn't need a lot of micronutrients, they are still super important for a healthy body and for normal physical and mental functions. Lacking even one micronutrient can lead to serious, sometimes even life-threatening health issues!

## Slide 14

我们现在来看一看一下不同的微量營養素和它们的重要性。有人知道任何例子嗎？例如，維生素A缺乏會導致夜盲症，損害眼睛，導致夜間看不清楚。正如你在圖中看到的，左邊顯示的是視力正常的人在晚上看到的東西。然而，右圖顯示了夜盲症患者在晚上看到的東西。

Let's take a look at different micronutrients and why they matter. Does anyone know any examples? For example, not getting enough vitamin A can lead to night blindness, affecting your eyes and making it hard to see at night. As you can see in the picture, the left side shows what a person with normal vision sees at night, while the right side shows what someone with night blindness sees at night.

## Slide 15

另一方面，如果您缺乏維生素 D，可能會導致佝僂病，這是一種導致骨骼變軟弱的疾病。

On the other hand, if you don't have enough vitamin D, this could lead to rickets, a disease that causes softer and weaker bones.

## Slide 16

另外，如果身体缺铁，就造不出足够的红血球——这些像“小货车”一样运送氧气的小细胞！缺铁时，你可能会觉得累、头晕或者气喘吁吁，因为身体得不到足够的氧气。这就是贫血啦！所以呀，多吃含铁的食物（例如菠菜或豆类！），就能让血液更强壮，让你活力满满哦！

Furthermore, without enough iron, your body can't make enough red blood cells—the tiny "delivery trucks" that carry oxygen! If you're low on iron, you might feel tired, dizzy, or even out of breath because your body isn't getting enough oxygen. That's called anemia. So remember, eating iron-rich foods (like spinach or beans!) helps your blood stay strong and keeps you full of energy!

## Slide 17

缺乏这些維生素怎么办呢？

攝取微量營養素的方法有很多。首先，食物來源富含微量營養素，如水果、肉類、蔬菜等！其次，服用維生素或礦物質片也很受歡迎。有多種自然方式可以提供微量營養素，例如，在陽光下吸收維生素 D！

What do you do if you are lacking in these vitamins?

There are many ways to get micronutrients. First off, foods rich in micronutrients like fruits, meats, and veggies are great! Also, taking vitamin or mineral pills is really common. There are also lots of natural ways to get micronutrients, like soaking up some vitamin D in the sun!

## Slide 18

所以這裡我們給大家提出了一個挑戰！你們能每個人拿一張紙，在食物金字塔或飲食指南上畫出自己的飲食習慣。（給他們 10 分鐘左右的時間，然後請他們分享）

Here's a challenge for you to do! Can each of you grab a piece of paper and draw your eating habits on the food pyramid or dietary guidelines? (Give them about 10 minutes, then ask them to share).

## Slide 19

接著，我們會展示不同種類的實物圖片。如果你知道請回答：

食物健康嗎？

食物屬於哪一個食物種類？（提示：總共有五個食物種類）

請舉手回答！

Next, we're going to show pictures of different kinds of food. If you know, please answer: Is food healthy? What food group does this belong to? (Hint: There are five food groups in total)

Please raise your hand to answer!

## Slide 32

Chinese Version: <https://create.kahoot.it/details/77fd99d1-0b2a-4423-8bb0-31fec518704a>

English Version: <https://create.kahoot.it/details/a93b7702-e29b-47e9-a53a-530a09b5e29a>