

# 熱量知多少

## Facts about Calorie and Energy

維持攝取與消耗的熱量平衡，對保持理想體重非常重要。如攝取的熱量少於消耗的熱量，會阻礙身體成長和導致體重下降。相反，如攝取的熱量多於消耗的熱量，就會導致肥胖。我們每天平均所需的熱量載於下表：

The balance between energy input and output is important for maintaining a healthy body weight. If your energy input is less than the output, your body growth will be hampered and weight loss will occur. On the contrary, if your energy input is greater than the output, it will lead to overweight. Our daily energy requirements are listed below:

組別 Group 年齡 Age	男性 Male (千卡kcal)			女性 Female (千卡kcal)		
	低 Low	中 Medium	高 High	低 Low	中 Medium	高 High
體能活動水平 Activity Level						
7-9歲	1500	1700	1900	1350	1550	1750
10-13歲	1800	2050	2300	1650	1900	2150
14-17歲	2500	2850	3200	2000	2300	2550
18歲以上above	2250	2600	3000	1800	2100	2400
50歲以上above	2100	2450	2800	1750	2050	2350
65歲以上above	2050	2350		1700	1950	
80歲以上above	1900	2200		1500	1750	

女性：  
懷孕初期 + 0千卡  
懷孕中期 + 300千卡  
懷孕後期 + 450千卡  
哺乳期 + 500千卡

Female:  
1st trimester of pregnancy + 0 kcal  
2nd trimester of pregnancy + 300 kcal  
3rd trimester of pregnancy + 450 kcal  
Breastfeeding + 500 kcal

(參考資料：《中國居民膳食營養素參考攝入量》。中國營養學會，二零一三。)  
(Reference: The Chinese Dietary Reference Intake. Chinese Nutrition Society; 2013.)

## 體能活動與熱量消耗

### Physical Activities and Energy Expenditure

想有健康體魄，除飲食均衡外，亦須把體能活動融入生活，建立健康的生活模式。

Apart from maintain a balanced diet, we should also make physical activity a part of our daily life and develop a healthy lifestyle in order to stay healthy.

- 熱量單位為Kilocalorie(千卡)，俗稱卡路里。一千卡是指把一公斤(一公升)水的溫度提高攝氏一度所需的能量。
- 活動種類不同，消耗的熱量不同
- 計算熱量消耗的方程式如下：

- Kilocalorie (kcal) is the unit for measuring energy. One kcal is the amount of energy needed to heat up one kilogram (one liter) of water by one degree Celsius.
- Energy expenditure varies with activities
- The formula for energy expenditure is as follows:

**體重(公斤) x 活動時間(小時) x 代謝等值(MET)**  
舉例：體重60公斤人士，急步走30分鐘  
所消耗的熱量為：  
60公斤 x 0.5小時 x 4.3METs = 129千卡

**Body Weight(kg) x Activity Duration(hour) x Metabolic Equivalent (MET)**  
Example : the energy expended by a 60kg person for doing speed walking for 30 minutes is 60kg x 0.5 hour x 4.3METs = 129 kcal

- 下表載列不同活動所消耗的熱量(以活動30分鐘計算)：

- The amount of energy expended in performing the following activities for 30 minutes are as follows:

	運動項目 Type of Activity	代謝等值 (MET)註	40公斤kg (千卡kcal)	50公斤kg (千卡kcal)	60公斤kg (千卡kcal)	70公斤kg (千卡kcal)	80公斤kg (千卡kcal)	90公斤kg (千卡kcal)
日常生活 Daily activities	抹車打蠟Car waxing	2.0	40	50	60	70	80	90
	彈琴Playing piano	2.3	46	58	69	81	92	104
	園藝Gardening	3.8	76	95	114	133	152	171
	掃地Floor sweeping	3.3	66	83	99	116	132	149
靜態運動 Static activities	靜坐Sitting	1.3	26	33	39	46	52	59
	伸展運動Stretching	2.3	46	58	69	81	92	104
	步行Walking	3.5	70	88	105	123	140	158
動態運動 Active activities	籃球Basketball	6.5	130	163	195	228	260	293
	足球Football	7.0	140	175	210	245	280	315
	踏單車Cycling	7.5	150	188	225	263	300	338
	跑步(8公里/小時) Running (8km/hr)	8.3	166	208	249	291	332	374

(以上資料只供參考，實際消耗的熱量取決於活動劇烈程度和時間長短，以及個人體能、技術水平、性別、年齡及體重等因素。)

(The information given above is for reference only. The actual amount of energy expended is determined by factors such as intensity and duration of an activity and the physical fitness, skill level, gender, age and body weight of an individual.)

註：代謝等值 (Metabolic Equivalent (MET)) 是體能活動的強度指標。一般而言，低於 3METs 的屬低強度；3至6 METs 的屬中等強度；高於 6METs 的則屬劇烈強度。

Metabolic Equivalent (MET) is an indicator for the intensity of physical activities. Generally speaking, physical activities of less than 3 METs are regarded as low-intensity; 3 to 6 METs as moderate-intensity; and higher than 6 METs as vigorous-intensity.

