

## 授課講師學經歷

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課程名稱(主題)	不復胖的飲食觀
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## 授課內容摘要

多餘的熱量會囤積在體內，長時間下來就會形成肥胖組織。人體消耗熱量的主要途徑分為基礎代謝、身體活動和食物熱效應三種，其中以基礎代謝最為重要!

「減肥後不復胖」必須考慮，基礎代謝率是只維持一個人生命力及不自主活動的最低熱量。約占人體總消耗熱量的 65~70%，基礎代謝率高，易消耗身體多餘的脂肪，進而達到減重的目標。接著以「計算好熱量就不胖」，不同的身體活動需要不同的能量供給，才能發揮正常的機能。儘量的從事各式各樣的身體活動，才能瘦的久、不復胖。「均衡營養照顧健康」，食物的生熱效應，以蛋白質>脂質>醣類，但減重期間的飲食，需要均衡搭配才能長久。「飲食食物多樣性，營養均衡身體強!」配合「有技巧的飲食行為」，在飲食行位方面必須改變採購習慣，選擇低脂、低卡、天然食物，取代高脂、高熱量、半成品食物。另外要注意早餐要豐盛、午餐要吃飽、晚餐吃得少。掌握每餐重點，固定用餐時間，避免不定時進餐，難以調節身體的消化與吸收。適時的改變用餐順序:先喝湯，接著吃蔬菜及水果，再吃肉或蛋類，最後吃飯；專心吃飯，細嚼慢嚥，剛剛好不過飽；謹慎的減少進入身體的熱量:去皮吃瘦肉、油炸食物去裹粉、喝湯前撈除浮油及避免甜度過高的食物。改變飲食習慣，吃東西時聽聽輕音樂、避免家中囤積零食及拒絕吃當作發洩等皆可以輔助持續的體重維持。另外有些市售商品減重代餐或保健食品都應該在認識清楚下健康吃。

# 不復胖的飲食觀

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- Food choice decisions
  - *what we eat*
  - soup or salad
- Food consumption volume decisions
  - *how much we eat*
  - half of the bowl or all of it
  - package size, plate shape, lighting, variety, or the presence of others

## Successful long-term weight loss maintenance

- National Weight Control Registry,
  - (average weight loss of 30 kg for an average of 5.5 years)
- $\geq 10\%$  of initial body weight ,
- $\geq 1$  year

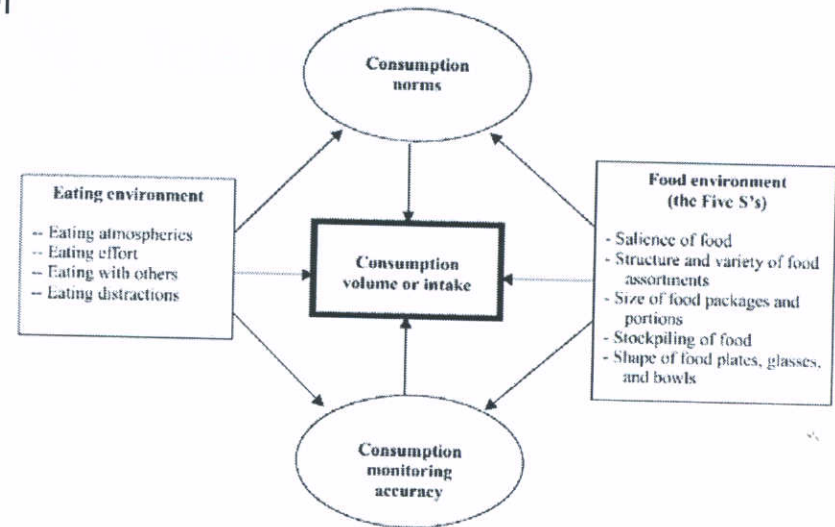


Figure 1 Antecedents and mediators of food consumption volume.

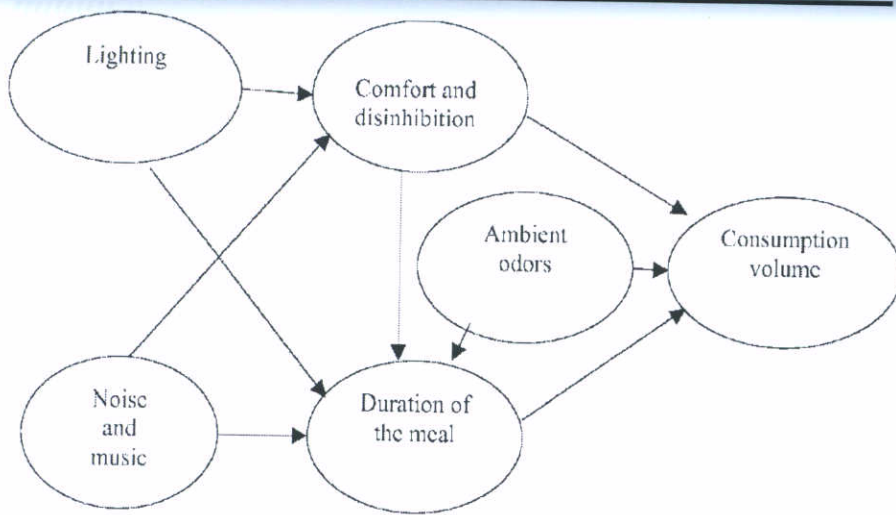


Figure 2 Atmospherics that influence food consumption volume.

## 7 dietary key point for weight maintenance

- Calorie counting
- Nutrition balance
- Dieting dietary skill
- 19 Super nutrients
- 20 Good natural foods
- 15 Health food
- Meal replacement

Shieh, 2008

## Calorie balance

- Stored body fat, 3500 calories a pound
  - 75% fat, 25% lean tissue
  - diet, exercise or combination
- Calorie deficit
  - calorie-restriction alone,
  - fewer calories in (diet), more calories out (exercise)

## Total energy expenditure, TEE

- Basal metabolic rate
  - Resting energy expenditure
    - 1.2 BMR
- Physical activity
  - Non-exercise activity thermogenesis, NEAT
  - Activity = REE × Activity factor
- Diet induced thermogenesis
  - $(BMR + Activity) \div 9$
  - Protein > Fat > CHO
  - Food traffic lights

## Basal metabolic rate

- Harris Benedict Equation
  - Male =  $66 + 13.7 \times BW \text{ (Kg)} + (5 \times BH \text{ (cm)} - 6.8 \times \text{age})$
  - Female =  $655 + 9.6 \times BW \text{ (Kg)} + (1.7 \times BH \text{ (cm)} - 4.7 \times \text{age})$
- BMR for Taiwanese
  - $54.34 + 13.88 \times BW \text{ (Kg)} + 4.16 \times BH \text{ (cm)} - 3.43 \times \text{age} - 112.4 \times \text{sex factor}$  ( Male:0, Female: 1)
- Easy way
  - Male =  $BW \text{ (Kg)} \times 24(\text{hr}) \times 1$
  - Female =  $BW \text{ (Kg)} \times 24(\text{hr}) \times 0.9$

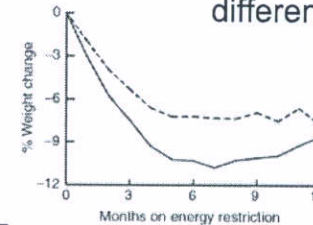
表 1-3 各年齡層之基礎代謝值 (BMR)

年齡 (歲)	BMR (kcal/kg/min)	
	男性	女性
7-9	0.0295	0.0279
10-12	0.0244	0.0231
13-15	0.0205	0.0194
16-19	0.0183	0.0166
20-24	0.0167	0.0162
25-34	0.0159	0.0153
35-54	0.0154	0.0147
55-69	0.0151	0.0144
70+	0.0145	0.0144

資料來源：行政院衛生署《國民營養健康調查計畫及其附屬》- 第 5 冊 (1993)

## Low vs Moderate Dietary Energy Restriction

- Theoretical calculations: small daily energy reductions → weight loss
- Experimental data:
  - 10 or 30%ER, 12 months, not significantly different



Das, et al., 2009

## Balanced Nutrition = Weight Maintenance

- Principle
  - A variety of nutritious, well-balanced, family-friendly meals
  - Right choice Gosselin & Cote, 2001
    - Fat Burning Foods
  - Grape fruit
    - 3 times a day, before meal
    - 3.6 lb/12wks
  - Red wine
    - block a receptor on fat cells
    - breakdown and preventing new fat cells forming.

## Dietary intake in weight maintenance

- Total calories
  - Calories and fat intake
  - LCD Vs. VLCD
- Macronutrient
  - Low fat Vs. low CHO
- Simplicity
  - Meal replacement



## Dietary intake in weight maintenance

- Dietary
    - Eat >5 fruit-veg a day
    - Use prepackaged meals
    - Practice portion control
    - Count fat grams
    - Choose low-fat food
    - Consume a low-calorie, low-fat diet
    - Eat breakfast regularly
    - Limit portion sizes
    - Limit intake of high fat/high calorie foods
- 




## Dieting dietary skill

- Purchasing habits
    - Low fat in, high fat out
    - Natural in, product out
  - Consumption volume
    - regular in, irregular out
      - time, quantity
      - Meal point
  - Eating order
    - soup → veg-fruit → meat & egg → cereal
  - Eating habit
    - Chewing carefully, 80% satiety, not being a garbage can
  - Food selection
- 



## 19 Super nutrients

- Satiety
    - Dietary fiber
    - Glucomannan
  - Appetite
    - Chromine
    - HCA
- 

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- Reduce fat absorption
    - L-arginine, L-lysine, L-ornithine
    - Chitosan
    - Oligopeptide
  - Reduce starch absorption
    - $\alpha$ -Amylase inhibitor
    - Gymnema Sylvestre extraction
    - great Northern Bean Protein
-



Reduce CHO absorption

- Soybean extraction
- Niacin
- Green tea extraction

Enhance BMR

- Nucleic acid



Enhance lipolysis


- CLA

Enhance fat depletion

- L-carnitine
- DHEA

Enhance body fat utilization

- Inositol
- Choline



20 Good natural food  
High fiber

- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> Potato       | <input type="checkbox"/> Kelp          |
| <input type="checkbox"/> Sweet potato | <input type="checkbox"/> Tomato        |
| <input type="checkbox"/> Oat          | <input type="checkbox"/> Agar          |
| <input type="checkbox"/> Konjac       | <input type="checkbox"/> Beans, legume |
| <input type="checkbox"/> Apple        | <input type="checkbox"/> Grain cereals |



Fat-suppressed

- |                                    |   |
|------------------------------------|---|
| <input type="checkbox"/> Onion     | <input type="checkbox"/> Bamboo                               |
| <input type="checkbox"/> Leeks     | <input type="checkbox"/> Grapefruit                           |
| <input type="checkbox"/> Garlic    | <input type="checkbox"/> Green tea                            |
| <input type="checkbox"/> Wax gourd | <input type="checkbox"/> Mustard leaves,<br>pickled and dried |
| <input type="checkbox"/> Hawthorn  | <input type="checkbox"/> Mushroom                             |



## 15 Health food

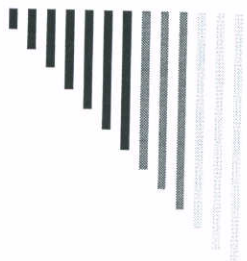
- Evening Primrose
  - Soybean peptide
  - Lactobacillus
  - Pollen
  - Psyllium
  - Brewer's Yeast
  - Fish oil
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- Multivitamin & minerals
  - Chlorella
  - Date
  - Co Q10
  - Dietary fiber
  - Spirulina
  - $\gamma$ -GLA
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Thanks for your  
attention

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