



臺北醫學大學
TAIPEI MEDICAL UNIVERSITY

107學年度健康促進學校輔導計畫

健康體位種子教師培訓課程

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臺北醫學大學

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中小學生雙重體位不佳現況

身體質量指數	過輕	過重	肥胖
國小	7.9% ♂ 7.5% ♀ 8.4%	13.2% ♂ 14.5% ♀ 11.9%	14.9% ♂ 17.4% ♀ 12.2%
國中	6.7% ♂ 7.1% ♀ 6.2%	12.7% ♂ 13.3% ♀ 12.0%	16.8% ♂ 20.0% ♀ 13.2%

年齡	男性				女性			
	過輕 (BMI ≤)	正常範圍 (BMI 介於)	過重 (BMI ≥)	肥胖 (BMI ≥)	過輕 (BMI ≤)	正常範圍 (BMI 介於)	過重 (BMI ≥)	肥胖 (BMI ≥)
6	13.5	13.5-16.9	16.9	18.5	13.1	13.1-17.2	17.2	18.8
6.5	13.6	13.6-17.3	17.3	19.2	13.2	13.2-17.5	17.5	19.2
7	13.8	13.8-17.9	17.9	20.3	13.4	13.4-17.7	17.7	19.6
7.5	14	14.0-18.6	18.6	21.2	13.7	13.7-18.0	18	20.3
8	14.1	14.1-19.0	19	21.6	13.8	13.8-18.4	18.4	20.7
8.5	14.2	14.2-19.3	19.3	22	13.9	13.9-18.8	18.8	21
9	14.3	14.3-19.5	19.5	22.3	14	14.0-19.1	19.1	21.3
9.5	14.4	14.4-19.7	19.7	22.5	14.1	14.1-19.3	19.3	21.6
10	14.5	14.5-20.0	20	22.7	14.3	14.3-19.7	19.7	22
10.5	14.6	14.6-20.3	20.3	22.9	14.4	14.4-20.1	20.1	22.3
11	14.8	14.8-20.7	20.7	23.2	14.7	14.7-20.5	20.5	22.7
11.5	15	15.0-21.0	21	23.5	14.9	14.9-20.9	20.9	23.1
12	15.2	15.2-21.3	21.3	23.9	15.2	15.2-21.3	21.3	23.5

12歲男學生為例

BMI 值 $\geq 85\%$ 時，為過重: **21.3**

BMI 值 $\geq 95\%$ 時，為肥胖: **23.9**

BMI值 $\geq 95\%$ 數值切點之 120% 為嚴重肥胖: **28.68**

Obesity classified in children and adolescent

Table 3

Obesity classified based on body mass index criteria in children and adolescent.

Category	BMI percentile
Overweight	BMI greater than or equal to 85 th percentile for age and sex specific BMI
Class 1 obesity	BMI greater than or equal to 95 th percentile for age and sex
Class 2 obesity	BMI greater than or equal to 120% of the 95 th percentile or BMI greater than or equal to 35
Class 3 obesity	BMI greater than or equal to 140% of the 95 th percentile or BMI greater than or equal to 40

Body composition

The World Health Organization (WHO) classifies overweight and obesity as abnormal and refers to them as having **excessive fat accumulation** in both adults and children but **fails to directly measure** body fat.



Cutoffs for Body Fatness Categories by Sex and Age

Age, y	Percent Body Fat (No. of Children/Group) by Fatness Category ^a		
	Normal	Moderate	Elevated
Boys			
<9	<22 (108)	22–26 (17)	>26 (26)
9–11.9	<24 (99)	24–34 (35)	>34 (31)
12–14.9	<23 (93)	23–32 (26)	>32 (32)
≥15	<22 (167)	22–29 (20)	>29 (14)
Girls			
<9	<27 (100)	27–34 (19)	>34 (20)
9–11.9	<30 (108)	30–37 (37)	>37 (27)
12–14.9	<32 (84)	32–39 (22)	>39 (26)
≥15	<36 (92)	36–42 (24)	>42 (11)

^a Cutoffs for percent body fat were chosen so that within each sex-age group, the number of children in the fatness categories (normal, moderate, and elevated) would equal that in the corresponding body mass index–for-age categories (normal weight, overweight, and obese, respectively).

No. (%) of Participants by Body Fatness Category ^a						
BMI-for-Age Percentile	Boys			Girls		
	Normal	Moderate	Elevated	Normal	Moderate	Elevated
<85th	392 (92)	28 (7)	5 (1)	353 (92)	30 (8)	1 (<1)
85th–94th	31 (32)	46 (47)	21 (21)	30 (29)	56 (55)	16 (16)
≥95th	2 (2)	24 (23)	77 (75)	1 (1)	16 (19)	67 (80)
Total	Boys			84		

Abbreviation: BMI, body mass index.

^aThe body fatness categories were defined as follows: 1 = 10–14.9%, 2 = 15–19.9%, 3 = 20–24.9%, 4 = 25–29.9%, 5 = 30–34.9%, 6 = 35–39.9%, 7 = 40–44.9%, 8 = 45–49.9%, 9 = 50–54.9%, 10 = 55–59.9%, 11 = 60–64.9%, 12 = 65–69.9%, 13 = 70–74.9%, 14 = 75–79.9%, 15 = 80–84.9%, 16 = 85–89.9%, 17 = 90–94.9%, 18 = 95–99.9%, 19 = 100–104.9%, 20 = 105–109.9%, 21 = 110–114.9%, 22 = 115–119.9%, 23 = 120–124.9%, 24 = 125–129.9%, 25 = 130–134.9%, 26 = 135–139.9%, 27 = 140–144.9%, 28 = 145–149.9%, 29 = 150–154.9%, 30 = 155–159.9%, 31 = 160–164.9%, 32 = 165–169.9%, 33 = 170–174.9%, 34 = 175–179.9%, 35 = 180–184.9%, 36 = 185–189.9%, 37 = 190–194.9%, 38 = 195–199.9%, 39 = 200–204.9%, 40 = 205–209.9%, 41 = 210–214.9%, 42 = 215–219.9%, 43 = 220–224.9%, 44 = 225–229.9%, 45 = 230–234.9%, 46 = 235–239.9%, 47 = 240–244.9%, 48 = 245–249.9%, 49 = 250–254.9%, 50 = 255–259.9%, 51 = 260–264.9%, 52 = 265–269.9%, 53 = 270–274.9%, 54 = 275–279.9%, 55 = 280–284.9%, 56 = 285–289.9%, 57 = 290–294.9%, 58 = 295–299.9%, 59 = 300–304.9%, 60 = 305–309.9%, 61 = 310–314.9%, 62 = 315–319.9%, 63 = 320–324.9%, 64 = 325–329.9%, 65 = 330–334.9%, 66 = 335–339.9%, 67 = 340–344.9%, 68 = 345–349.9%, 69 = 350–354.9%, 70 = 355–359.9%, 71 = 360–364.9%, 72 = 365–369.9%, 73 = 370–374.9%, 74 = 375–379.9%, 75 = 380–384.9%, 76 = 385–389.9%, 77 = 390–394.9%, 78 = 395–399.9%, 79 = 400–404.9%, 80 = 405–409.9%, 81 = 410–414.9%, 82 = 415–419.9%, 83 = 420–424.9%, 84 = 425–429.9%, 85 = 430–434.9%, 86 = 435–439.9%, 87 = 440–444.9%, 88 = 445–449.9%, 89 = 450–454.9%, 90 = 455–459.9%, 91 = 460–464.9%, 92 = 465–469.9%, 93 = 470–474.9%, 94 = 475–479.9%, 95 = 480–484.9%, 96 = 485–489.9%, 97 = 490–494.9%, 98 = 495–499.9%, 99 = 500–504.9%, 100 = 505–509.9%, 101 = 510–514.9%, 102 = 515–519.9%, 103 = 520–524.9%, 104 = 525–529.9%, 105 = 530–534.9%, 106 = 535–539.9%, 107 = 540–544.9%, 108 = 545–549.9%, 109 = 550–554.9%, 110 = 555–559.9%, 111 = 560–564.9%, 112 = 565–569.9%, 113 = 570–574.9%, 114 = 575–579.9%, 115 = 580–584.9%, 116 = 585–589.9%, 117 = 590–594.9%, 118 = 595–599.9%, 119 = 600–604.9%, 120 = 605–609.9%, 121 = 610–614.9%, 122 = 615–619.9%, 123 = 620–624.9%, 124 = 625–629.9%, 125 = 630–634.9%, 126 = 635–639.9%, 127 = 640–644.9%, 128 = 645–649.9%, 129 = 650–654.9%, 130 = 655–659.9%, 131 = 660–664.9%, 132 = 665–669.9%, 133 = 670–674.9%, 134 = 675–679.9%, 135 = 680–684.9%, 136 = 685–689.9%, 137 = 690–694.9%, 138 = 695–699.9%, 139 = 700–704.9%, 140 = 705–709.9%, 141 = 710–714.9%, 142 = 715–719.9%, 143 = 720–724.9%, 144 = 725–729.9%, 145 = 730–734.9%, 146 = 735–739.9%, 147 = 740–744.9%, 148 = 745–749.9%, 149 = 750–754.9%, 150 = 755–759.9%, 151 = 760–764.9%, 152 = 765–769.9%, 153 = 770–774.9%, 154 = 775–779.9%, 155 = 780–784.9%, 156 = 785–789.9%, 157 = 790–794.9%, 158 = 795–799.9%, 159 = 800–804.9%, 160 = 805–809.9%, 161 = 810–814.9%, 162 = 815–819.9%, 163 = 820–824.9%, 164 = 825–829.9%, 165 = 830–834.9%, 166 = 835–839.9%, 167 = 840–844.9%, 168 = 845–849.9%, 169 = 850–854.9%, 170 = 855–859.9%, 171 = 860–864.9%, 172 = 865–869.9%, 173 = 870–874.9%, 174 = 875–879.9%, 175 = 880–884.9%, 176 = 885–889.9%, 177 = 890–894.9%, 178 = 895–899.9%, 179 = 900–904.9%, 180 = 905–909.9%, 181 = 910–914.9%, 182 = 915–919.9%, 183 = 920–924.9%, 184 = 925–929.9%, 185 = 930–934.9%, 186 = 935–939.9%, 187 = 940–944.9%, 188 = 945–949.9%, 189 = 950–954.9%, 190 = 955–959.9%, 191 = 960–964.9%, 192 = 965–969.9%, 193 = 970–974.9%, 194 = 975–979.9%, 195 = 980–984.9%, 196 = 985–989.9%, 197 = 990–994.9%, 198 = 995–999.9%, 199 = 1000–1004.9%, 200 = 1005–1009.9%, 201 = 1010–1014.9%, 202 = 1015–1019.9%, 203 = 1020–1024.9%, 204 = 1025–1029.9%, 205 = 1030–1034.9%, 206 = 1035–1039.9%, 207 = 1040–1044.9%, 208 = 1045–1049.9%, 209 = 1050–1054.9%, 210 = 1055–1059.9%, 211 = 1060–1064.9%, 212 = 1065–1069.9%, 213 = 1070–1074.9%, 214 = 1075–1079.9%, 215 = 1080–1084.9%, 216 = 1085–1089.9%, 217 = 1090–1094.9%, 218 = 1095–1099.9%, 219 = 1100–1104.9%, 220 = 1105–1109.9%, 221 = 1110–1114.9%, 222 = 1115–1119.9%, 223 = 1120–1124.9%, 224 = 1125–1129.9%, 225 = 1130–1134.9%, 226 = 1135–1139.9%, 227 = 1140–1144.9%, 228 = 1145–1149.9%, 229 = 1150–1154.9%, 230 = 1155–1159.9%, 231 = 1160–1164.9%, 232 = 1165–1169.9%, 233 = 1170–1174.9%, 234 = 1175–1179.9%, 235 = 1180–1184.9%, 236 = 1185–1189.9%, 237 = 1190–1194.9%, 238 = 1195–1199.9%, 239 = 1200–1204.9%, 240 = 1205–1209.9%, 241 = 1210–1214.9%, 242 = 1215–1219.9%, 243 = 1220–1224.9%, 244 = 1225–1229.9%, 245 = 1230–1234.9%, 246 = 1235–1239.9%, 247 = 1240–1244.9%, 248 = 1245–1249.9%, 249 = 1250–1254.9%, 250 = 1255–1259.9%, 251 = 1260–1264.9%, 252 = 1265–1269.9%, 253 = 1270–1274.9%, 254 = 1275–1279.9%, 255 = 1280–1284.9%, 256 = 1285–1289.9%, 257 = 1290–12

^aThe body fatness categories were defined as follows: Normal, Moderate, and Elevated, based on the age category.

	Normal	Moderate	Elevated
	392 (92)	28 (7)	5 (1)
85%-94%	31 (32)	46 (47)	21 (21)
	2 (2)	24 (23)	77 (75)
	425	98	103
Girls			
	Normal	Moderate	Elevated
	353 (92)	30 (8)	1 (<1)
85%-94%	30 (29)	56 (55)	16 (16)
	1 (1)	16 (19)	67 (80)
	384	102	84

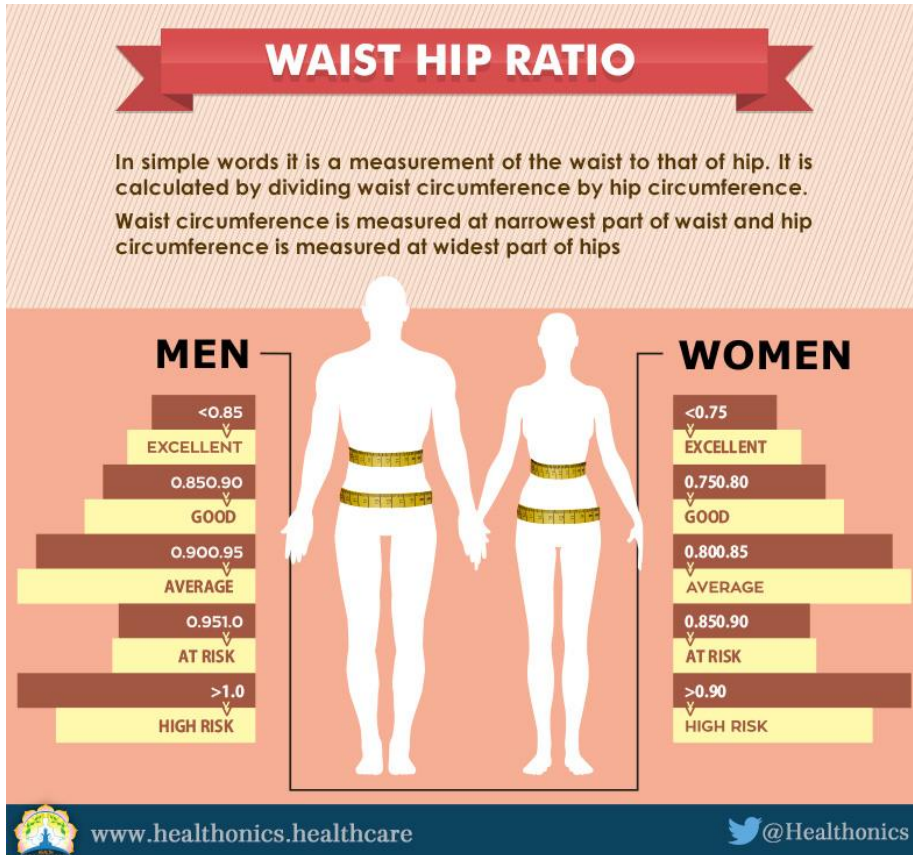


Waist Circumference

There is evidence that obtaining waist circumference as an indicator of abdominal adiposity offers additional information about metabolic and cardiovascular disease risk

1999-2008 National Health and Nutrition Examination Survey

腰臀比--體脂肪分佈



腰圍

男 ≤ 90 公分(35.5吋)

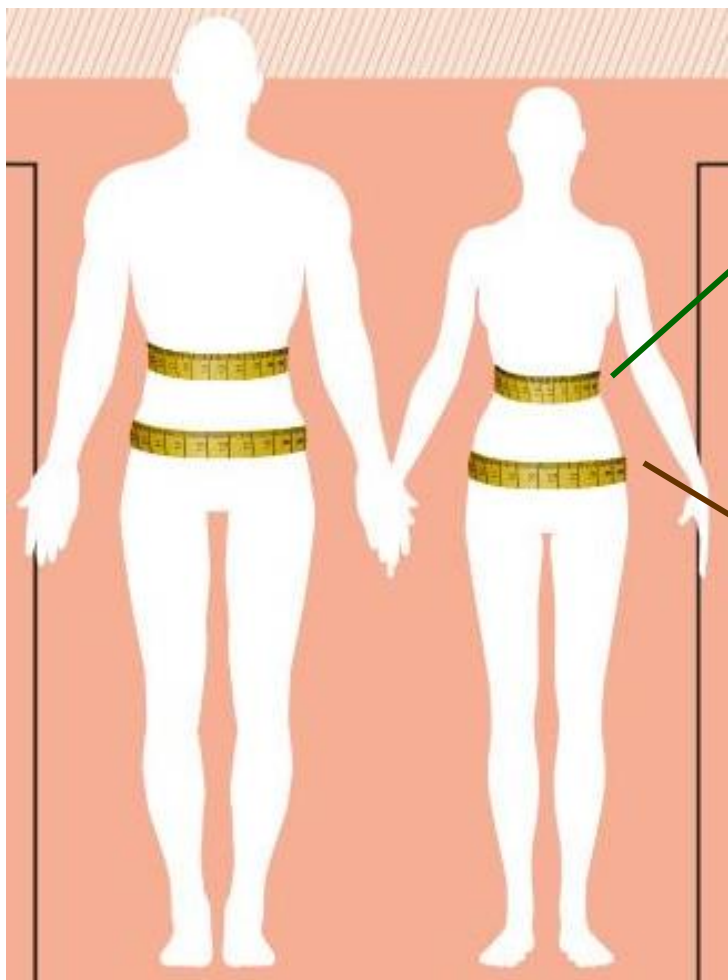
女 ≤ 80 公分(31.5吋)

腰臀比

男 0.85-0.9

女 0.7-0.8

腰臀圍測量



腰圍

雙腳併攏
腹部肌肉放鬆
手臂自然垂放兩側
正常呼吸
以無彈性捲尺測量
肋骨以下，肚臍以上
之身體最細位置

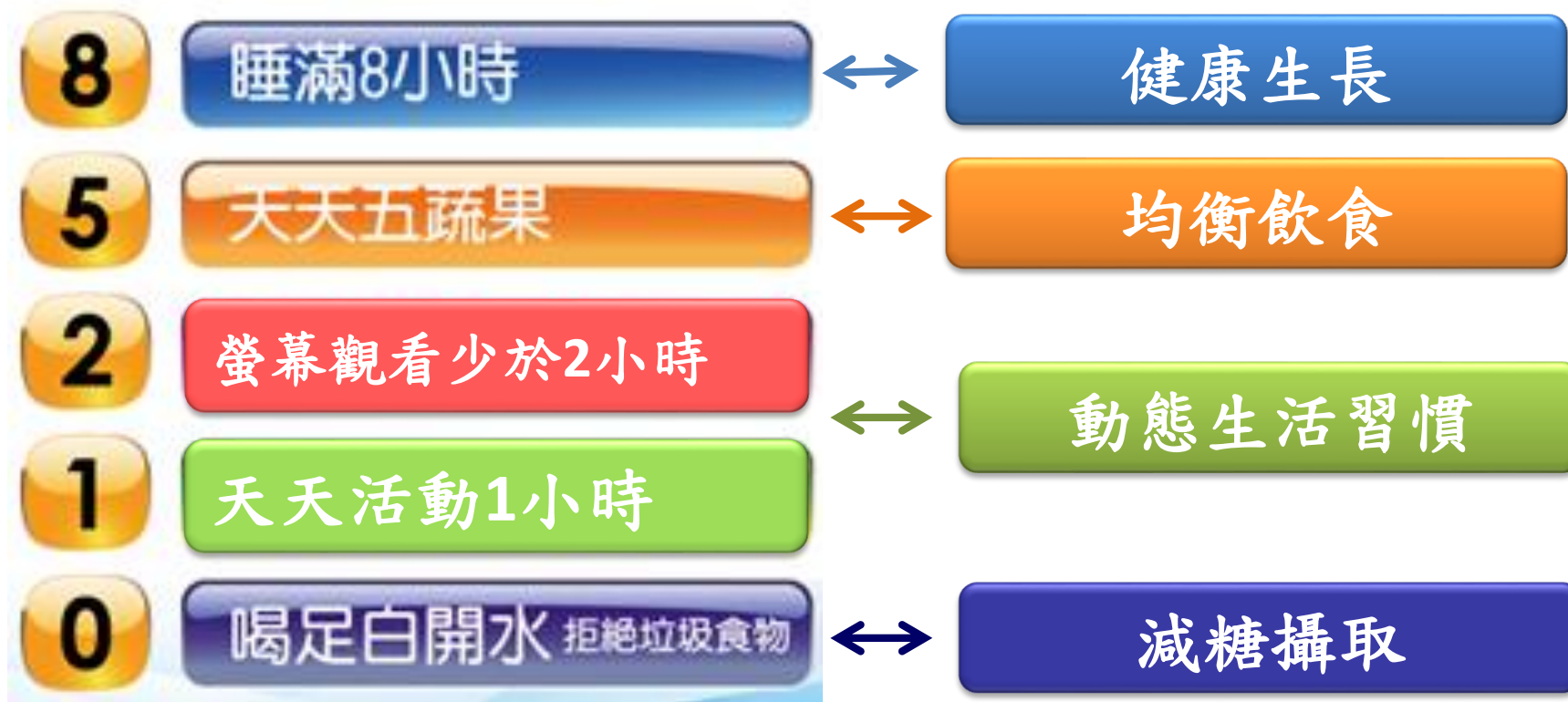
臀圍

測量臀部最寬位置

	Population	Strategies
Primary prevention General	Population-wide interventions that include youth of all body sizes or weight	<u>Eating</u> and <u>physical-activity</u> messages or programs intended to prevent incidence of overweight/obesity and/or provide a <u>supportive environment</u> for weight maintenance
Secondary prevention Selective	Overweight or obese youth with <u>no weight-related comorbidities</u>	More structured and involved eating and physical-activity programs <u>intended to help overweight and obese youth obtain a healthy weight</u> ; may require medical approval or limited supervision
Tertiary prevention Targeted	Overweight or obese youth <u>with comorbidities</u> <u>Severely obese youth</u>	Intensive and comprehensive treatments for overweight and obese youth conducted under medical supervision with a focus on resolving <u>weight-related comorbidities</u> or at least decreasing their severity
^a NA=not applicable.		

持續推動健康體位（85210）

維持良好體位全校目標
（保我210）



健康體位 85210

- 愛睏星「8」- 睡滿 8 小時

每天睡滿 8 小時，晚上11點前就寢

睡飽飽，精神好、頭好好、長高高



健康體位 85210



- 蔬果星「5」- 天天五蔬果

午餐蔬菜吃光光

刪熱量、五蔬果、少油炸

健康體位 85210



★ 電波衛星「2」- 觀看螢幕
少於二小時

電視/電動/電腦/電話 時間少於2小時

用眼距離、少坐多動

健康體位 85210

跳跳星「1」- 天天運動30分
活動30分

每週運動210分鐘以上

跳跳星

、快樂、變聰明



健康體位 85210

水瓶星「0」- 喝足白開水

以無糖取代，每日目標 1500 c.c.

外出帶水壺、補水方便又環保



健康體位 Follow Me



Effectiveness of nutrition-education and physical-activity interventions

1. In school-based programs, what is the effectiveness of nutrition education as a part of an intervention to treat childhood overweight?

Conclusion statement: There is insufficient evidence to draw conclusions about the effectiveness of school-based nutrition-education interventions alone to address adiposity in children.

Grade III^a

2. In school-based programs, what is the effectiveness of altering physical-activity patterns as a part of an intervention to treat childhood overweight?

Conclusion statement: The use of school-based physical-activity interventions alone is unlikely to bring about improvement in measures of adiposity in school-aged children.

Grade I

3. In school-based programs, what is the effectiveness of combined nutrition-education and physical-activity interventions to address childhood overweight?

Conclusion statement: School-based interventions that combined both a physical-activity and a nutrition-education component were diverse, combining different types of interventions for different lengths of time.

Multicomponent school-based interventions that include at least physical-activity and nutrition-education interventions may be effective in improving adiposity measures, although results appear to be heavily dependent on a wide range of intervention design factors, population, and context.

Grade II

健康體位管理種子教師培訓

種子教師培訓能力目標：

1. 使教師具有健康體位促進的相關知識
 2. 能主動帶領健康體位促進社團
 3. 能收集數據進行研究及策略改善
 4. 能帶領學生回饋於健康體位之促進方法及效果
- 培訓完成給予種子教師培訓證明
 - 鼓勵學校成立健康體位促進社團，使其具有正向觀感，讓學童在遊戲中能實踐健康飲食及規律運動。

國小健康食材學習活動

學習單設計

低年級



蔬果著色、食材小卡

- 透過實地接觸蔬果讓學童了解食物原形
- 增加品嚐食物原味意願
- 減少吃過度加工食品、零食等習慣

中年級



六大類食物連連看、營養標示面面觀

- 學習六大類食物分類及營養標示查看
- 了解包裝食品中的糖及鈉含量
- 了解高糖或高鈉食品對健康的影響

高年級



蔬果清洗截切練習 我的餐盤 餐食設計

- 簡易餐食食譜設計
- 包含採購、洗切、烹調等
- 落實健康飲食



Grocery store/ supermarket nutrition education

One activity that may facilitate the achievement of healthful dietary patterns is grocery shopping for healthy foods

Do grocery store tours lead to knowledge gains?

Do grocery store tours lead to behavior change?

What attributes of grocery store tours are associated with health-related outcomes being positively met?

模擬示範教學

乳品區

肉品區

蔬菜區



水果區

- ✓ 聯繫符合上述學習條件之場域
- ✓ 國小低、中、高年級各約10-15位



Garden-based nutrition education

Garden-based nutrition education programs, which have been evaluated in school, afterschool, and larger community settings, are promising for increasing children's **fruit and vegetable preferences and intakes**

Gardening increased children's access to vegetables and reduced their reluctance to try new foods

Life skill behaviorally based nutrition education

Integrating educational messaging with environmental change to make healthy choices easier is essential, as is a focus on programs that teach food purchasing and preparation skills, as well as parenting practices regarding food and activity

The effectiveness of behaviorally based nutrition education across the age groups are needed to reinforce the importance of teaching our children food preparation skills, menu planning, food shopping, and food selection skills

Life skill behaviorally based nutrition education

These skills, previously taught in home economics courses, have largely been phased out of school curricula, and it is time to re-examine their importance as a necessary life skill

IOM recommendations for national nutrition-education curriculum standards for prekindergarten through 12th grade are forthcoming and will be important for promoting evidence based academic content and strategies in support of child health promotion and obesity prevention

謝謝
聆聽

