



臺北醫學大學
TAIPEI MEDICAL UNIVERSITY

108學年度健康促進學校輔導計畫

學校推動健康體位素養導向策略

謝榮鴻 教授

臺北醫學大學

2020/1/6

健康密碼

8 睡足**8**小時

5 天天**5**蔬果

2 螢幕注視少於**2**

1 天天運動**1**小時

0 **0** 含糖飲料







節次	星期一	星期二	星期三	星期四	星期五
導師時間 07:55-08:35	綠	紫	原	Blue	便
第一節 08:40-09:20	數	英	國	國	自
第二節 09:30-10:10	數	本土語	數	國	自
第三節 10:30-11:10	體	自	音樂	英	視覺
第四節 11:20-12:00	國	自	表演	英	社
午餐(12:00~12:35) / 靜息時間(12:35~13:15)					
第五節 13:20-14:00	社	綜合		健	數
第六節 14:10-14:50	社	綜合		體	資訊
第七節 15:10-15:50	書法/閱讀	國		數	國

22:00 -- 06:00 睡眠

06:30 -- 07:00 陸訓

07:10 -- 08:00 泳訓

08:40 -- 12:00 上課

12:00 -- 12:35 午餐

12:35 -- 13:15 靜息時間

13:20 -- 15:50 上課

16:00 -- 18:00 返家/社團/課輔班

18:00 -- 19:30 晚餐

19:30 -- 21:30 功課/家庭時間

21:30 -- 22:00 準備就寢



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8

睡足8小時

睡得飽、精神好、表現好

睡飽才能長高

睡飽有精神，能記更多東西

如何才會睡得飽

我願意睡前不做太過激烈的活動

我願意每天睡滿8小時

我會每天9點以前上床睡覺

睡前不看電視、打電腦、玩電動



睡滿8小時



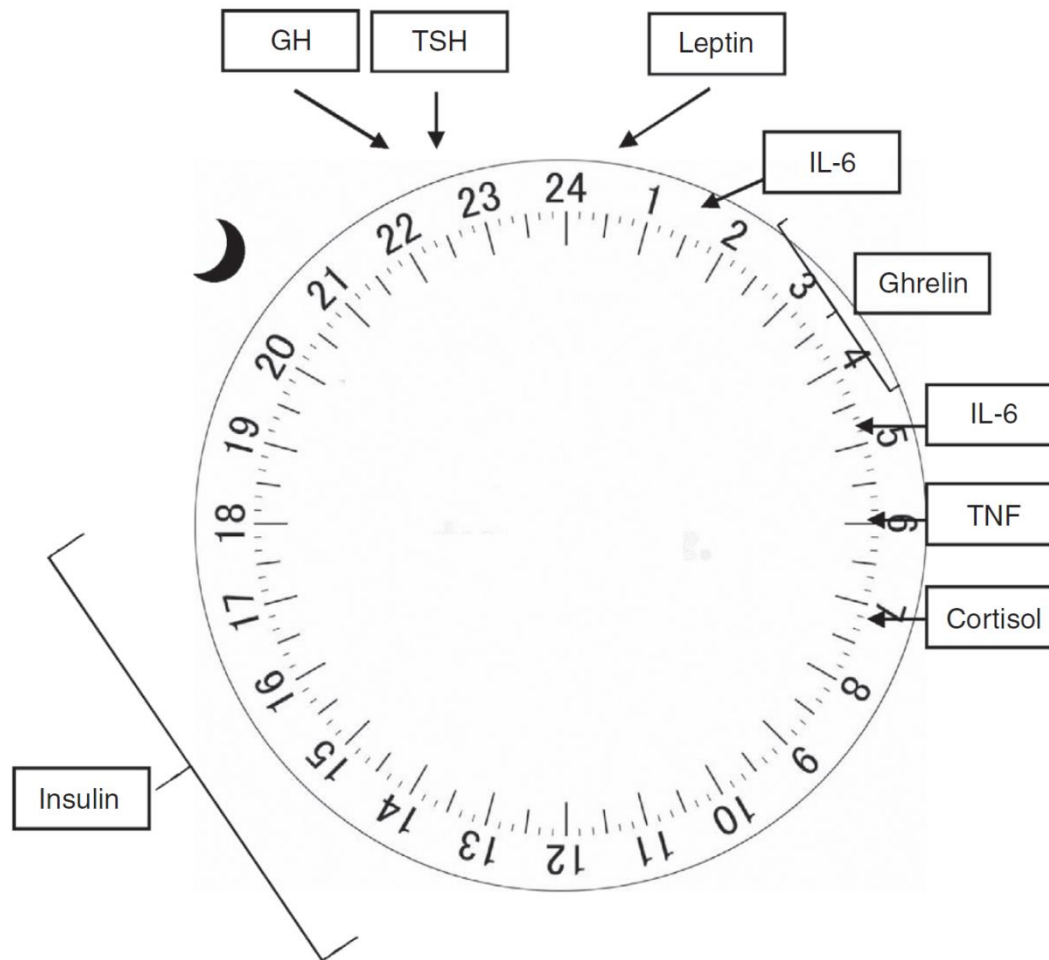
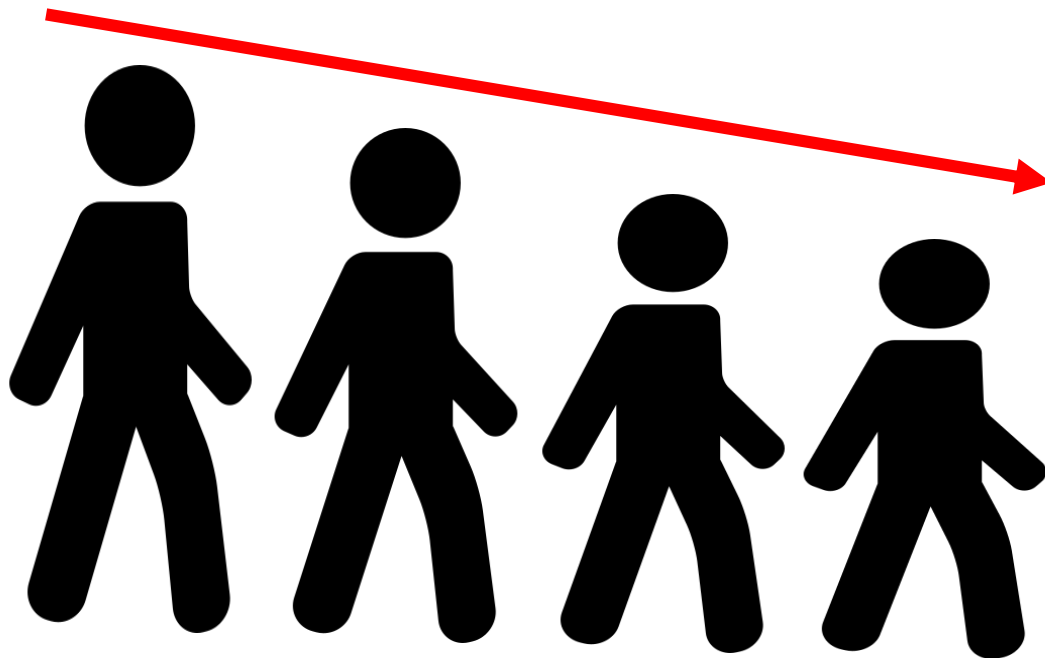


Figure 2 Physiological circadian distribution of hormones and inflammatory factors, considering a hypothetical time of sleep onset at 9 PM (☾). IL-6, interleukin-6; TNF, tumor necrosis factor.

台灣孩童成長趨緩

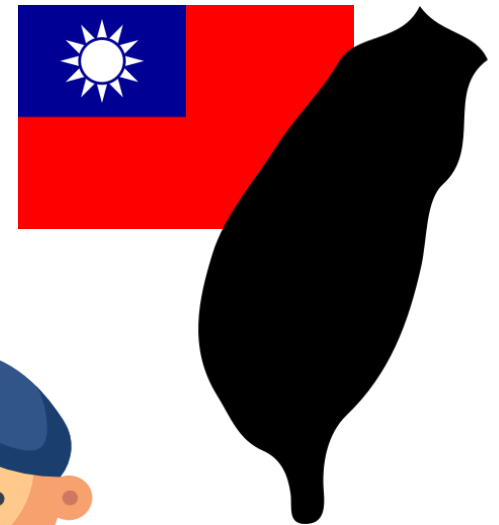
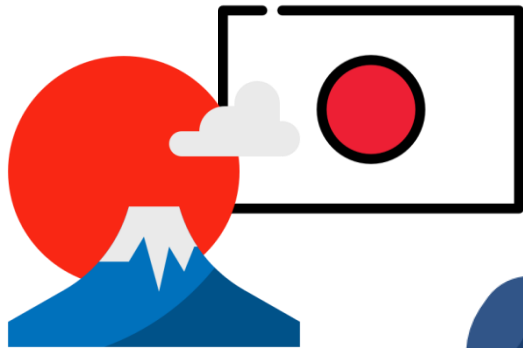
國小孩童平均身高連續四年出現負成長



日本孩童長得比較好!!!!!!

近十年

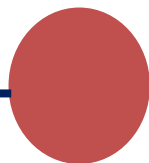
日本11~13歲男童比我國男童高



170



160



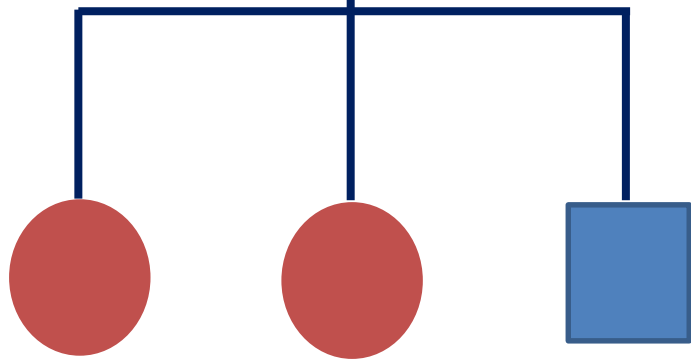
父母親遺傳身高：

男生=[雙親身高總和+11]÷2(±7.5公分)

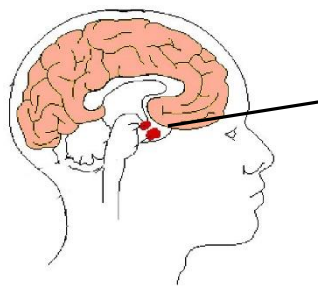
=____(-7.5)~____~____(+7.5)公分

女生=[雙親身高總和-11]÷2(±6公分)

=____(-6)~____~____(+6)公分



159.5 (153.5-165.5) 170.5 (163-178)



Pituitary
gland



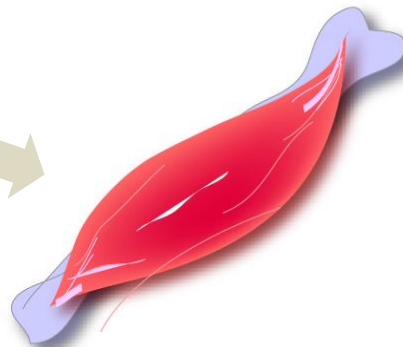
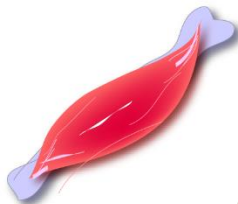
hGH



Nutrients



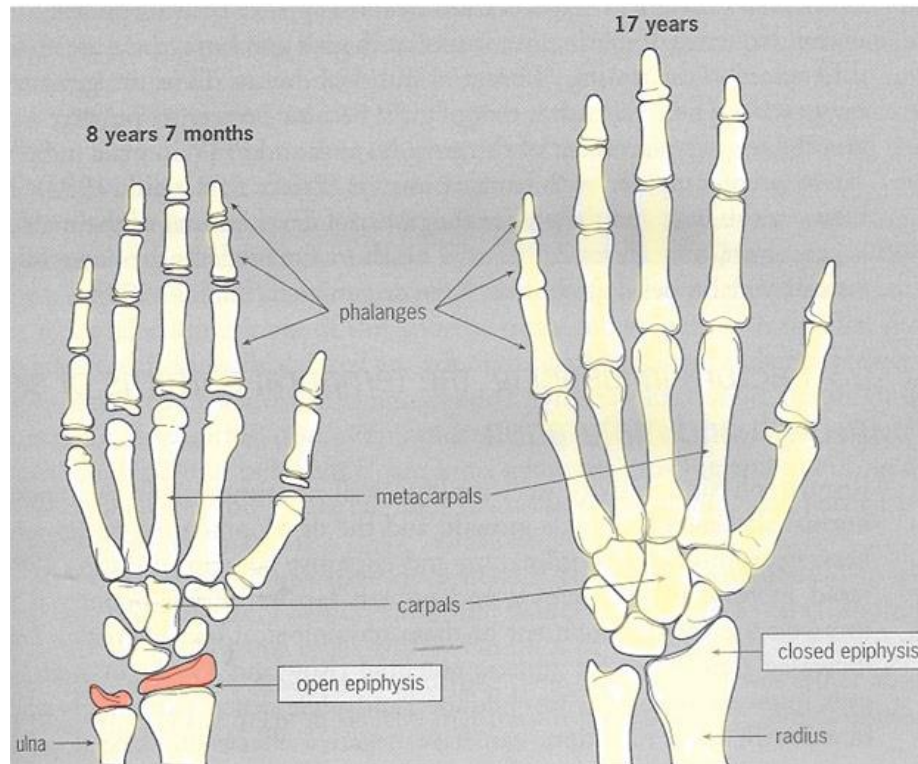
IGF-1

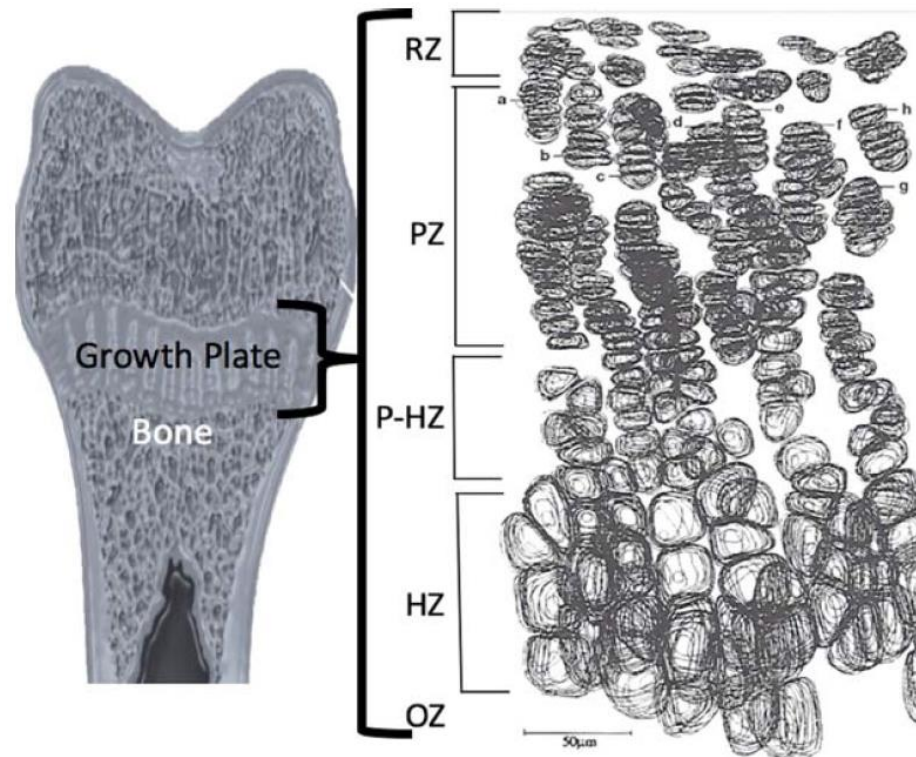
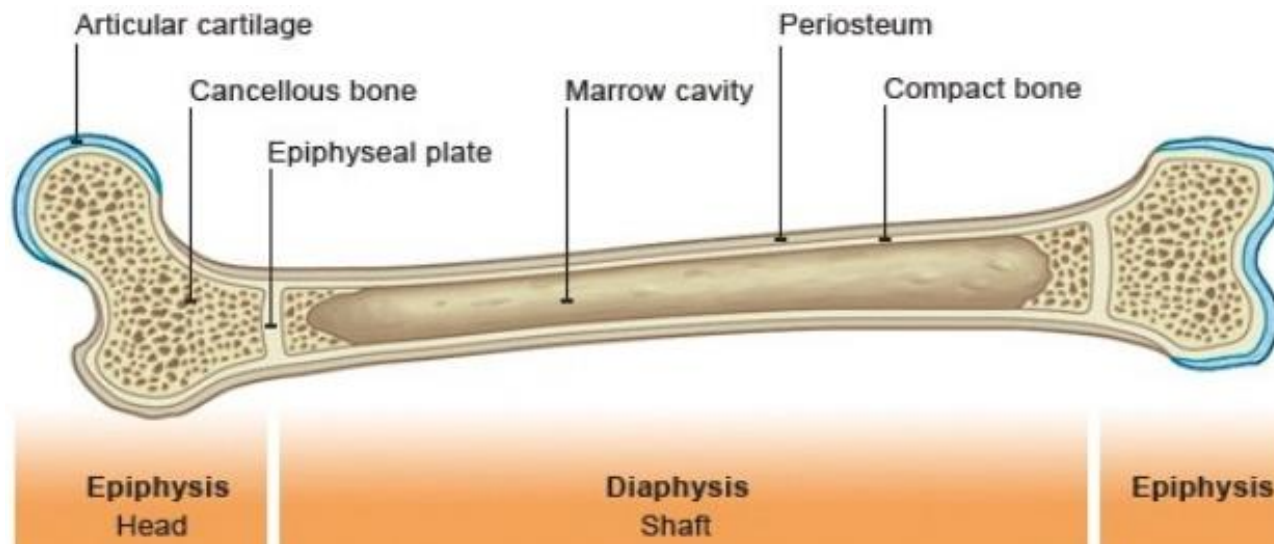


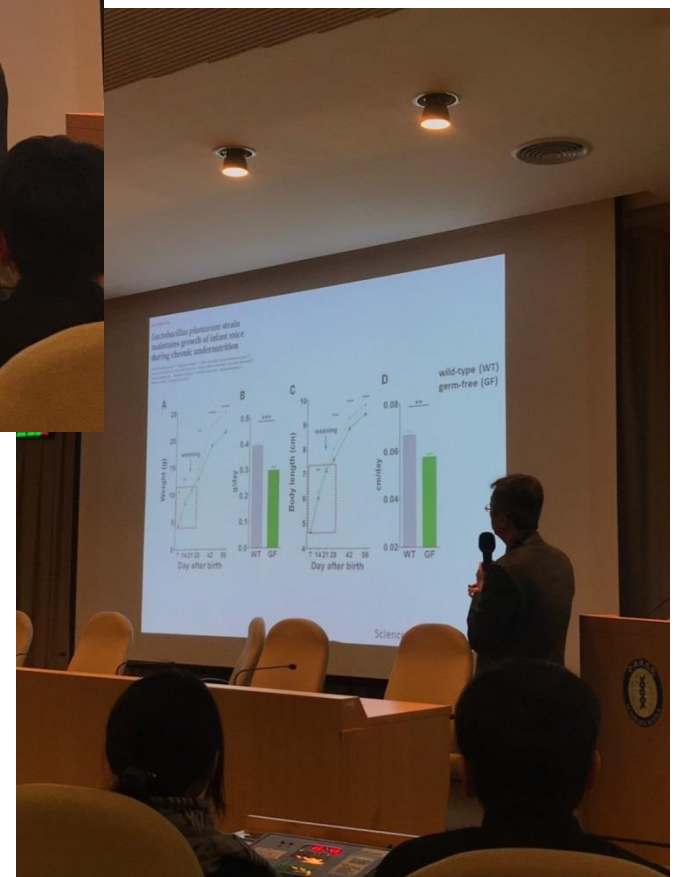
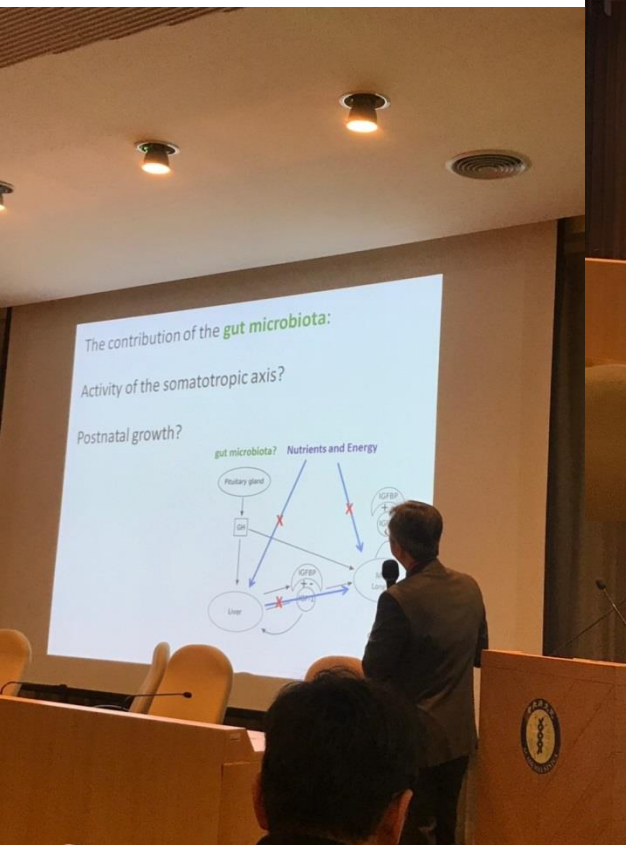
Juvenile
growth

OPEN

CLOSED







5

天天5蔬果

聰明吃

每天要吃滿**5**蔬果

吃油炸及含糖食物飲料不好

我願意吃水果來替代喝果汁

我願意把蛋糕甜點換成蔬菜水果

餐餐蔬菜吃光光

我會把每餐的蔬菜吃光

我會天天吃蔬菜





2 螢幕注視少於2

聰明使用**3C**產品

長時間用電腦跟手機對身體不好

長時間注視螢幕對眼睛不好

看手機與運動我願意選擇運動

我玩手机跟平板不超過**30**分鐘

我每天注視螢幕時間不超過**2**小時



1 天天運動1小時

天天運動1小時

天天運動對身體好

運動會使人心情變好

運動能讓我長高

我下課會選擇離開教室去活動

搭電梯跟走樓梯我會選擇走樓梯

早上起床先拉筋做伸展

我會找父母一起出門運動







0 0 含糖飲料

充足飲用白開水

喝足開水對身體好

喝太多含糖飲料會變胖不健康

每節下課我會提醒自己喝開水

我會不喝含糖飲料

我願意嘗試選擇無糖優酪乳



校園已普遍設立熱食部，但是否開放訂外食，各校規則大不同，例如建中，中午開放每班3位代表外出購買餐點，師大附中開放部分區域領外食，至於松山高中、育成高中禁止訂外食。



師大附中外送車一輛一輛駛入校園。記者張世杰 / 攝影

松山、育成高中禁訂外食

建中學務主任白萬應表示，之前班聯會決議，中午時段學生領取外出證，就能去外面購餐，所以從開學至今，校門口並未出



中午放飯，成功高中門口不再見到家長的身影，到來的則是一輛輛的粉紅熊貓。（攝影 / 趙世勳）

現場直擊》時代不同了！外送經濟夯 粉紅熊貓取代媽媽愛心便當

社會議題

分享文章： f t g+ LINE

趙世勳 2019-09-05 17:11

小 中 大



Types of prevention	Target	Measures
General prevention (primary prevention)	<p>Target group: General public</p> <p>Target: Counteracting the development of obesity</p>	<p>Creating awareness of obesity as an illness</p> <p>Establishing healthy surroundings (e.g. health-promoting school environments)</p> <p>Education and behavioral training in day care centers, schools and through mass media</p> <p>Improving physical activity opportunities in schools and communities</p> <p>Health orientation in politics (e.g. economic and agriculture policies)</p> <p>Removal of advertising in children's TV programming</p> <p>Cooperation of interest groups (e.g. food industries, health insurances, media and sport clubs)</p>

Types of prevention	Target	Measures
Selective prevention (secondary prevention)	<p>Target group: Potentially at-risk group of general public</p> <p>Target: Obesity prevention along with the prevention of associated comorbidities</p>	<p>Early identification of and discussion with at-risk individuals through pediatricians and family doctors or physicians at public health offices</p> <p>Routine checkups for the purpose of offering and including in family-oriented training programs</p>



Types of prevention	Target	Measures
Targeted prevention (tertiary prevention)	<p>Target group: Overweight children and adolescents with high health risks or already obese</p> <p>Target: Weight stabilization and improvement of comorbidities</p>	<p>Interdisciplinary programs and measures (see recommendations under primary and secondary prevention)</p> <p>Support through the above-mentioned measures for general obesity prevention as well as measures of general health promotion</p>

Types of prevention	Target	Measures
Behavior-oriented prevention	<i>Personalized measures:</i> Addressing individual behavior and habits	Education in nutrition Promotion of movement during school lessons as well as educational programs for enhancing physical activities
Community-/environment-based prevention	<i>Context related measures:</i> Facilitating health-related decision making	Provision of facilities and equipment in the school environment (e.g. playgrounds, healthy school meals and snacks)

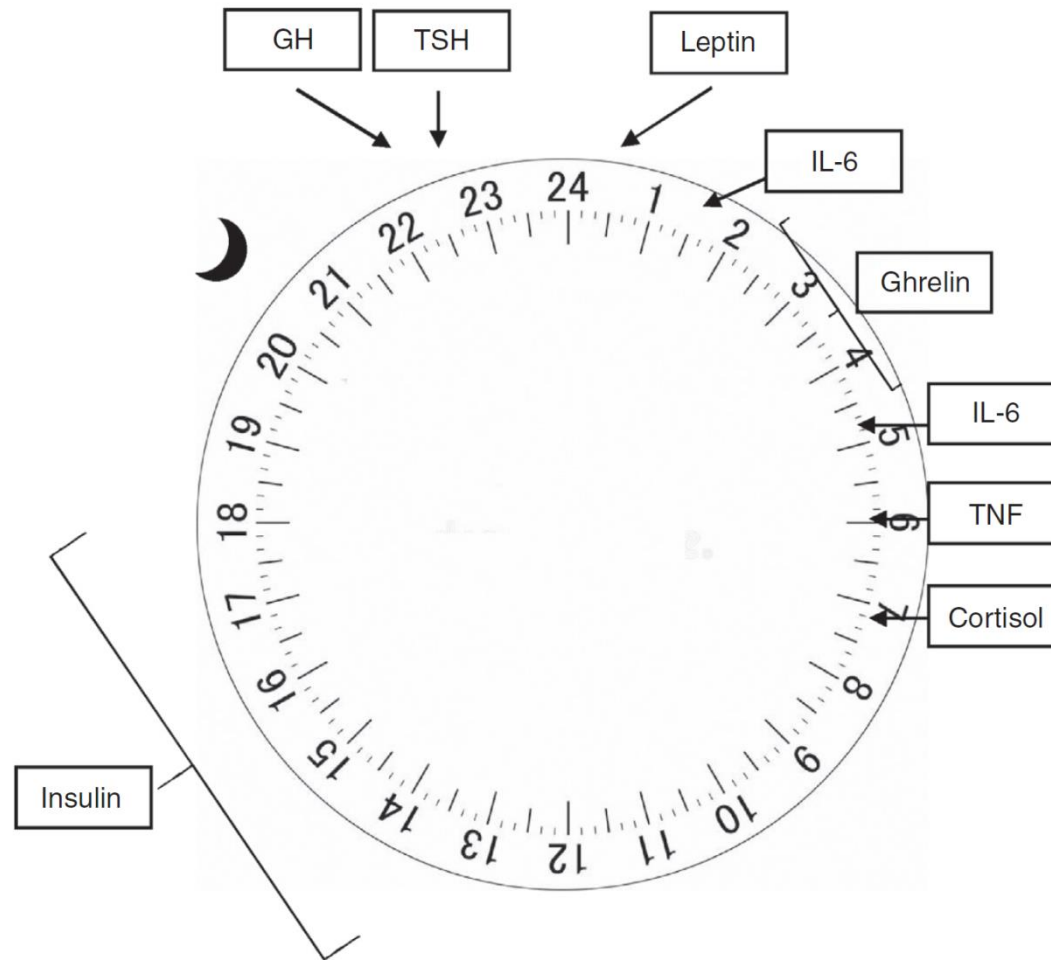


Figure 2 Physiological circadian distribution of hormones and inflammatory factors, considering a hypothetical time of sleep onset at 9 PM (☾). IL-6, interleukin-6; TNF, tumor necrosis factor.

Recommendations for the prevention of obesity and overweight in infants and pre-school children

Nutrition

- By age 1, meals should be taken seated with the family
 - Introduction to new, healthy foods
 - Positive mealtime conditions (e.g. positive atmosphere, no outside distractions: e.g. TV)
 - Varied diet with plenty of beverages (water or unsweetened, sugar-free drinks)
 - Ample plant-based foods (vegetables, fruit, potatoes, whole grain products)
 - Limited animal derived products (milk and milk products, fish, eggs)
 - Very limited added sugar and sweets
 - Careful observation of the sugar content in food and drinks
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Physical activity

- For children 3–5 years: at least 60 min of structured physical activity daily
 - ≥ 3 years: From 60 min to several hours of unstructured physical activity; limit inactivity to less than 60 minutes at a time, outside of sleep
 - School age: a minimum of 60 min of moderate to intensive physical activity daily or at least 10,000 steps per day
 - Adolescence: a minimum of 90 min of moderate to intense physical activity daily or at least 10,000 steps per day
 - Acquisition of basic motor skills as the basis for future physical dexterity and activity
 - Promoting access to indoor and outdoor exercise areas
 - Education of parents and caregivers on the importance of physical activity
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Recommendations for the prevention of obesity and overweight in infants and pre-school children

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Recommendations for the prevention of obesity and overweight in infants and pre-school children

Media consumption

- No TV in children's bedrooms
 - Limit access to media and in general reduction of leisure time spent sitting according to age:
 - For children under 3 years: 0 min
 - For children 3–6 years: 30 min maximum
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Primary prevention

Primary prevention aims to prevent disease or injury before it ever occurs. This is done by preventing exposures to hazards that cause disease or injury, altering unhealthy or unsafe behaviours that can lead to disease or injury, and increasing resistance to disease or injury should exposure occur. Examples include:

- legislation and enforcement to ban or control the use of hazardous products (e.g. asbestos) or to mandate safe and healthy practices (e.g. use of seatbelts and bike helmets)
- education about healthy and safe habits (e.g. eating well, exercising regularly, not smoking)
- immunization against infectious diseases.

Secondary prevention

Secondary prevention aims to reduce the impact of a disease or injury that has already occurred. This is done by detecting and treating disease or injury as soon as possible to halt or slow its progress, encouraging personal strategies to prevent reinjury or recurrence, and implementing programs to return people to their original health and function to prevent long-term problems. Examples include:

- regular exams and screening tests to detect disease in its earliest stages (e.g. mammograms to detect breast cancer)
- daily, low-dose aspirins and/or diet and exercise programs to prevent further heart attacks or strokes
- suitably modified work so injured or ill workers can return safely to their jobs.

Tertiary prevention

Tertiary prevention aims to soften the impact of an ongoing illness or injury that has lasting effects. This is done by helping people manage long-term, often-complex health problems and injuries (e.g. chronic diseases, permanent impairments) in order to improve as much as possible their ability to function, their quality of life and their life expectancy. Examples include:

- cardiac or stroke rehabilitation programs, chronic disease management programs (e.g. for diabetes, arthritis, depression, etc.)
- support groups that allow members to share strategies for living well
- vocational rehabilitation programs to retrain workers for new jobs when they have recovered as much as possible.

	Population	Strategies
Primary prevention General	Population-wide interventions that include youth of all body sizes or weight	Eating and physical-activity messages or programs intended to prevent incidence of overweight/obesity and/or provide a supportive environment for weight maintenance
Secondary prevention Selective	Overweight or obese youth with no weight-related comorbidities	More structured and involved eating and physical-activity programs intended to help overweight and obese youth obtain a healthy weight; may require medical approval or limited supervision
Tertiary prevention Targeted	Overweight or obese youth with comorbidities Severely obese youth	Intensive and comprehensive treatments for overweight and obese youth conducted under medical supervision with a focus on resolving weight-related comorbidities or at least decreasing their severity

^aNA=not applicable.

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

國小健康食材學習活動

低年級營養教育教學延伸教材：

- 教學目標：認識生鮮蔬果、均衡飲食觀念
- 場域學習：找出指定食材、完成設計我的餐盤



↑ 繪畫食材



← 繪畫食材



↑ 我的餐盤分享



→ 食材尋寶完成！

國小健康食材學習活動

中年級營養教育教學延伸教材：

- 教學目標：認識營養標示、找出包裝食品含糖
- 場域學習：閱讀包裝食品營養標示、計算含糖量

隨糖任務 **SECRET**

請填妥隨糖任務卡

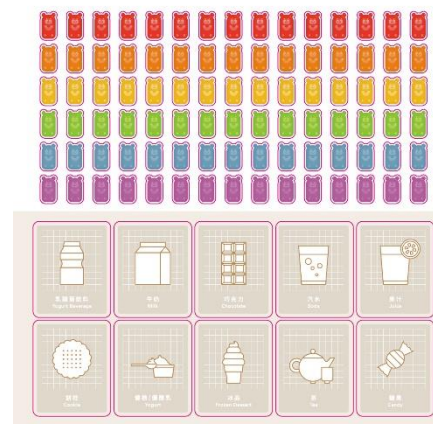
每份重量	7.3 公克
每包裝含 10 份	
每份	每日營養素
熱 量	29.0 大卡
蛋白質	0.4 公克
脂 肪	0.0 公克
飽和脂肪	0.0 公克
反式脂肪	0.0 公克
碳水化合物	6.7 公克
糖	5.0 公克
鈉	0.0 毫克
膳食纖維	0.0 公克

1. 2. 3. 4. 5. 6.

找出屬於你的黑熊任務。
每天糖量不超標，
守護健康哦！

每日黑熊糖量建議

	糖低	糖高
男生	10	12
女生	10	11



糖量貼紙

產品繪圖

教材 L 夾

國小健康食材學習活動

中年級營養教育教學延伸教材：

- 教學目標：認識營養標示、找出包裝食品含糖
- 場域學習：閱讀包裝食品營養標示、計算含糖量



← 觀察產品營養標示



↑ 協助學生含糖量計算

↑ 營養標示閱讀教學



紀錄產品及計算含糖量→



← 貼上糖量貼紙

國小健康食材學習活動

高年級營養教育教學延伸教材：

- 教學目標：以均衡飲食設計食譜
- 場域學習：採購食材、製備膳食



教材 L 夾



食譜作法

1. 食材洗淨備料：小雞胸肉半磅、洋蔥切丁、花椰菜切小朵狀 (5分)
2. 煮一鍋熱水，沸騰後放入鹽巴，川燙花椰菜 (2分) 與義大利麵 (10分)
3. 雞胸肉攪打成泥狀，加入鹽巴、黑胡椒調味，再搓成圓球狀3顆 (5分)
4. 平底鍋預熱加入油，將肉丸煎至上色後盛盤備用 (10分)
5. 洋蔥丁炒軟後 (5分)，加入小雞胸肉泥炒勻 (5分)
6. 加入紅醬拌一拌水至鍋中，醬汁濃稠後加入雞肉丸、花椰菜與鹽粒均勻拌炒 (10分)
7. 最後灑上九層塔、鹽巴、黑胡椒調味即可完成

食譜材料	採買量	烹飪量
<input type="checkbox"/> 雞胸肉	Chicken	1 盒 3 磅
<input type="checkbox"/> 義大利麵	Pasta	1 包 120 根
<input type="checkbox"/> 小番茄	Cherry Tomato	1 盒 9 顆
<input type="checkbox"/> 洋蔥	Onion	1 顆 1/8 顆
<input type="checkbox"/> 花椰菜	Broccoli	1 顆 9 朵
<input type="checkbox"/> 九層塔	Basil	1 包 1 枝
<input type="checkbox"/> 蕃茄醬紅醬	Tomato Sauce	1 罐 5 湯匙
<input type="checkbox"/> 橄欖油	Olive Oil	- 50 元大小
<input type="checkbox"/> 鹽巴	Salt	- 5 元大小
<input type="checkbox"/> 黑胡椒	Pepper	- 1 元大小

熱量	全穀雜糧類	豆魚蛋肉類	蔬菜類
600 kcal	3	3	1.5
	水果類	乳品類	油脂與堅果種子類
	0.5	0	3



食譜卡



食譜作法

1. 食材洗淨備料：小黃瓜、胡蘿蔔刨成絲 (5分)
2. 雞蛋打勻，加入胡蘿蔔絲、鹽巴、黑胡椒攪勻 (5分)
3. 熱鍋後加入 50 元大小的油，將蛋液煎熟後，盛盤備用 (5分)
4. 放入蛋餅皮煎至表皮金黃，再放入小黃瓜、鮭魚、起司片 (7分)
5. 待起司片融化，即可將蛋餅捲起完成

食譜材料	採買量	烹飪量
<input type="checkbox"/> 蛋餅皮	Burrito	1 包 1 個
<input type="checkbox"/> 雞蛋	Egg	1 盒 1 顆
<input type="checkbox"/> 水燻鮭魚	Tuna	1 罐 3 湯匙
<input type="checkbox"/> 小黃瓜	Cucumber	1 盒 1/4 根
<input type="checkbox"/> 胡蘿蔔	Carrot	1 根 1/2 根
<input type="checkbox"/> 起司片	Cheese	1 包 1 片
<input type="checkbox"/> 橄欖油	Olive Oil	- 50 元大小
<input type="checkbox"/> 鹽巴	Salt	- 1 元大小
<input type="checkbox"/> 黑胡椒	Pepper	- 1 元大小

熱量	全穀雜糧類	豆魚蛋肉類	蔬菜類
500 kcal	2	2	1
	水果類	乳品類	油脂與堅果種子類
	0	0.5	3



教材 L 夾

國小健康食材學習活動

高年級營養教育教學延伸教材：

- 教學目標：以均衡飲食設計食譜
- 場域學習：採購食材、製備膳食



↑ 食材尋寶、採買 ↑



食材



依照食譜卡
領取食材



食材洗切、烹調



義大利麵擺盤
作品名稱：醜不拉噠花媽



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?

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