

營養和健康品質

(Nutrition and Quality of Health)

白小良(Hsiao-Liang Pai)

白小良(Hsiao-Liang Pai)

學歷:

- 2009-現今 美國紐約哥倫比亞大學教育學院, 營養教育博士候選人
- 1989-1991 美國紐約哥倫比亞大學教育學院, 營養教育碩士
- 1987-1989 美國紐約哥倫比亞大學, 公共衛生碩士
- 1986-1987 美國紐約哥倫比亞大學醫學院, 人類營養學碩士
- 1977-1979 台灣文化大學, 食品營養學士
- 1974-1977 台灣實踐家政專科學校, 食品營養學系畢業

經歷:

- 1996-1998 洛山磯”傳聲雜誌”, 專欄作者
- 1989-1992 美國哥倫比亞大學醫學院皮膚科, 研究助理
- 1987-1988 美國哥倫比亞大學醫學院癌症研究中心, 研究助理
- 1981-1986 台灣馬偕醫院臨床, 營養組長
- 1979-1981 台灣馬偕醫院, 營養師
- 1979-1984 台灣羅東聖母護校, 膳食療養學講師
- 1979-1984 台灣文化大學, 膳食療養學助教

著作:

- 1.“家庭營養師” - 1999 (漢光文化出版社, 中文版)
- 2.“健康人美食” - 1998 (讀者文摘出版, 中文版)
- 3.“現代保健食譜” - 1987 (漢光文化出版社, 中文和英文版)
- 4.“嬰幼兒營養食譜” - 1985 (漢光文化出版社, 中文和英文版)
- 5.“飲食與營養” - 1984(世界文物出版社, 中文版)

何謂營養工作？

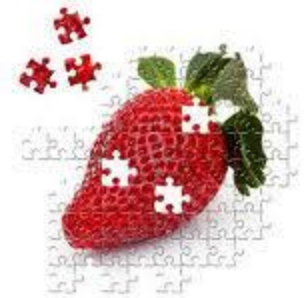
- (1) 爲什麼選擇營養爲個人專業
- (2) 營養工作的內容(計算熱量、營養素、份量控制，…)

營養師是什麼樣的人？

- 身材好的人
- 吃得很健康, 只吃健康食物的人
- “在吃的方面,和一般人過不去的人”

營養專業人員是一個藝術工作者

如何將所有生硬,堅深,繁瑣的
生物學，營養學，生理學，心理學，化學，食品科學，行為科學，人類學，病理學，流行病學，公共衛生....
連綴在一起
作出一幅美好而容易理解的畫面

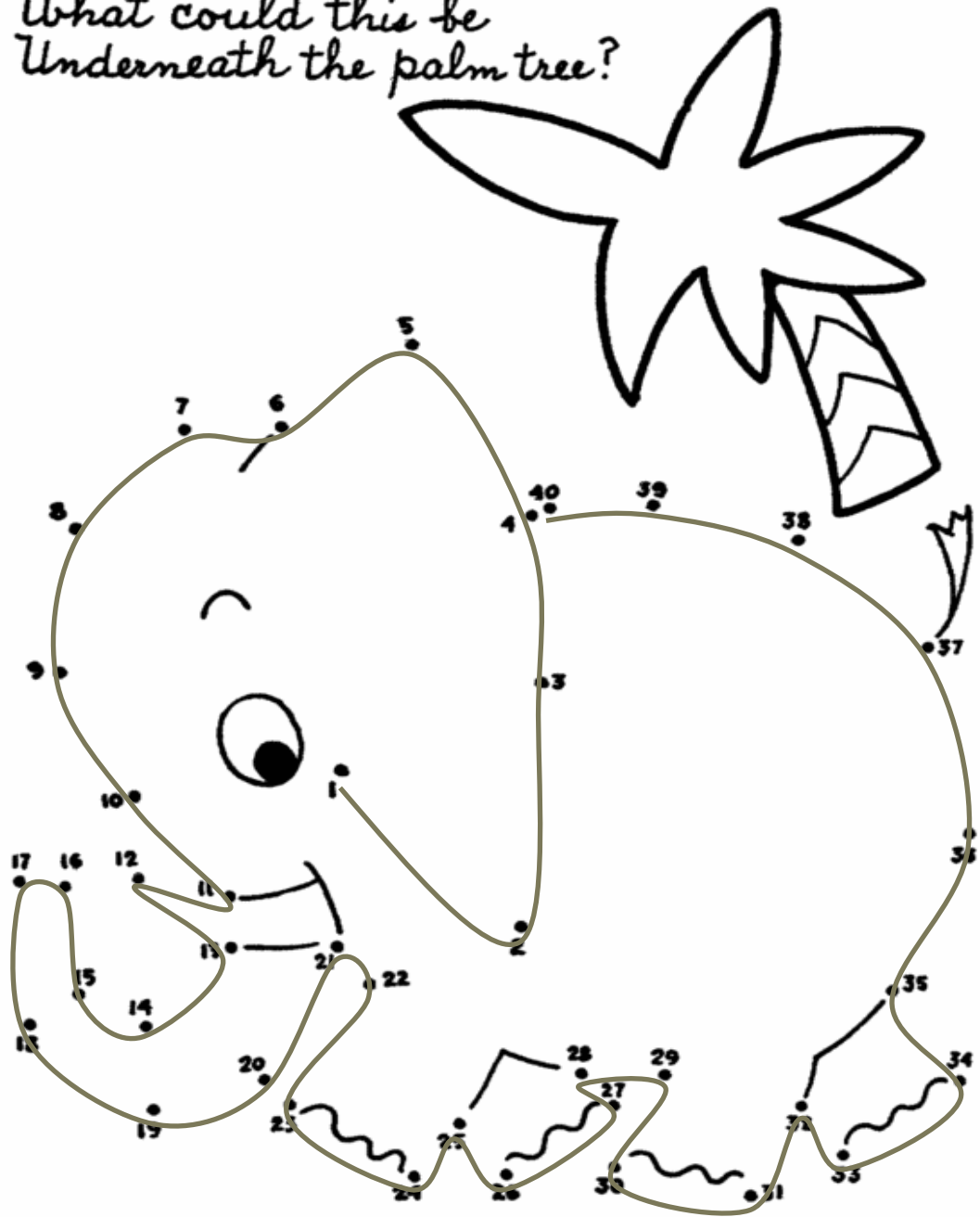




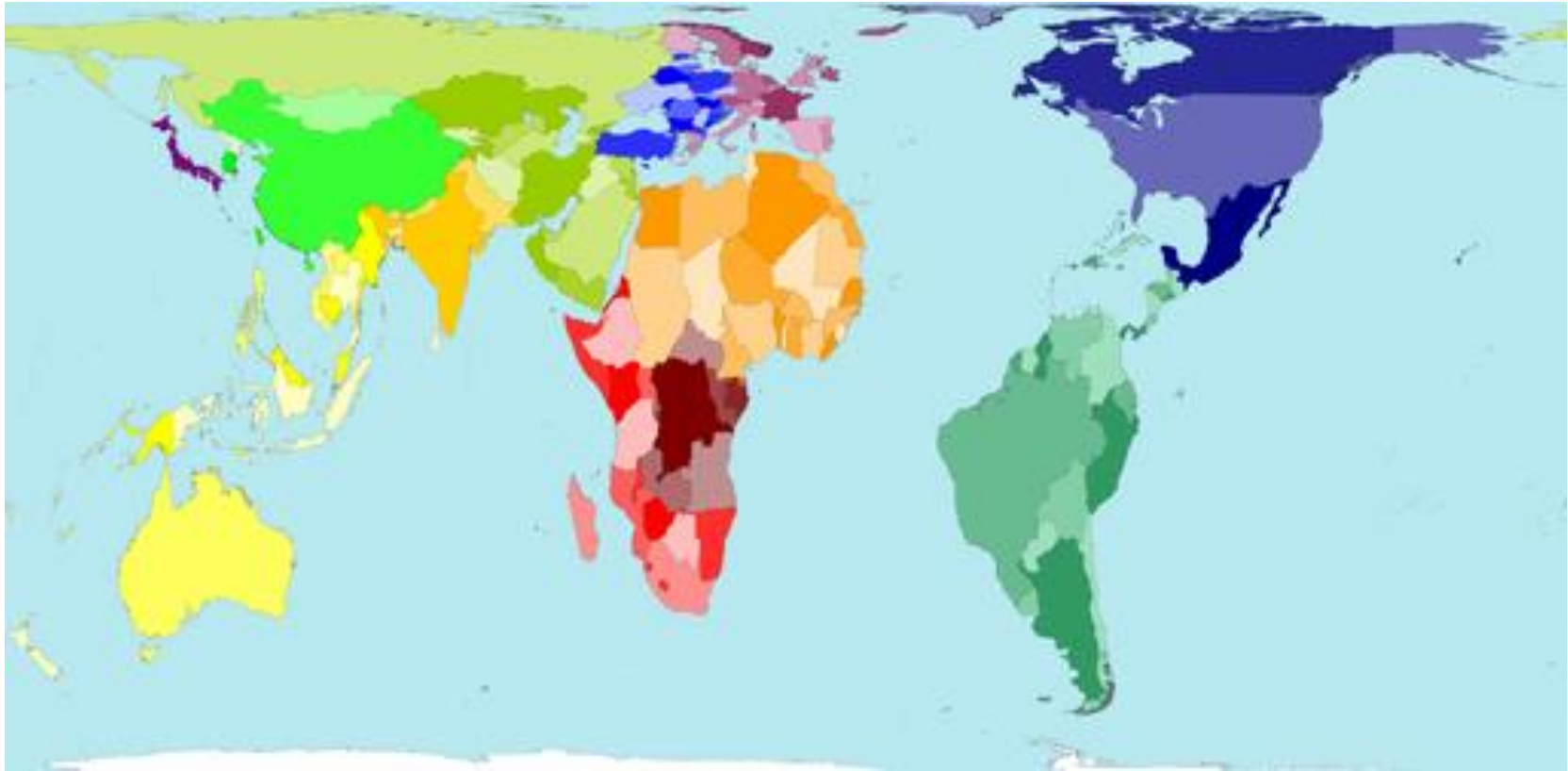


NUTRITION

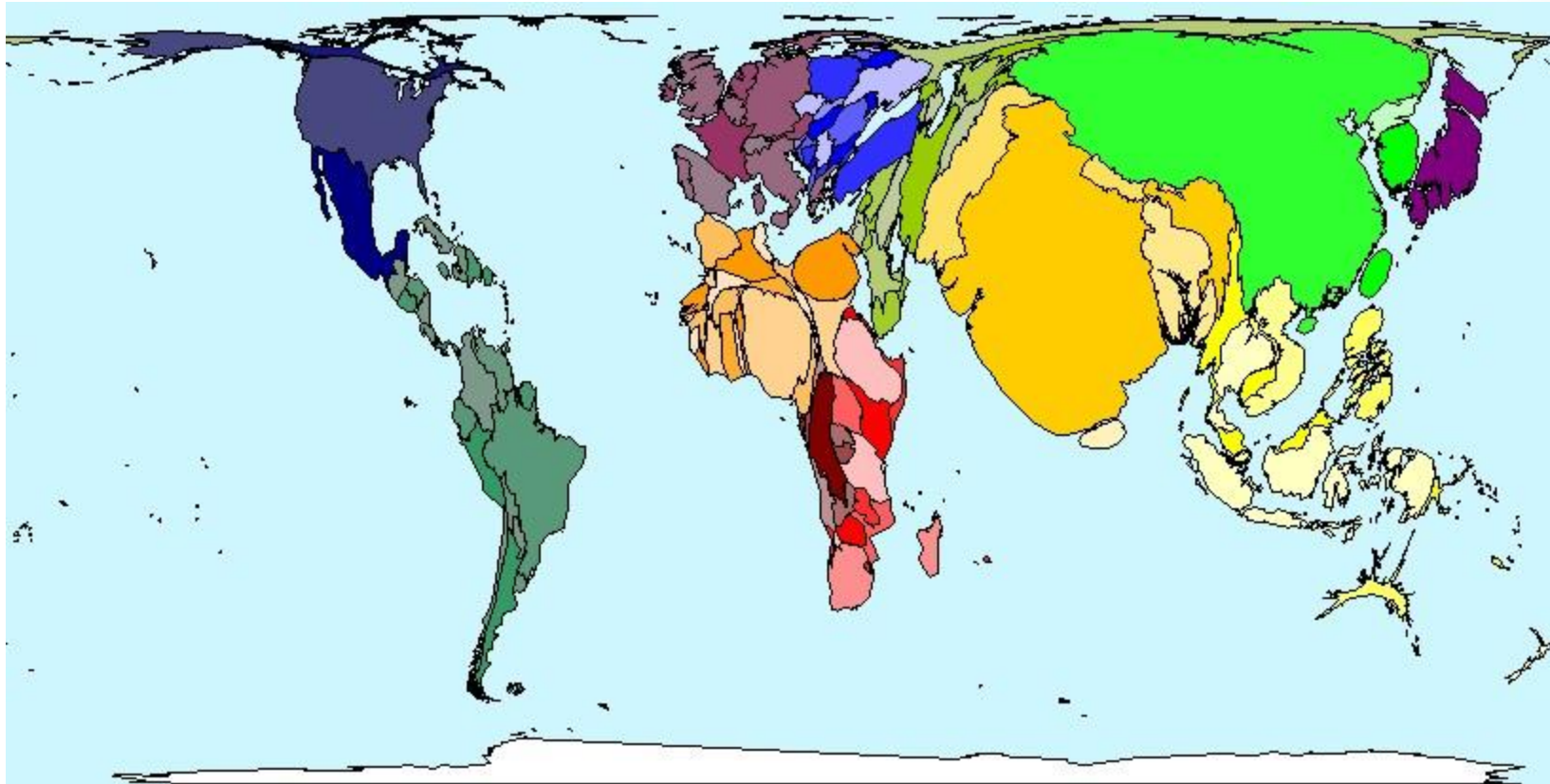
What could this be
Underneath the palm tree?



Land Area



Total Population



MOST PEOPLE

Rank	Territory	Value
1	China	1295
2	India	1050
3	United States	291
4	Indonesia	217
5	Brazil	176
6	Pakistan	150
7	Russian Federation	144
8	Bangladesh	144
9	Japan	128
10	Nigeria	121

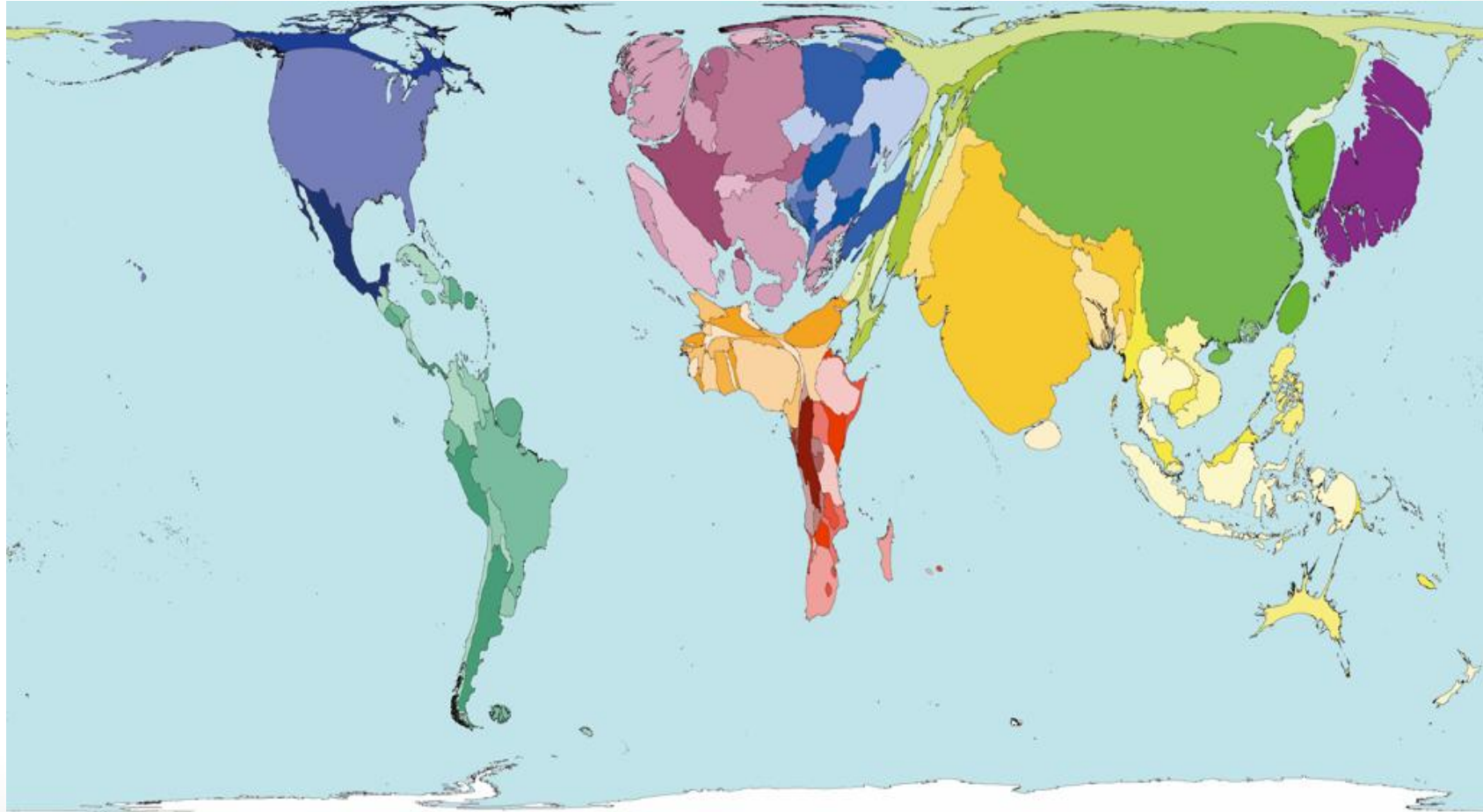
2005年中國大陸，台灣和亞裔美國人十大死亡原因

順位	中國大陸	台灣	亞裔美國人
1	惡性腫瘤	惡性腫瘤	惡性腫瘤
2	腦血管疾病	腦血管疾病	心臟疾病
3	心臟疾病	心臟疾病	腦血管疾病
4	支氣管炎、肺氣腫及氣喘	糖尿病	事故傷害
5	事故傷害	事故傷害	糖尿病
6	消化系統疾病*	肺炎	肺炎
7	內分泌疾病	慢性肝病及肝硬化	支氣管炎、肺氣腫及氣喘
8	腎炎、腎徵候群及腎性病變	腎炎、腎徵候群及腎性病變	腎炎、腎徵候群及腎性病變
9	精神病	自殺	自殺
10	神經系統疾病	高血壓性疾病	阿爾茨海默氏症的疾病

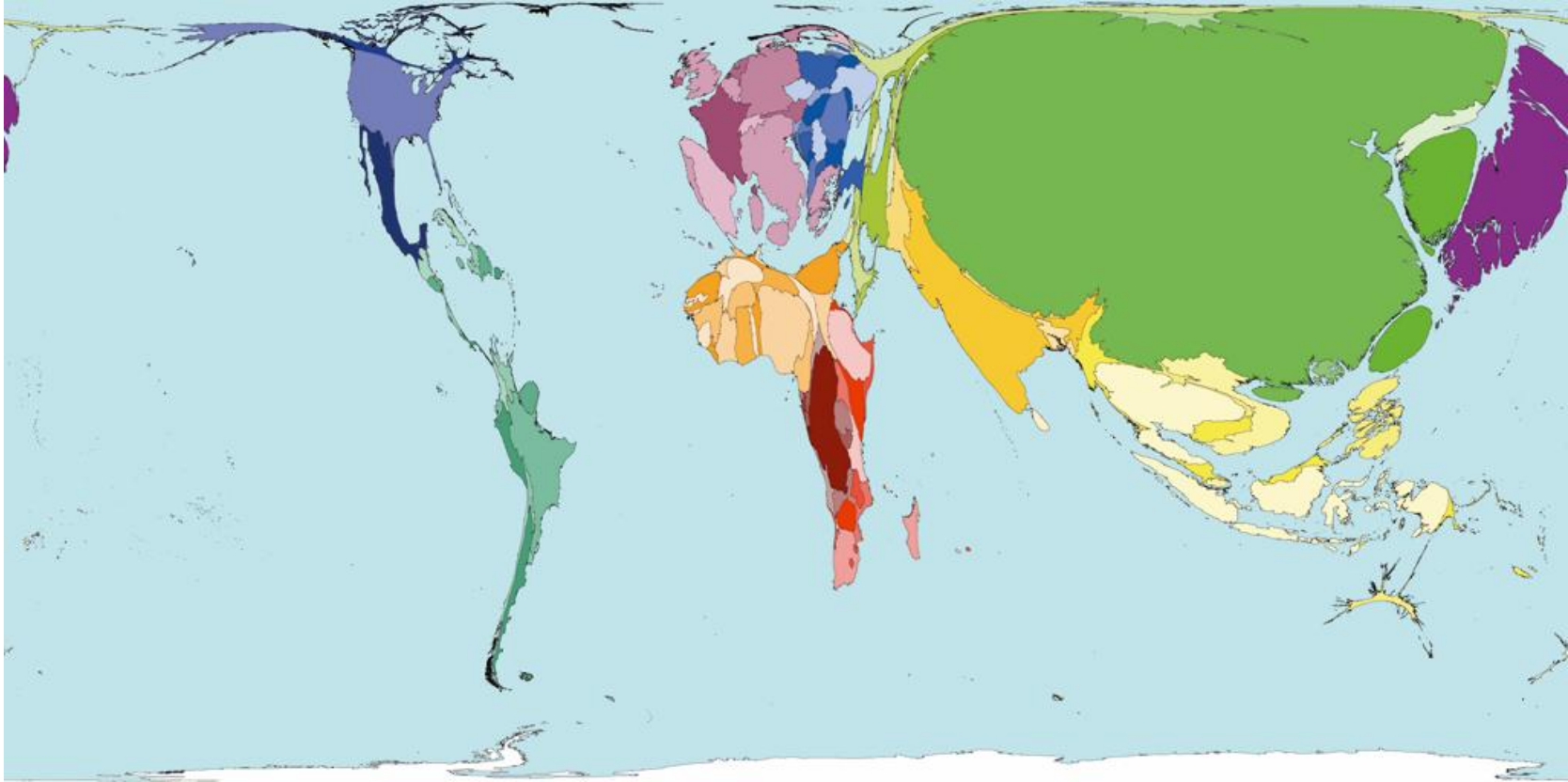
■ 和 ■ : 與營養有關的疾病

■ : 與肥胖有關的疾病

All Cancer Deaths



Liver Cancer Deaths



現代人健康問題源於:

1. 飲食不當
2. 睡眠品質差
3. 缺乏運動
4. 生活壓力

造成身體內部發炎, 導致各種的慢性疾病

(糖尿病、心臟血管疾病、惡性腫瘤、腎炎腎徵候群、自體免疫性疾病、關節炎、痛風)

營養工作落實的困難

- (1) 營養知識的教育不足
- (2) 飲食行為的改變
- (3) 認知性
- (4) 價值觀, 投資報酬率醫療費用, 有機食品(質優, 量少), 外食花費
- (5) 媒體主導

SUPER BATTLE OVER SUPERSIZE



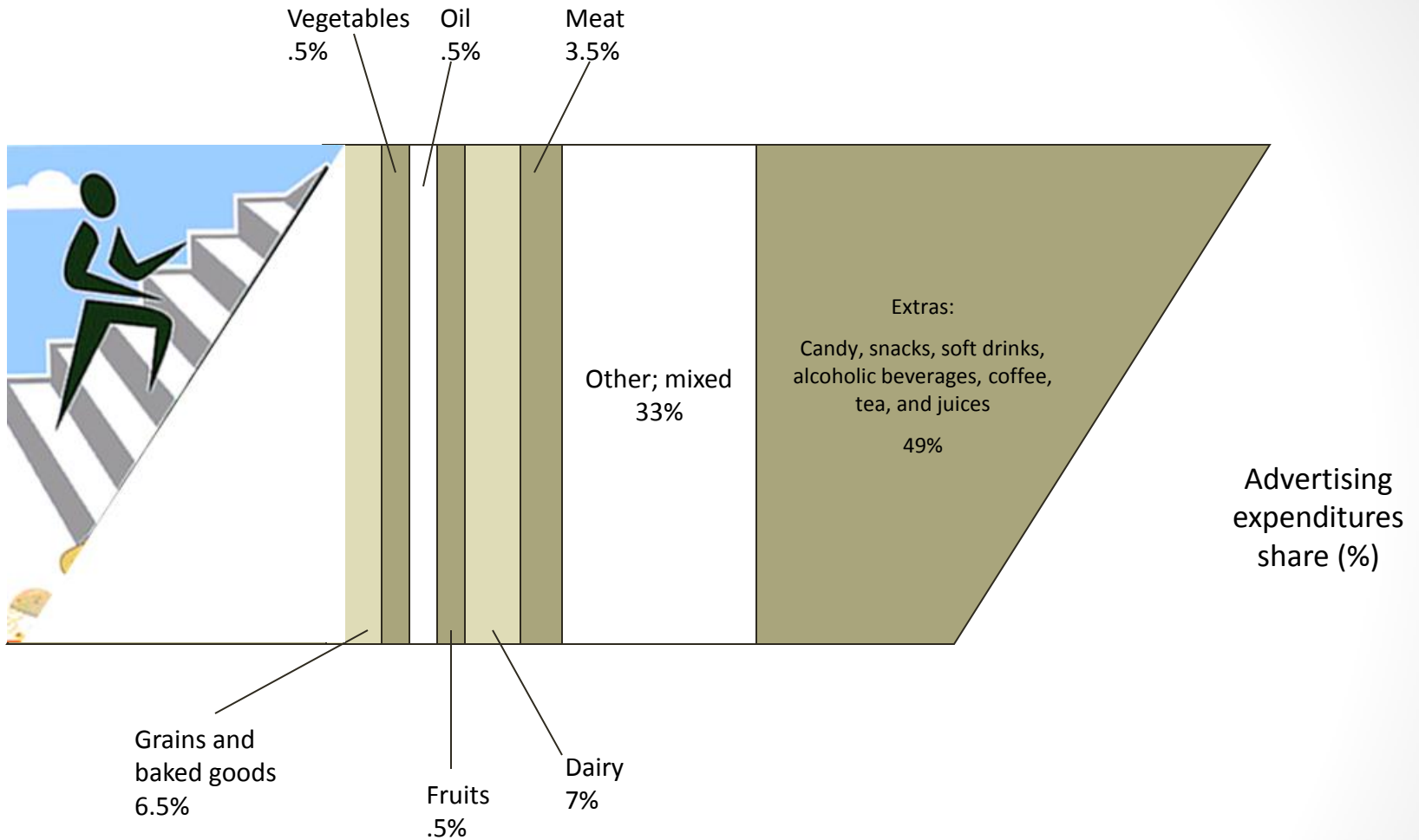
Mayor's bid to ban
large sodas draws
allies and foes

Page 3



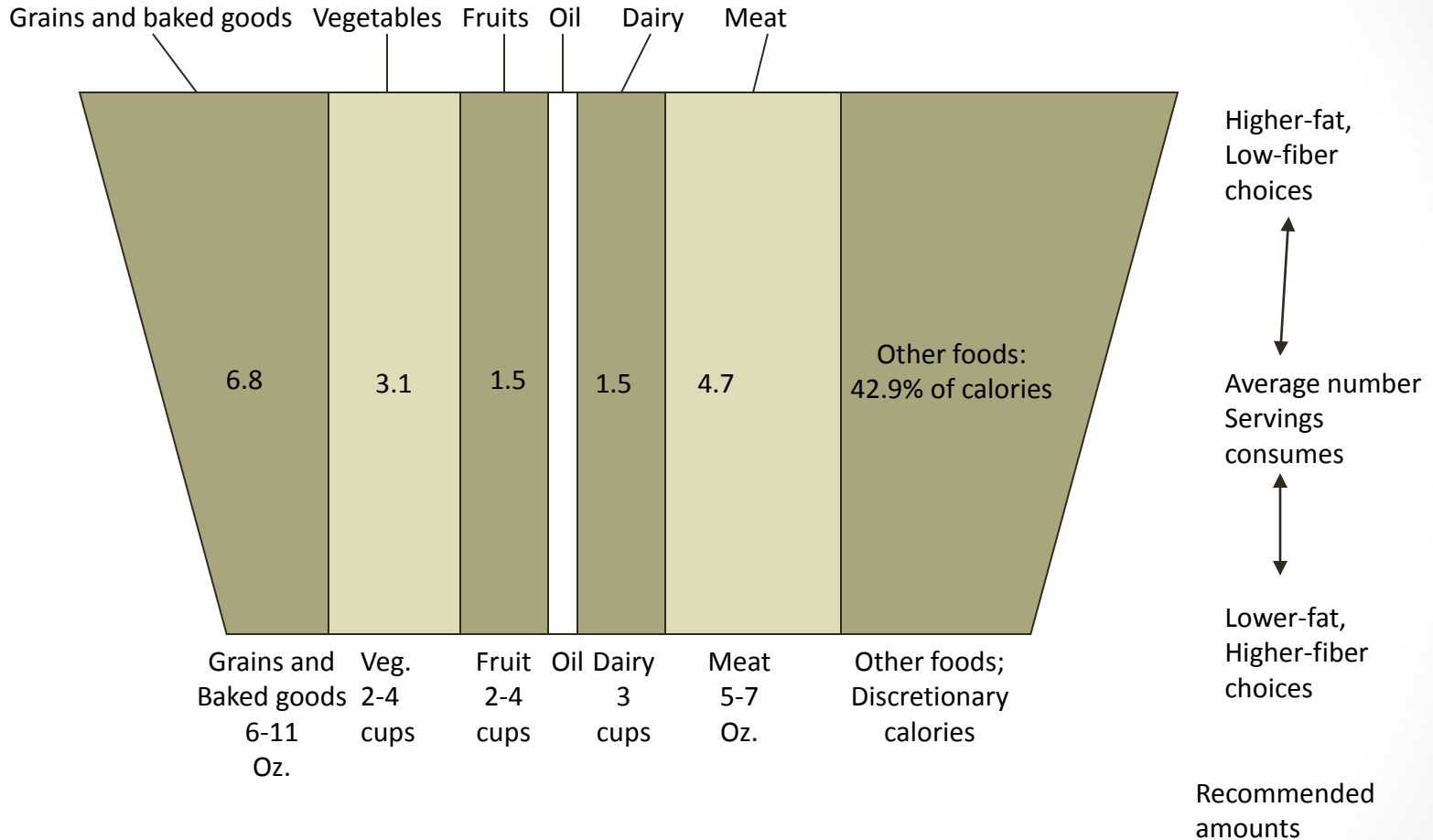
A child can barely fit her hands around this 32-ounce sugary drink, which would be deemed too big under the mayor's proposed rules.

(JANEY BOROVIK)



Food Marketing pyramid: Advertising expenditures by food manufacture

Food consumption pyramid: average servings consumed by the U.S. population compared with MyPyramid recommendations



營養工作從何做起？

- (1) 理論架構的探討
- (2) 工具的使用 (飲食指南, you tube)
- (3) 生活化, 適當語言, 敏感度
- (4) 思考角度的變更

點 v.s. 面,

正 v.s. 負 (healthy v.s. unhealthy)

Nutrition Education as facilitating Why to and How to Take Action

(I) The Motivational, Pre-action: A Focus on **Why to** Take Action

-nutrition studies about health outcomes of taking action, such as calcium and bone health, or antioxidants and reduced cancer risk.

(II) The Action Phase : A Focus on **How-to** Take action

-such as knowing the key features of MyPyramid, being able to read food label, shopping wisely, being able to practice safe food preparation methods...

營養工作的層面小自個人,大至族群. 討論的議題將含括:

- (1) 擴大營養專業的視野: 個人-民眾-族群-人類
- (2) 回到人類基本的需求: 人體需要, 兒童飲食行爲, 家庭結構, 基本飲食技能
- (3) 自我文化認同: 適當的語言, 飲食文化
- (4) 專業層面的共識: 社會環境的敏感度, 研究資訊, 資訊篩選
- (5) 效益提供大眾適當的預防, 保健知識 (非專業語言)

營養工作的層面小自個人,大至族群. 討論的議題將含括:

(1) 擴大營養專業的視野: 個人-民眾-族群-人類

(2) 回到人類基本的需求: 人體需要, 兒童飲食行爲, 家庭結構, 基本飲食技能

(3) 自我文化認同: 適當的語言, 飲食文化

(4) 專業層面的共識: 社會環境的敏感度, 研究資訊, 資訊篩選

(5) 效益提供大眾適當的預防, 保健知識 (非專業語言)

Planet



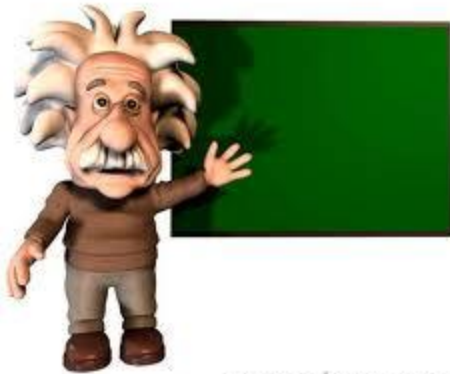
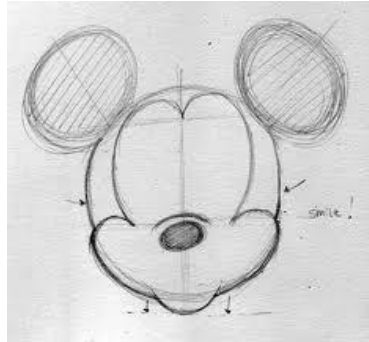
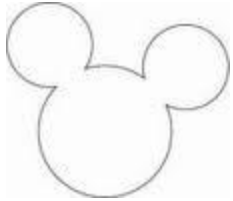
Population

People

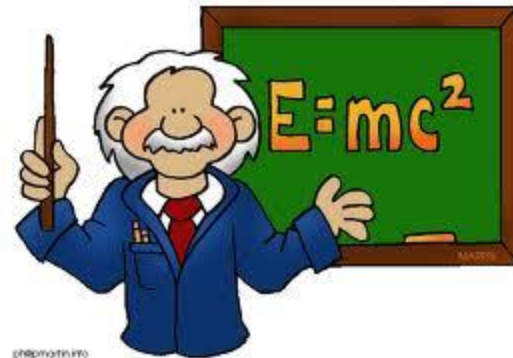
Persons



Mickey Mouse v.s. *Einstein*



SCIENCEPHOTOLIBRARY



SHREYASPHOTO

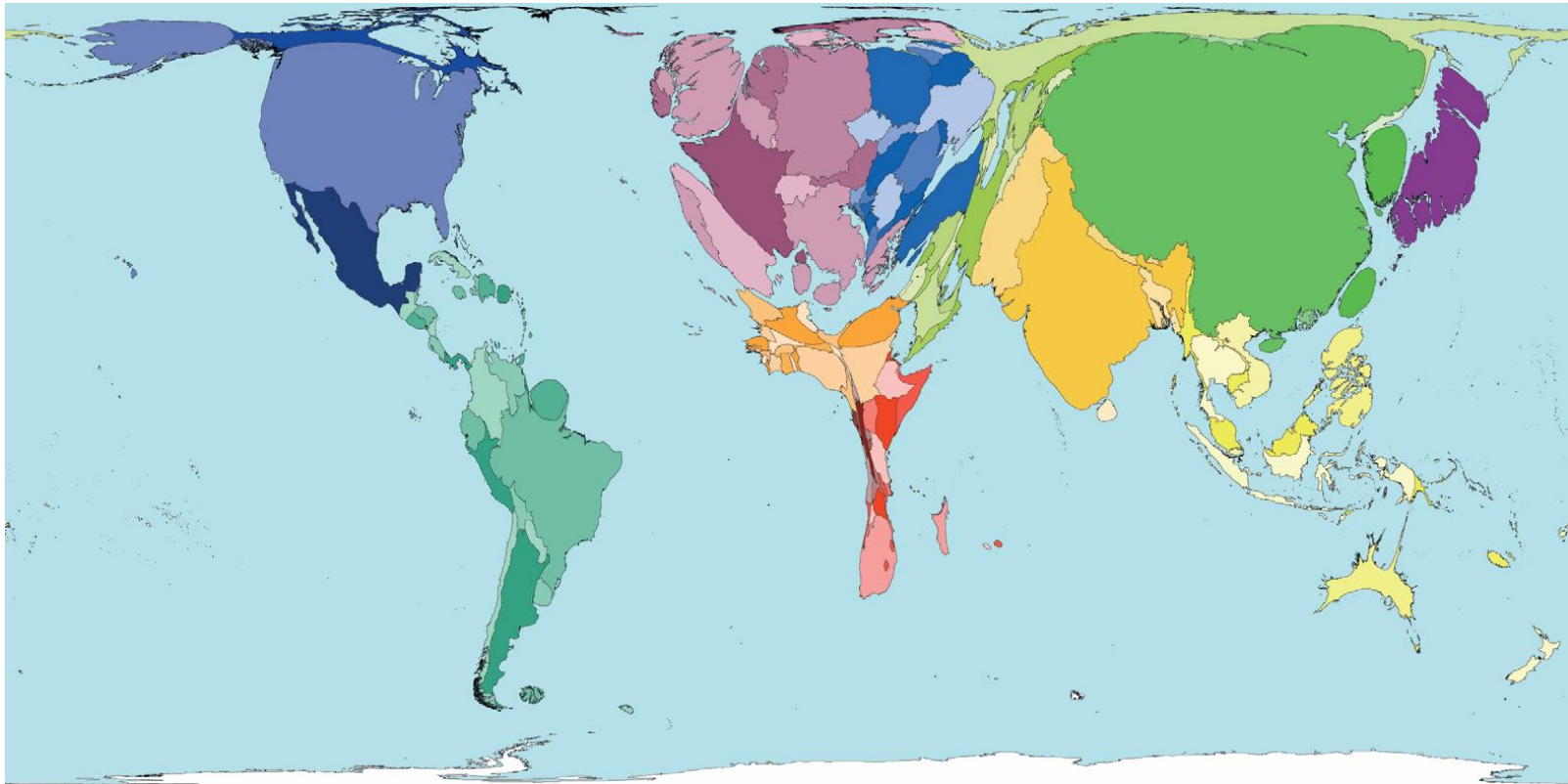
The top of ten leading causes of death among Chinese Americans are

cancer, cardiovascular disease, heart disease, and diabetes.

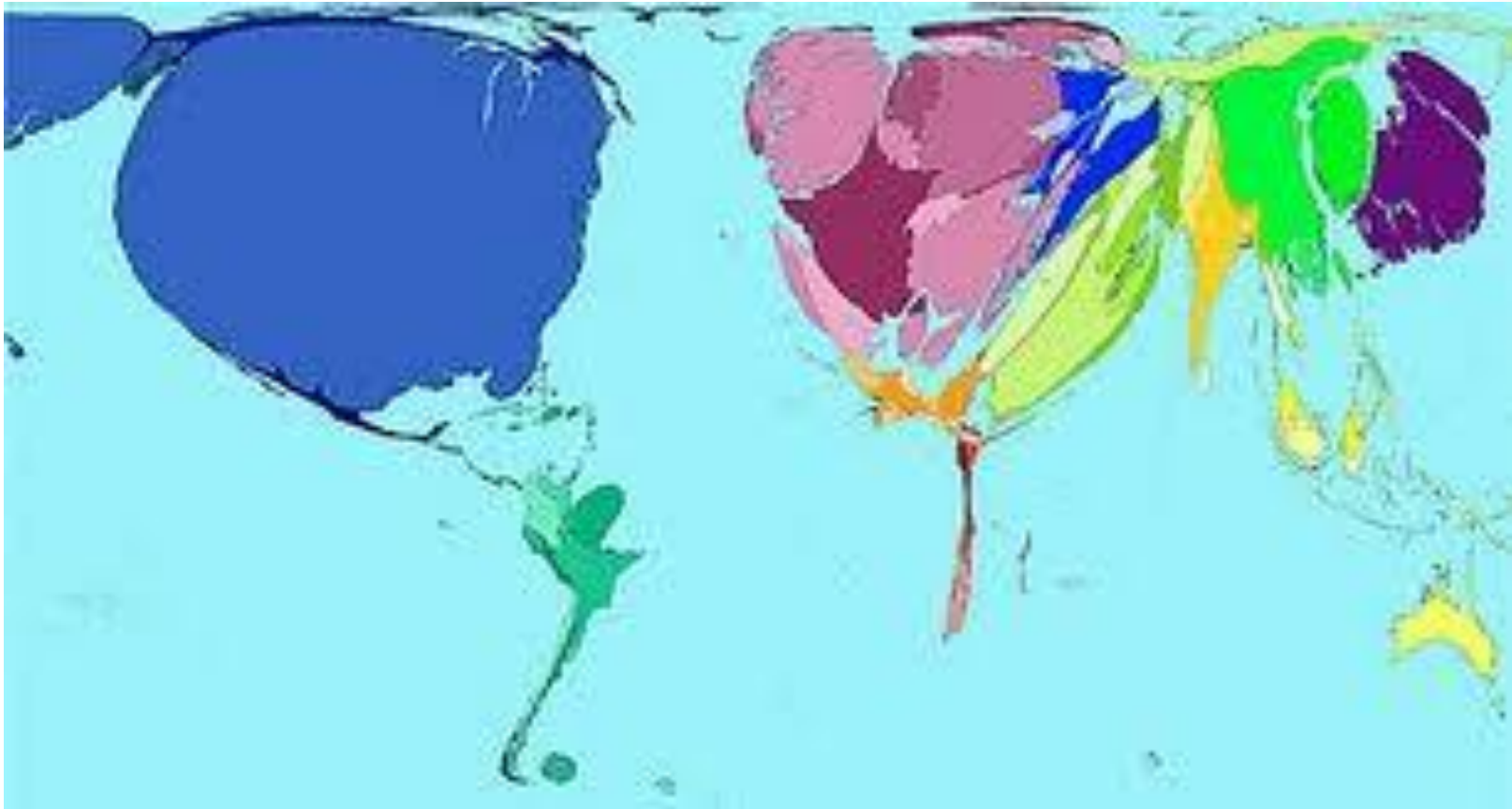
- One of major risk factors is ***obesity***.



Meat Consumed



Fat Map



BRFSS, 1990, 2000, 2010

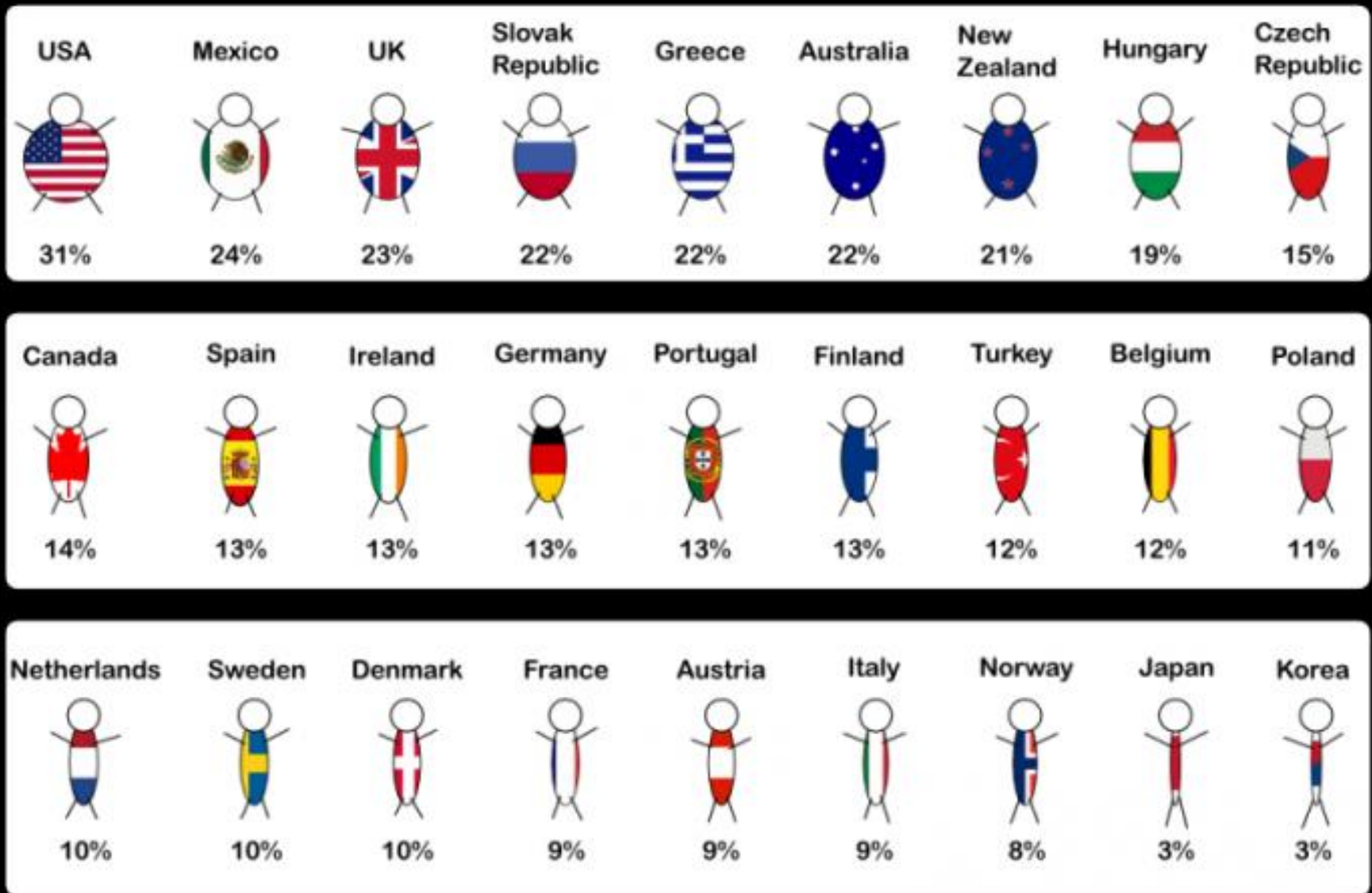
(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



Source: Behavioral Risk Factor Surveillance System, CDC.



OBESITY: The percentage of the population older than 15 with a body-mass index greater than 30.

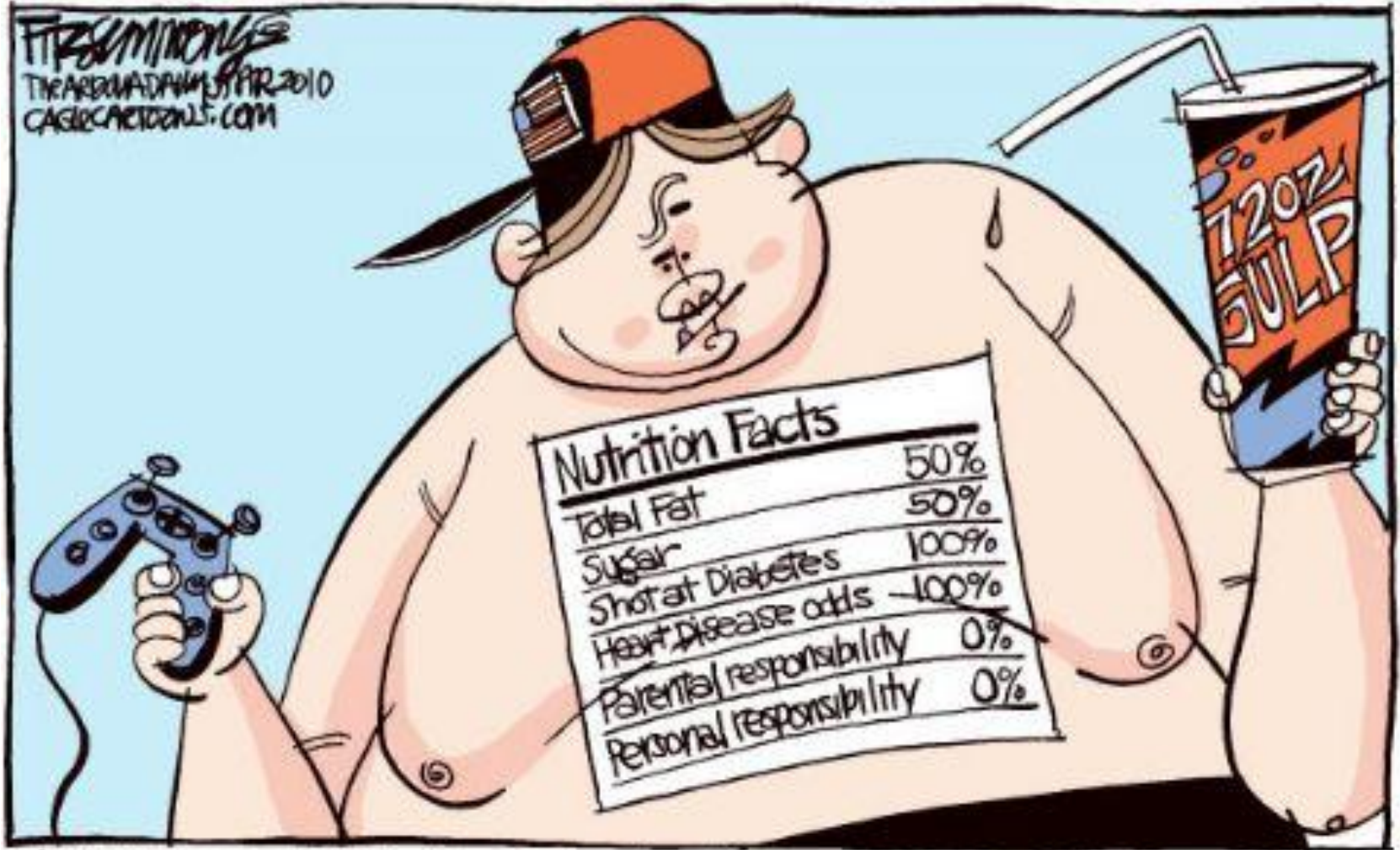


Data taken from:
<http://en.wikipedia.org/w/index.php?title=Image:Bmi30charL.png&oldid=107854217>

Drawing by:
<http://www.WellingtonGrey.net>

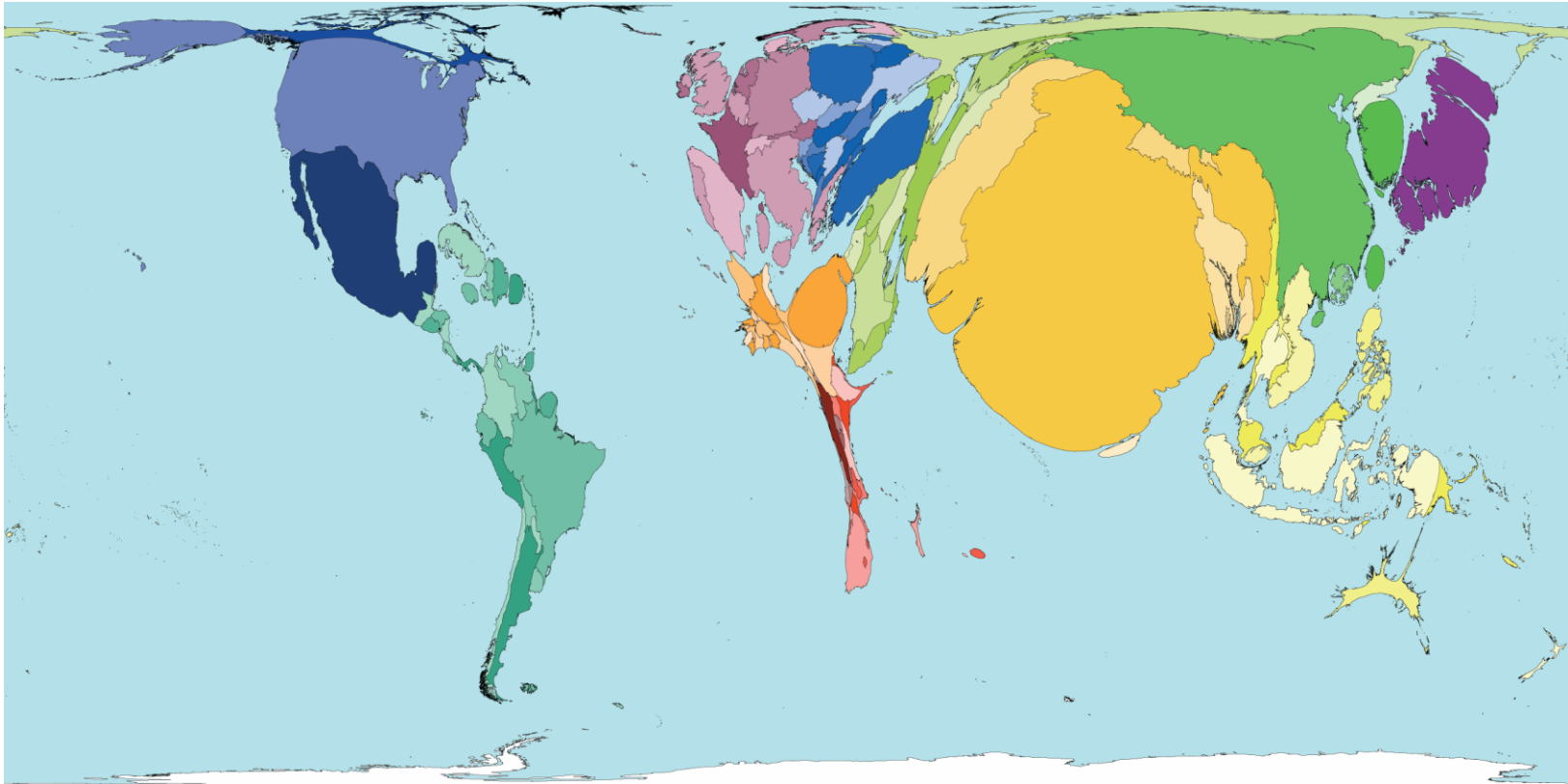


FITZMINIONS
THE ARCADE FIRE PAR 2010
CAGLECARTOONS.COM



MICHELLE OBAMA ANNOUNCES STRATEGY TO COMBAT CHILDHOOD OBESITY IN AMERICA = INGREDIENTS LABELS WILL NOW BE PRINTED ON OUR CHILDREN.

Diabetes Prevalence



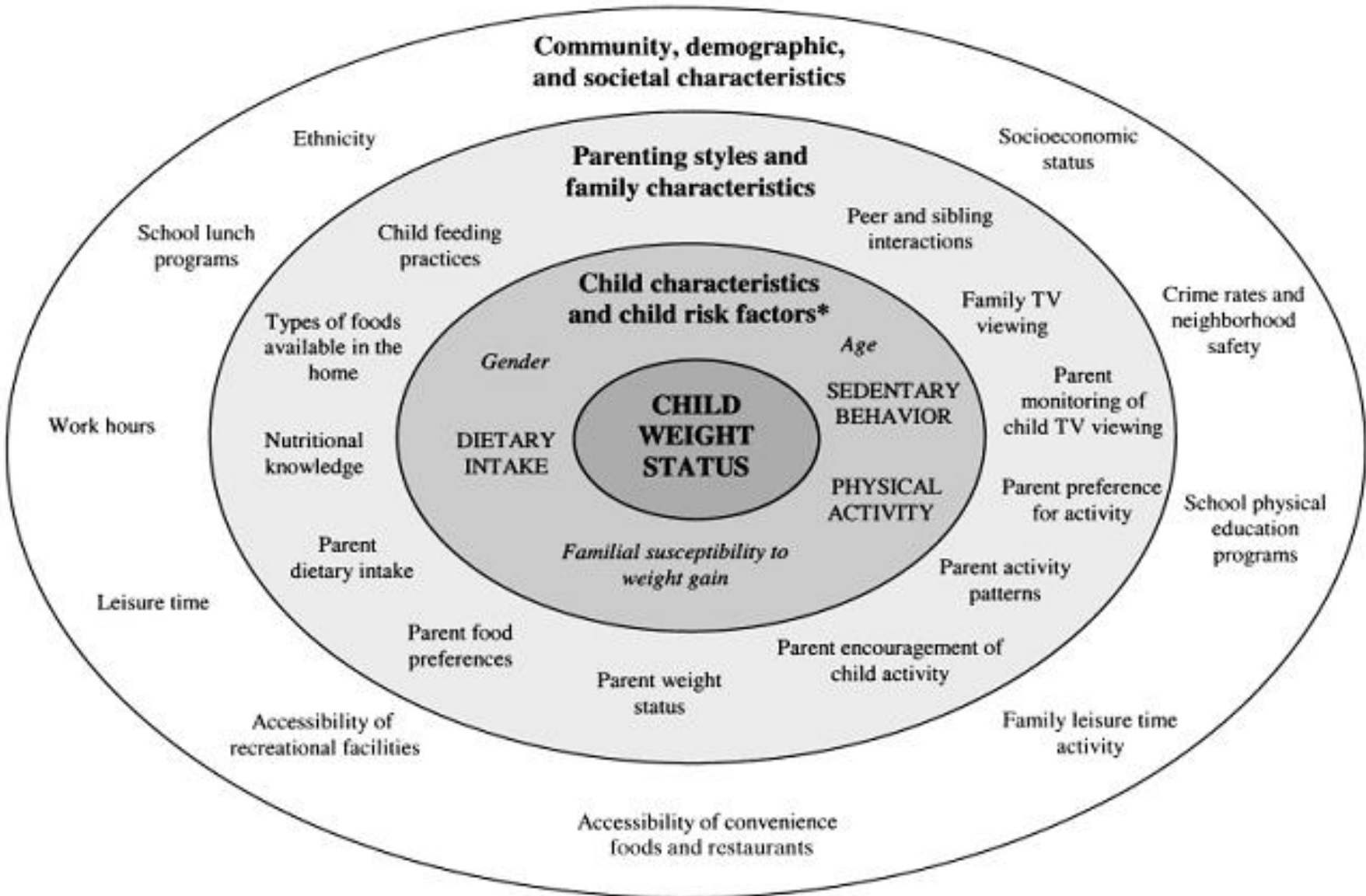
HIGHEST DIABETES PREVALENCE

Rank	Territory	Value
1	Mexico	14
2	Trinidad & Tobago	14
3	Saudi Arabia	12
4	Mauritius	12
4	Hong Kong (China)	12
6	Papua New Guinea	12
7	Cuba	12
8	Puerto Rico	11
8	Singapore	11
10	Jamaica	11

Contributing Factors

Video Games
Vending Machines
Meal Skipping
Snacking
Fruit Juices
Single Parents
Marketing to Kids
Fat Intake
Education
Fast Food
Depression
Pop Consumption
Reward w/food
Computers
Personality Type
Day Care
Television
Sugar Intake
Poor Self Esteem
Poor Parenting
Parental Health Habits





飲食不適當原因

(1) 時間不對:

早餐、午餐、晚餐

(2) 種類不對:

(a) 加工食品過多

(b) 營養素攝入量比例不當

(3) 份量不對

(4) 地點不對:

外食過於頻繁

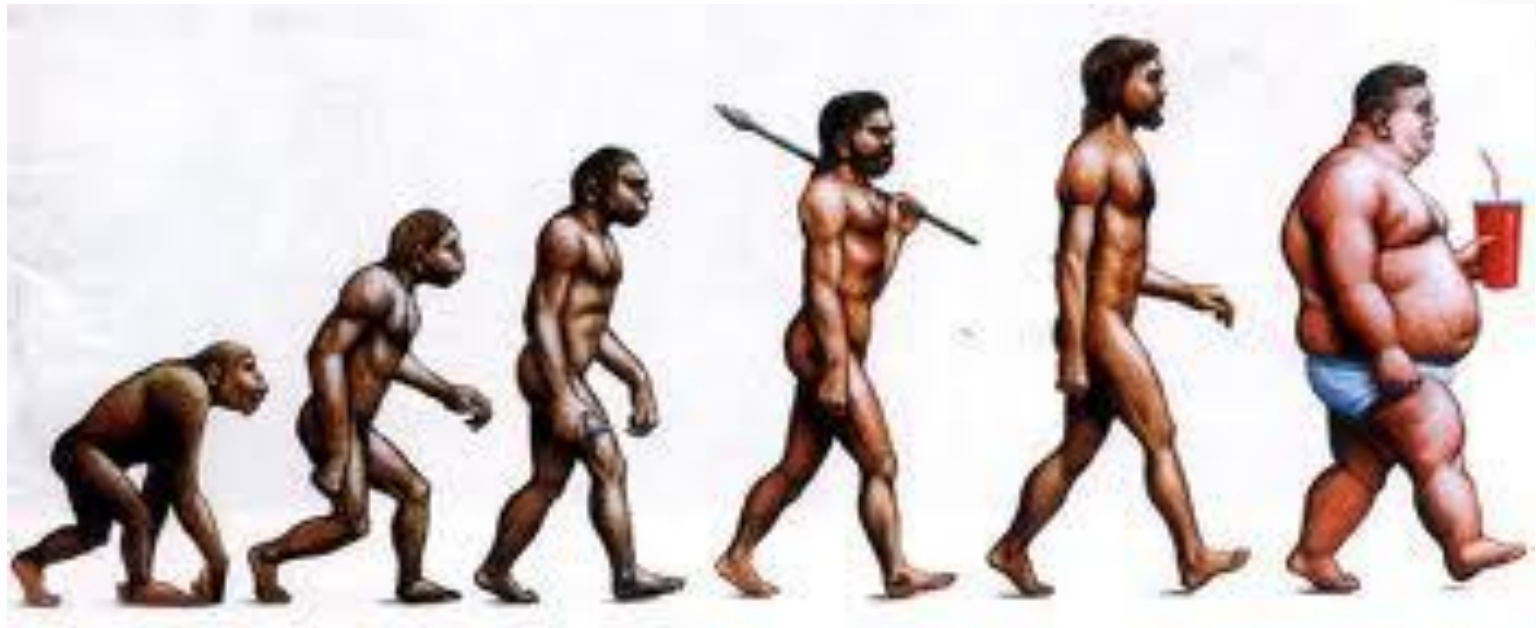
原因:

(a) 沒有時間準備

(b) 不知道怎麼烹調

(c) 外食比較方便





Ticket for Speeding? Speed Eating



COFFEE

20 Years Ago

Coffee
(with whole milk and sugar)



45 calories
8 ounces

Today

Mocha Coffee
(with steamed whole milk and mocha syrup)



350 calories
16 ounces

Calorie Difference: 305 calories

ADAM ZYGAS
WWW.ADAMZYGAS.COM
THE BUFFALO NEWS
©2006





**ARE YOU POURING
ON THE POUNDS?**

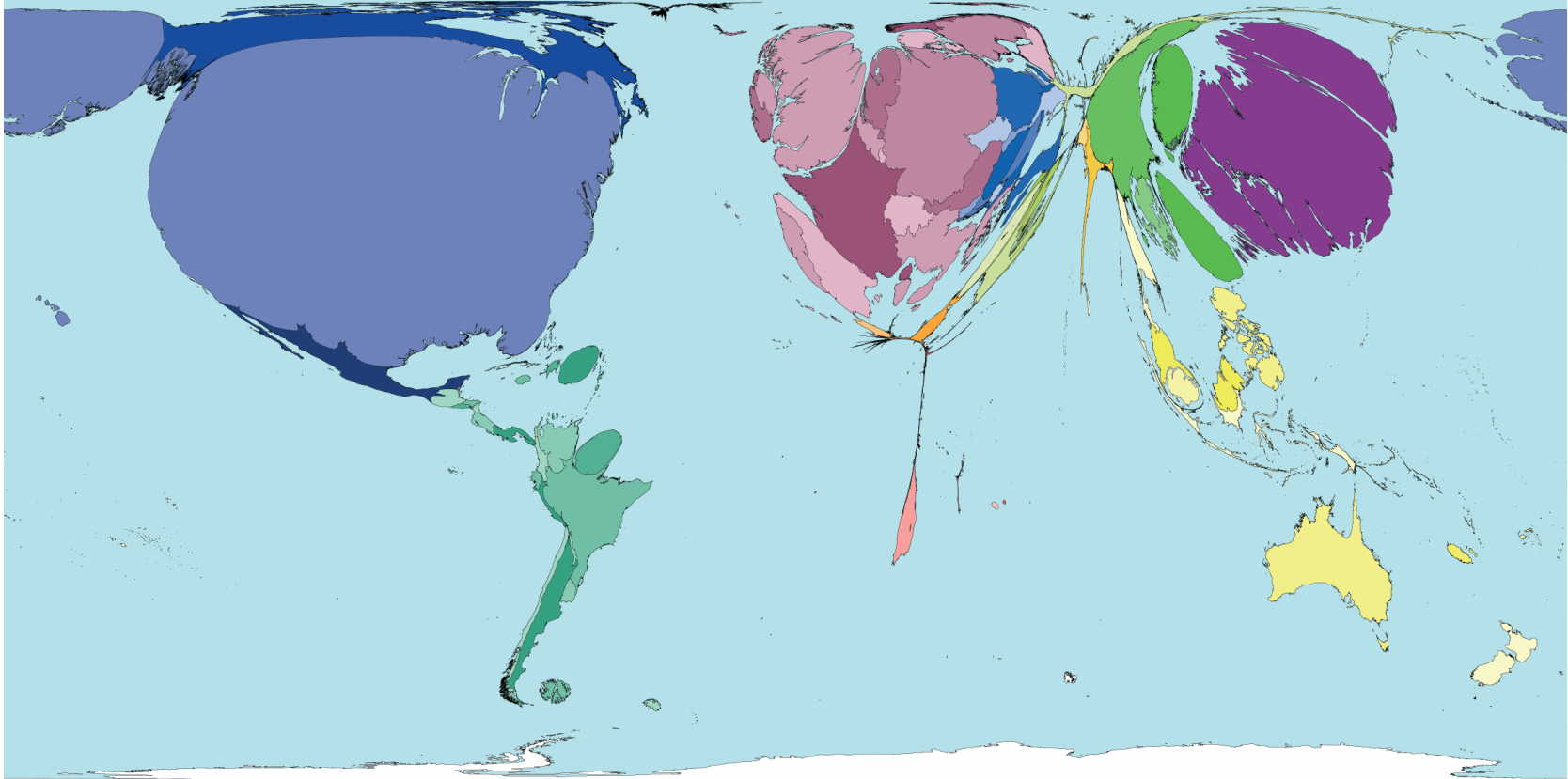
DON'T DRINK YOURSELF FAT.
How to cut back on soda,
juice and other sugary beverages.



• Available In Spanish and Chinese call 311 or visit nyc.gov/health
• Disponible en español llame al 311 o visite nyc.gov/health
• 中文服務 - 請電 311 或瀏覽 nyc.gov/health



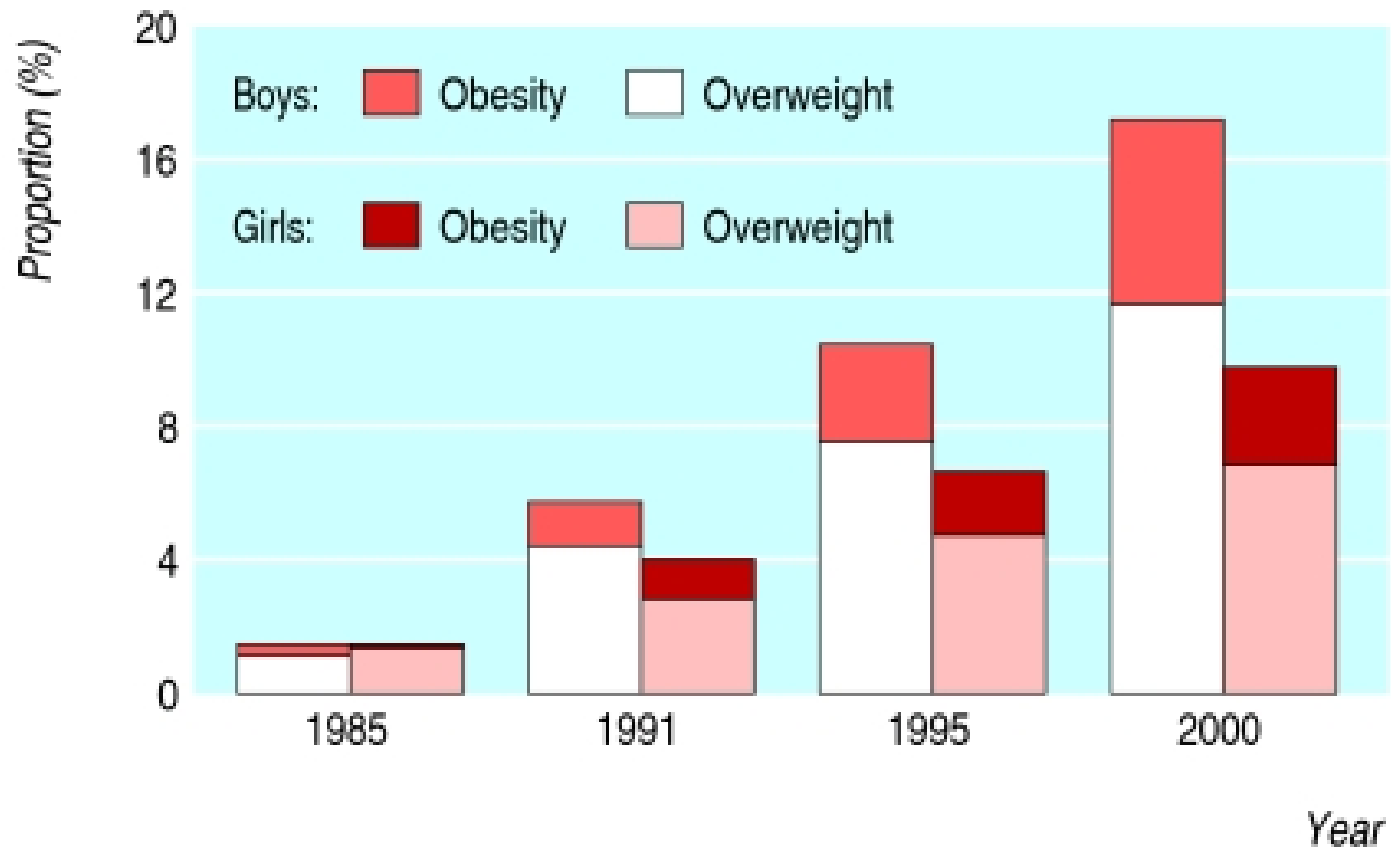
International Fast Food



Fast food giant Yum Brands opens
a new KFC in China almost every
day



Overweight and obesity in schoolchildren aged 7-18 in large cities in China



營養工作的層面小自個人,大至族群. 討論的議題將含括:

(1) 擴大營養專業的視野: 個人-民眾-族群-人類

(2) 回到人類基本的需求: 人體需要, 兒童飲食行爲, 家庭結構, 基本飲食技能

(3) 自我文化認同: 適當的語言, 飲食文化

(4) 專業層面的共識: 社會環境的敏感度, 研究資訊, 資訊篩選

(5) 效益提供大眾適當的預防, 保健知識 (非專業語言)

© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com



search ID: aken130

"Table for four please, I'll be eating alone this evening."

走回廚房的重要性

1. 飲食和家庭結構

2. 若想讓你的家庭更健康，
走進廚房是決定性的第一步

1. 每天至少為你的家人準備一餐
2. 每週至少一次與家人, 特別是讓孩子共同參與烹調和準備食物
3. 每個月至少一次與你的親屬, 朋友聚會一次, 分享自己親手做的家常菜, 而不是外面的現成食物

Monday Campaign



Get your TKCM
starter Kit!

營養工作的層面自個人,大至族群. 討論的 議題將含括:

- (1) 擴大營養專業的視野: 個人-民眾-族群-人類
- (2) 回到人類基本的需求: 人體需要, 兒童飲食行爲, 家庭結構, 基本飲食技能

(3) 自我文化認同: 適當的語言, 飲食文化

- (4) 專業層面的共識: 社會環境的敏感度, 研究資訊, 資訊篩選
- (5) 效益提供大眾適當的預防, 保健知識 (非專業語言)

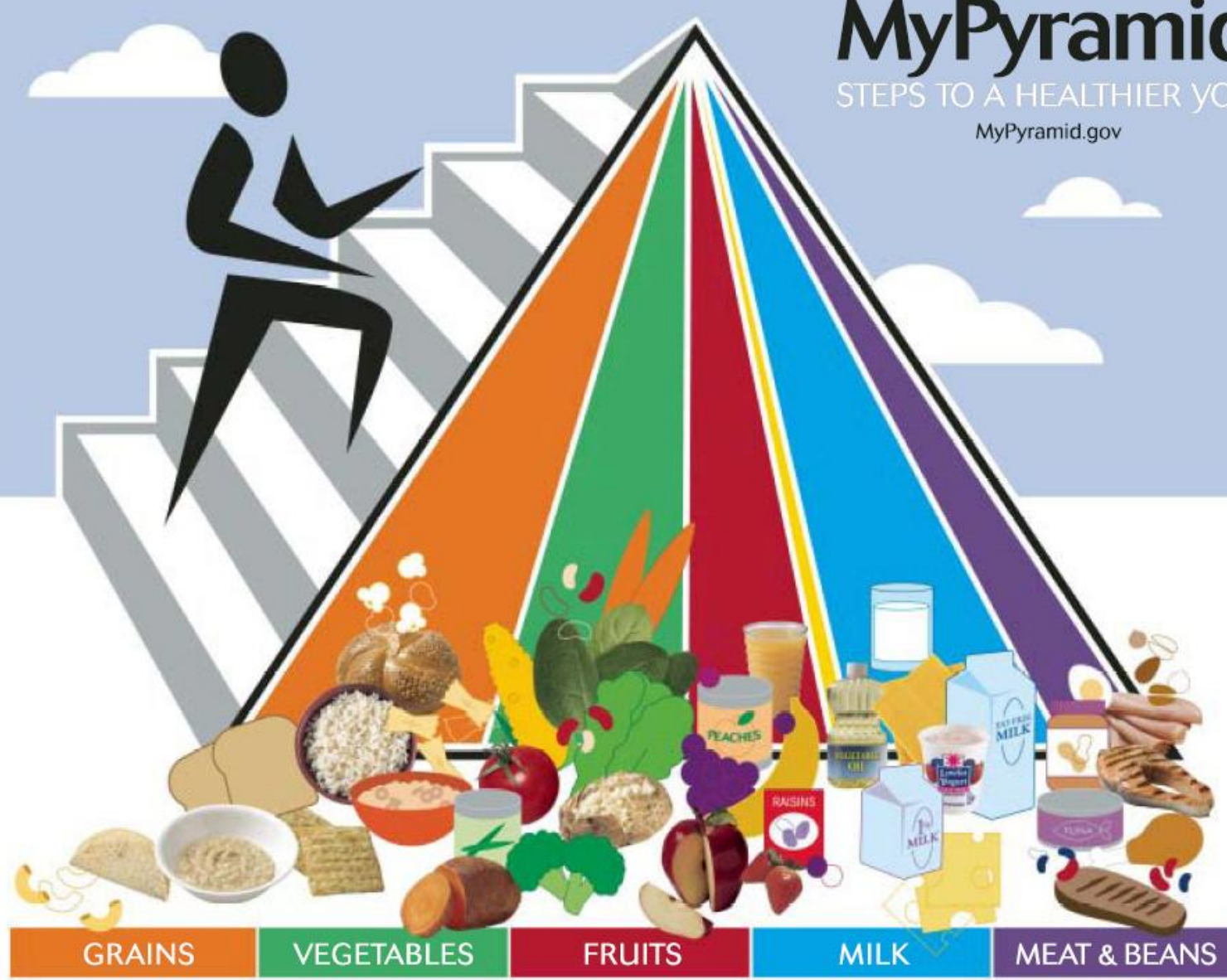
FDA TO RETOOL FOOD GUIDE PYRAMID,
CITING CONSUMER CONFUSION



MyPyramid

STEPS TO A HEALTHIER YOU

MyPyramid.gov



GRAINS

VEGETABLES

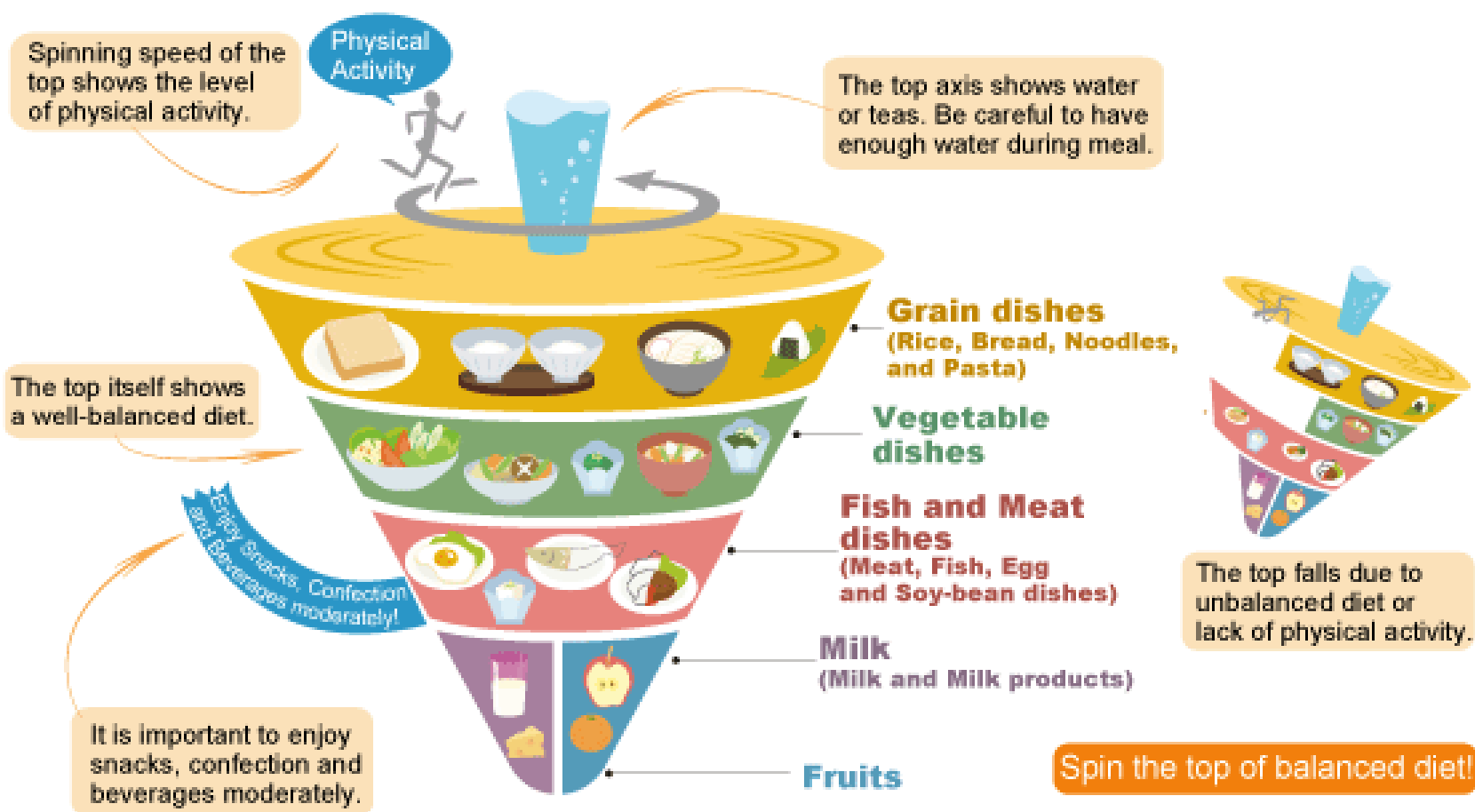
FRUITS

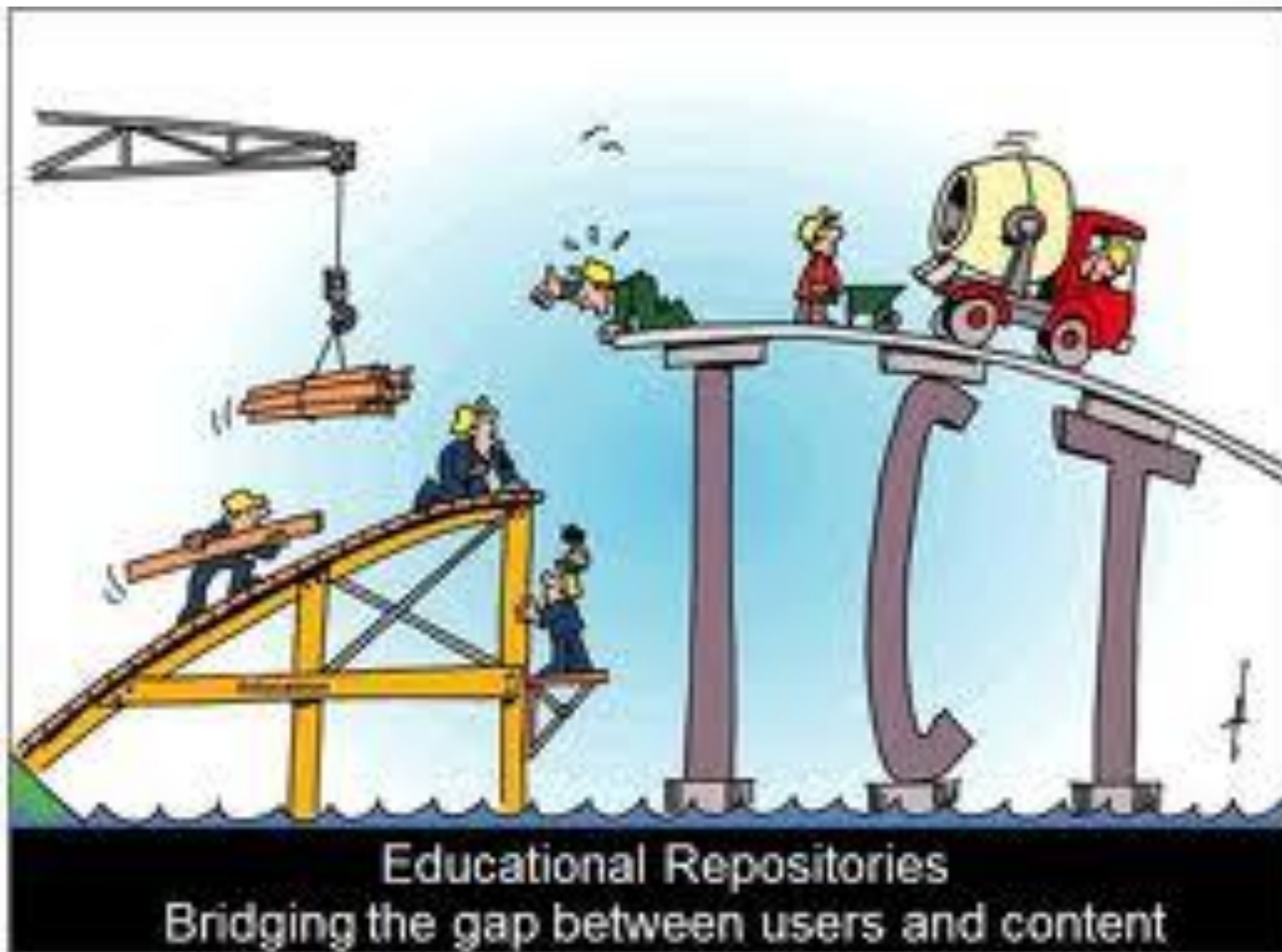
MILK

MEAT & BEANS



"Dietary Guidelines for Japanese (Japanese Food Guide Spinning Top)"



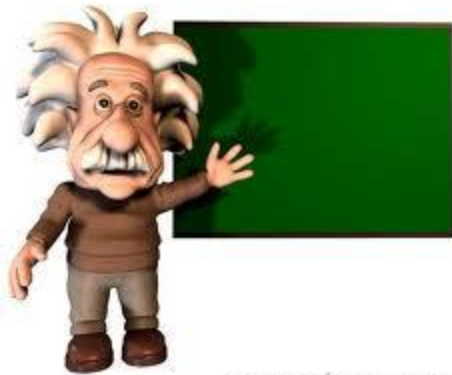
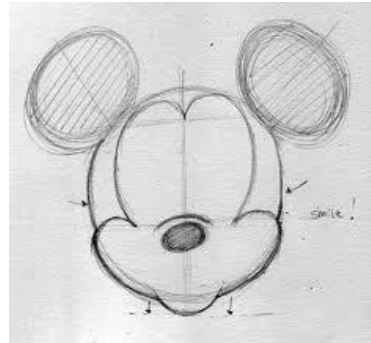
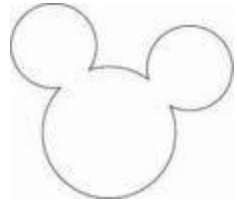


Educational Repositories
Bridging the gap between users and content

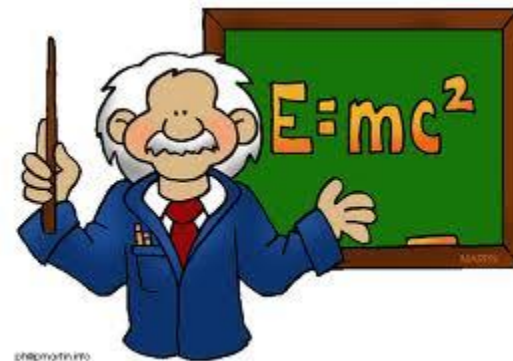
營養工作的層面自個人,大至族群. 討論的 議題將含括:

- (1) 擴大營養專業的視野: 個人-民眾-族群-人類
- (2) 回到人類基本的需求: 人體需要, 兒童飲食行爲, 家庭結構, 基本飲食技能
- (3) 自我文化認同: 適當的語言, 飲食文化
- (4) 專業層面的共識: 社會環境的敏感度, 研究
資訊, 資訊篩選**
- (5) 效益提供大眾適當的預防, 保健知識 (非專業語言)

Mickey Mouse v.s. *Einstein*



SCIENCEPHOTOLIBRARY



onephoto.info

營養工作的層面自個人,大至族群. 討論的 議題將含括:

- (1) 擴大營養專業的視野: 個人-民眾-族群-人類
- (2) 回到人類基本的需求: 人體需要, 兒童飲食行爲, 家庭結構, 基本飲食技能
- (3) 自我文化認同: 適當的語言, 飲食文化
- (4) 專業層面的共識: 社會環境的敏感度, 研究資訊, 資訊篩選
- (5) 效益提供大眾適當的預防, 保健知識 (非專業語言)**

減肥產品廣告用語

1. Easy, Simple, Safe
2. Safe, Effective, Guarantee
3. Time to take control
4. Eat whatever you want
5. Sexy and slim body shape just in 30 days away
6. Money back guarantee
7. Fat Loss for Food Lover program

- wasn't hungry
- stop dieting, stop starving
- Without counting calories
- Loss weight or you don't pay
- eat all my favor food
- How to use foods to jump start your metabolism
- Just pick up phone & call
- 7 days size down
- Risk Free

whole milk
全脂牛奶

low-fat milk
低脂牛奶

Skim milk
脫脂牛奶

"reduced-fat" milk
減脂牛奶

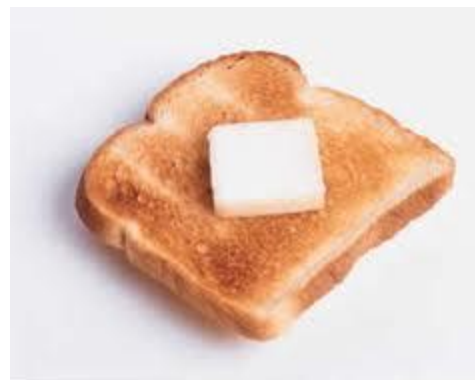


含 3.25% 牛奶脂肪

含 0.5-2.0% 牛奶脂肪

含少於 0.5% 牛奶脂肪

含2%牛奶脂肪



含有蛋白酶的水果

- 鳳梨: 含鳳梨蛋白酶 (bromelain)
- 木瓜: 含木瓜蛋白酶 (papain)
- 奇異果, 獼猴桃(kiwi): 含actinidin, 類似木瓜蛋白酶

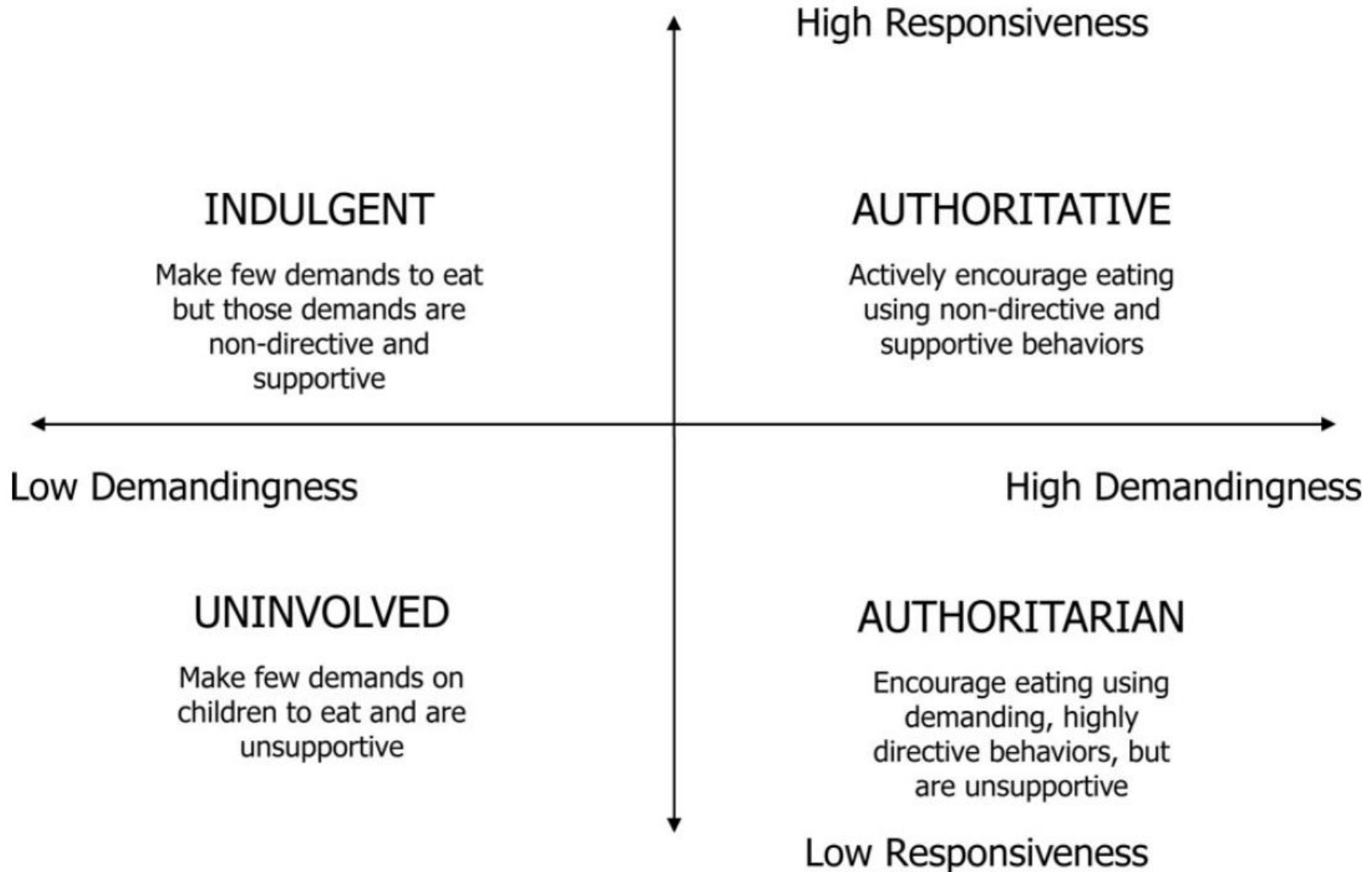
Research Question:

Relationship of Chinese American parental feeding practices, perceptions of parent-self and their school-age child's weight status, and level of parent's acculturation

Hsiao-Liang Pai

*Relationship of Chinese American **parental feeding practices**, **perceptions of** parent-self and their school-age child's **weight status**, and level of parent's **acculturation***

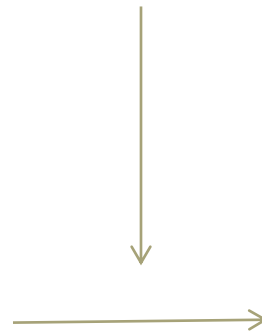
Typological Approach to Feeding



Moderating role of feeding style in the parent feeding practice- child weight relationship

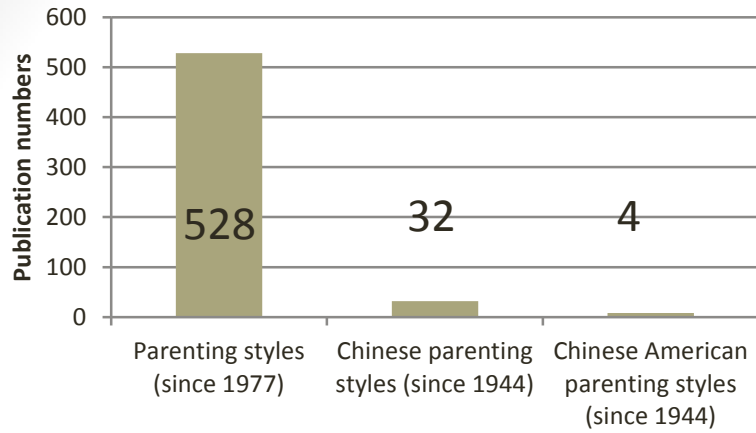
Moderator *Feeding Style*
(*demandingness & responsiveness*)

Predictor *Feeding Practice*
(*Restriction, Pressure to eat or*
Monitoring)

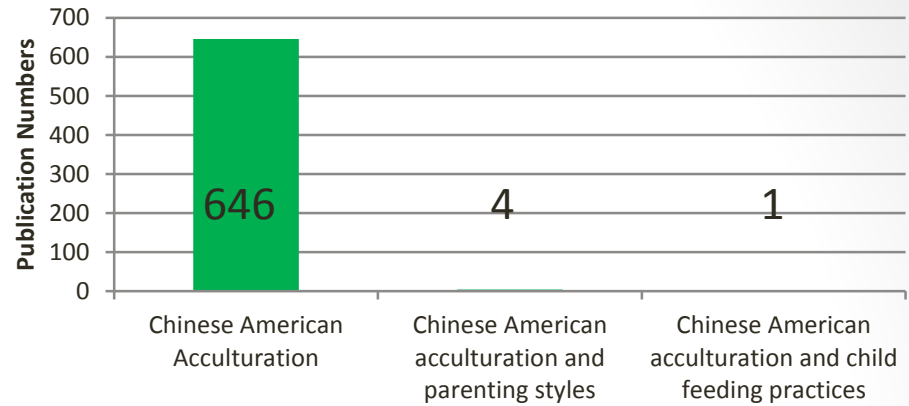


Outcome Variable: *Child Weight* (BMI z-score)

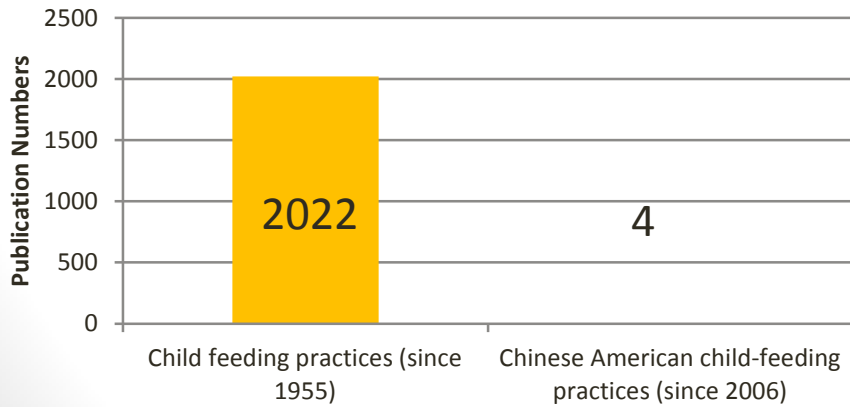
Publications in Parenting Styles



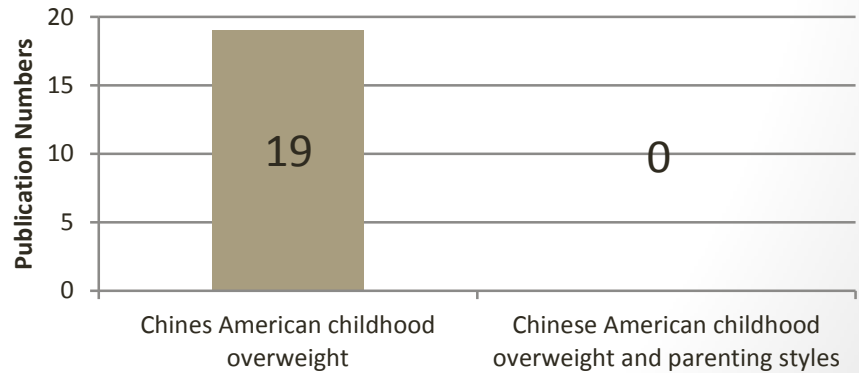
Publications in Chinese American Acculturation



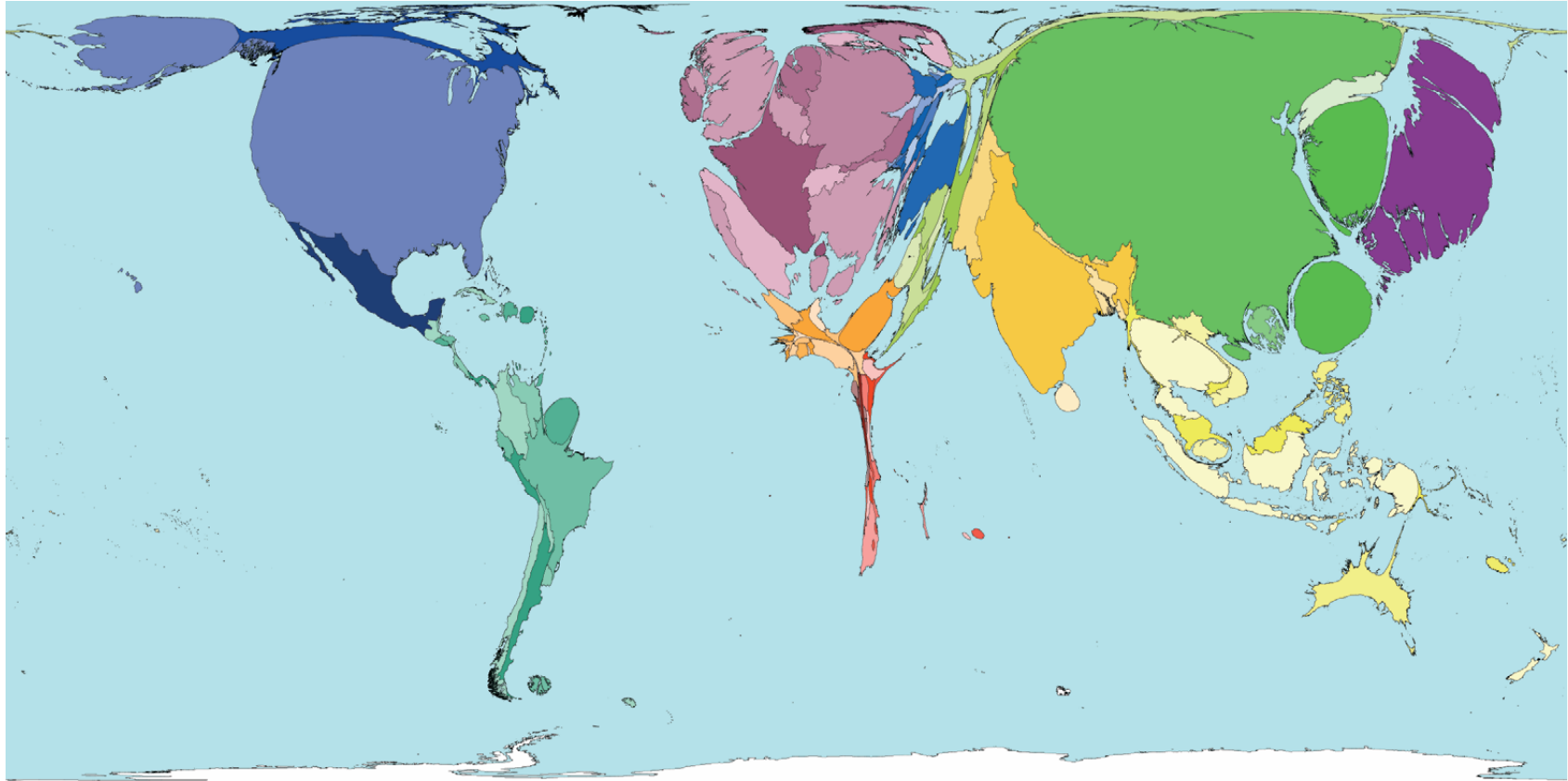
Publications in Child Feeding Practice



Publications in Chinese American Childhood Overweight



Wealth Year 2015



TERRITORIES PREDICTED TO BE THE MOST WEALTHY BY 2015

Rank	Territory	Value
1	Taiwan	64519
2	Hong Kong (China)	51470
3	Singapore	48645
4	Malta	42407
5	Luxembourg	38526
6	Republic of Korea	38249
7	United States	38063
8	Norway	36830
9	Japan	35694
10	Ireland	34677

Lessons Learned from the 7 Most Healthy Countries

1) Iceland:

- Iceland's cool clean air increases the health of the body through the lungs.

2) Japan:

- From Japan (Asia): "Every meal in Japan looks like a piece of art. Food is so beautiful and so delicious and so simple," fitness expert Harley Pasternak said to Empower News Magazine.
- "They are the largest consumer of fish in the world and of whole soy and of seaweed and green tea. When they are about 80 percent full, they stop and wait for about 10 minutes, then decide whether to keep going. And most times, they are full so they don't need to keep eating more."
- Simply put; You should take time to eat, do not rush through mealtime and do not stuff yourself beyond repair.

3) Sweden:

- In the landscape like Sweden everyone practices outside exercise/activities daily. The Sweden diet is high in fish that is fresh caught and poached, fermented, smoked, and or dried instead of frying or cooking in oil.

4) Okinawa:

- Okinawa locals eat tons home grown fruits and vegetables per day as well as fresh caught seafood and tofu. Okinawa also have low stress but rigorous daily activity.

5) New Zealand:

- The New Zealanders enjoy many outdoor activities that are full of beneficial exercise, such as fishing, swimming, camping, and hiking. They eat freshly caught seafood (most of which they catch themselves) and locally grown organic fruits and veggies. Some these include kiwis, avocados, lettuce, apples, and plums.

6) Sardiniae(Europe):

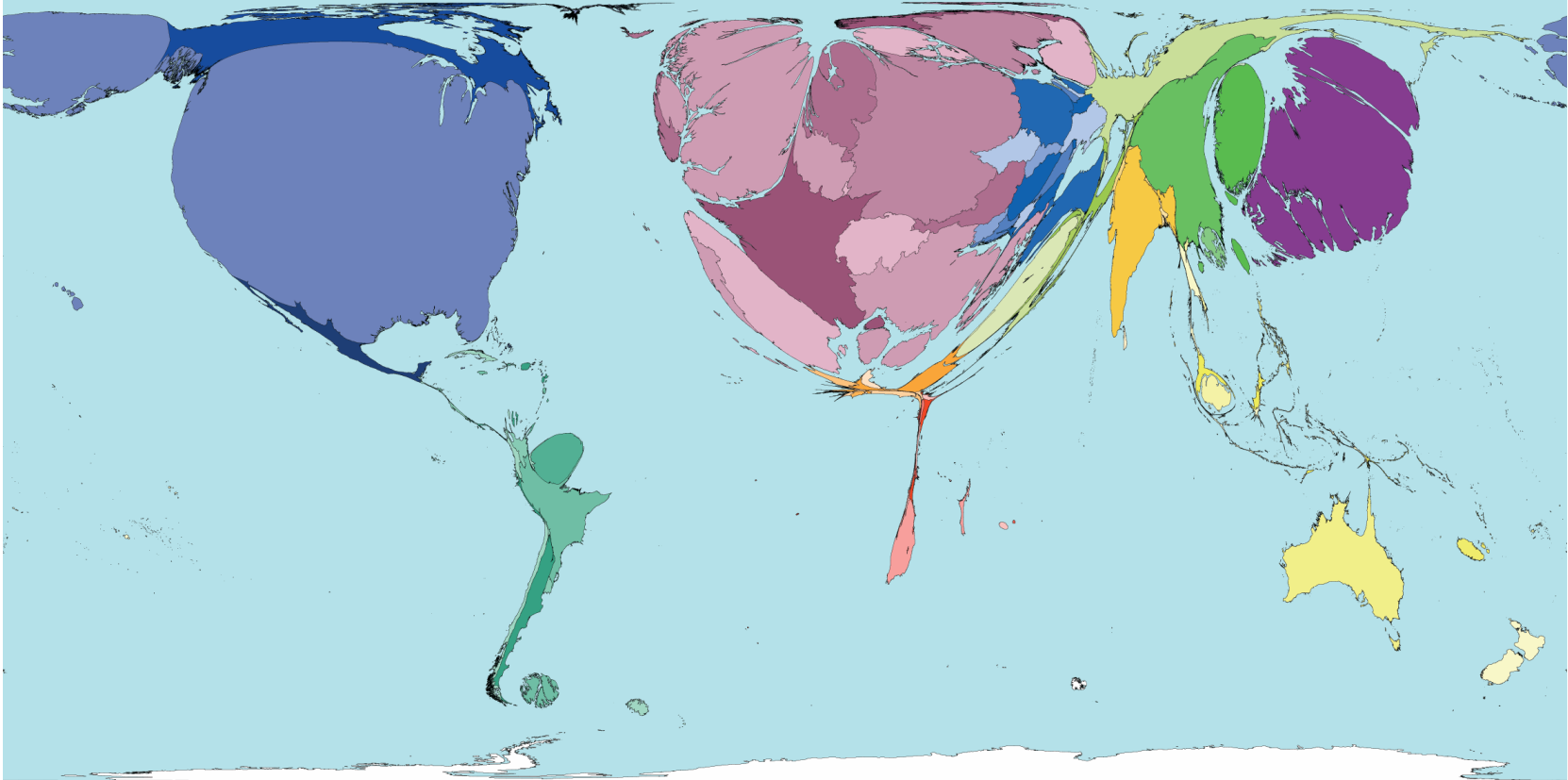
- The many shepherds walk an average of 5 miles PER DAY.

7) Finland(Scandinavia, Europe):

- Only 30 years ago Finland had the highest death rates in heart disease, which led the country to increase pro-health actions. "Smoking has been reduced significantly and fruit and vegetable intake has more than doubled." According to WebMD, smoking can lead to heart disease.

(Source: <http://www.webmd.com/smoking-cessation/quit-smoking-heart>.)

Science Research



MCAT (Medical College Admission Test)

---- 2015 add 20% Behavior Science

NIH Research Grant

National Cancer Institute

Future Works

A. Analysis of health and quality of life

B. Analysis of risk behaviors

C. Analysis of determined of exposure to risk factors

D. Intervention development

- Large Population

- Individual tailored

E. Intervention implementation

結論

1. 營養教育為提高整個社會健康品質最重要的一步
2. 營養教育需要
 - 運用商業手法
 - 跨越科學信息和現實生活兩者中存在的一道鴻溝
 - 使用市民的語言, 推銷營養正確的營養知識
3. 若想讓自己及周圍人更健康,
走進廚房是決定性的第一步
4. 我們需要更多真正屬於我們文化的科學研究信息

營養和健康品質

(Nutrition and Quality of Health)

白小良(Hsiao-Liang Pai)