

OBESITY EPIDEMIC - BRINGING SOLUTIONS FROM THE GOVERNMENT & COMMUNITY.

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Is this you?



Obesity worldwide: Statistics & Facts

- The World Health Organization (WHO) classifies an adult with BMI ≥ 25 as overweight and BMI ≥ 30 as obese.
- Around two billion [adults worldwide are currently overweight](#).
- In 2021, a survey done on people from 30 different countries found obesity **ranked fifth**, behind COVID-19, cancer, mental health, and stress as the biggest health problem their country is facing.

PERCENTAGE OF ADULTS WORLDWIDE WHO ARE
OVERWEIGHT

38.9%

PERCENTAGE OF ADOLESCENTS WORLDWIDE WHO
ARE OBESE

5.6%

SHARE OF THE WORLD POPULATION FORECAST TO BE
OVERWEIGHT BY 2025

42%

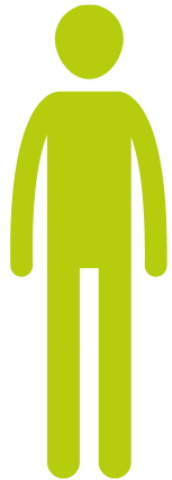
According to the latest WHO Global Health Observatory data collected in 2016 :

- ◆ More than **1.9 billion** adults were overweight, with 650 million of these individuals being obese.
- ◆ The global prevalence of obesity **nearly tripled** between 1975 and 2016, with substantial rises in most countries (low-income and middle-income nations).
- ◆ **Global spread of obesity has been labelled as a pandemic.**
- ◆ At least **2.8 million** people die each year as a result of being overweight or obese.
- ◆ **Obesity is preventable!**



BMI Categories

Underweight



≤ 18.5

Healthy



18.5-24.9

Overweight



25-29.9

Obese



30+

Mild obesity
- BMI of 30 to 34.9

Severe obesity
- BMI of 35 to 39.9

Morbid obesity
- BMI beyond 40



MEDICAL COMPLICATIONS OF OBESITY

EAT A HEALTHY DIET & PREVENT OBESITY!

Pulmonary disease

Stroke

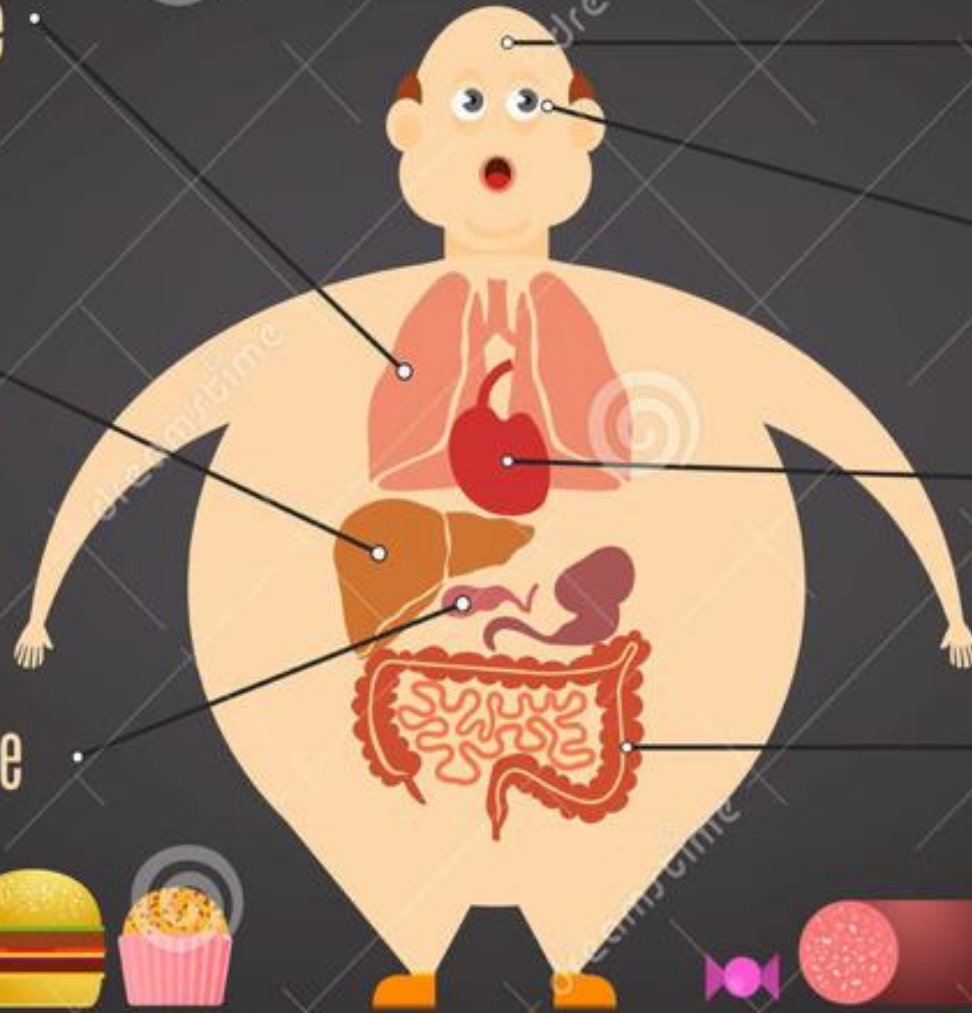
Nonalcoholic
fatty liver disease

Cataracts

Gallbladder disease

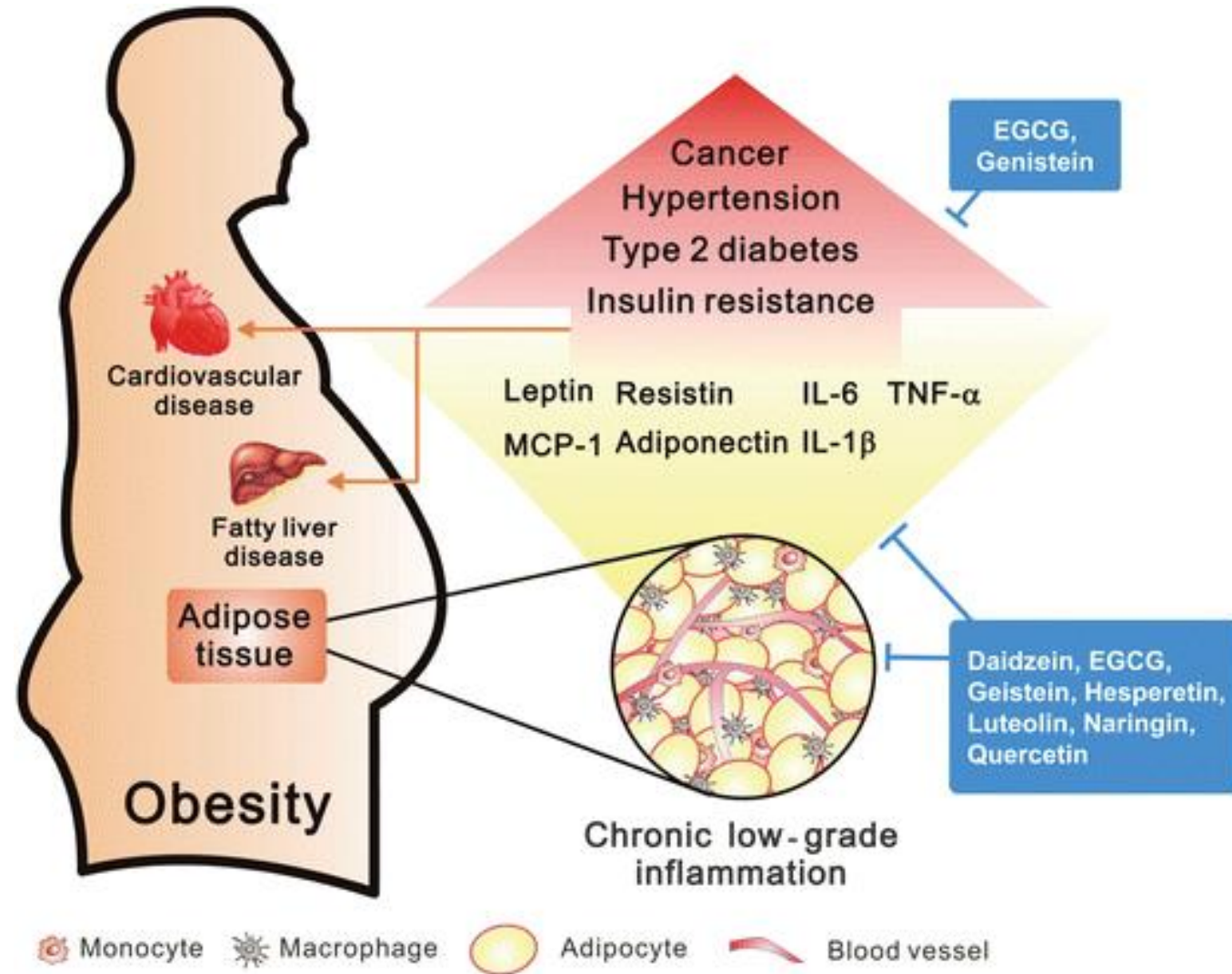
Coronary heart
disease

Cancer



OBESITY & INFLAMMATION

- Chronic low-grade inflammation
- Inflammation → insulin resistance → metabolic diseases

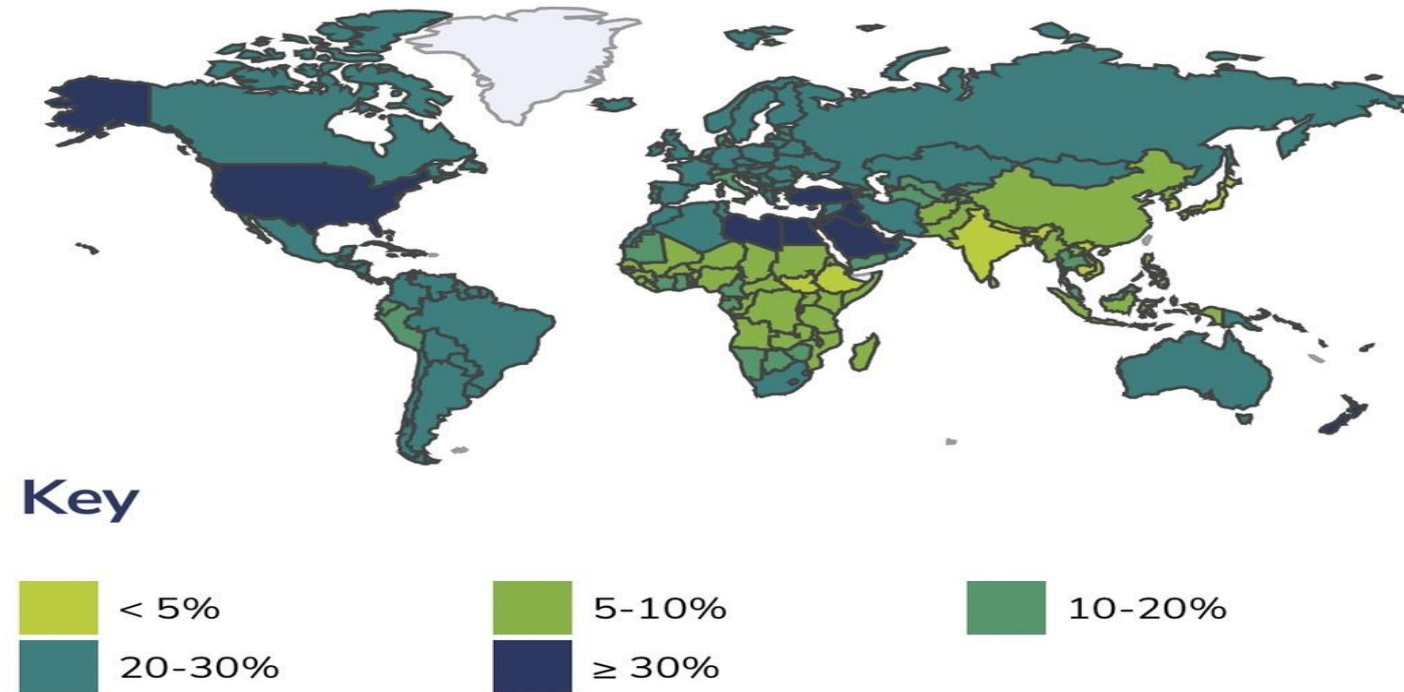


GLOBAL OBESITY AT A GLANCE



Estimates of prevalence of obesity in adults

Obesity BMI ≥ 30 kg/m². All adults



Source: Global Health Observatory Data Repository

<https://apps.who.int/gho/data/node.main.A900A?lang=en>

(last accessed 14.06.21)



NUTRITION AND HEALTH SURVEY IN TAIWAN (NAHSIT) (2013-2016; 2017-2020)

- Data was collected and managed by **Health Promotion Administration, MOHW**
- The survey is conducted every 4 years and contains:

Behavior indicators

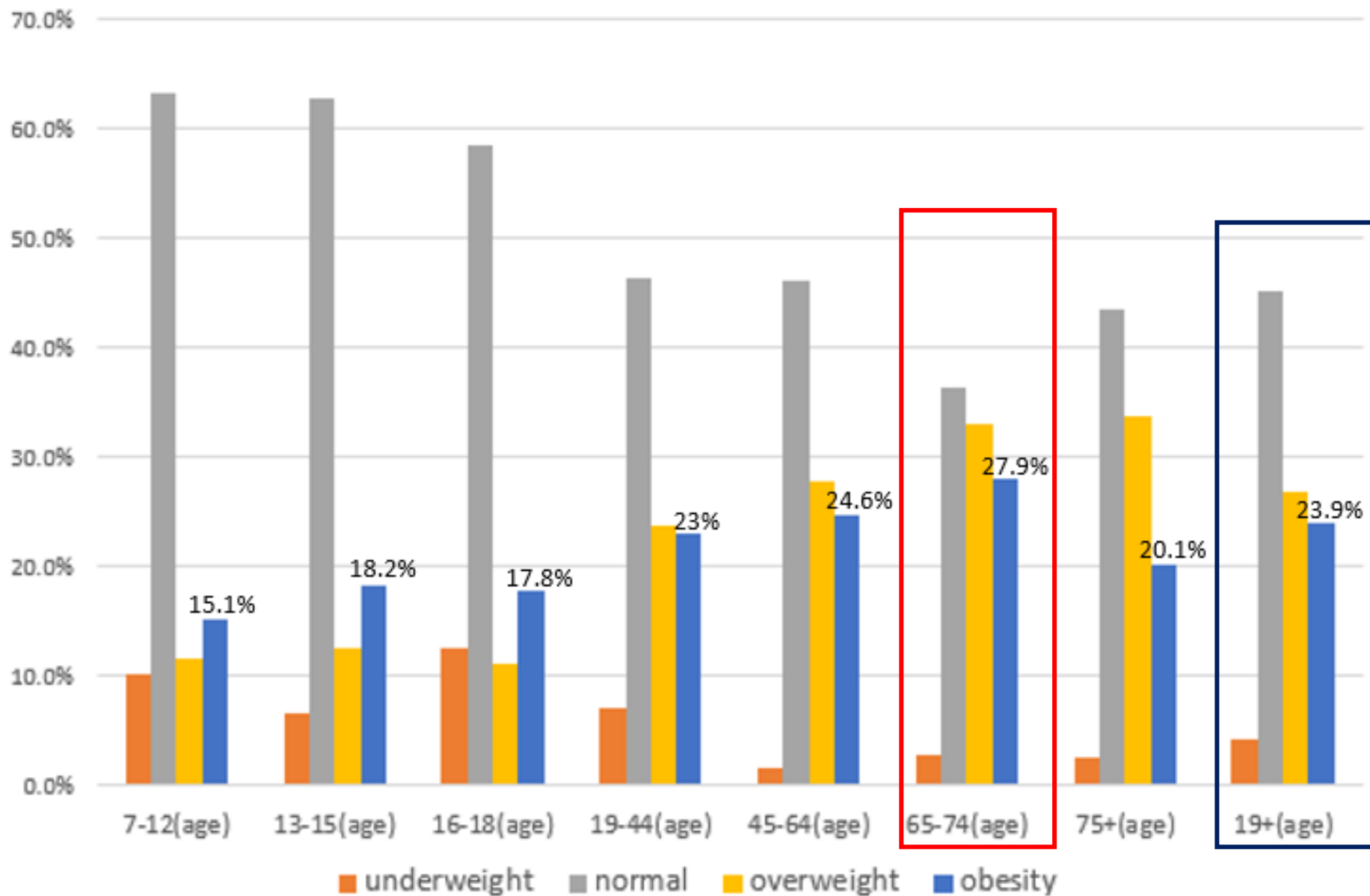
- Diet behavior (specific nutrients, salt intake, SSBs)
- Diet belief
- Physical activity
- **Weight management**
- Use of tobacco, alcohol, and betel nuts

Health outcome indicators

- **Overweight and obesity**
- Anemia
- Diabetes
- Kidney disease
- Physical functioning
- Medical and Reproductive history
- Respiratory disease

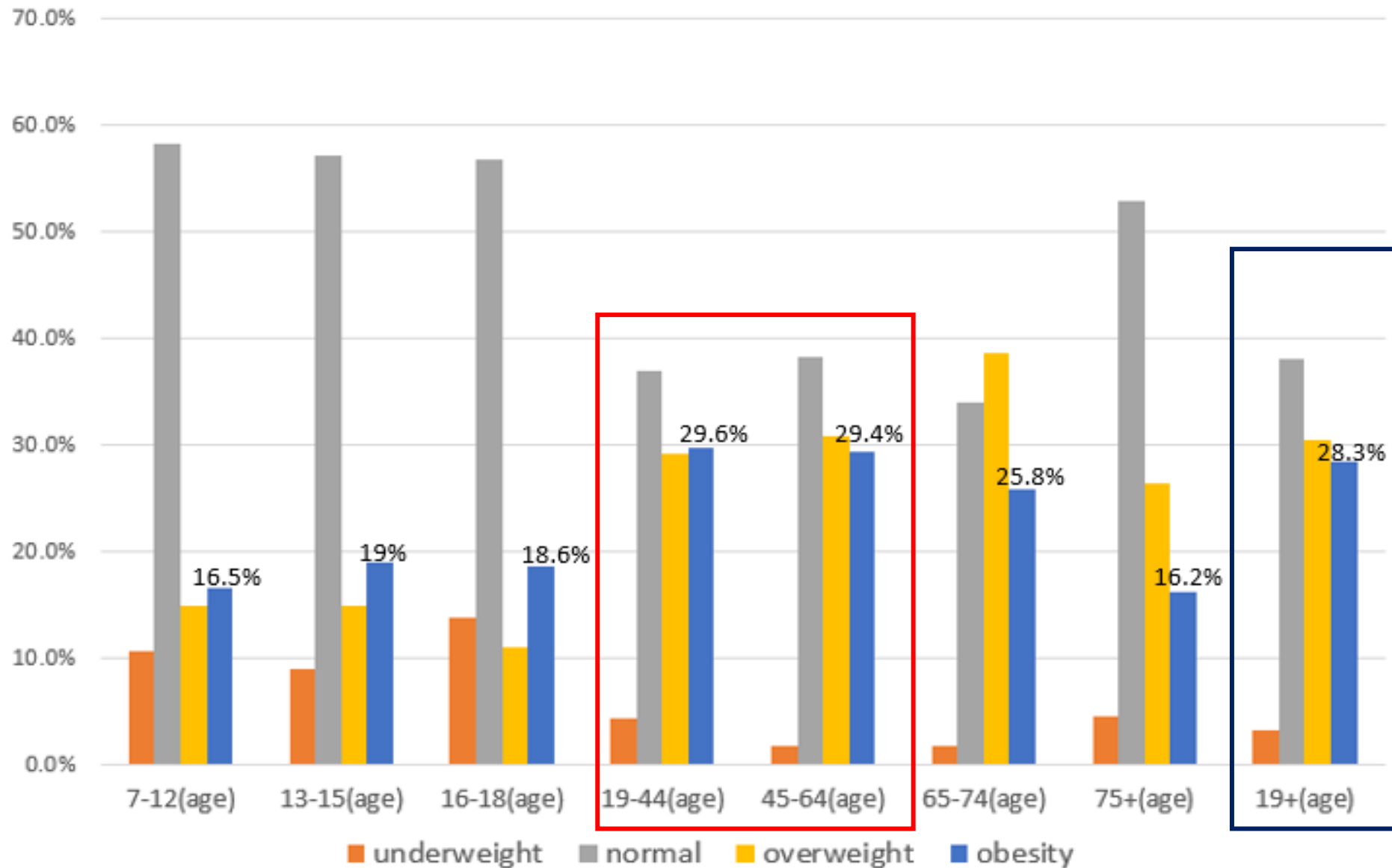


Overall prevalence of obesity based on age group



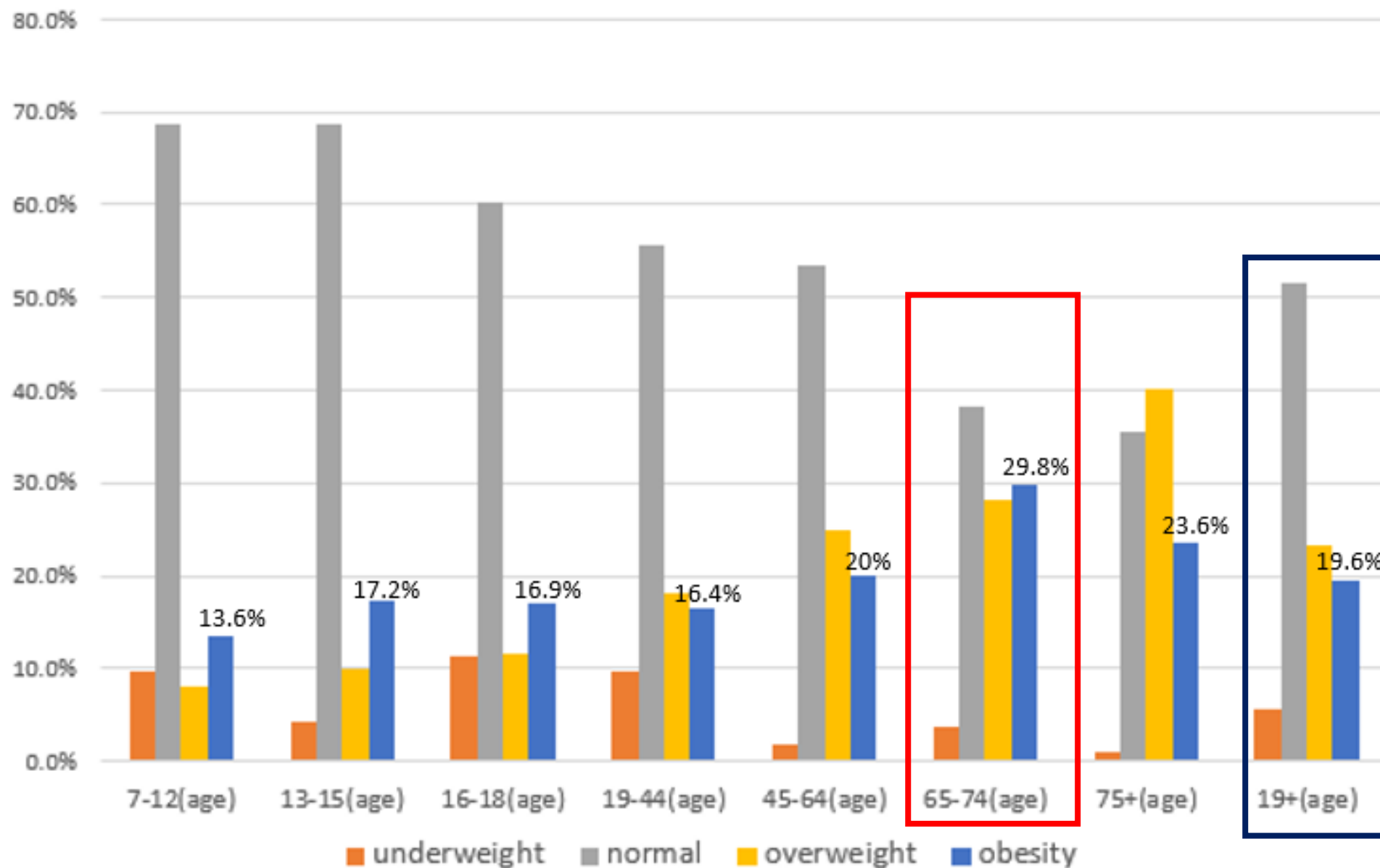
Source: Nutrition and Health Survey in Taiwan, 2017-2020

Prevalence of obesity among men aged 19 years and over

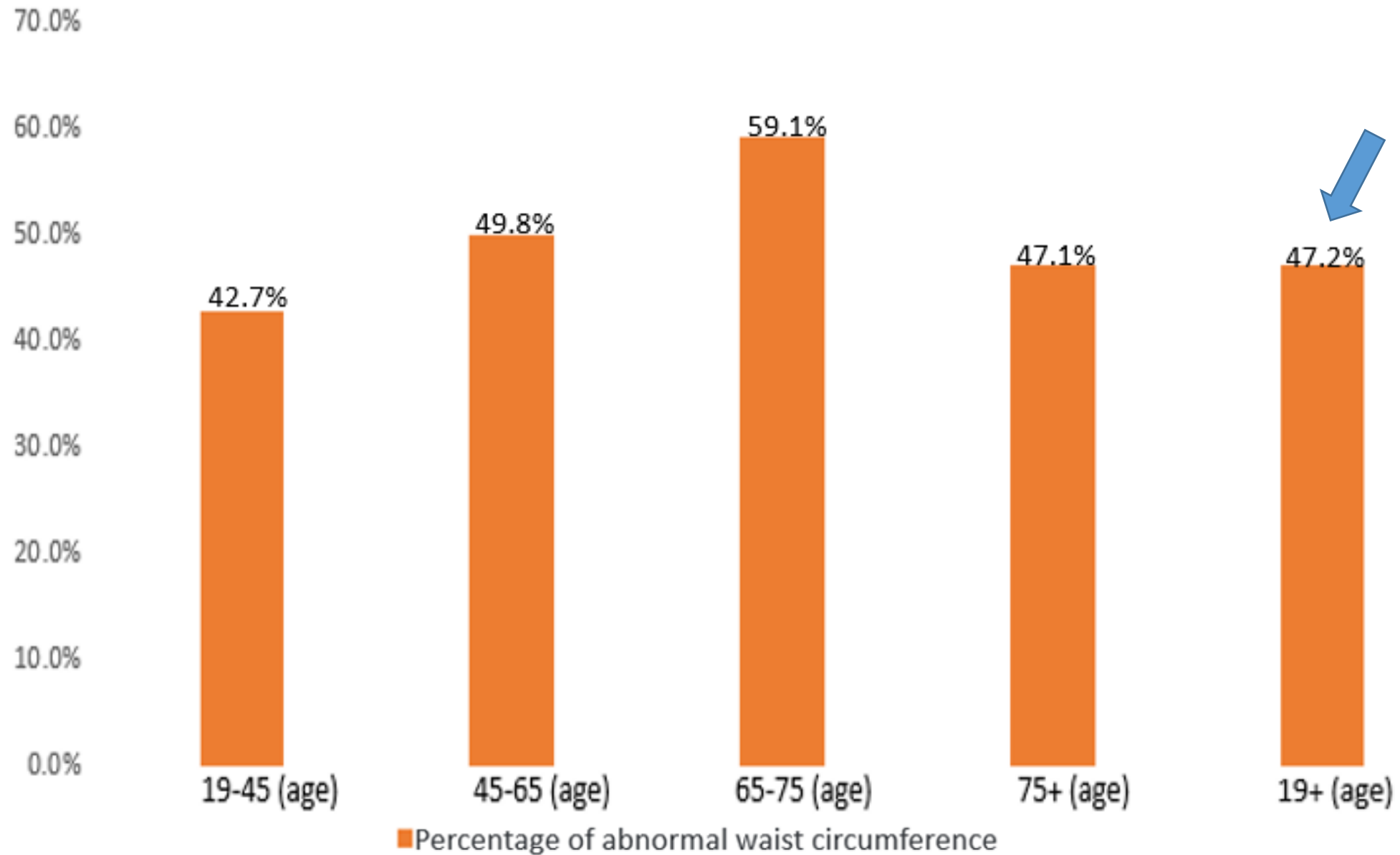


Source: Nutrition and Health Survey in Taiwan, 2017-2020

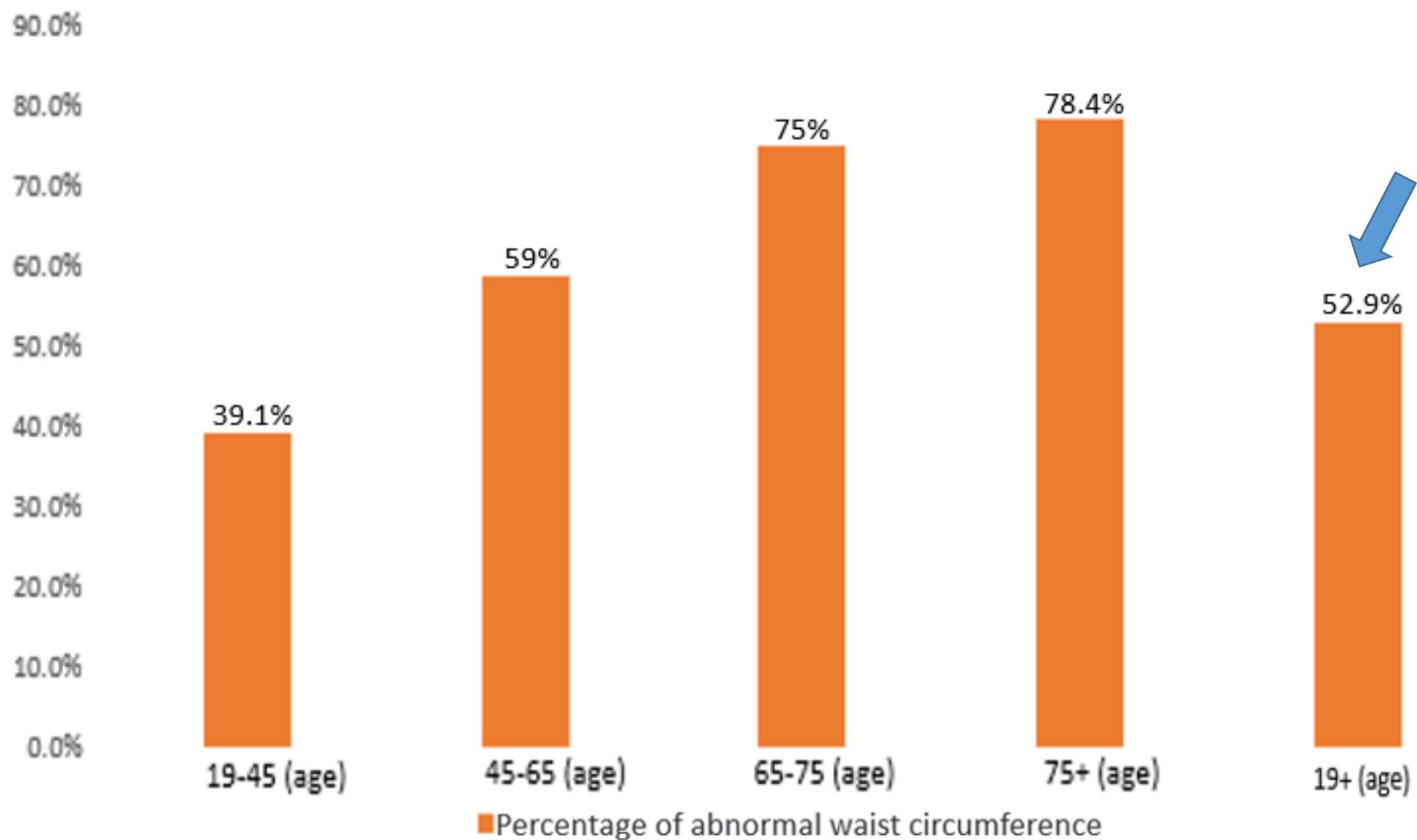
Prevalence of obesity among women aged 19 years and over



Percentage of abnormal waist circumference among men aged 19 years and over



Percentage of abnormal waist circumference among women aged 19 years and over



GLOBAL HEALTH PROMOTION STRATEGIES TO REDUCE OBESITY



THAILAND



Thailand



1) Soda ban in schools policy

- restrict SSBs in schools
- promote healthy eating among schoolchildren.

2) Fatless Belly Thais (FBT)

- **to** raise public awareness of obesity and its control
- **Promoting 3E** (**E**ating, **E**xercise/ physical activity, and **E**motional control).

3) Sugar-sweetened beverages(SSBs) taxation

- increase taxes on SSBs
- reduce SSBs consumption among Thai people.





UNITED KINGDOM



United Kingdom (UK)



- In July, 2020, the UK Government introduced policies, including advertisement and promotional deal restrictions for foods **high in fat, sugar, and salt.**
- Launched a new **healthy eating and weight loss campaign.**



UNITED KINGDOM(UK)



Policy: Started taxing soft drink manufacturers for the sugar content of the products they sell.

Result: Between 2015 and 2018, the average sugar content of soda sold in the U.K. **dropped** by 29 percent¹



¹Public Health England. (2019). Sugar reduction: Report on progress between 2015 and 2018.





S I N G A P O R E





MINISTRY
OF HEALTH
SINGAPORE



- ◆ Singaporeans consume on average **60g or 12 teaspoons** of sugar a day.
- ◆ More than **half of this sugar consumption** comes from **beverages** (64% are pre-packaged beverages).

Source: Ministry of Health Singapore. News Highlights (2022). www.moh.gov.sg/news-highlights/details/public-consultation-on-measures-to-reduce-sugar-intake-from-pre-packaged-sugar-sweetened-beverages



Singapore



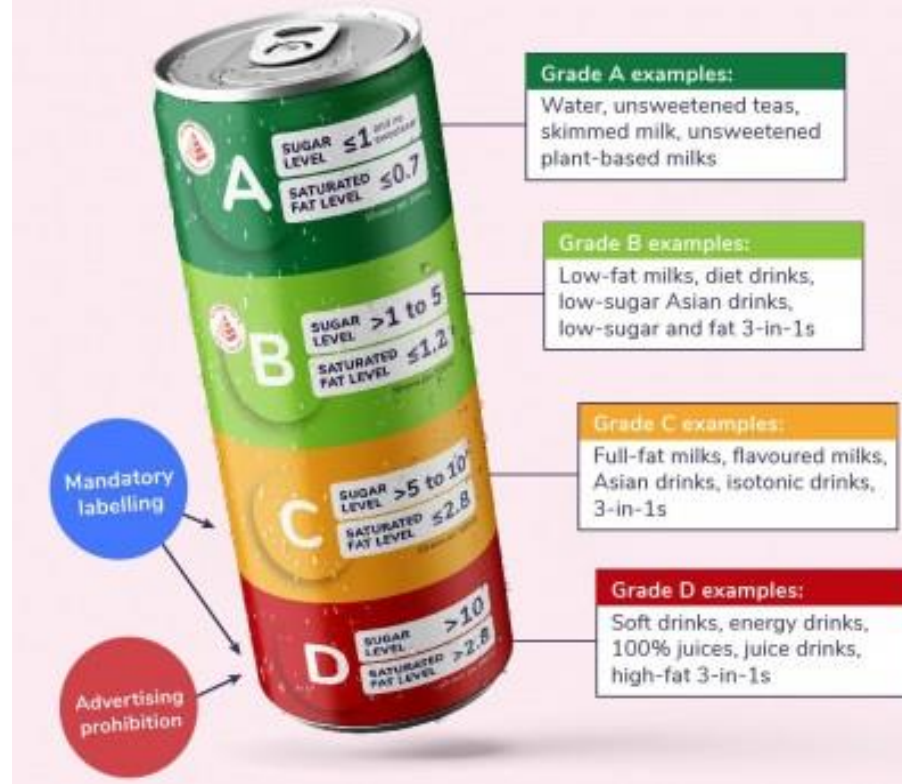
□ **Mandatory Front-of-Pack Nutrition Label**

- Introduce a graded, color-coded front-of-pack nutrient-summary label
- Drinks will receive a "**Nutri-Grade**" rating, ranging from A to D, with D being the unhealthiest.
- Retailers will also be largely banned from advertising D-grade drinks on all media platforms.

□ GOAL: To help consumers identify beverages that are **higher in sugar and saturated fat** → **make healthier choices** 😊



GRADING SYSTEM FOR BEVERAGES



In Singapore, a new nutrition summary label called Nutri-Grade will be introduced from the **end of 2021**. This aims to help consumers better gauge how healthy pre-packaged drinks are at a glance.



Singapore



- **Introduce an advertising prohibition of product advertisements for the least healthy SSBs on all local mass media platforms** (i.e. those that receive the poorest front-of-pack label grade).
- **Outcome: Drinks receive D-grade will be largely banned from being advertised on all media platforms.**





UNITED STATES



UNITED STATES

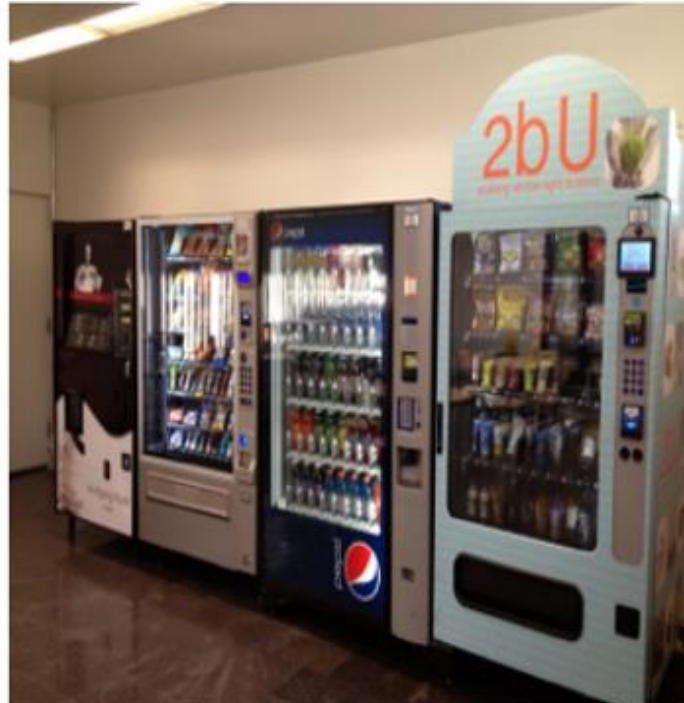


- In the U.S., soda has only been taxed at the local level, and the tax are paid by consumers.
- Local taxes on soda and other sugary drinks are often controversial, and soda companies lobby to prevent them from passing.
- Result : Early research in U.S. cities with soda taxes show that they do work to decrease soda consumption*



How Do we Battle Obesity in the community?





Some elements of our environment that may make it easier to gain weight include **sedentary jobs**, **easy access to inexpensive calories**, and cities built more for **car travel** than for physical activity.



Taiwan



Eating Environment

1. Encourage supermarkets to increase availability of healthy meals & food products.
2. Ask restaurants & street vendors to serve healthy meals and snacks.
3. Encourage food manufacturers to produce healthy meals and food products.



Physical Activity

1. Encourage an active lifestyle in the community.
2. Monitor the progress of building an active lifestyle environment.



Green Space

1. Construct green exercise environment.
2. Build nature environment supporting whole body well-being.
3. Create a comfortable living space to support regular physical activity.



Media Impact

1. Advocate for less stereotype on obese people.
2. Advocate for diverse healthy BMI, diet, physical activity.
3. Establish long-term healthy BMI campaign.

Singapore



Healthier diets

1. **HPB** introduced **Healthier Choice Symbol (HCS)** and **Healthier Dining Program (HDP)** to increase availability of healthier options.
2. Healthy meals in mainstream schools & preschools.



Physical Activity

1. Physical activity programs and sport facilities island-wide.
2. Target at-risk Professional, Managers, Executives and Technicians (PMET) at the workplace.
3. Active Ageing Programs (AAPs) for seniors



Active City

1. Build a city that encourages active lifestyles and mobility.
2. 350 parks and gardens, 200km of covered linkways, and 440km of cycling paths and park connectors.
3. **80.9%** of Singaporeans had **sufficient total physical activity** in 2017.



Healthy Bars to Schools

1. A unique public-private partnership to mobilize and engage stakeholders to promote and sponsor salad bars in schools.
2. Ensure access to free drinking water as an alternative to sugar-sweetened beverages.



Healthy Food Environments

1. Providing incentives for supermarkets or farmers markets to establish their businesses in underserved areas.
2. Starting in 2018, FDA requested chain restaurants to place nutrition and calorie content on their menus.



Physical Activity

1. Encourage use of paths or trails.
2. Enhanced school-based physical education.
3. Opening school facilities to public use and creating walking trails.



Media Impact

Implement large-scale media campaigns that deliver healthy eating and weight control messages by television, radio, newspaper, and social media.

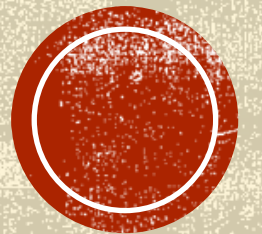
Is menu labeling effective.....

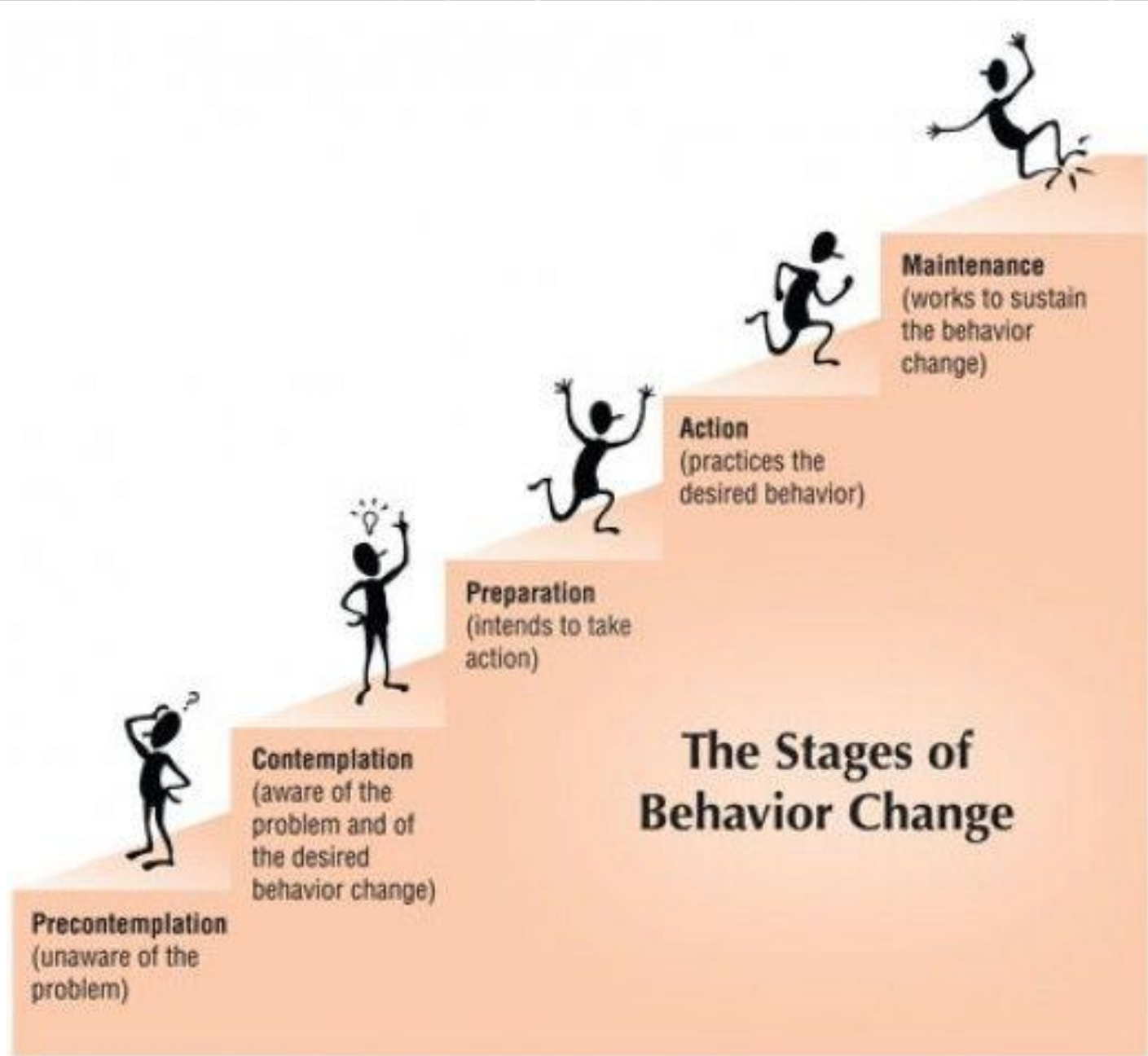
- Research into the impact of menu labeling requirement has yielded mixed results.
- Labeling did not have any impact on people's food purchasing behaviors..... [New York University]
- Having been given the calorie information improved people's knowledge, but people still tended to underestimate their caloric consumption!
- So, the question comes down to “are calorie counts effective”? The jury's still out.





**HOW DO WE MAKE BEHAVIORAL
CHANGE?**





Sources: Grimley 1997 (75) and Prochaska 1992 (148)

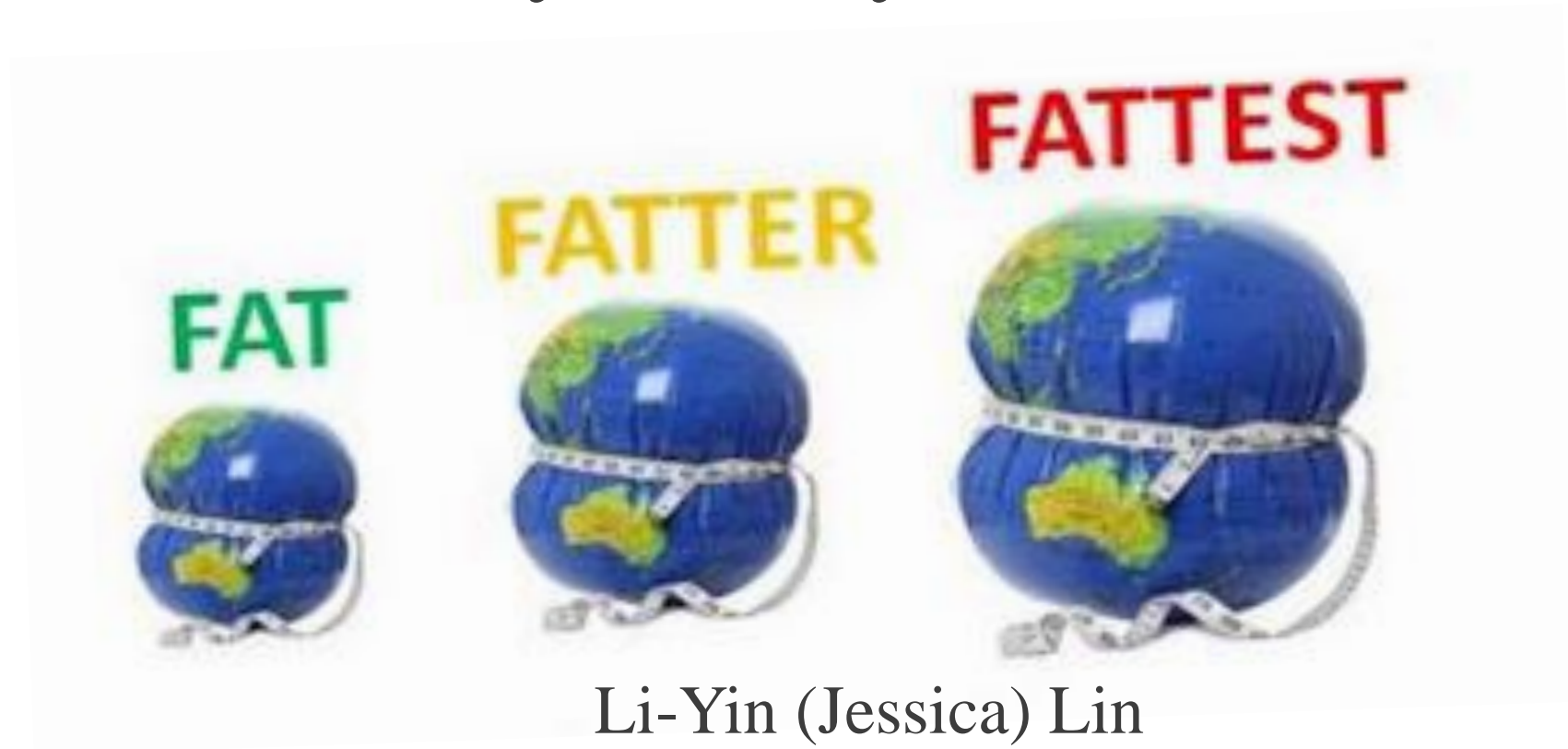


KEY MESSAGES

- Your body is a reflection of you MIND – Behavior Modification
- Mind over food – Dieting
- Mind over body – Exercising
- Mind over mind – Stress Reduction



Thank you for your attention!



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