

Epidemiology of Obesity



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Definition

- **Adults:**
 - Overweight: BMI ≥ 25
 - Obesity is a BMI ≥ 30 .
- **For children under 5 years of age: Weight-for-height**
 - **Overweight:** >2 SD above WHO Child Growth Standards median;
 - **Obesity:** >3 SD above the WHO Child Growth Standards median.
- **Children aged between 5–19 years: BMI-for-age**
 - Overweight: >1 SD above the WHO Growth Reference median;
 - Obesity: > 2 SD above the WHO Growth Reference median.

Problem statement



Worldwide
obesity
has more
than doubled
since 1980



41

MILLION
CHILDREN

UNDER THE
AGE OF

5

WERE
OVERWEIGHT
OR OBESE IN

2014

ASTONISHINGLY,

THERE ARE

MORE PEOPLE

IN THE WORLD
SUFFERING FROM

OBESITY THAN HUNGER

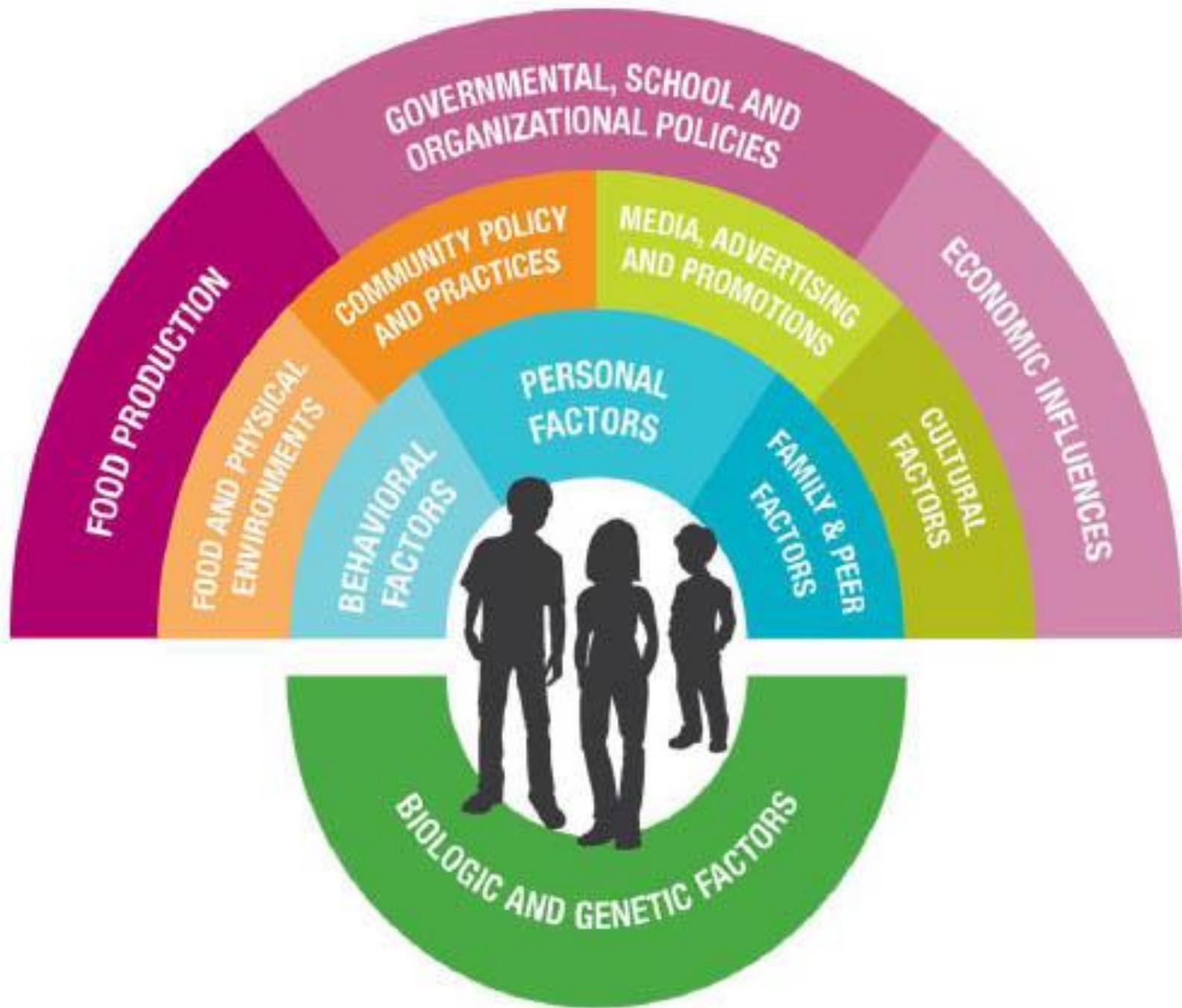
“**OBESITY**”
IS PREVENTABLE!

Problem statement...

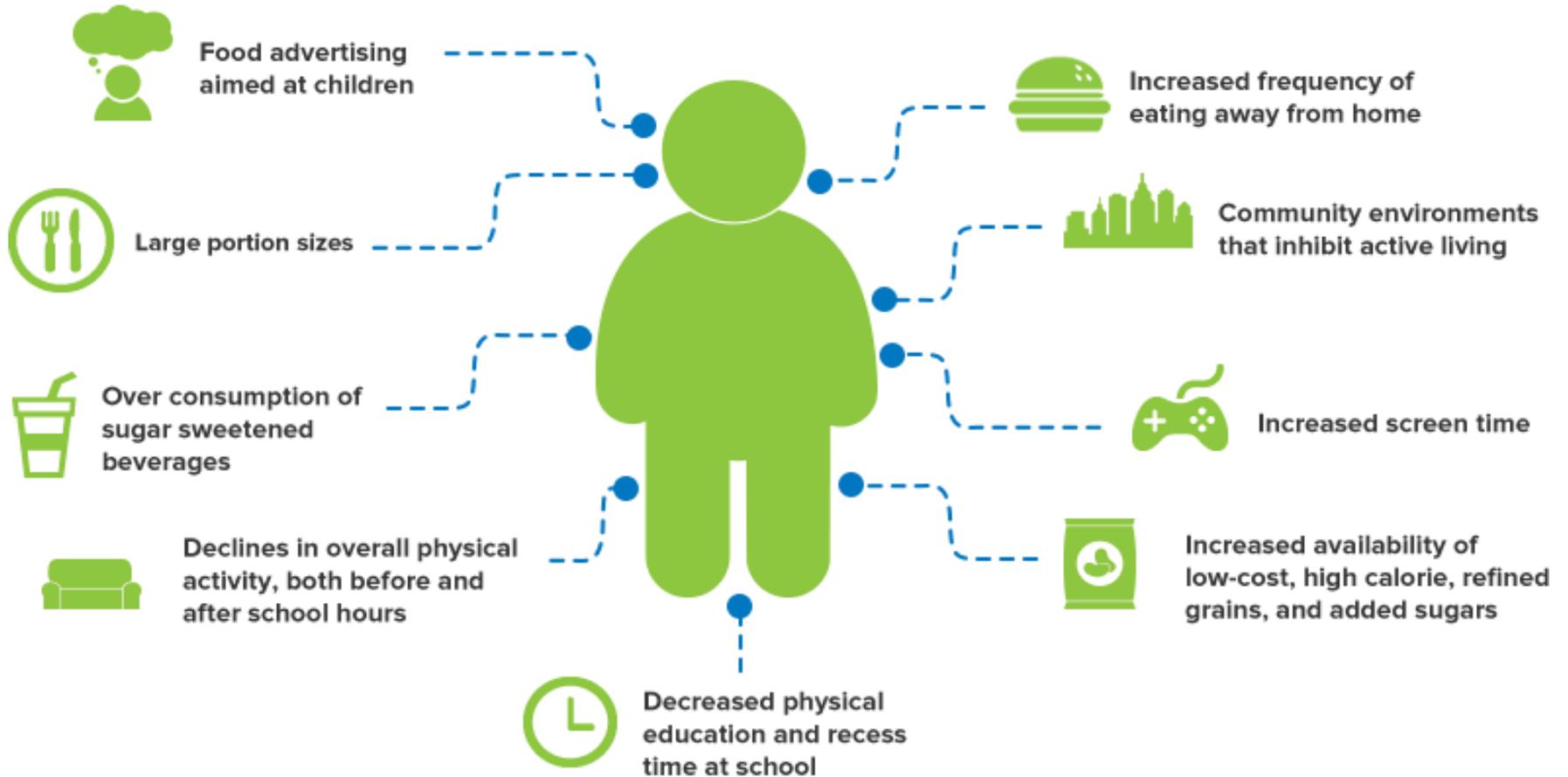
- Worldwide obesity has nearly tripled since 1975.
- In 2016:
 - **Overweight:** 39% of adults aged ≥ 18 years (1.9 billion), (39% of men and 40% of women)
 - **Obese:** 13% (over 650 million) (11% of men and 15% of women).
 - **Children under the age of 5:** 41 million were overweight or obese
 - **Children and adolescents aged 5-19:** Over 340 million were overweight or obese.

What causes obesity and overweight?

- An increased intake of energy-dense foods that are high in fat;
- An increase in physical inactivity due to the
 - increasingly sedentary nature of many forms of work,
 - changing modes of transportation,
 - increasing urbanization.

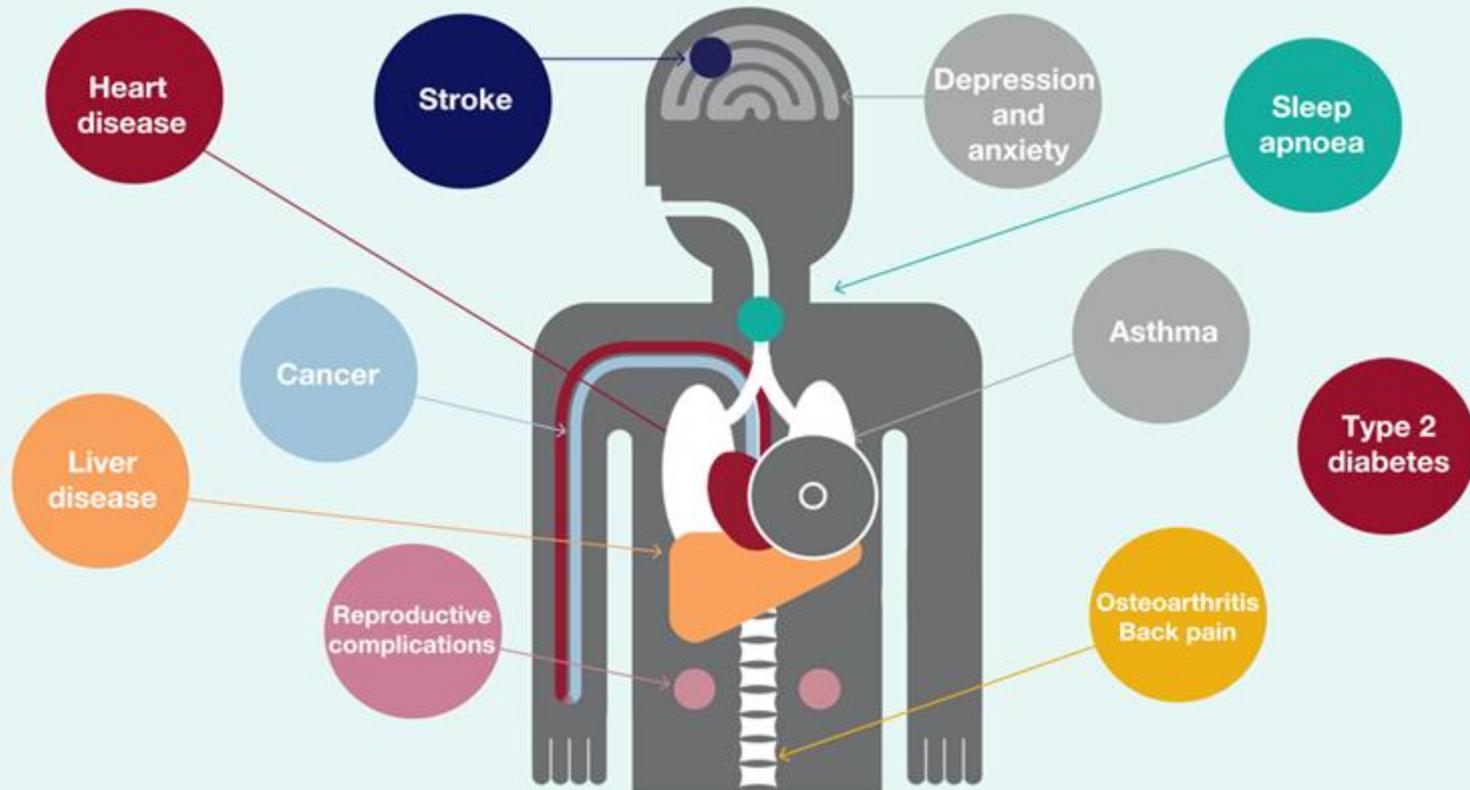


Associated factors..



Common consequences of Obesity

Obesity harms health



What are common health consequences of overweight and obesity?

Raised BMI is a major risk factor for non-communicable diseases such as:

- Cardiovascular diseases (mainly heart disease and stroke), which were the leading cause of death in 2012;
- Diabetes;
- Musculoskeletal disorders (especially osteoarthritis – a highly disabling degenerative disease of the joints);
- Some cancers (including endometrial, breast, ovarian, prostate, liver, gallbladder, kidney, and colon).

Consequences....

SLEEP APNOEA AND BREATHING PROBLEMS

LEADING TO
INTERRUPTED
SLEEP, WHICH HAS
A BIG IMPACT
ON YOUR QUALITY
OF LIFE

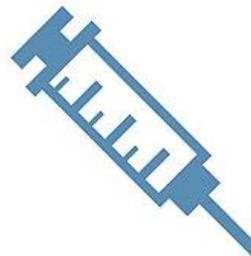
zzzzzzzzzz

OBESE
PEOPLE ARE

80%

MORE LIKELY
TO DEVELOP

**TYPE 2
DIABETES**



FORMS OF CANCER

IT IS THOUGHT THAT

1 in 20

CANCERS
IN THE UK

ARE LINKED
TO BEING
OVERWEIGHT
OR OBESE

Consequences of childhood obesity

Associated with a higher chance of obesity, premature death and disability in adulthood.

In addition to increased future risks, obese children experience

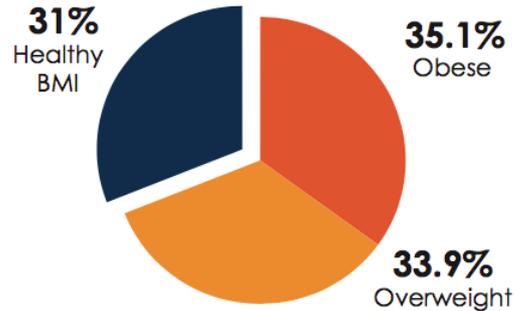
- breathing difficulties,
- increased risk of fractures,
- hypertension,
- early markers of cardiovascular disease,
- insulin resistance and psychological effects.

“Today, more than 95% of all chronic disease is caused by food choice, toxic food ingredients, nutritional deficiencies and lack of physical exercise.”



Economic Cost of Obesity

PREVALENCE OF OVERWEIGHT AND OBESITY IN AMERICA



2 in 3 adults
are overweight or obese. ¹

OBESITY CAUSES

Heart disease and stroke
High blood pressure
High Cholesterol
Diabetes
Some cancers



The cost to your bottom line

\$190.2 BILLION

The estimated annual health care costs of obesity-related illness.²

\$4.3 BILLION

The cost of obesity-related job absenteeism annually.³

\$506 PER YEAR
PER OBESE WORKER

Obesity is associated with lower productivity (presenteeism) while at work, which costs employers \$506 per obese worker per year.³

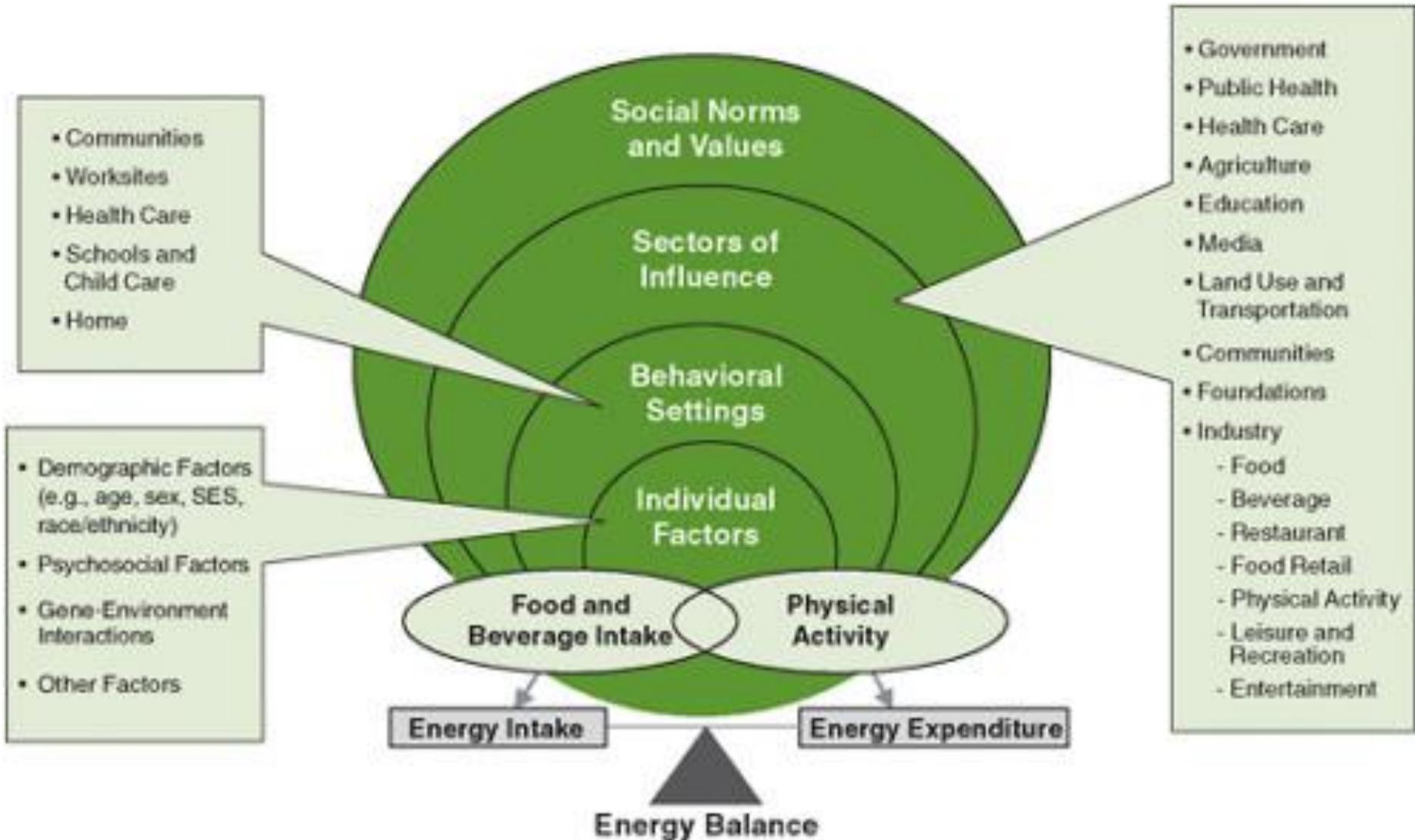
36% HIGHER

Medical costs attributed to obese and overweight adults are 36% higher than those of normal weight.⁴



As a person's BMI increases, so do the number of sick days, medical claims and healthcare costs associated with that person.³

Framework for organizing influences on Obesity



Recommended levels of physical activity for children aged 5 - 17 years

- Physical activity includes play, games, sports, transportation, chores, recreation, physical education, or planned exercise, in the context of family, school, and community activities.
- They should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.
- Amounts of physical activity greater than 60 minutes provide additional health benefits.
- Most of the daily physical activity should be aerobic.
- Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week.

Benefits of Physical Activity for Young People

Appropriate practice of physical activity assists young people to:

- develop healthy musculoskeletal tissues (i.e. bones, muscles and joints);
- develop a healthy cardiovascular system (i.e. heart and lungs);
- develop neuromuscular awareness (i.e. coordination and movement control);
- maintain a healthy body weight.
- Associated with psychological benefits in young people by improving their control over symptoms of anxiety and depression.
- Can assist in the social development of young people by providing opportunities for self-expression, building self-confidence, social interaction and integration.
- Physically active young people more readily adopt other healthy behaviours (e.g. avoidance of tobacco, alcohol and drug use) and demonstrate higher academic performance at school.

Summary

THE WORLD IS GETTING FATTER



HOW DO I KNOW WHETHER I AM OVERWEIGHT?

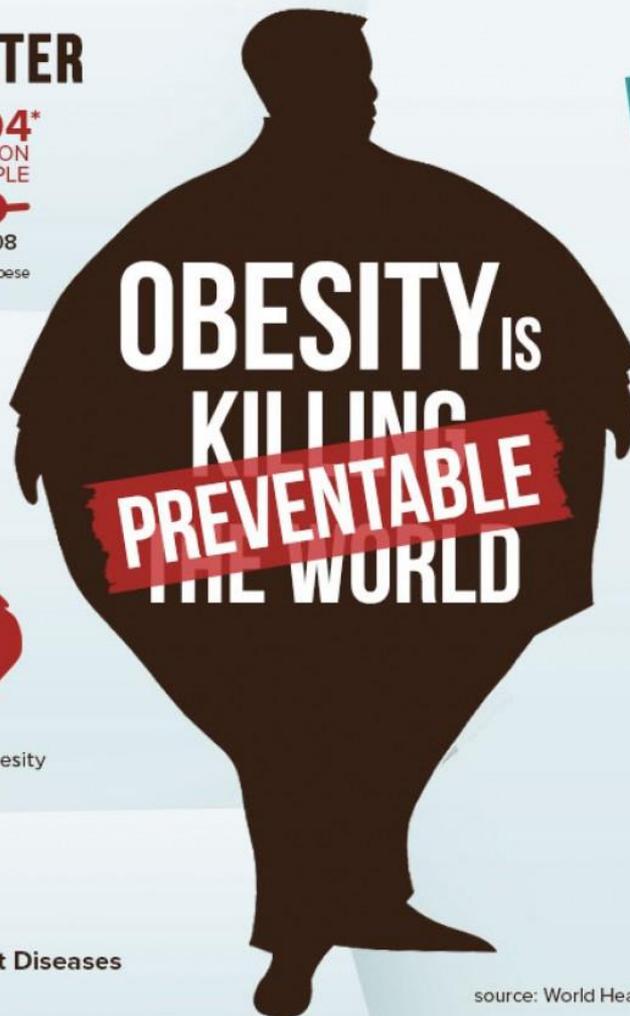
Calculate your body mass index (BMI) using this formula: $BMI = \frac{\text{weight (kg)}}{\text{height}^2 (\text{m}^2)}$



OBESITY KILLS!

7 common diseases due to obesity:

- Arthritis
- Cancer
- Infertility
- Heart Diseases
- Back Pain
- Diabetes
- Stroke



A B C TO OBESITY PREVENTION

SIMPLE RULES TO STAY IN SHAPE

A dopt New Healthy Habits



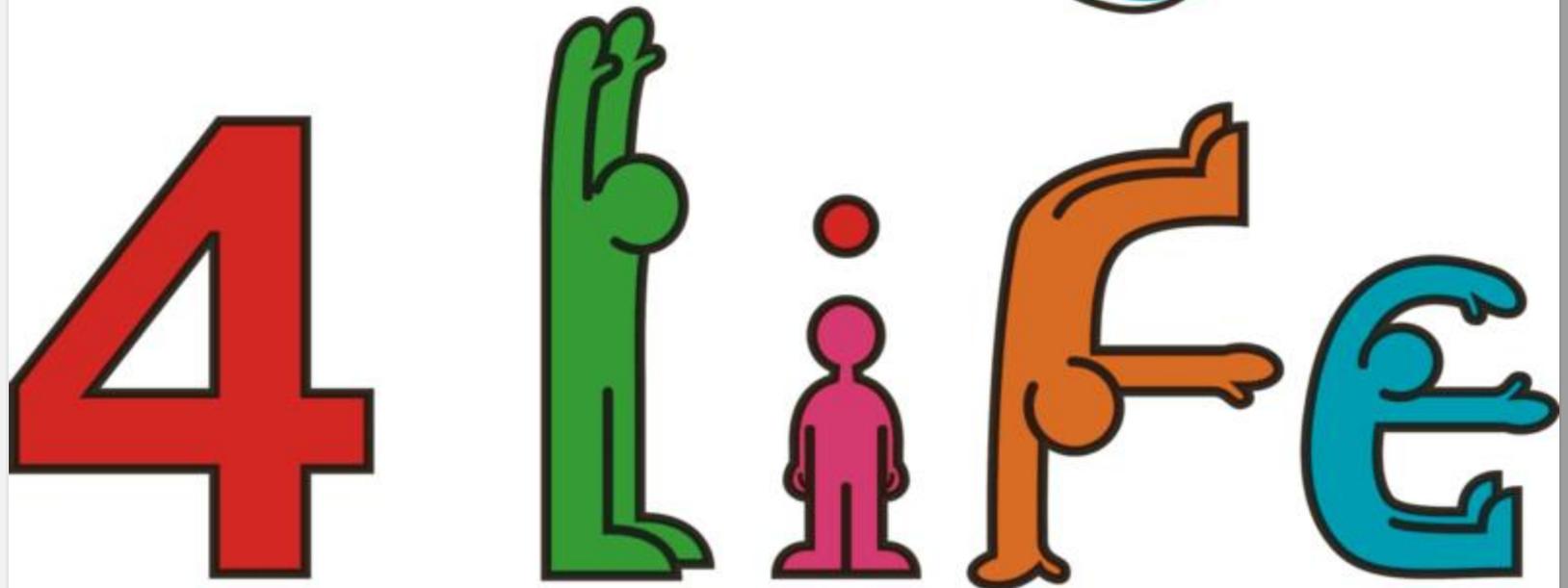
B alance Your Calorie Intake



C ontrol Your Weight Gain



change



Eat well

Move more

Live longer