

# **Selected civilisation diseases**

**Risks to the health of children and  
teenagers**

"Health is a state of complete physical, mental and social well-being and not merely the absence of illness or disability"(WHO)

# Overweight and obesity

## Kluczowe fakty wg WHO

Ponad 340 milionów dzieci i młodzieży w wieku 5-19 lat miało nadwagę lub było otyłych (2016r.)

38 milionów dzieci poniżej 5 roku życia miało nadwagę lub było otyłych (2019r.)

Od 1975 liczba osób z otyłością została niemal potrojona w skali światowej

W 2016r. nadwagę miało ponad 1,9 miliarda dorosłych - 39% populacji (18 lat i starsi)

Wśród nich 650 milionów - 13% populacji było otyłych

Over 340 million children and teenagers aged 5-19 years were overweight or obese (2016)

38 million children under five were overweight or obese (2019)

## Key facts according to WHO

Since 1975 the number of people with obesity has almost tripled worldwide

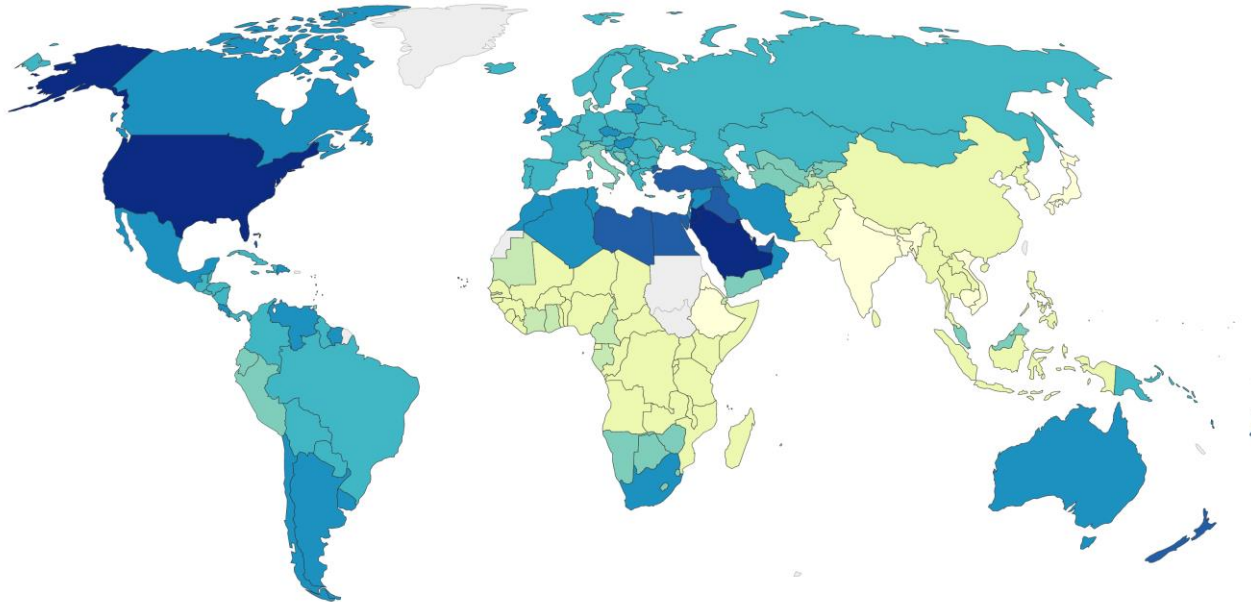
In 2016, more than 1.9 billion adults were overweight - 39% of the population (18 years old and over)

Among these, 650 million-13% of the population were obese

## Share of adults that are obese, 2016

Obesity is defined as having a body-mass index (BMI) equal to or greater than 30. BMI is a person's weight in kilograms divided by his or her height in metres squared.

Our World  
in Data



<https://ourworldindata.org/grapher/share-of-adults-defined-as-obese?time=2016>

**Overweight and obesity** are an abnormal or excessive accumulation of fat which can affect health (WHO)

Body mass index (BMI)



Adults:  
BMI  $\geq$  25 overweight

Adults:  
BMI  $\geq$  30 obesity

Children and teenagers:  
Scale adapted to gender  
and age



## Abdominal obesity:

### \* waist circumference

women > 88 cm

men > 94 cm

### \* WHR indicator (waist-to-hip ratio)

women > 0,85

men > 0,9

# Causes of obesity



# Consequences of childhood obesity



Cardiovascular diseases



Insulin resistance



Musculoskeletal disorders



Certain forms of cancer

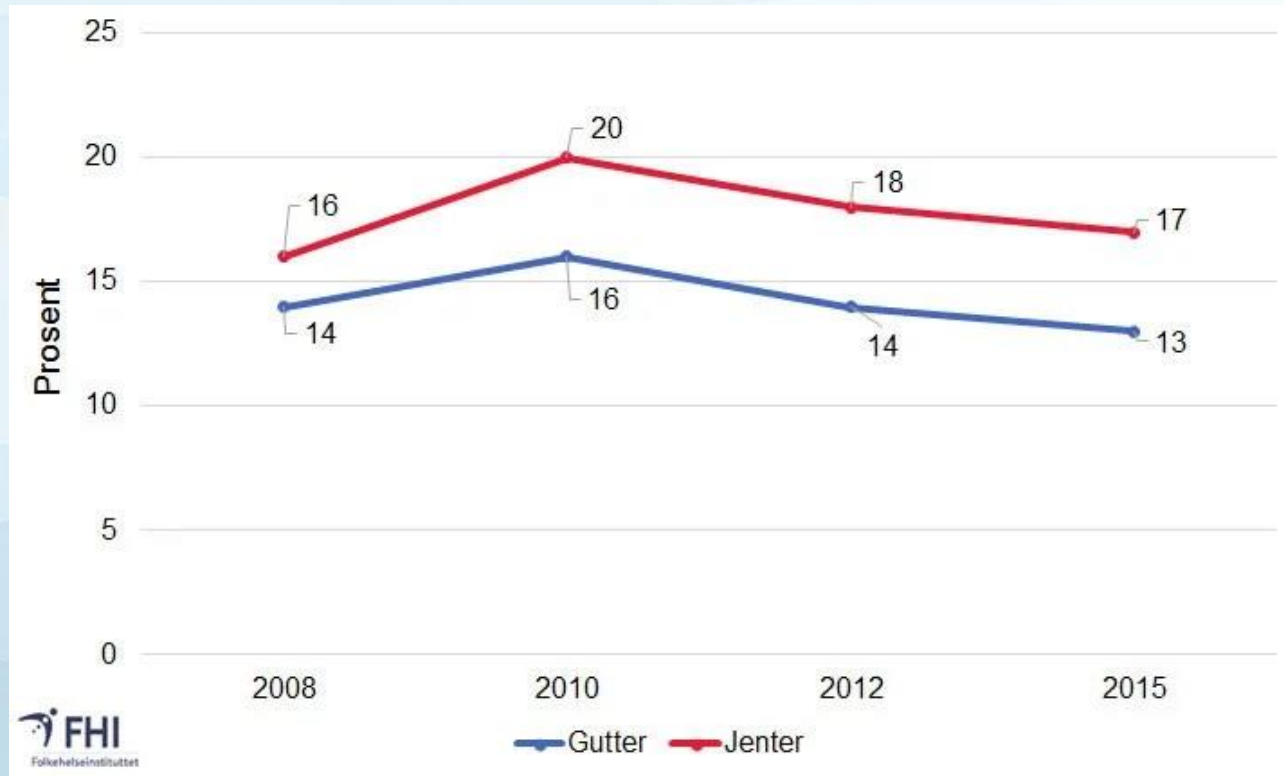


Disability



Depression

# Child obesity in Norway



Source: Barnevekststudien 2008, 2010, 2012 og 2015, Folkehelseinstituttet

# Child obesity in Norway



- 15 to 20% of children are overweight or obese.
- About 25% of teenagers are overweight or obese.
  
- Among children, 17% of girls and 13% of boys are overweight or obese.
- Among lower secondary school students, 25% of boys and 20% of girls are overweight or obese.
- Among secondary school students, 27% of boys and 25% of girls are overweight or obese.

# Diabetes



Chronic metabolic disease resulting from disturbed secretion or activity of insulin, a hormone produced by the pancreas

## Type 1 (insulin-dependent)

The beta cells of the pancreas responsible for insulin production and secretion are destroyed

Most often in children and teenagers

In adults  
LADA (Latent Autoimmune Diabetes in Adults)

## Type 2 (insulin-dependent)

Abnormal insulin activity in the body (insulin resistance)

In adults, the elderly, but also in children

## Other

Pregnancy  
Secondary



# WHO facts

422 million people worldwide have diabetes

Most sick people live in underdeveloped and developing countries

Numbers of cases and the prevalence of diabetes have been increasing over the last decades

# Facts Norway

Approx. 28 000 type 1

Approx. 216 000 type 2

About 350 children will develop type 1 diabetes annually

2000 children and teenagers under 15 years of age suffer from type 1 diabetes

# Causes of diabetes and prevention



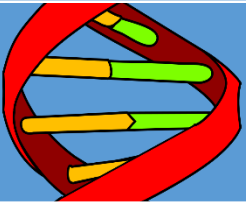
Overweight and obesity



Eating habits



Insufficient level of physical activity

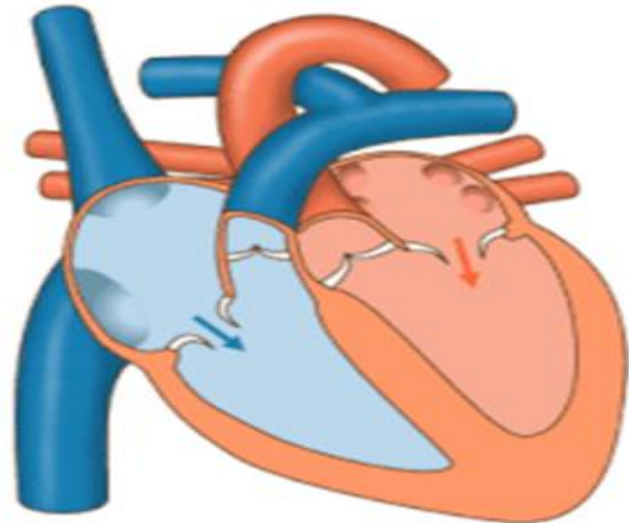


Genetic

# Cardiovascular diseases, illnesses involving disorders of the heart and/or blood vessels

Chronic diseases such as hypertension, atherosclerosis, coronary heart disease

Sudden incidents: heart attack, stroke

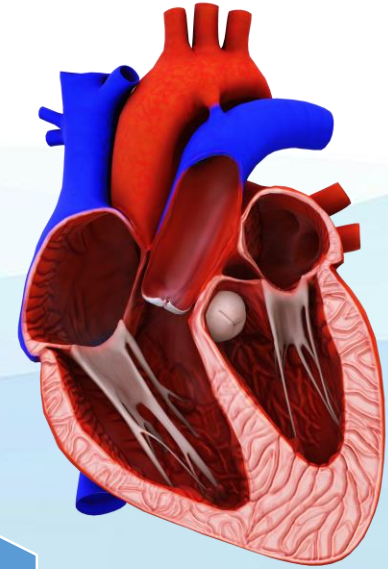


## Facts according to WHO

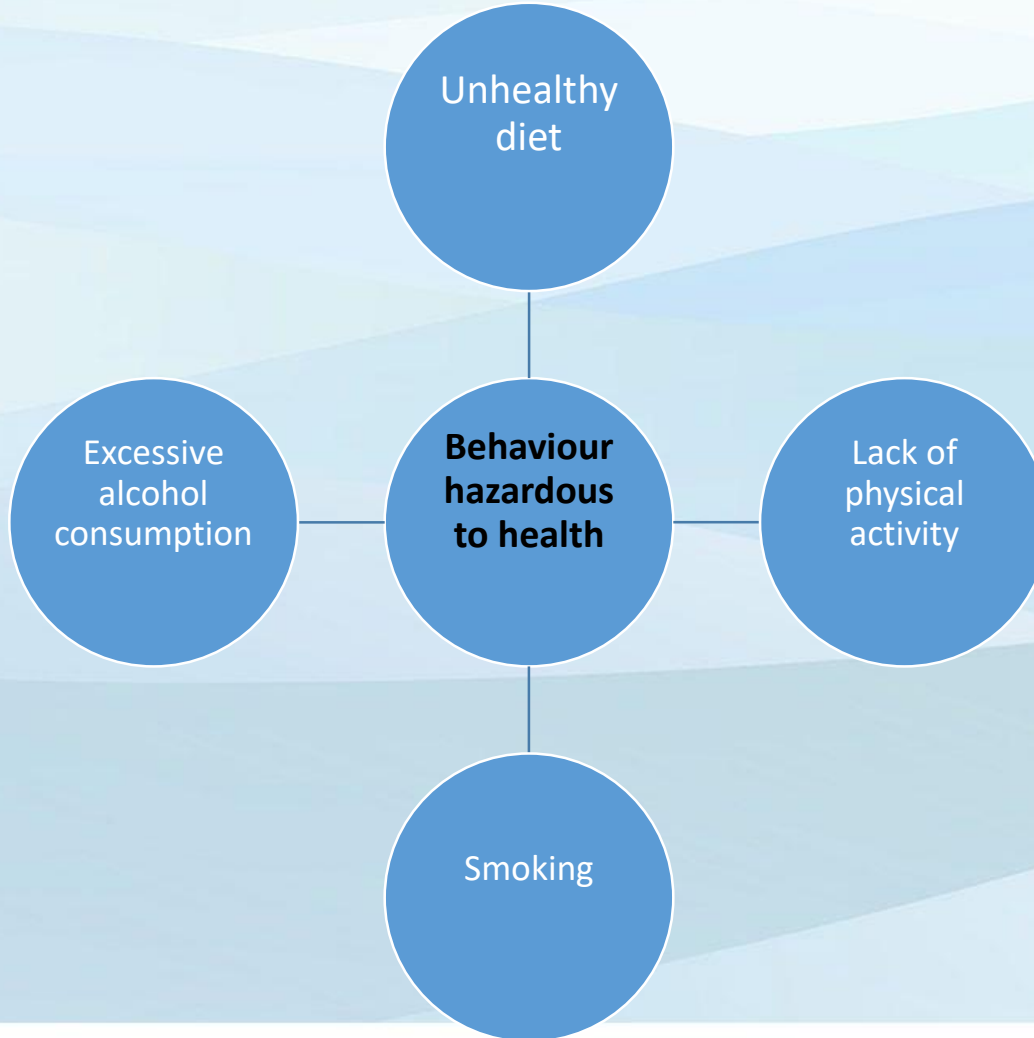
1. place among the causes of death in the world

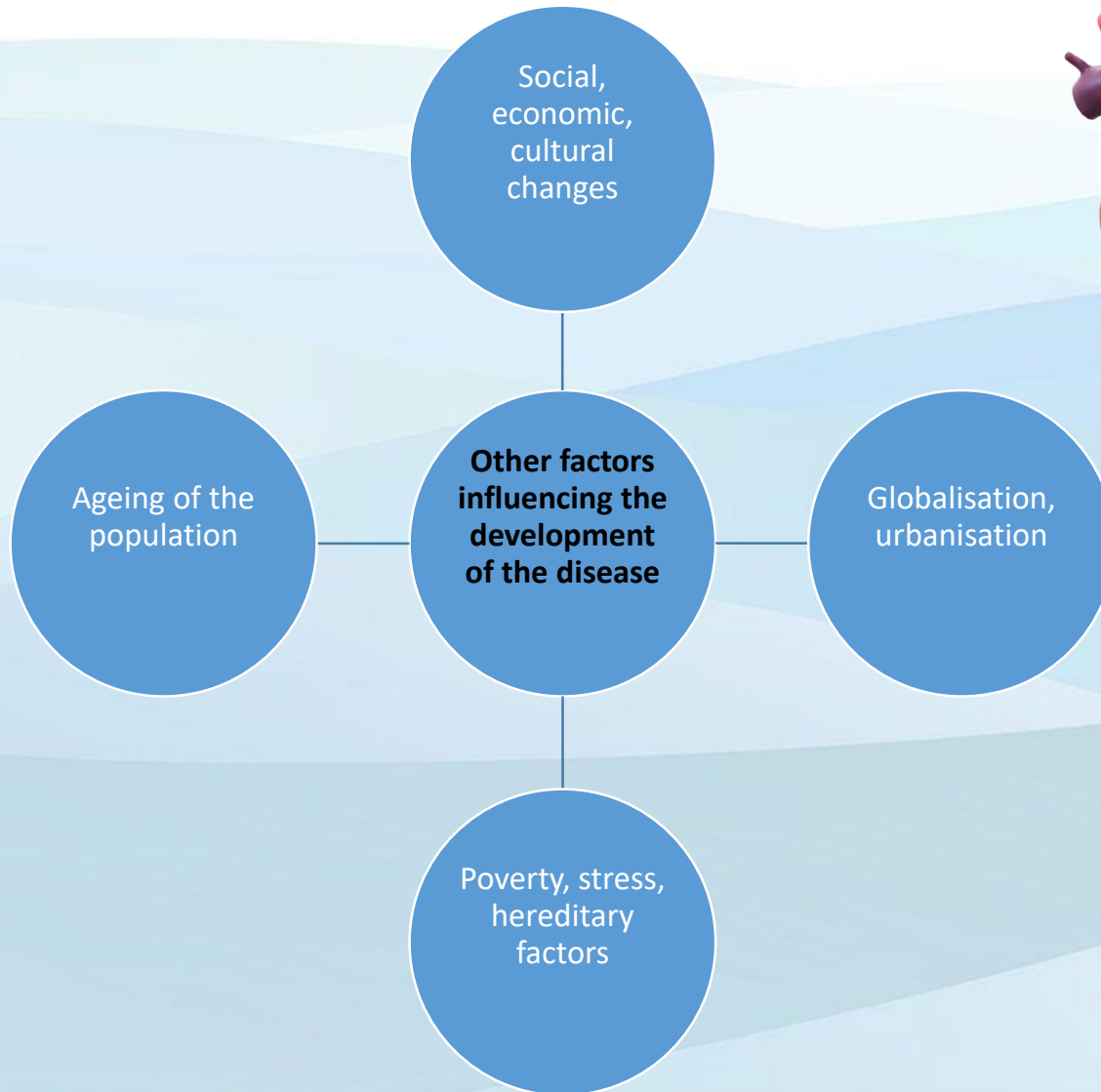
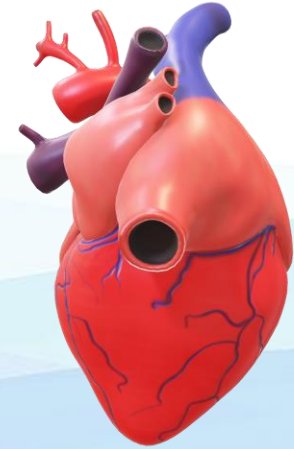
17.9 million people die every year

4 out of 5 deaths in connection with cardiovascular disease are the result of a heart attack or stroke.



# Factors influencing disease development





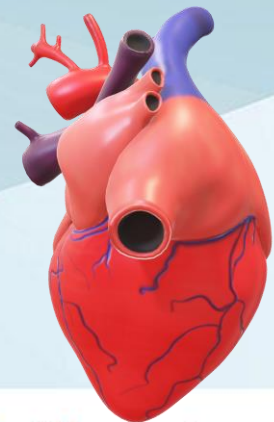
# Action to reduce disease risk (WHO)

## POPULATION-WIDE

- Comprehensive regulation of tobacco sales
- Tax regulations to reduce the consumption of foods high in fat, sugar and salt
- Building walking and cycling paths to increase physical activity
- Strategies to reduce harmful alcohol consumption
- Providing healthy school meals for children

## INDIVIDUAL

- Individual health interventions aimed at people with:
  - - high overall risk of cardiovascular disease
  - - the level of a single risk factor above the thresholds



# Mental health

## Key facts (WHO)



Mental health is more than the absence of mental disorders.

Mental health is an integral part of health; indeed, there is no health without mental health.

Mental health depends on a number of socio-economic, biological and environmental factors.

Cost-effective public health and inter-sectoral strategies and interventions that exist to promote, protect and restore mental health.

# Specific ways to promote mental health (WHO, selected)

- interventions in early childhood (e.g. providing a stable environment that is sensitive to children's health and nutritional needs, with protection against risks, early learning opportunities and interactions that are sensitive, emotionally supportive and stimulating);
- support for children (e.g. life skills programmes, children and youth development programmes);
- Mental health promotion activities in schools (e.g. various types of programmes);
- law and anti-discrimination campaigns;

# Eating disorders



## Anorexia

A mental disorder, characterized by a strong desire to reduce body weight.

## Bulimia

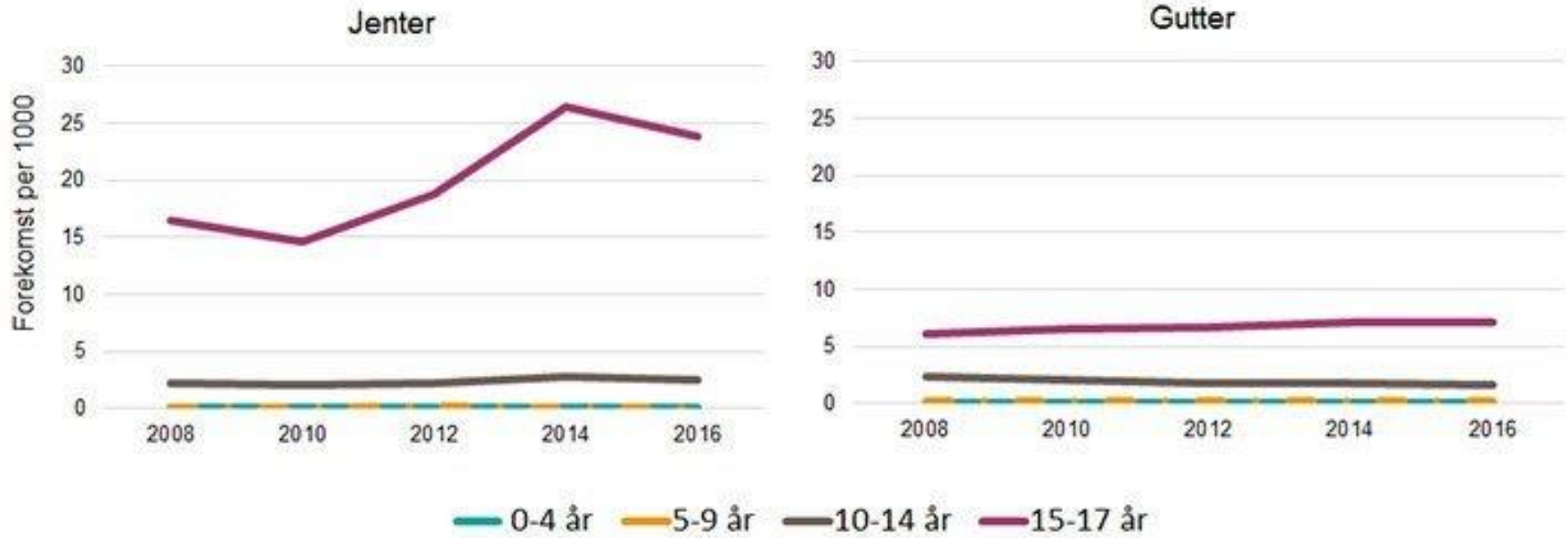
Disruption of food intake:  
Compulsive eating in a short time and then compensatory behaviour - vomiting the food you have taken, or imposing a strict diet that borders on hunger.

# Mental health of children and teenagers in Norway



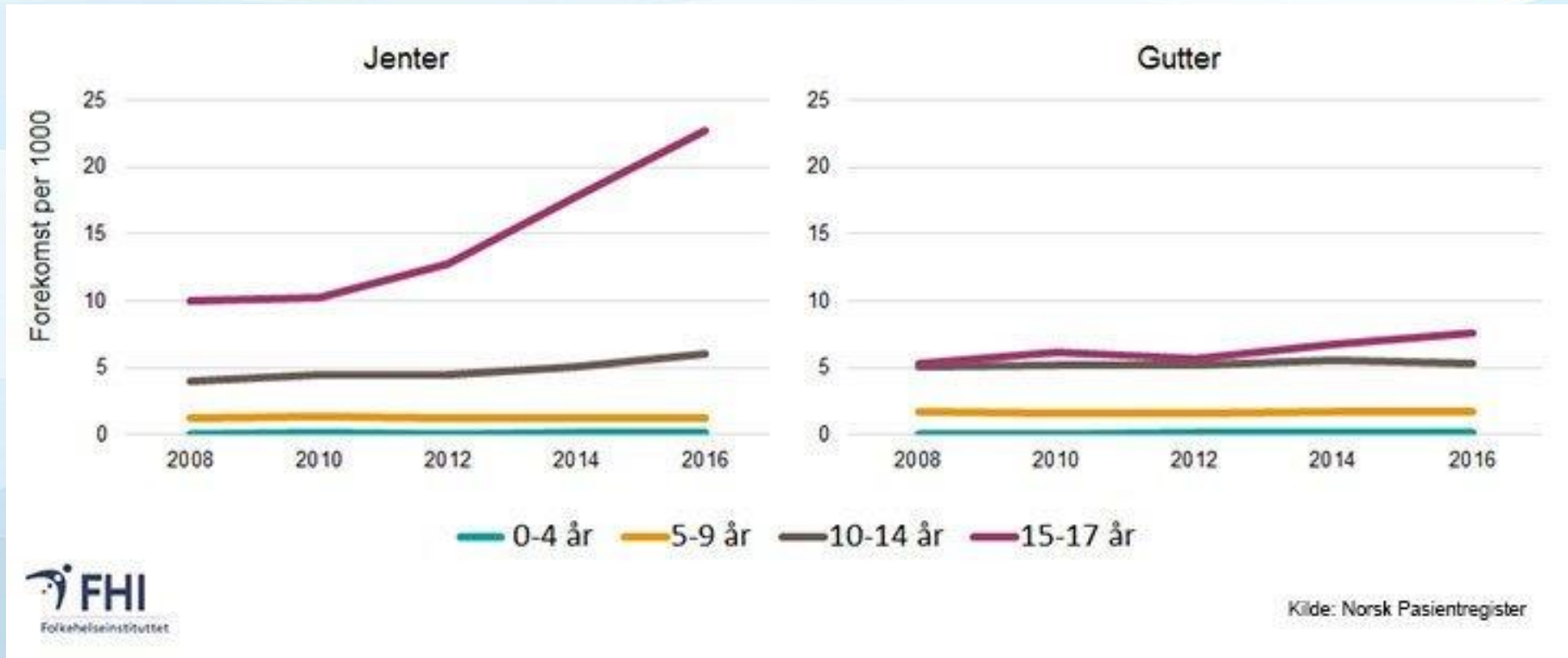
- About 7% of schoolchildren have symptoms corresponding to mental disorders (data from 2007 and 2012).
- The most common mental disorders among children are:
  - Behavioural disorders
  - Depression
  - States of anxiety
- The incidence of anxiety and depression increases in adolescence.
- Between 5 and 7 % over the five-year period 2011-2016, the proportion of girls aged 15-17 diagnosed by the Barne- og ungdomspsykiatrisk poliklinikk (BUP) mental health institution has increased.
- From puberty onwards, depression, anxiety disorders, adaptation disorders and eating disorders predominate in girls.

# Depression



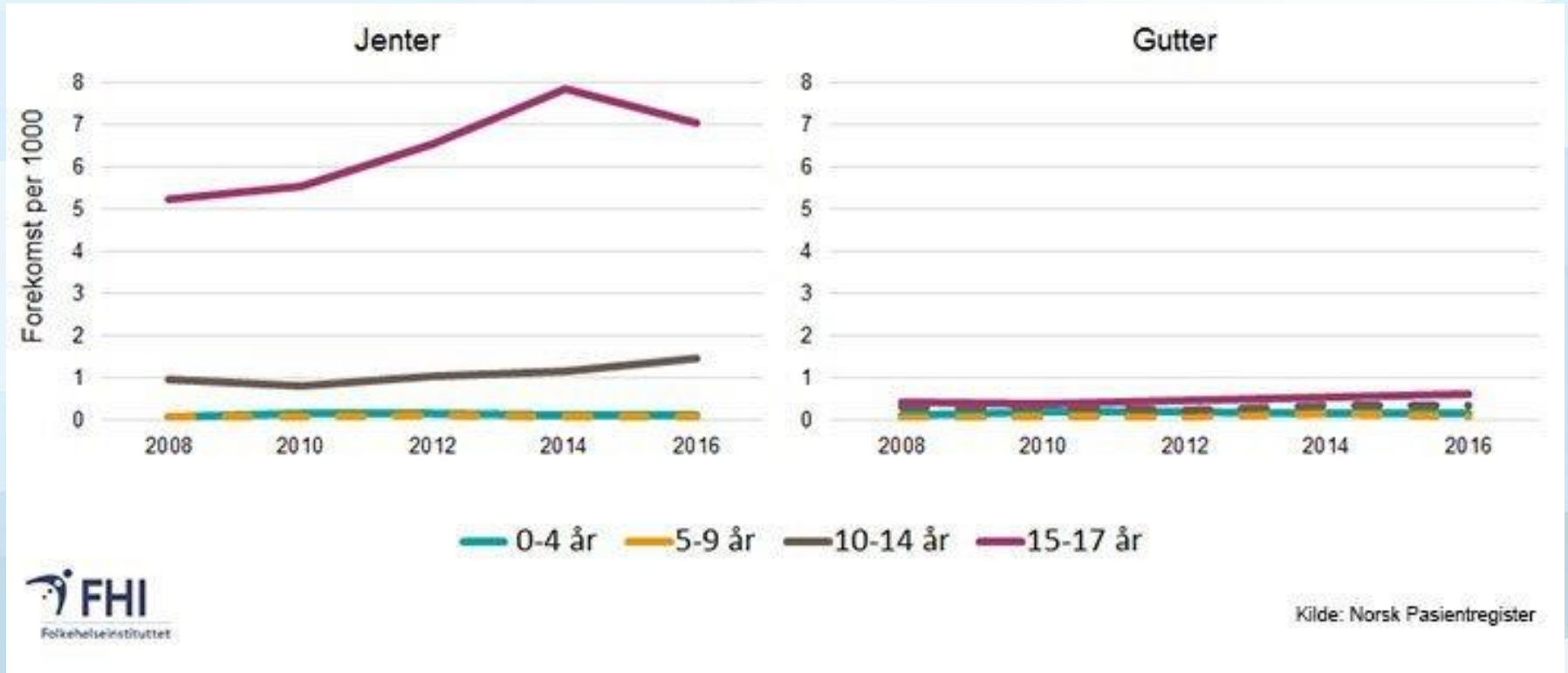
Source: Norsk pasientregister, Folkehelseinstituttet

# States of anxiety



Source: Norsk pasientregister, Folkehelseinstituttet

# Eating disorders



Source: Norsk pasientregister, Folkehelseinstituttet