An example of an SDG focused lesson

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Too much or too little

- The primary author of this lesson was Antonius Warmeling

- The example is part of a chapter he is co-authoring with me.

Levels of overweight on the rise

The share of adults worldwide who are overweight jumped from 1.454 billion in 2002 to 1.934 billion in 2010, an increase of 25 percent. Some 23 percent of individuals age 15 or older were overweight in 2002, while in 2010 the figure rose to 38 percent—even though the number of adults increased by only 11 percent during these eight years. Much of this change occurred in the industrial world. Economic, cultural, and possibly genetic factors all played a part. But in every country where the people have gotten heavier the result has been the same: an increase in preventable medical problems.

"Overweight" is used here for people with a body mass index (BMI) of 25 or greater. BMI is a measure relating a person's height to weight. (A person with a BMI of 30 or above is usually labeled "obese," but here the term "overweight" covers overweight and obese populations combined.)

The data considered are for people 15 and older in 177 nations—home to the vast majority of the world.

Opening Questions

- What is the Worldwatch Institute saying to us? Describe it with your own words.

- Explain their conclusions using the data.

- What are some reasons for these changes in BMI?

- Investigate the calculation of BMI for a human who is overweight or even obese.

- What does this quote mean? "even though the number of adults increased by only 11 percent during these eight years"
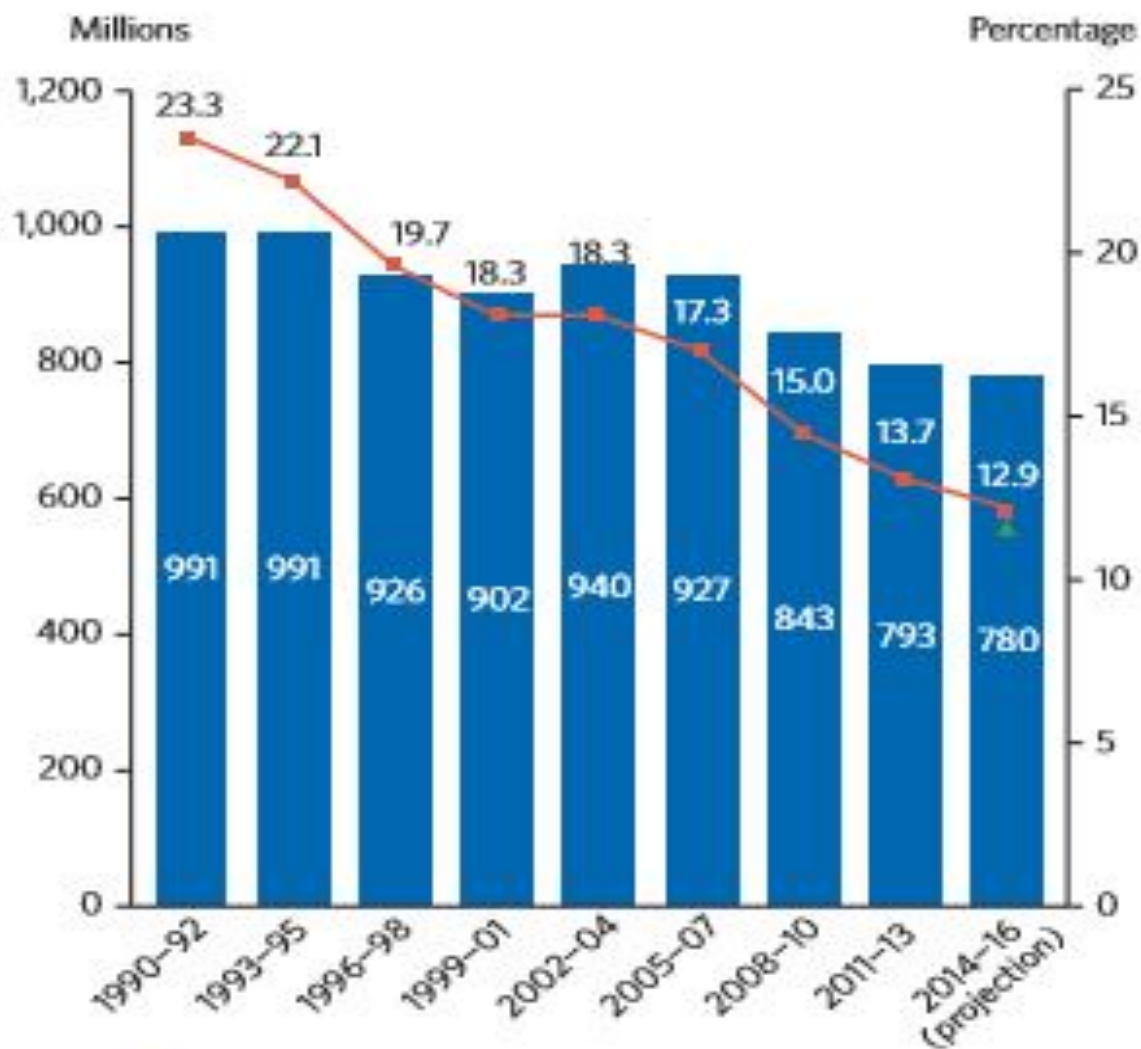
Continuing questions

- What was the number of all people in the researched nations and age group?

- What do you suppose are the differences in developing or industrial countries? Is there a difference between women and men?

  (data can be found at http://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics)

Half the proportion of undernourished people (1990 – 2015)

Current estimates suggest that about 795 million people are undernourished globally. This means that nearly one in nine individuals do not have enough to eat. The vast majority of them (780 million people) live in the developing regions. However, projections indicate a drop of almost half in the proportion of undernourished people in the developing regions, from 23.3 per cent in 1990–1992 to 12.9 per cent in 2014–2016.

source: The Millennium Development Goals, Report 2015 (Target 1c)

Number and proportion of undernourished people in the developing regions, from 1990–1992 to 2014–2016

Millions

Percentage

23.3
22.1
19.7
18.3
18.3
17.3
15.0
13.7
12.9

991 991 926 902 940 927 843 793 780

1990–92 1993–95 1996–98 1999–01 2002–04 2005–07 2008–10 2011–13 2014–16 (projection)

■ Left axis: number of undernourished people

─■─ Right axis: proportion of undernourished people

▲ Right axis: 2015 target

Opening Questions

- Tell each other, what you see in the graph.
- Research how the word "undernourished" is defined. Why do you think it is defined like that?
- Which UN sustainable development goals are being addressed? Are the goals achieved?
- How many people lived in the period from 2014 to 2016 in the world? How many were there in 1990-92?

Continuing questions

- Which is more important, the proportion of undernourished people or the actual number of undernourished people? Develop an argument for each answer.

- Can you create a reasonable projection? Based on this graph, what do you expect to happen in the years up to 2030?

Connecting questions

- Compare the number of undernourished and overweight people, for example in 2010.

- In the industrial countries we may find the term "underweight." Research different definitions of "underweight" and "undernourished." (A definition of underweight is a BMI < 18.5)

- Design a presentation that addresses the issues of BMI and malnourishment using examples of people with the same height and different weights to illustrate the categories of overweight, underweight, etc. (or use examples with the same weight and different heights).