

# 22

## Obesity

### Comprehension Questions

Indicate whether the statement is true or false, and justify your answer. Be sure to cite evidence from the chapter and state any additional assumptions you may need.

1. In the United States, the rise in body weight started about 30 years ago.

**FALSE.** Body weight has been rising in the U.S. for at least the past 150 years.

2. While obesity generally results in higher per-year medical costs, obese individuals do not typically have higher average *lifetime* medical costs than non-obese individuals because they do not live as long.

**FALSE.** Yang and Hall (2007) show that obesity increases the expected net present value of future health care expenditures for a 65-year-old by over \$20,000, even after accounting for lower life expectancies.

3. Increasing female labor force participation rates (alongside declining time spent on preparing meals at home) has been implicated as one cause of rising obesity rates.

**TRUE.** This trend combined with the fact that restaurant meals tend to be more calorically dense than home-cooked ones has been credited as one cause of rising obesity rates.

4. At firms that do not provide health insurance, the wages of obese workers are lower than the wages of non-obese workers with similar levels of pro-

ductivity.

**FALSE.** There is no wage pass-through at firms without health insurance (see Chapter 18).

5. Over the past 15 years, obesity rates have increased sharply for high school dropouts and for people with only high school degrees. Rates for college graduates, however, have remained flat.

**FALSE.** Obesity rates have been rising across all education levels (see Figure 22.1).

6. Developed countries with high food price tariffs tend to have lower prevalence rates of obesity.

**TRUE.** For example, English-speaking countries – Canada, New Zealand, Australia, the UK, and the US – which have lower agricultural trade barriers also have on average higher levels of obesity.

7. Suppose that there is no wage penalty for obesity at the Springfield Nuclear Power Plant (SNPP). Suppose further that Mr. Burns (the boss) offers his employees generous pooled health insurance coverage. Finally suppose that obese workers at the SNPP are likely to spend more on health care than their thinner colleagues. Without further assumptions, one can conclude that Homer Simpson's gluttony and sloth necessarily causes a large welfare loss.

**FALSE.** For there to be social loss from health insurance, the insurance has to change behavior. But if there is no moral hazard, then there is no welfare loss.

8. People tend to underestimate the calories counts of food not prepared for them at home.

**TRUE.** This has motivated public health efforts to mandate nutrition fact labeling in restaurants.

9. Body Mass Index (BMI) is a reliable measure of obesity.

**FALSE.** BMI does not differentiate between fat and muscle weight. As a result, very-fit body builders can appear morbidly obese according to BMI.

10. The only way to combat childhood obesity is through strict government intervention.

**FALSE.** Less heavy-handed nudges like placing vegetables before french fries in cafeteria lines may also play a role in combatting childhood obesity.

11. Genetics plays a role in determining body weight for children and adults.

**TRUE.** Various twin studies like Sacerdote (2007) suggest that genetics plays a role in explaining why some people are more likely to be overweight than others.

12. New York has seen a majority of people change their behaviors because of the recent requirement that restaurants list the calorie counts for all their menu items.

**FALSE.** The new requirements did not seem to affect overall calorie consumption but did decrease intake among the minority who reported using the nutrition information (Dumanovsky et al. 2011).

13. Many countries in the world have experienced increases in the number of obese individuals in their population, but only the U.S. has seen increases in childhood obesity.

**FALSE.** The increase of childhood obesity is common across most industrialized countries and some low-income countries as well (Han et al. 2010). For example, between the 1970s and 1990s, childhood obesity rates at least doubled in Brazil, Chile, Finland, France, Germany, Greece, the UK, Australia, and Japan.

14. Having generous insurance makes you fat because you do not pay the full health costs of eating poorly and not exercising.

**FALSE.** This statement would be TRUE if having insurance significantly altered behavior through moral hazard. But the RAND HIE provides counter-evidence that more generous health insurance did not make enrollees fat.

15. Having an obese friend increases the likelihood of obesity.

**TRUE.** Results from the Framingham Heart Study by Christakis and Fowler (2007) provide suggestive evidence that people are more likely to become obese if they have an obese friend. However, the direction of causality is not clear, and it may not be true that having an obese friend is *causally* related to obesity.