**Question Bank**

**Chapter 8**

**Now or Later**

**Think Break Questions** (from Book: p. 119)

1. Using Figure 8.1 or 8.2, assume the budget constraint is binding. Explain how increasing the food budget may or may not counteract a decrease in the delay weight or certainty weight.
2. Consider three types of nutrition/health interventions: (i) a worksite wellness program, (ii) a healthy food taste test and (iii) a personal health risk appraisal checkup. Classify these according to which component in the utility function given by equation (8.4) they target: hedonic utility, delay weight, certainty weight, or health production utility. Does the analysis of intertemporal choice help you determine why some may be more effective than others?
3. Using Figure 8.3, show how a tax on unhealthy indulgent food may offset or moderate a present consumption bias effect. In the presence of present consumption bias, discuss why a tax may be more effective than a nutrition education program.
4. Why might healthier AND tastier foods be an effective strategy for improving dietary quality and health with this framework? Explain.

***Multiple Choice Questions***

1. The psychologist, Walter Mishel, conducted intertemporal choice experiments with

a. rats

b. monkeys

c. kids

2. An intertemporal choice occurs when the

a. benefit of the choice occurs at a different time than the cost.

b. cost of the choice is greater later than the benefits now.

c. a and b.

d. none of the above.

3. Which is **not** an example of an intertemporal choice?

a. a college education

b. a savings account

c. a rollercoaster ride

d. a weight lifting workout

4. Intertemporal choice problems are also studied under the heading of

a. present consumption bias.

b. delayed gratification.

c. delay discounting .

d. self-control problems.

e. all of the above.

5. Understanding the nature of an intertemporal choice problem in the context of food and nutrition is important because health conditions associated with a poor diet can take a long time to appear.

a. True

b. False

6. The certainty of experiencing a future condition or event is irrelevant when analyzing an intertemporal choice problem.

a. True

b. False

7. The delay effect and uncertainty effect both cause individuals to place more weight on future health in making decisions.

a. True.

b. False.

8. The delay weight is a simple way to indicate how much importance individuals place on future health and utility.

a. True.

b. False.

9. As the delay weight gets smaller, \_\_\_\_\_\_ (fill in blank) weight is placed on the future.

a. less

b. more

c. the same

10. As long as hedonic and health utility are not the same and an individual places some weight on their future health state, they will choose a level of food consumption that does not maximize their hedonic utility.

a. True

b. False

11. The total utility and hedonic utility cannot be equal.

a. True

b. False

12. If the total utility and the hedonic utility are the same, the delay weight is implicitly

a. perhaps 1.

b. perhaps 0.

c. positive.

d. negative.

13. The full expenditure constraint does not affect an intertemporal choice problem.

a. True

b. False

14. Health effects from food and nutrient intake are uncertain because

a. the precise biological process from nutrition to health is unknown.

b. health is affected by many factors in addition to nutrition.

c. a and b.

15. As the certainty weight gets smaller, \_\_\_\_\_\_ (fill in blank) weight is placed on the future

a. less

b. more

c. the same

16. If the total utility and the hedonic utility are the same, the certainty weight is implicitly

a. perhaps 1.

b. perhaps 0.

c. positive.

d. negative.

17. A zero delay weight is indistinguishable from a zero certainty weight in terms of choices.

a. True

b. False

18. Individuals tend to underinvest in goods, such as healthy food, when the effects are uncertain.

a. True

b. False

19. Present consumption bias increases with

a. an increase in the delay weight.

b. a decrease in the certainty weight.

c. both a and b

20. As present consumption bias increases, the demand for savory, indulgent food increases and unsavory food decreases.

a. True

b. False

***Short Answer Questions***

1. Using two graphs (one for a healthy unsavory food and one for an unhealthy savory food) show that an increase in the delay weight will increase consumption of the healthy food relative to the unhealthy food. **Explain.**

2. Using two graphs (one for a healthy unsavory food and one for an unhealthy savory food) show that an increase in the certainty weight for the healthy food will increase consumption of the healthy food relative to the unhealthy food. **Explain.**

3. Using equation (8.4) **explain** why the certainty weight for a health food must be greater than the certainty weight health for an unhealthy food in order for there to be a chance that the healthy food would be eaten.

***Discussion Questions***

1. In the context of this chapter, explain why it is important that there be consistency in messages about nutrition from the Dietary Guidelines Committee.

2. If different individuals have different delay weights, explain why it might be important to get a measure of individuals delay weights in terms of policy design.