

## Ketosis Training Institute – Certification Exam

### Section One: Questions on Obesity and Diabetes

#### Part I:

1. What kind of disorder causes obesity?
2. Why doesn't Calories in Equal Calories out?
3. How does the body respond to a calorie reduction diet and how does it affect a person's weight?
4. What are five false assumptions leading to the CALORIE-REDUCTION ERROR?
5. Why isn't increasing exercise the key to weight loss?
6. What factors do basal metabolic rate depend on?
7. How do the thermogenic effect of food and other factors affect the basal metabolic rate?
8. What is Dr. Fung's conclusion about exercise and weight loss?
9. What is a common assumption, and *misperception* about why the obese are obese?
10. What is the homeostatic mechanism known as the 'set point'?
11. Why is the set point too high in obese people?
12. How does the Thermostat Analogy explain the high set point challenge?
13. What is Leptin Resistance?

#### Part II:

1. What is the difference between Type 1 Diabetes and Type 2 Diabetes?
2. What is the evidence of a *causal* link between insulin and weight gain in diabetics prescribed oral hypoglycemic agents?

3. In non-diabetic patients, how do increased insulin levels correspond with increased weight and decreased insulin levels correspond with decreased weight?
4. What factor in non-diabetic medications leads to weight gain?
  
5. Why is insulin a major controller of body set weight?
6. How is obesity a '*hormonal* dysregulation of fat accumulation?
7. Compare insulin and leptin levels in thin people and obese people.
8. What is the most crucial question in obesity?
9. What is cortisol's key role in metabolism and what are two common 'nicknames' for cortisol?
10. What *response* does this 'Stress Hormone' prepare our bodies for?
11. What roles do cortisol (aka synthetic prednisone) levels and glucose levels play in a short-term stress condition?
12. List some common long-term stressors.
13. Give examples of studies which demonstrate that chronically elevated cortisol levels lead to increased insulin.
14. What is the definition of *insulin resistance*?
15. Explain the *causal* relationship of cortisol levels on weight in studies of Cushing's Disease Syndrome and Addison's Disease?
16. According to the Hormonal Theory of Obesity, what is the relationship between cortisol, insulin and obesity?
17. Since long-term stress leads to weight gain, what active processes can help reduce stress?
18. Explain how sleep deprivation leads to weight gain and good sleep is essential to any weight loss plan.
19. What was Dr. Atkins' low-carb revolution and how did it affect insulin levels?

20. How did the American Heart Association's (AHA's) forty-year recommendation of a low-fat diet affect the obesity crisis?
21. Why didn't long-term studies of the Atkins Diet result in lasting weight loss?
22. Which refined carbohydrate contributes most to obesity?