

## **Mastery Series: Diabetic Complications**

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1. Theoretically, what is the simplest way to cause cells to become insulin resistant?
2. Theoretically, what is the simplest way to cause cells to become insulin sensitive?
3. What are the symptoms of ketoacidosis?
4. What is the "cure" for ketoacidosis?
5. What are the 2 big problems during ketoacidosis?
6. Why does adipose tissue release too much fat, and the liver make too many ketones if a patient is very insulin resistant?
7. What hormone increases blood sugar?
8. ACTH is released in a burst from the pituitary gland around 4am. How would this affect blood sugar in the early morning hours?
9. There are a wide variety of chronic complications to diabetes. What are they?
10. Almost all of the chronic complications have the same cause, which is:

## Diabetic Complications

## Mastery Series Answers

1. high amounts of insulin over a long period of time (due to diet of excessive calories, especially in the form of carbohydrates)
2. keep insulin levels low
3. rapid breathing, ketones in urine, hyperglycemia
4. insulin
5. \*dehydration from hyperglycemia and resulting polyuria and \*acidosis from excessive ketogenesis
6. insulin normally inhibits lipolysis and ketogenesis; when organs are insulin resistant, then lipolysis and ketogenesis occur excessively
7. cortisol
8. elevate it
9. \*heart disease/stroke; vision loss; kidney damage; poor wound healing; infection; neuropathy
10. damage to blood vessels