METABOLISM

بسم الله الرحمن الرحيم

FINAL

Past Papers

﴿ وَإِن تَتَوَلَّوْا يَسْتَبْدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَالَكُم ﴾

اللهم استعملنا ولا تستبدلنا

Written by:

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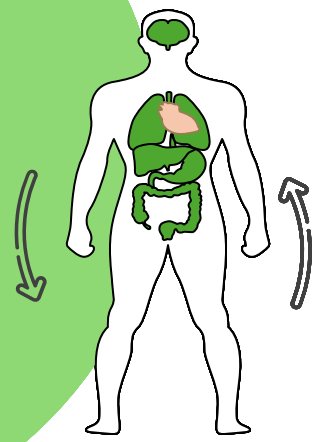

Obesity

Question 1:

Which of the following is an environmental or behavioral contribution to obesity?

A) Genetic predisposition
B) Sedentary lifestyles
C) Hormonal imbalances
D) Insufficient insulin production

Ans:b

Question 2:

One of these cases is considered obese:

A. a pear-shaped man with w/h of 0.9

B. an apple shaped woman with w/h of 0.7

C. someone with BMI 29.9

Ans:a

Question 3:

40-year-old woman, 5 feet, 1 inch (155 cm) tall and weighing 188 pounds (85.5 kg), seeks your advice on how to lose weight. Her waist measured 41 inches and her hips 39 inches. A physical examination and blood laboratory data were all within the normal range. Her only child, who is 14 years old, her sister, and both of her parents are overweight. The patient recalls being obese throughout her childhood and adolescence. Over the past 15 years she had been on seven different diets for periods of 2 weeks to 3 months, losing from 5–25 pounds. On discontinuation of each diet, she regained weight, returning to 185–190 pounds. Which one of the following best describes this patient?

A. She is classified as overweight.

B. She shows an “apple” pattern of fat distribution.

C. She has approximately the same number of fat cells as a normal-weight individual, but each adipocyte is larger.

D. She would be expected to show lower than normal levels of circulating leptin.

Ans:b

Question 4:

40- A 50-year-old man, 170 cm tall and weighing 90 kg, seeks your advice on how to lose weight. His waist measured 110 cm and his hips 100 cm. His only child, his siblings, and both of his parents are overweight. The patient recalls being obese throughout his childhood and adolescence. Over the past 15 years he tried several weight reduction diets. On discontinuation of each diet, he regained weight. Which one of the following best describes this patient?

a. He mostly has a larger number of fat cells when compared to a normal-weight individual.

b. He is classified as overweight.

c. He would be expected to show lower than normal levels of circulating leptin.

d. He would be expected to show higher than normal levels of circulating HDL.

e. He shows a "pear" pattern of fat distribution.

Ans:a

Question 5:

What is wrong about adiponectin?

A) Controls lipid profile.

B) It increases if body weight increases.

C) Stimulate beta oxidation.

Ans:b

Question 6:

What happens in case of mutation to leptin gene?

A) Weight loss.

B) Polyuria.

C) Hyperphagia.

D) Polydepsis.

Ans:c
hyperphagia = over eating

Question 7:

Insulin resistance causes all of the following except:

A) Increases lipolysis in adipose tissue.

B) Increases beta oxidation.

C) Reduces glucose uptake in skeletal muscle.

D) Inhibits hepatic gluconeogenesis.

Ans:

Question 8:

Insulin resistance causes all of the following except:

A) Increases lipolysis in adipose tissue.

B) Increases beta oxidation.

Ans:b

- *Loss of weight can be achieved by Inhibition of*
- *a. phosphatidyl serine decarboxvlase*
- *b. pancreatic lipase*
- *c. HMG COA lyase*
- *d. lipoprotein lipase*
- *e. acyl COA dehvdrogenase*

- *Answer:B*

TEST BANK Question 1:

A 42-year-old woman weighing 95 kg, with a height of 160 cm, presents with difficulty losing weight. Her waist circumference is 115 cm, and her hip circumference is 100 cm. Blood tests show elevated triglycerides, low HDL cholesterol, and a fasting glucose of 105 mg/dL. She also reports frequent fatigue. Which of the following mechanisms most likely explains her metabolic profile?

a. Increased adiponectin secretion from subcutaneous fat

b. Decreased inhibition of lipolysis in adipose tissue

c. She is overweight

d. She has a pear-shaped fat distribution

Ans:b

TEST BANK Question 2:

A 37-year-old woman, weighing 80 kg with a height of 155 cm, presents with a waist circumference of 110 cm and a hip circumference of 105 cm. She complains of persistent weight gain, poor energy, and a strong preference for high-calorie foods. Her leptin levels are high, but genetic testing reveals a leptin receptor mutation. Which of the following best explains her condition?

a. High leptin levels should suppress her appetite and reduce her caloric intake

b. The leptin receptor mutation leads to impaired hypothalamic signaling, promoting hyperphagia

c. Increased visceral fat enhances b-oxidation, making weight loss harder

d. Increased insulin sensitivity worsens her energy storage in adipose tissue

Ans:b

TEST BANK Question 3:

Which of the following statements regarding metabolic changes in obesity is **incorrect**?

A) Chronic systemic inflammation in obesity is exacerbated by increased release of pro-inflammatory cytokines from adipose tissue.

B) Low adiponectin levels in obesity contribute to increased tissue sensitivity to insulin, particularly in the liver.

C) Dyslipidemia in obesity includes elevated triglycerides and reduced HDL cholesterol, both of which increase cardiovascular risk.

D) Increased mass of adipocytes in obesity releases signals that contribute to insulin resistance and systemic inflammation.

Ans:b

For any feedback, scan the code or click on it.

Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
V0 → V1			
V1 → V2			

رسالة من الفريق العلمي:

لا اله إلا أنت سبحانك إني كنت من الظالمين

سبحان الله وبحمده، سبحان الله العظيم

اللَّهمَّ إنِّي أسألكَ من خيرِ ما سألكَ عبدكَ ونبيكَ، وأعوذ بكَ من شرِّ ما عاذَ منه عبدكَ ونبيكَ، ربي إنِّي أسألكَ الجنَّةَ وما قرَّبَ إليها من قولٍ وعملٍ، وأعوذ بكَ منَ النَّارِ وما قرَّبَ إليها من قولٍ أو عملٍ، كما أسألكَ أن تجعلَ كلَّ قضاءٍ قضيتَه لي خيرًا.

Additional Resources: