BMS Round of the IMS Quiz 2019 with answers   23.11.19

Name:

Institution:

Mobile number:

Email id:

Topic: Obesity and Metabolic Syndrome

Time 2.00 to 2.30pm

Quiz Master... Dr Jyothika A Desai   Total Marks-100

Answer the following Questions. Scratching or overwriting will be disqualified. Each correct answer fetches 2 marks. A wrong answer invites a negative marking of 1 mark. If the Question is passed without answering, no marks will be cut. The winner will participate in the National IMS Quiz at IMSCON 2020, Feb 14 to 16, Bangalore.
The decision of the Quizmaster is final.

Fill in the Blanks   24 marks

1. The female figure changes in the perimenopausal period from Pear to Apple shape due to redistribution of fat from the subcutaneous to the visceral sites

2. In women with the same BMI, Waist Hip Ratio can cause a difference in metabolic and cardiovascular risk.

3. Ponderal Index is also known as Rohrer's index or Corpulence Index.

4. The Body Mass Index is also known as the Quetelet Index.

5. Leptin is an Adipokine produced by adipose tissue.

6. Leptin increases peripheral uptake of glucose and stimulates Hepatic Neoglucogenesis.

7. Leptin also acts on pancreatic B-cells and reduces insulin secretion.

8. This study was on lipids and atherosclerosis. PDAY Study - Pathobiological Determinants of Atherosclerosis in Youth study

9. Goal of treatment in CAD is - LDL Cholesterol less than 100mgs%

10.The Framingham Risk score is widely used to estimate long term CAD risk in women.

11.The ACS in 2015 recommended watching less than 7 hours of television per week as part of Lifestyle management to prevent CVD.

12. Hypertension is the single, most important risk factor for stroke in women.

Decode the following Acronyms 6 marks

1. WISE... Women's Ischaemia Syndrome Evaluation study

2. WEST...Women's Estrogen and Stroke Trial

3. SCORE - Systematic COronary Risk Evaluation

State True or False   30 marks

1. Women with premature ovarian failure have change in body fat distribution as that in premenopausal women (F)

2. Younger women with Premature Ovarian Insufficiency are more susceptible to Metabolic Syndrome regardless of their BMI. (T)

3. BMI gives a strong association between cardiovascular events and Metabolic Syndrome. (F)

4. There is a 21% increase in Fibroids with every 10 kgs increase in weight. (T)

5. Weight loss in an obese woman reduces heavy Menstrual Bleeding and the size of the fibroids. (F)

6. The higher the weight, the later the onset of Natural Menopause. (T)

7. The average age of Natural Menopause is lower in South Asian women, compared to Caucasian women with the same BMI. (T)

8. Age at Menopause is more important than BMI in determining Fracture risk. (T)

9. The duration of Hot flushes is reduced in women who have a higher BMI. (T)

10. Men who are obese also suffer from hot flushes and sweats. (T)

11. Women with Metabolic syndrome have a significantly lower Female sexual function index score. (T)

12. Inflammatory markers like CRP do not improve with weight loss. (F)

13. Bariatric surgery for obesity improves female sexual function Index score & Biochemical Hyperandrogenism. (T)

14. Menopausal hormone therapy does not lead to weight gain or increased visceral adiposity.. (T)

15. Women with Hot flushes and Night sweats have a greater risk of dying from cardio vascular disease. (T)

Circle the correct answer 40 marks

1. The average prevalence in percentage of the Metabolic Syndrome is

a. 10

b. 20

c. 40

d. 50

2. All are risk factors for Atherosclerosis in major vessels *except*:

a. Family history of CVD

b. Obesity

c. Depression

d. Early Menarche

3. In women with metabolic syndrome, improvement in metabolic risk factors occurs in how many weeks?

a. 4

b. 8

c. 12

d.16

4. To reduce the body fat and improve general health American college of sports medicine recommends how many minutes of moderate exercise per week?

a. 30 -130

b. 60 -160

c. 120 -220

d. 150-250

5. Single most important Lifestyle changes recommended for Metabolic Syndrome is

a. Restriction of Carbohydrate

b. Medication

c. Exercise

d. Restriction in fat

6. All the following contribute to developing Metabolic Syndrome in obesity except

a. Hypoxia

b. Leptin Expression

c. Ghrelin Dysregulation

d. Insulin resistance

7. The most important risk factor in the diagnostic criteria for Metabolic Syndrome is

a. Low HDL

b. Insulin Resistance

c. Hypertension

d. Abdominal Obesity

8. Grade IV obesity is when the BMI is more than how many Kg/m2?

a. 40

b. 45

c. 50

d. 55

9. Obesity is determined by all of the following except

a. BMI

b. Waist circumference

c. Waist-Hip ratio

d. Body fat measurement

10. The most accurate method of measuring body fat is

a. Skin fold measurement

b. Hydro-densitometry

c. Body circumference measurement

d. Dual energy x ray absorptiometry

11. Obesity is associated with increase of all the following hormones *except*

a. Adiponectin

b. Ghrelin

c. Leptin

d. Insulin

12. All the following statements regarding Gynaecoid obesity are true *except*

a. Fat distribution is in the lower body

b. Lipoprotein lipase increases during pregnancy

c. Resistance to catecholamines

d. Resistance to insulin

13. The most important principle in weight loss is

a. Restriction of calories

b. Restriction of carbohydrate

c. Increase in protein intake

d. Low fat diet

14. Criteria to diagnose metabolic syndrome include all the following *except*

a) Hypertension 130/85mmHg

b) High triglyceride level 150mg/dl or more

c) Fasting glucose 110mg or higher

d) LDL cholesterol more than 100mg/dl

15. Documented mechanisms by which estrogen may decrease the risk of cardiovascular disease include all *except*:

a. Increased high-density lipoprotein

b. Decreased low-density lipoprotein

c. Antioxidant effect

d. **Decreased hypercoagulability**

16. The strongest predictor for coronary heart disease in postmenopausal women is:

a. **Low HDL-Cholesterol**

b. High Total Cholesterol

c. High LDL- Cholesterol

d. High Triglycerides

17. Framingham Risk assessment tool for estimating a patient's risk of developing cardiovascular disease includes all *except:*

a. Total Cholesterol

b. Age

c. H/o Smoking

d. **Diastolic blood pressure**

18. Triglyceride level is increased in all the following *except*

a. Obesity

b. Smoking

c. Lack of exercise

d. **Alcohol intake**

19. Serum Levels of which of the following is reduced in metabolic syndrome?

a. C Reactive protein

b. **Adiponectin**

c. TNF alpha

d. Resistin

Adiponectin is an anti-inflammatory cytokine produced exclusively by adipocytes. Adiponectin enhances insulin sensitivity and inhibits many steps in the inflammatory process. Adiponectin levels are reduced in the metabolic syndrome

20. Effect of Menopause on Metabolic Syndrome includes all *except*

a. Increase in Central obesity

b. Increase in Insulin Resistance

c. **Decrease in stroke risk**

d. Alteration in serum lipid levels