

ASSESSMENT OF 15 MCQS

FPSC NO : 122

MCQS ON LIFESTYLE MEDICINE: PRESCRIPTIONS FOR BETTER HEALTH
SUBMISSION DEADLINE: 26 NOVEMBER 2024, 12 NOON

INSTRUCTIONS

- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (<https://lms.wizlearn.com/cfps/>)
- Please contact sfp@cfps.org.sg if you have not received an email on the new LMS account.
- Attempt **ALL** the following multiple-choice questions.
- There is only **ONE** correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College Online Portal before the submission deadline stated above.
- There will be **NO** further extension of the submission deadline

- 1. What is the primary goal of motivational interviewing in dietary counselling?**
 - A. To prescribe a strict diet plan for all patients
 - B. To encourage patients to reflect on their habits and set realistic goals
 - C. To focus on calorie counting exclusively
 - D. To minimise patient input in the dietary decision process
 - E. To recommend eliminating all fats and sugars from the diet
- 2. What is a benefit of using the My Healthy Plate model in dietary counselling?**
 - A. It focuses primarily on high-protein diets for weight loss
 - B. It emphasises the elimination of all carbohydrates
 - C. It promotes a balanced approach adaptable to various health conditions
 - D. It requires patients to avoid fruits and vegetables
 - E. It suggests avoiding all types of fats in meals
- 3. What technique can doctors use to engage patients in conversations about their diet and encourage behaviour change?**
 - A. Direct instruction with minimal patient input
 - B. Motivational interviewing techniques
 - C. Prescribing a generic diet plan for all patients
 - D. Recommending only strict low-calorie diets
 - E. Focusing exclusively on medications
- 4. Which national health campaign helps patients identify healthier food options in Singapore?**
 - A. The Eat Right Programme
 - B. The Healthier Food Pyramid
 - C. The Healthier Choice Symbol
 - D. The Calorie Control Challenge
 - E. The Sugar-Free Singapore Initiative
- 5. When advising a patient with diabetes, which of the following dietary practices is most recommended?**
 - A. Skipping meals to lower blood sugar
 - B. Consuming unlimited carbohydrates at each meal
 - C. Spacing out meals and snacks 3-5 hours apart
 - D. Focusing only on protein-rich foods
 - E. Avoiding all types of fats
- 6. A 55-year-old male patient with a history of hypertension and controlled type 2 diabetes presents for exercise counselling. According to the ACSM pre-participation screening algorithm, which of the following exercise prescriptions is most appropriate, assuming the patient is asymptomatic and engages in moderate-intensity walking three times per week?**
 - A. Immediate initiation of vigorous-intensity aerobic exercise without further clearance
 - B. Continuation of current activity with the addition of high-intensity resistance training
 - C. Cessation of all physical activity until a stress test is performed
 - D. Gradual progression to vigorous-intensity aerobic exercise after medical clearance
 - E. Immediate prescription of a low-intensity exercise programme with no need for medical clearance
- 7. In the context of managing a patient with metabolic syndrome, which of the following exercise-induced mechanisms is primarily responsible for reducing the risk of type 2 diabetes?**
 - A. Increased glucagon secretion during exercise, leading to improved glucose regulation
 - B. Enhanced endothelial function reducing peripheral insulin resistance
 - C. Elevated basal metabolic rate through anaerobic glycolysis
 - D. Improved insulin sensitivity via increased GLUT4 translocation in skeletal muscle
 - E. Suppression of hepatic glucose production through catecholamine release

8. For a patient with multiple comorbidities, including chronic heart failure (NYHA Class II), controlled type 2 diabetes, and obesity, which of the following exercise prescription strategies is the most evidence-based approach?

- F. Initiating high-intensity interval training (HIIT) with close monitoring of glucose levels
- G. Prescribing low-intensity, non-weight-bearing aerobic exercises with gradual intensity increase
- H. Encouraging daily resistance training focusing on maximal strength to improve cardiovascular health
- I. Recommending unrestricted aerobic exercise as tolerated, without specific precautions
- J. Advising against any form of exercise due to the high risk of adverse cardiovascular events

9. A 65-year-old male patient with well-controlled hypertension and hyperlipidaemia, and a history of mild, asymptomatic left ventricular hypertrophy (LVH) identified on a routine echocardiogram, presents for advice on initiating an exercise regimen. He is currently inactive and seeks to begin a moderate-intensity aerobic programme to improve his cardiovascular health.

Which of the following statements regarding the management of his exercise initiation is INCORRECT?

- A. The ACSM Pre-participation Screening Algorithm should be applied to assess the necessity of medical clearance before increasing his physical activity level
- B. Given his history of LVH, a stress test should be recommended prior to engaging in any structured exercise programme
- C. Encouraging a gradual increase in exercise intensity and duration, starting with low-to-moderate intensity, is advisable to avoid potential cardiovascular events
- D. The patient's current inactivity status should be factored into the decision-making process regarding exercise prescription and the need for clearance
- E. Consideration of his well-controlled hypertension and absence of symptoms may allow for initiating low-to-moderate intensity exercise without immediate further diagnostic testing

10. A 62-year-old woman with a BMI of 34, diagnosed with type 2 diabetes, chronic kidney disease stage 3, and bilateral knee osteoarthritis is referred for exercise counselling. She has been largely sedentary due to joint pain and is concerned about how exercise might impact her condition.

Which of the following exercise recommendations is INCORRECT for this patient?

- A. Begin with low-intensity, non-weight-bearing exercises such as cycling or water aerobics to accommodate her osteoarthritis and reduce joint stress
- B. Incorporate resistance training to improve muscle strength, which can aid in glycaemic control and alleviate pressure on her joints
- C. Monitor her blood glucose levels closely before, during, and after exercise sessions to prevent hypoglycaemia, particularly given her diabetic status
- D. Advise against any form of exercise that involves resistance training, as this may exacerbate her chronic kidney disease by increasing proteinuria
- E. Emphasise gradual progression in exercise intensity and duration, while ensuring frequent monitoring of her kidney function and cardiovascular status

11. Ms W is a 26-year-old lady. She is 87 kg and 1.58 m (BMI 34.9 kg/m²). She does not have any significant past medical history. She presents to your clinic today for a routine corporate health screening. How would you initiate a conversation on weight management with her?

- A. It looks like your weight is higher than what is typically considered healthy for your height. Have you thought about trying a new diet or exercise plan to address this?
- B. I see that you have a higher BMI than the average range. Weight management can be important for overall health. Would you like to discuss some strategies that might help you manage your weight?
- C. Since you're here for a routine checkup, let's focus on other aspects of your health and leave the weight management discussion for another time
- D. You should consider joining a weight loss programme immediately to get your weight under control
- E. Have you considered taking weight management medication? It might be something you should think about

12. Mr G is a 45-year-old gentleman. He is 98 kg and 1.75m (BMI 32 kg/m²). His past medical history is significant for diabetes and depression. He is currently on metformin 500 mg bd, glipizide 10 mg bd, and mirtazapine 15 mg on. His latest HbA1c is 6.7% and urine ACR is 5.7 mg/mmol (normal <2.5 mg/mmol for males). His depression symptoms are well controlled. His blood pressure today is 158/89 mmHg, pulse rate 77 bpm. He expressed the intention to lose weight in clinic today. However, he is not keen to start on injectables. He has not tried any pharmacological therapies for weight loss.

- A. Which of the following is the best option in managing Mr Goh's weight?
- B. Switch glipizide to empagliflozin 25 mg om
- C. Switch metformin to oral semaglutide 3 mg om
- D. Switch mirtazapine to bupropion 150 mg om
- E. Start SC semaglutide 0.25 mg once a week
- F. Start phentermine 15 mg om

13. Mr K is a 60-year-old gentleman. He is 104 kg and 1.8 m (BMI 32.1 kg/m²). His past medical history is significant for diabetes, hypertension, and hyperlipidaemia. He is currently on metformin 850 mg bd, atorvastatin 40 mg on, amlodipine 5 mg om, lisinopril 20 mg om, SC liraglutide 1.8 mg once daily. He reports vomiting and diarrhoea since his liraglutide has been uptitrated two days ago. What can be done to manage his diarrhoea?

- A. Increase his metformin dose to address the gastrointestinal symptoms
- B. Switch his liraglutide to oral semaglutide
- C. Reduce the dose of liraglutide to 1.2 mg daily temporarily
- D. Discontinue atorvastatin to see if the diarrhoea improves
- E. Start an antidiarrheal medication like loperamide and keep liraglutide at the same dose

14. Mdm Y is a 65-year-old lady. She has been started on SC semaglutide 12 weeks ago. Her baseline weight was 100 kg; her weight today is 98 kg. How would you manage her treatment?

- A. Discontinue semaglutide as the weight loss after three months is less than 5% of her body weight
- B. Increase the dose of semaglutide to accelerate weight loss, since her weight loss has been slower than expected
- C. Switch to a different GLP-1 receptor agonist, as semaglutide may not be effective for her
- D. Add an additional antihyperglycemic medication to enhance weight loss, while keeping the semaglutide dose unchanged
- E. Ascertain Mdm Y's adherence to lifestyle modification and semaglutide

15. Which of the following is considered a SMART goal?

- A. I want to lose weight and be healthier
- B. I will eat less junk food
- C. I will try to avoid overeating and improve my eating habits
- D. I aim to lose 5 kg in two months by exercising 30 minutes a day, five days a week, and following a balanced diet
- E. I plan to reduce my weight and get in shape