

Set out below are a series of multiple choice questions designed to test your understanding of the special feature on "Type 2 diabetes".

All pharmacists are invited to complete these questions and send their answers, together with a **stamped and addressed A5 envelope**, to: The College of Pharmacy Practice, Barclays Venture Centre, University of Warwick Science Park, Coventry CV4 7EZ, by **Monday, February 19. Envelopes must be marked "Type 2 diabetes"**. Results will be returned with a certificate of completion which, in the case of college members, will count towards their continuing education requirements. Completion of Credit for Learning questions entitles pharmacy undergraduates to one point towards the Professional Development Certificate, a joint initiative between the British Pharmaceutical Students' Association and the College of Pharmacy Practice. The answers will be given in the March issue. Faulding Pharmaceuticals, which is sponsoring this project, is offering a prize of £500 towards attendance at an approved pharmaceutical conference to the college member who achieves the highest marks overall in this series of five Credit for Learning exercises. This is the fifth set of questions in the sixth series. An indication is given about the expected time it should take to complete the study of an article, associated reading and answering the questions. For this feature, there is a provisional time of three-and-a-half hours. To answer the questions, please draw a ring around either T or F (T = true, F = false). There may be more than one true answer to each question. While we will correct material errors, *Hospital Pharmacist* does not have the resources to enter into correspondence about the answers.

### THE QUESTIONS

1. Diabetes mellitus (DM):
- a) Is a metabolic disorder T F
- b) Is underdiagnosed in the UK T F
- c) Requires a team approach in its management T F
- d) Is not only a problem of blood glucose T F
- e) Can be cured T F
2. In considering type 2 DM:
- a) It proceeds through a stage of impaired glucose tolerance T F
- b) It can be prevented T F
- c) It has increased familial tendency T F
- d) It is not a progressive disorder T F
- e) Good blood glucose control prevents chronic complications T F
3. Insulin is required in type 2 DM:
- a) To prevent diabetic ketoacidosis T F
- b) In pregnant women T F
- c) At the diagnosis if fasting blood sugar is very high T F



- d) During and after major surgery T F
- e) When one oral agent fails to control blood glucose T F

4. The WHO revised criteria specify that for the diagnosis of DM to be made, the following must be present:

- a) Polyuria T F
- b) A random blood glucose of 11.1mmol/L or a fasting blood glucose of over 7mmol/L T F
- c) A two-hour plasma glucose level of 7mmol/L after a 75G glucose load T F
- d) Weight loss T F
- e) If asymptomatic, at least two glucose tests within the diabetic range on different days T F

5. The following is true:

- a) About 2.4 million people in the UK have DM T F
- b) 80 per cent of all people in the UK with DM have type 2 disease T F
- c) DM may arise because of excessive secretion of growth hormone T F
- d) Most individuals with acute pancreatitis develop DM T F
- e) Ketosis may occur in non-diabetic patients T F

6. In relation to risk factors for the development of type 2 DM:

- a) Identical twins have a near 100 per cent concordance rate for type 2 DM T F
- b) Patients with type 2 DM confer a 50 per cent probability of developing the disease to their offspring T F
- c) World-wide, there is a significantly greater tendency for males to develop type 2 DM than females T F
- d) Disease primarily due to insulin deficiency is typically characterised by fasting hyperglycaemia T F
- e) Disease primarily due to insulin resistance is typically characterised by post-prandial hyperglycaemia T F

7. In the development of type 2 DM:

- a) Hyperinsulinaemia may aggravate insulin resistance T F
- b) Patients who are morbidly obese invariably have impaired glucose tolerance T F
- c) Patients with gestational diabetes have an increased risk of developing type 2 DM later in life T F
- d) Foetal malnutrition may confer an increased risk of diabetes in future adult life T F
- e) Type 2 DM may occur in some patients as a result of starvation T F

8. Sulphonylureas:

- a) Should be used with caution in patients who are breast-feeding T F
- b) Should be avoided in renal failure T F
- c) Require islet  $\beta$ -cell activity for a therapeutic effect T F
- d) Have a secondary failure rate of between 5 and 10 per cent of patients receiving them each year T F
- e) May produce hypoglycaemia which is generally easy to reverse with oral glucose administration T F

9. Metformin:

- a) Is most useful in obese type 2 DM patients T F
- b) Acts primarily by increasing insulin secretion within the pancreas T F
- c) May accumulate in hepatic failure T F
- d) Has an increased risk of causing lactic acidosis if used in patients with severe heart failure T F
- e) May reduce fasting glucose by about 25 per cent T F

10. With other oral drugs in the management of type 2 DM:

- a) Acarbose mainly reduces post-prandial hyperglycaemia; it has little effect on fasting blood glucose T F
- b) Repaglinide is most useful in reducing fasting hyperglycaemia T F
- c) Thiazolidinediones act mainly by reducing insulin resistance T F
- d) Thiazolidinediones may be expected to have a lower treatment failure rate than sulphonylureas T F
- e) Troglitazone was withdrawn because of severe hepatotoxicity T F

Reader's name .....

College member: ..... Yes  No

Royal Pharmaceutical Society of Great Britain

registration number: .....

Address: .....

Post Code: .....

Here are the answers to the multiple choice questions on substance abuse, which were published in the October issue.

- 1 (a) F, (b) T, (c) T, (d) T, (e) F 2 (a) T, (b) T, (c) T, (d) F, (e) F 3 (a) T, (b) T, (c) F, (d) T, (e) F 4 (a) F, (b) T, (c) T, (d) T, (e) F 5 (a) T, (b) T, (c) F, (d) T, (e) F 6 (a) T, (b) F, (c) T, (d) F, (e) F 7 (a) F, (b) T, (c) F, (d) F, (e) F 8 (a) F, (b) T, (c) F, (d) F, (e) T 9 (a) T, (b) F, (c) F, (d) T, (e) T 10 (a) F, (b) T, (c) F, (d) T, (e) T.