

### Workshop Test Answers

**1. The answer is d.**

- a) He takes no diabetes medication, no risk of hypoglycemia.
- b) He is overweight BMI=28, to promote a 5-7% weight loss he can create a calorie deficit with exercise. Increasing his energy intake by 300 calories may promote weight maintenance or weight gain. He can meet his nutritional needs at 1500 calories/day.
- c) He does not need extra CHO to prevent hypoglycemia. The extra calories may prevent weight loss or promote weight gain.
- d) He can meet his nutritional needs at 1500 calories/day if he chooses a nutrient dense diet. His exercise program may promote increased energy expenditure and weight loss.

Source: CDA: Building Competency in Diabetes Education: The Essentials (2013)

**2. The answer is C.**

- a) The DASH eating plan is not as simple as the plate method and would not be the best choice for that reason
- b) Exchange lists too complicated given JI cognitive limitations
- c) The plate method would be most appropriate because it uses a simple dinner plate graphic to teach general portion control, consistency, and basic food categories.
- d) Carbohydrate counting-same as b.

Reference: CDA. Building Competency in Diabetes Education: The Essentials (2013)

**3. The answer is b**

Assess if and what type of bedtime snack she is consuming. Rationale: When comparing before bed and before breakfast readings on the nights her BGs are < 7 mmol/L the following before breakfast readings are in the teens, otherwise the before bed and following before breakfast results are relatively similar: For example: Day 2 7.8 mmol/L before bed and Day 3 before breakfast is 7.9 mmol/L and Day 3 before bed reading is 9.8 mmol/L and before breakfast on Day 4 is 9.0 mmol/L. We know she is afraid of hypoglycemia. In this case, checking for bedtime snacks would be done to rule out food as the potential cause. It also provides the opportunity to explore at what blood sugar she feels safe to go to sleep at without the fear of lows. Pattern management requires identification of trends or patterns under similar circumstances (usual food, usual activity). Assessing for snacks is part of the assessment.

Reference: CDA. Building Competency in Diabetes Education: The Essentials (2013)

**4. The answer is b**

- a) Is prescriptive in nature. This reflects a medical model
- b) Promotes active client participation.
- c) Assumes the health care professional is the expert. This reflects a medical model.
- d) Is based on the medical model.

Reference: CDA. Building Competency in Diabetes Education: The Essentials (2013)

**5. The Answer is b**

- a) No less than 45% total daily energy to prevent high intakes of fat
- b) Up to 60% CHO if Low Glycemic Index (GI) & High Fiber (25 -50 g/day). Low GI foods may decrease glycemic response. Diets high in dietary fibre associated with decreased risk cardiovascular disease.
- c) Small range of 5% limits individual preferences.
- d) Minimum 130 g CHO/day (glucose for brain).  
30% of 1200 calorie diet would provide 360 calories, 90 grams CHO.  
30% of 1500 calorie diet would provide 450 calories, 112.5 grams CHO

Reference: 2013 Clinical Practice Guidelines Can J Diabetes 2013;37:S46

**6. The Answer is d**

cognitive, affective, psychomotor

References: Belton, A., & Simpson N. (2010). The How to of Patient Education.  
CDA Building Competency in Diabetes Education: The Essentials (2013)

**7. The answer is c**

- a) It is recommended to subtract all of the sugar alcohol content from the total CHO. Their conversion rate to glucose is slow, variable, and usually minimal, and may have no significant effect on BG
- b) It is recommended to subtract all of the fibre from the total CHO.
- c) It is recommended to subtract all of the fibre from the total CHO. Fibre slows gastric emptying and delays absorption of glucose in small intestine.
- d) Total amount of carbohydrate, in grams, includes starch, sugar and fibre.

Reference: 2013 Clinical Practice Guidelines Can J Diabetes 2013;37:S51

**8. The answer is b**

Rationale: Insulin dose adjustment for exercise. Reduce the bolus by 20-50% if the exercise is within 2 hours of the bolus. Sanjay is exercising when the rapid insulin is peaking. Reducing the insulin will reduce the risk of hypoglycemia. The % reduction will

depend on type of exercise, intensity and duration, and his current blood sugar. This principle applies to insulin regardless of delivery system: syringe, pen or pump.

Disconnecting from the pump will not help. The bolus has been delivered. People can be off a pump for 60 minutes without taking extra steps to cover the insulin during the hour. Consuming 11 grams of carbohydrate is not sufficient. Supplementing with carbohydrates depends on a person's blood sugar and weight and should be tailored to the individual.

Reference: CDA Building Competency in Diabetes Education: The Essentials (2013) (According to CPG 2013 p S41 15-30g carbohydrate if pre-exercise BG levels are < 5.5 mmol/L depending on injected insulin dose, exercise duration and intensity, and results of BG monitoring)

**9. The answer is c**

visual, auditory, kinesthetic, tactual

References : Belton, A., & Simpson N. (2010). The How to of Patient Education.

CDA: Building Competency in Diabetes Education: The Essentials (2013)

**10. The answer is a**

Increase the basal analogue. Rationale: His fasting blood sugars are consistently above target, he reports no hypoglycemic episodes.

**11. The answer is a**

Rationale: According to the principles of pattern management: elimination of hypoglycemia is the priority. Safety first! There is a consistent pattern of low blood sugars before breakfast.

Reference: CDA. Building Competency in Diabetes Education: The Essentials (2013)

**12. The answer is b**

b) BMI =kg/m<sup>2</sup> = 62kg and is 1.85 meters=  $62 \div 1.85^2 = 62 \div 3.42 = 18.08$

Reference: CDA Building Competency in Diabetes Education: The Essentials (2013)

p5-7

**13. The answer is c**

Rationale: She is in the 4's and 2s before lunch and 3's -4 before dinner on her run days. Reducing her breakfast dose is a good idea to eliminate the lows before lunch, but her blood sugars are low at dinner. Exercise can increase insulin sensitivity and have a blood glucose lowering effect for many hours post the exercise. Therefore both breakfast and lunch doses should be reduced. Principles of insulin dose adjustment for exercise.

Reference: CDA Building Competency in Diabetes Education: The Essentials (2013)

**14. The answer is a**

- a) Individuals demonstrate adaptive problem solving in their decisions for living with diabetes. Outcome indicator
- b) Referrals to other services are facilitated, as needed. Process indicator (p7)
- c) Personnel involved in diabetes education have clinical expertise within a recognized profession. Structure indicator (p1)
- d) Physical space and education resources are conducive to learning and are based on individual/community needs. Structure indicator (p3)

Reference: Standards of Diabetes Education in Canada, 2014 p. 9

**15. The answer is b**

Contemplation. Rationale: she is planning to start insulin within the next 6 months and acknowledges the need to start.

Reference: CDA Building Competency in Diabetes Education: The Essentials (2013)