

**EXAMINATION QUESTION PAPER:      Reassessment, 2014**

**Module code:**                      PD2010N Summer

**Module title:**                      Practice of Diet Therapy 1

**Module leader:**                    Sarah Illingworth

**Date:**                                  July/August 2014

**Duration:**                            3 hours

**Exam type:**                          Seen, Closed

**Materials supplied:**              Weight, Height, Body Mass Index Charts,  
Henry Equation and standard adjustments

**Materials permitted:**            Writing materials, Calculator

**Warning:**                            Candidates are warned that possession of unauthorised  
materials in an examination is a serious assessment  
offence.

**Instructions to candidates:**      Before starting the paper candidates will be required to read  
all of the questions carefully  
**Answer ALL THREE QUESTIONS.**  
Make sure that you address all sections in the questions  
you answer  
Answer each question in a separate booklet  
**DO NOT TURN PAGE OVER UNTIL INSTRUCTED**

## QUESTION ONE

Mrs Jones is 78 years old and has been living in a nursing home for the past three years. She suffered from a cerebrovascular accident (CVA) which left her unable to swallow and reliant on a gastrostomy tube feed as her sole source of nutrition. She is wheelchair bound and dysphasic.

Six months ago, the staff in the nursing home noticed an improvement in Mrs Jones functional ability and she was referred to the speech and language therapist for an assessment of her ability to swallow food and drink.

After an initial assessment of her swallow, the speech and language therapist recommended that Mrs Jones should have a thin pureed dysphagia diet (texture B) and thickened fluids (stage 3) and reviewed her on a regular basis. More recently, under the speech and language therapist's guidance she is currently managing a thick pureed dysphagia diet (texture C) and fluids thickened to a syrupy consistency (stage 1).

Her weight is currently 60 kg and her height is approximately 1.5m. When she was admitted to the nursing home 3 years ago, she weighed 45 kg and has steadily gained weight since. Before she started to eat, 6 months ago she weighed 57 kg.

She is afebrile and has been prescribed clopidogrel, 75 mg once daily and 40 mg simvastatin once daily. She opens her bowels on a daily basis and her skin condition is intact.

Her recent blood biochemistry is

Sodium 138 mmol/L, Potassium 3.8 mmol/L, Urea 4.6 mmol/L, CRP 1 mg/L

Creatinine 110 µmol/L

She is currently receiving 1500 mls of a 1 kcal/ml fibre enriched feed at 125 mls/hour for twelve hours overnight with additional flushes of water. She is having ~ 2100 mls fluid via the gastrostomy tube over 24 hours.

Her average oral intake over 24 hours is:

- 2 tablespoons of pureed porridge made with full fat milk
- 3 tablespoons of a smooth thick and creamy yogurt
- 60 mls of thickened orange juice
- 1 tablespoon of smooth mashed potato pureed with gravy
- 1 tablespoon of pureed meat
- 2 tablespoons of fruit pureed with custard
- 300 mls thickened water

The nursing staff are concerned about her slow but continuous weight gain and have asked for a dietetic review to reduce her feed in light of the fact that she is eating.

- a) From the information you have available, assess Mrs Jones's nutritional status. Include a quantitative dietary assessment of her energy, protein and fluid intake from both the feed and oral intake. Include an estimation of Mrs Jones's requirements for energy, protein and fluid over a 24 hour period. Indicate any additional information you may require to undertake a complete nutritional assessment. (50%)
- b) State the patient specific goals you would set for Mrs Jones and indicate whether a reduction in feed is justified as a result of your nutritional assessment. (15%)
- c) Describe a suitable nutritional care plan to meet the patient specific goals you have set. Justify your answers. (20%)
- d) State how you will monitor your patient. Justify your monitoring plan (15%)

## QUESTION TWO

Sally is a 20-year-old woman. She was diagnosed with an allergy to fish when she was 3 years old and she has been following a strict fish and shellfish free diet ever since. Sally's initial exposure to fish resulted in an anaphylactic reaction requiring adrenaline. Since then she has carried 2 adrenaline auto-injectors with her at all times. The local allergy team regularly review Sally but repeated allergy tests suggest that she is still at a high risk of having a severe reaction to fish if she were exposed to it. Her consultant allergist has recommended that she continue to follow a strict fish and shellfish free diet.

Sally's weight is 54.2kg and her height is 1.56m. She reports no recent weight loss. She has no other underlying medical issues. Sally reports that she commenced a vegetarian diet during her first year at University due to concerns about animal welfare. She also enjoys eating out with friends and she reports that her and her flatmates take it in turns to prepare meals for each other when they are at home.

Her recent blood biochemistry taken at a routine health screen reveals the following:

Sodium:	142 mmol/l
Potassium	4.6 mmol/l
Urea	4.2 mmol/l
Creatinine	73 umol/l
Ferritin	10 ug/ml
CRP	5.2 mg/l

A diet history reveals that she consumes the following:

Breakfast:	2 x Weetabix with semi-skimmed milk Cup of tea with semi-skimmed milk
Mid-morning:	Banana/apple
Lunch:	Shop bought sandwich (Cheese/Egg mayonnaise) Crisps Diet cola
Afternoon:	Kitkat/Muesli bar Cup of tea, as above
Evening meal:	Vegetable stir fry with noodles, Pasta with roasted vegetables, Couscous with apricots and vegetables Chocolate mousse 1 x glass of white wine

Sally is starting her second year of studying a law degree. She moved out of her family home into catered university accommodation for her first year and has recently moved into a shared flat with friends close to campus. She has recently

registered with a new GP who has suggested that she makes an appointment with a Dietitian for a review of the adequacy of her diet.

- a) **Discuss the differences between a diagnosis of IgE mediated food allergy and a diagnosis of non-allergic food hypersensitivity. (20%)**
- b) **From the information you have available, assess Sally's nutritional status. Include a qualitative dietary assessment. You are not required to undertake a quantitative assessment of her dietary intake. You are not required to estimate her nutritional requirements. Indicate any additional information you may require to undertake a complete nutritional assessment (20%)**
- c) **What advice would you give Sally to support her in continuing to follow a fish and shellfish free diet? (40%)**

Following her initial appointment, Sally calls you to say that she has been invited on a last-minute holiday to Turkey with 5 friends during the Christmas break. She has never been abroad before and is anxious about managing her diet while she is away.

- d) **What advice you would you give Sally to help her to manage her food allergy while she is away? (20%)**

### QUESTION THREE

Mrs Jones is a 34-year-old full-time hospital administrator who has been referred to you for pre-conceptual dietary advice as she is planning to become pregnant for the first time. She has type 1 diabetes which was diagnosed 30 years ago. Mrs Jones has been referred by her G.P.

Her insulin regimen is an injection of Actrapid before her breakfast, midday and evening meal and Insulatard at bedtime.

Mrs Jones does all the shopping and cooking. She eats out at a restaurant with her husband twice a month. Mrs Jones swims occasionally and drinks approximately 8 units of alcohol per week.

Her weight is 82 kg, height is 1.7 m and waist circumference is 87 cm. Her most recent blood pressure reading was 122/70 mmHg. Recent blood tests revealed an HbA1c of 6.7%. Mrs Jones reports her sister and mother have asthma.

Dietary recall for past 24 hours:

Breakfast:                    3 slices of granary toast with spread and jam  
    Cup of tea with semi-skimmed milk, sweetener

Mid-morning:                2 digestive biscuits  
    Cup of tea, as above

Lunch:                         Liver Pate with tomatoes and lettuce on a white bread roll  
    1 packet of peanuts  
    Cup of coffee, semi-skimmed milk, sweetener

Afternoon:                    2 digestive biscuits  
    Cup of tea, as above

Evening meal:                Vegetable lasagne and oven chips with sweetcorn  
    Medium bowl of chocolate ice-cream

Supper:                        Cheese and biscuits  
    Cup of tea, as above

**a) From the information you have available, assess Mrs Jones's nutritional status. Include a qualitative dietary assessment. You are not required to undertake an estimate of her nutritional requirements but you should explain the process. Indicate any additional information you may require to undertake a complete nutritional assessment (20%)**

**b) State and justify the aims of dietary treatment. (30%)**

- c) **What changes would you make to Mrs Jones's diet above to achieve these aims? Please provide rationale for the suggested changes. (35%)**
- d) **At her follow up appointment Mrs Jones asks about preconception dietary advice for her husband. What advice would you give her? (15%)**