

**CORK INSTITUTE OF TECHNOLOGY  
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ**

**Semester 1 Repeat Examinations 20010/11**

**Module Title: Clinical Nutrition**

**Module Code: BIOL8001**

**School: Science**

**Programme Title: B.Sc. (Honours) in Herbal Science**

**Programme Code: SHERB\_8\_Y4  
SNHSC\_8\_Y4**

**External Examiner(s): Dr J Green & Prof. Elizabeth Williamson**

**Internal Examiner(s): Ms AM. Keaveney**

**Instructions: Answer 3 questions only. All questions have equal marks**

**Duration: 2 hours**

**Sitting: Winter 2010**

**Requirements for this examination:**

**Note to Candidates:** Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper.  
If in doubt please contact an Invigilator.

1. Cardiovascular health

- a. Critically discuss the current understanding of the role of cholesterol in the development of atherosclerosis and coronary heart disease.
- b. Critically evaluate the role of fibre and essential fatty acids in relation coronary heart disease.

2. Allergy

A new patient presents with a baby that has just been diagnosed with an allergy to milk based formulae. The child has been changed to a soy based formulae as recommended but has come to seek additional nutritional advice.

- a. Critically evaluate the nutritional advice you could give the mother of this child?
- b. Discuss the range of allergic reactions that can occur in the body and the associated causative foods

3. Diabetes

W.G. is a 41-year-old white man who was diagnosed with diabetes 15 months ago (Type 2). He is now beginning diabetes education and medical nutrition therapy (MNT) upon referral from his doctor. His diabetes is poorly controlled even with medication (metformin). He takes no other medications; denies smoking, alcohol, and drug use; and knows of no health problems other than diabetes.

With reference to the above case;

- a. Critically discuss the effect of diet on the development and progression of diabetes
- b. Critically discuss the different approaches that can be recommended for effective diabetic control.

4. Obesity

JLW is a 54 year old patient who came in to discuss weight loss. She has been obese since her teens, with maximum weight of 289 lbs (20 st). Average adult body mass index (BMI) has been 40. She has tried various weight loss plans, “fad” diets, and exercise programs without success. At age 36, she underwent stomach stapling, leaving her stomach with a capacity of about 125 cc, also without success. She heard about something called “Insulin Resistance Syndrome (IRS),” and attended a complementary and alternative medicine program to learn about it.

With reference to the above case;

- a. Critically discuss the current understanding of Insulin Resistance Syndrome (Metabolic syndrome), its associated medical conditions, diet and obesity
- b. Critically discuss the factors that have been proposed to assist in weight loss and prevention of complications of obesity

5. Cancer

- a. Critically discuss the current understanding of the relationship between diet and breast cancer
- b. Critically evaluate **two** of the following in relation to cancer (in general)
  - i. Fruit/ veg and cancer
  - ii. Fish and cancer
  - iii. Cancer and alcohol