

HEALTHY EATING & WELLBEING – COURSE SYLLABUS

The course is geared at giving learners solid knowledge of nutrition and the confidence to apply this knowledge to aspects of your own health and well-being, and provide practical advice to others in a variety of settings.

There are eleven main areas of the course:

1. The Digestive System
2. Nutrients
3. Elements of a Balanced Diet
4. Nutrients and the cooking process, food storage and food processing
5. Metabolism, basal metabolic rate and units of energy
6. Importance and benefits of eating regularly
7. Basic rules/ guidelines of food labelling
8. Nutritional imbalances and health and well-being
9. Other dietary habits and factors
10. Principles of weight loss and weight management
11. General and further advice for health and well-being

Learners should read through each section and unit and then take the multiple choice quiz at the end: the overall pass mark is 60%. Upon successful completion of the course the learner will have gained considerable knowledge of nutrition in relation to health and the confidence to apply this knowledge to aspects of one's own health and well-being, and provide practical advice to others in a variety of settings.

COURSE CONTENTS

1. THE DIGESTIVE SYSTEM

Learning Objective:

Explain the basic processes and science of digestion in relation to nutrition and absorption

Overview:

The digestive system, the single most important aspect of nutrition, is discussed in-depth in relation to analysis of the various primary macronutrients (protein, fat, carbohydrates and fibre).

1.1 The journey of food

1.2 Physical processes of digestion

1.3 Chemical processes of digestion

1.4 Absorption of nutrients

1.5 Assimilation of nutrients

2. NUTRIENTS

Learning Objective:

Explain the function of protein, fat/lipids, carbohydrates, roughage/fibre, water, vitamins and minerals in the diet and identify examples of common food sources

Overview:

A breakdown of various macronutrients and micronutrients, describing their role/function, sources and recommended intakes.

2.1 Macronutrients

- 2.1 i) Protein
- 2.1 ii) Fats
 - 2.1 ii) a) Cholesterol
- 2.1 iii) Carbohydrates
 - 2.1 iii) a) Sugars
 - 2.1 iii) b) Starches
 - 2.1 iii) c) Fibre

2.2 Micronutrients

2.2 i) Water Soluble Vitamins

- 2.2 i) a) Vitamin B1
- 2.2 i) b) Vitamin B2
- 2.2 i) c) Vitamin B3
- 2.2 i) d) Vitamin B5
- 2.2 i) e) Vitamin B6
- 2.2 i) f) Vitamin B10
- 2.2 i) g) Vitamin B12
- 2.2 i) h) Vitamin C

2.2 ii) Fat Soluble Vitamins

- 2.2 ii) a) Vitamin A
- 2.2 ii) b) Vitamin D
- 2.2 ii) c) Vitamin E
- 2.2 ii) d) Vitamin K

2.2 iii) Minerals – Macro minerals

- 2.2 iii) a) Calcium
- 2.2 iii) b) Magnesium
- 2.2 iii) c) Potassium
- 2.2 iii) d) Sodium

2.2 iv) Minerals - Micro minerals

- 2.2 iv) a) Chromium
- 2.2 iv) b) Copper
- 2.2 iv) c) Iodine
- 2.2 iv) d) Iron
- 2.2 iv) e) Manganese

2.2 iv) f) Selenium

2.2 iv) g) Zinc

2.3 Various Nutrients & Some of Their Primary Food Sources - Overview

2.4 Reference Nutrient Intakes

2.4 i) Reference Nutrient Intake per Day for Males and Females Aged 19-50

2.4 ii) Specific Nutrients Requirements in Different Life Phases

2.5 Other Nutrients of Importance

2.5 i) Antioxidants

2.5 ii) Sodium

2.6 Non-Nutrient Constituents

2.6 i) Water

2.6 ii) Caffeine

2.6 iii) Flavours and Colours

2.6 iv) Alcohol

3. ELEMENTS OF A BALANCED DIET

Learning Objective:

Explain what constitutes a balanced diet, in relation to health

Overview:

A basis of what constitutes the basics of a balanced diet, including other considerations for a healthy diet, and important debates/controversies surrounding diet & health.

3.1 Balance of Good Diet

3.2 Other Considerations for a Healthy Diet

3.2 i) Non- Toxic Cleaning Products

3.2 ii) Cookware

3.2 iii) Filtered or Bottled Water

3.2 iv) Organic Food Consumption

3.3 Important Debates/ Controversies Surrounding Diet and Health

3.3 i) Genetic Engineering

3.3 ii) Superfoods

3.3 iii) Detoxifying Diets

3.3 iv) Probiotics

4. NUTRIENTS & THE COOKING PROCESS, FOOD STORAGE & FOOD PROCESSING

Learning Objective:

Describe how nutrients may be affected by:

- the cooking process
- refining food
- environmental pollutants

Overview:

A comprehensive analysis of the various components that are involved in food production, including the cooking processes, food refining, storage and processing. You will also develop insights how food additives and environmental pollutants affect health.

4.1 The Cooking Process

- 4.1 i) Cooking & Food Safety
- 4.1 ii) Boiling
- 4.1 iii) Frying
- 4.1 iv) Baking
- 4.1 v) Microwave

4.2. Food Storage

- 4.2 i) Drying
- 4.2 ii) Refrigeration
- 4.2 iii) Freezing
- 4.2 iv) Canning

4.3 Food Processing

- 4.3 i) Preservatives
- 4.3 ii) Sequestrant
- 4.3 iii) Commercial antioxidants
- 4.3 iv) Flavour enhancers
- 4.3 v) Colours
- 4.3 vi) Emulsifiers, stabilisers, gelling agents and thickeners
- 4.3 vii) Sweeteners

4.3 viii) Some possible side effects of food additives

- a) Allergies/ sensitivities
- b) Hyperactivity

4.4 Refining Food

Refining Food

4.5 Environmental Pollutants

- 4.5 i) Pesticides
 - 4.5 ii) CO₂ emissions
 - 4.5 iii) Phthalates
 - 4.5 iv) Polychlorinated Biphenyls (PCBs)
 - 4.5 v) Brominated Flame Retardants
 - 4.5 vi) Dioxins
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5. METABOLISM, BASAL METABOLIC RATE AND UNITS OF ENERGY

Learning Objective:

Explain what is metabolism, Basal metabolic rate (BMR) and the units of energy

Overview:

A basic overview of human metabolism in relation to energy derived from the food we eat.

- 5. (i) Metabolism
- 5. (ii) Basal metabolic rate
- 5. (iii) Units of energy

6. IMPORTANCE & BENEFITS OF EATING REGULARLY

Learning Objective:

Explain what constitutes a balanced diet, in relation to health

Overview:

This section provides a brief overview of the importance of eating regularly in relation to health and well-being.

- 6. i) Eating regularly
- 6. ii) Effects of eating regularly on metabolism and general health

7. BASIC RULES/ GUIDELINES OF FOOD LABELLING

Learning Objective:

Describe the basic rules/ guidelines of food labelling

Overview:

This section provides a brief overview of important aspects of food labelling.

- 7. (i) Food labelling regulations
- 7. (ii) Issues surrounding labelling of processed foods

8. NUTRITIONAL IMBALANCES AND HEALTH AND WELL-BEING

Learning Objective:

Explain nutritional imbalances and health and well-being, in relation to:

- common anti-nutrients
- common ailments
- conditions directly affected by nutritional imbalances
- disorders and diseases of the digestive system

Overview:

In relation to nutrition and health, this section discusses:

- Common anti-nutrients general health and well-being, including: caffeine, alcohol, carbonated soft drinks, stress, smoking, medicines.
- Common ailments such as arthritis, common cold and stress.
- Specific conditions and nutrition, including hypoglycaemia, diabetes mellitus type I and II, gluten, nut and dairy intolerance

There is also a brief description of the main disorders and diseases of the digestive system, such as coeliac disease and reflux oesophagitis (heartburn).

8.1 Common Anti-nutrients General Health and Well-Being

- 8.1 i) Caffeine
- 8.1 ii) Alcohol
- 8.1 iii) Carbonated soft drinks
- 8.1 iv) Stress
- 8.1 v) Smoking
- 8.1 vi) Medicines

8.2 Common Ailments with Links to Nutritional Imbalances

- i) Arthritis
- ii) Asthma
- iii) Common cold
- iv) Cystitis
- v) Eczema
- vi) Migraine
- vii) PMS
- viii) Psoriasis
- ix) Sinusitis
- x) Stress
- xi) Water retention

8.3 Specific Conditions and Nutrition

- 8.3 i) Hypoglycaemia
 - Blood sugar balance
 - Insulin resistance
 - Glycaemic index
 - Glycaemic load
 - Insulin Index
- 8.3 ii) Diabetes mellitus
 - IDDM (Type I):
 - NIDDM (Type II):
 - Nutritional strategy for a Type II diabetic
- 8.3 iii) Gluten intolerance
- 8.3 iv) Nut intolerance
- 8.3 v) Dairy intolerance

8.4 Disorders and Diseases of the Digestive System

- 8.4 i) Anorexia nervosa
- 8.4 ii) Appendicitis
- 8.4 iii) Bulimia nervosa
- 8.4 iv) Cirrhosis of liver
- 8.4 v) Coeliac disease
- 8.4 vi) Gallstones
- 8.4 vii) Hernias
 - Abdominal hernia
 - Hiatus hernia
- 8.4 viii) Irritable bowel syndrome (IBS)
- 8.4 ix) Jaundice

- 8.4 x) Peptic ulcer
- 8.4 xi) Reflux oesophagitis (Heartburn)
- 8.4 xii) Stress

9. OTHER DIETARY HABITS AND FACTORS

Learning Objective:

Describe other dietary habits and factors including personal, social, religious and ethical considerations

Overview:

This section helps to contextualise nutritional knowledge built in terms of influencers on diet, including personal preferences, social factors, religious beliefs, vegetarianism, macrobiotic diet and food combining.

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- 9. i) Personal preferences
 - 9. ii) Social factors
 - 9. iii) Religious beliefs
 - 9. iv) Vegetarianism
 - 9. v) Macrobiotic diet
 - 9. vi) Food combining

10. PRINCIPLES OF WEIGHT LOSS AND WEIGHT MANAGEMENT

Learning Objective:

Describe the principles of weight loss diets including nutritional elements

Overview:

This section discusses in depth the key practices/ methods aligned with successful weight loss and weight management; along with specific dietary recommendations.

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- 10. i) Key practices/ methods aligned with successful weight loss and weight management
 - 10. ii) Specific dietary recommendations

11. GENERAL AND FURTHER ADVICE FOR HEALTH AND WELL-BEING

Learning Objective:

Understand the basis of general and further advice for health and well-being

Overview:

This section provides an overview of important practices that are aligned with general health and well-being, including fluid/water intake, supplements, exercise, smoking, work, time management, hobbies and interests stress and relaxation, and rest and sleep.

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- 11. i) Fluid/water intake
 - 11. ii) Supplements
 - 11. iii) Exercise
 - 11. iv) Smoking
 - 11. v) Work
 - 11. vi) Time management
 - 11. vii) Hobbies and Interests
 - 11. viii) Stress and Relaxation
 - 11. ix) Rest
 - 11. x) Sleep