FUNDAMENTALS OF NUTRITION & HEALTH – COURSE SYLLABUS

This course is appropriate for those interested in building fundamental nutrition knowledge and to help answer questions related to health and well-being. The course is also appropriate for individuals seeking to work in the nutrition field.

There are three main areas of the course:

1. The Digestive System
2. Nutrients
3. Elements of a Balanced Diet

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 knowledge of nutrition in relation to health and the confidence to apply this knowledge to aspects health and well-being.

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 constituents 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