

# Course Content

## *Section I*

### **The Incredible Nutrient Journey Through The Human Body (Audio and Text)**

#### **Chapter 1. The Journey Through The Organs Of The Human Body.**

Interaction between a professor and a student during their trip through the interior of the organs of the human body. Initial presentation of the nutrients, Mr. Protein, Mr. Carbohydrate, Mrs. Fat, Miss Vitamin, the Young Mineral, the Glyconutrient. Basics Concepts, brief presentation of nutrients, health concept, digestive system, cardiovascular system, respiratory system, nervous system, the senses, immune system, endocrine system, the blood, renal system, musculoskeletal system, the skin. Highlights of human anatomy and physiology, important aspects, compilations and descriptions.

#### **Chapter 2. The Glyconutrients.**

Interaction between the professor and the student, questions and answers game. Cell Communication, potentials benefits of the glyconutrients, glucose, fructose, mannose, galactose, xylose, N-acetylglucosamine, N-acetylgalactosamine, N-acetylneuraminic acid; benefits for the health, properties, sources.

#### **Chapter 3. Macronutrients.**

Interaction between the professor and the student, questions and answers game. Macronutrients. Carbohydrates. Classification. Structure. Functions. Digestion. The Glycoprotein's, the eight Monosaccharide implied in its configuration, general characteristics and functions. Metabolism. Sources. Requirements. Lipids or Fats. Classification. Structure. Digestion. Metabolism. Sources. Requirements. Proteins. Classification. Structure. Functions.

#### **Chapter 4. Micronutrients.**

Interaction between the professor and the student, questions and answers game. Vitamins. General Properties. Digestion and absorption. Functional roll of the vitamins. Vitamin deficiency. Nomenclature. Classification of vitamins

#### **Chapter 5. The Cell.**

Trip inside the cell. Narration, questions and answers. The cell as the life fundamental unit and characteristics, Cells organelles: the nucleus, the cytoplasm, the cell membrane, the mitochondria's, the lysosome, the ribosome, the reticular golgi apparatus, the vacuoles, functions, types of cells.

## *Section II*

### **Nutrition in the Wellness - Illness Continuum. (Text)**

#### **Chapter 1. Feeding vs. Nutrition**

Basics Concept. Nutrition Objectives. The body's organization related to the nutrition. Nutrition Laws. Basal Metabolism. Chemistry of Life. Energetic value of nutrients . Energetic needs of the human being.

#### **Chapter 2. Water. Vital liquid.**

Water, functions and necessities in the human being. Corporal Content. Nourishing contribution. Functions. Digestion. Metabolism. Hydration Balance. Physiopathology effects. Requirements.

#### **Chapter 3. Enzymes and Phytochemicals.**

Enzymes, functions in the organism. Phytochemicals, characteristics and functions.

#### **Chapter 4. Food Groups.**

Fruits. Dried Fruits. Vegetables. Diets. Legumes. Seaweed the vegetables of the sea. Fungi and mushrooms. The sweeteners. Milk and milk products. Eggs. Fats and oils. Meat. Fish. Seafood. Drinks. Condiments and spices.

#### **Chapter 5. Diverse types of Feeding.**

Diet. Foods and health. Feeding-related degeneration of the human body. A healthy and balanced diet. "Appetite".

Vegetarian diet.

Macrobiotic diet

Mediterranean diet

Modern / American diet.

#### **Chapter 6. Feeding in diverse stages of the life.**

Nutrition during pregnancy and breast-feeding. Nutrition for infants and children. Nutrition during the adolescence. Nutrition for athletes. Advanced age nutrition.

#### **Chapter 7. Feeding our body.**

Nutrition in real time. Nutritherapy. Nutrients for skin, hair, nails and senses. Nutrition, ocular health and auditory health. Cardio-healthy nutrients. Nutrients for a good digestion. Food combining and digestion. Norms of food combining. Nutrients for the nervous system. . Some interesting nutritional data. . Foods/nutrients for strong bones. Benefits of magnesium. . Diets high in proteins and calcium loss. Nutrients and the immune system. Key factors in the fight against infections. Foods/nutrients to prevent cancer. Garlic and prevention of influenza. Exceptional foods/nutrients. The inflammatory diet as a precursor to disease. Scientific findings of interest.

#### **Chapter 8. Detoxification of the body.**

Fasting and detoxification. Physiology of fasting. Fasting detoxification process. Fasting, accomplishment and effects.

Types of fasting. Body detoxification. Colon Hydrotherapy. The detoxification process. Removal of parasites.

#### **Chapter 9. Introduction to the nutritional supplements.**

Definitions. Reasons for supplements. Recommendations for the nutritional supplement consumption. Nutritional supplements, inconvenient effects. Groups of nutritional supplements. Weight-loss supplements. Vitamins. Minerals. Antioxidants.

#### **Chapter 10. Nutritherapy.**

Historical review. What is nutritherapy? Nutritherapy in cardiovascular illness. Nutritherapy in infections. Nutritherapy in immunology illness. Nutritherapy in allergic illness. Nutritherapy in nervous system illness. Nutritherapy in ocular disease Nutritherapy in genitourinary disease. Nutritherapy in metabolic disorders. Nutritherapy of obesity. Nutrients that help to lose weight. Nutritional supplementation and obesity. Nutritherapy of diabetes. Nutritherapy of thyroid disorders. Nutritherapy of hypoglycemia. Nutritherapy of musculo - skeletal disease.