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| **Course Title: Basic Nutrition Course Code: FSN 11301T** | | |
| Syllabus | Class 1 | Introductory class on basic Nutrition |
| Class 2 | Definition of food, nutrition, nutrients and calorie, composition of foods, classification of foods;  classification of nutrients, organic and inorganic nutrients, essential and nonessential nutrients,  macronutrients and micronutrients, refined/processed grains and whole grains, composition of the body, energy calculation of foods; overview of health and nutrition. |
| Class 3 | Carbohydrates: Definition, classification, sources, storage carbohydrates (glycogen), starch, glycemic index of different foods, physiological functions and deficiency diseases of carbohydrates.  Definition of dietary fibers, classification of dietary fibers, functions of dietary fibers, mechanisms of  reducing blood cholesterol and sugar, deficiency diseases of dietary fibers, daily requirement of fibers. balance: edema and dehydration |
| Class 4  (Class test + class) | Lipids: Definition, dietary classification, sources, essential and nonessential fatty acids and their  sources, functions of different lipids, deficiency diseases of lipids, lipids and heart disease, types of lipids need daily |
| Class 5 | Proteins: Definition, dietary classification, essential and nonessential amino acids, complete and  incomplete proteins and their sources, mutual supplementation of foods for complete protein sources,  LDL and HDL and their health implications, functions and deficiency diseases. Water-as a nutrient, function, sources, requirement, water balance & effect of deficiency. |
| Class 6  (Class test + class) | Definition of vitamins, classification, sources, functions, deficiency diseases and toxicities of different fat- and water-soluble vitamins; daily RDA of vitamins. |
| Class 7 | Minerals: Definition and classification, sources, functions, deficiency diseases and toxicities of  different minerals; trace elements and their functions; daily RDA of minerals. Body fluids and its  Electrolyte balance, acidosis and alkalosis. |
| Class 8 | Review Class on Whole Syllabus |

**Recommended Books:**

** Lori A. Smolin, Mary B Grosvenor. Basic Nutrition, 2010, Publisher: Chelsea House, 132 West 31stStreet, New York NY 10001.**

** Janice L. Thompson, Melinda M. Manore, Linda A. Vaughan. The science of nutrition, 2**

**nded., 2017, Publisher: Pearson, USA.**

** Linda K. DeBruyne, Kathryn Pinna, Eleanor N. Whitney. Nutrition and Diet Therapy, 8thed., 2013,Publisher: Cengage Learning, Mason, OH, USA.**

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