

Syllabus for B.Sc Nutrition and Dietetics
Choice Based Credit System
Semester I

CORE COURSES

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

UNIT I Basic concepts in food and nutrition

Basic terms used in study of food and nutrition

- Understanding relationship between food, nutrition and health
- Functions of food
 - Physiological
 - Psychological and social

UNIT II Nutrients

- Functions, dietary sources and clinical manifestations of deficiency/excess of the following nutrients:
 - Carbohydrates, lipids and proteins
 - Fat soluble vitamins-A, D, E and K
 - Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C
 - Minerals – calcium, iron and iodine

UNIT III Food Groups

- Selection, nutritional contribution and changes during cooking of the following food groups:
 - Cereals and Pulses
 - Fruits and vegetables
 - Milk & milk products
 - Eggs , Meat, poultry and fish
 - Fats and Oils

UNIT IV Methods of Cooking and Preventing Nutrient Losses

- Dry, moist, frying and microwave cooking
- Advantages, disadvantages
- Effect of various methods of cooking on nutrients
- Minimizing nutrient losses

PRACTICAL

1. Weights and measures; preparing market order and table setting
2. Food preparation, understanding the principles involved, nutritional quality and portion size

- Beverages: Hot tea/coffee, Milk shake/ lassi, fruit based beverages
- Cereals: Boiled rice, pulao, chapatti, parantha, puri, pastas
- Pulses: Whole, dehusked
- Vegetables: curries, dry preparations
- Milk and milk products:Kheer, custard
- Meat, Fish and poultry preparations
- Egg preparations: Boiled, poached, fried, scrambled, omelettes, egg pudding
- Soups: Broth, plain and cream soups
- Baked products: Biscuits/cookies, cream cakes, sponge cake preparations, tarts and pies
- Snacks:pakorras, cutlets, samosas, upma, poha, sandwiches
- Salads: salads and salad dressings.

RECOMMENDED READINGS

- Mudambi, SR and Rajagopal, MV. Fundamentals of Foods, Nutrition and Diet Therapy; Fifth Ed; 2012; New Age International Publishers
- Mudambi, SR, Rao SM and Rajagopal, MV. Food Science; Second Ed; 2006; New Age International Publishers
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- Potter NN, Hotchkiss JH. Food Science; Fifth Ed; 2006; CBS Publishers and Distributors.
- Sethi P and Lakra P Aahaar Vigyaan,Poshan Evam Suruksha, Elite Publishing House, 2015
- Jain P et al. *Poshan va swasthya ke mool siddhant (Hindi)*; First Ed; 2007; Academic Pratibha.
- Vrinda S. *Aahar Vigyan (Hindi)*; 2003; Shyam Prakashan
- Suri S. and Malhotra A. Food Science, Nutrition & Food Safety Pearson India Ltd. 2014.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S. Basic Food Preparation – A Complete Manual. Orient Longman, 2005.
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