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9. Economic Commission for Europe Inland Transport Committee. Restructured ADR applicable as from 1 January 2003. New York and Geneva, United Nations, 2002, (<http://www.unece.org/trans/danger/publi/adr/adr2003/ContentsE.html>).

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BCE 457: BIOCHEMISTRY IN DAY- TO- DAY LIFE: SOFTCORE

Lecture Hours: 36

Total Credits: 03

Course objectives

- To know the basic concepts of nutrition.
- To learn about macro and micronutrients, importance of water
- To study the significance of carbohydrates, proteins, fats and vitamins
- To bring awareness about effect of drugs on food and nutrition

Unit I

12 hrs.

Nutrition- Concepts of nutrients, essential nutrients and their classification. Basal Metabolic Rate (BMR), factors affecting BMR. Specific dynamic action (SDA) of foods. **Macro and micronutrients:** Sources, requirements, functions and deficiency symptoms. **Water:** Distribution in the body, function, special properties of water, water balances and factors affecting water balance. **Carbohydrates-** Dietary sources, Essentiality of carbohydrates, Dietary fibres.

Unit II

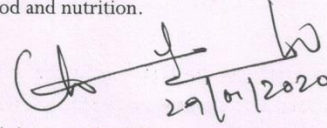
12 hrs.

Proteins- Essential amino acids, nutritional classification of proteins, supplementary value of proteins, protein calorie malnutrition. Kwashiorkor and Marasmus, Nitrogen balance, Malnutrition, protein calorific value. **Fats-** Sources, invisible fat, essential fatty acids. **Dietary formulation** for different age groups: children, adults, old age, pregnancy and lactating mother.

Unit III

12 hrs.

Vitamins- Fat soluble and water-soluble vitamins, pro-vitamins, antivitamins, dietary sources, daily requirement, function and deficiency symptoms of vitamins. Hyper-vitaminosis, vitamin-like compounds, disorders. **Food Drug Interaction:** Effect of drugs on food and nutrition.


 29/01/2020
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