



MAHATMA GANDHI UNIVERSITY
of
MEDICAL SCIENCES & TECHNOLOGY
JAIPUR

VAC 07

**CLINICAL
NUTRITION
&
DIETETICS**

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Sponsoring Body: India Education Trust

Mahatma Gandhi Occupational Therapy College, Jaipur

Value Added Course: Clinical Nutrition & Dietetics

Contact Hours- 20

COURSE SYLLABUS

Unit -1 Dietary goals & guidelines (6 Goals & 15 guidelines)

Unit -2 Assessment of nutritional status –

- a) Anthropometric measurements: Definition, measurements, tools/instruments. Technique for measurements, standards for references, indices, classification, interpretation of data. Measurement of height, weight, calculating BMI, triceps skinfold thickness, MUAC, Head circumference, chest circumference, waist circumference, hip circumference, waist to hip ratio
- b) Biochemical estimations: Useful biochemical parameters for assessment of nutritional status; i.e. serum or blood test for lipid profile, blood sugar level, electrolytes, renal function test, liver function test
- c) Clinical examination: Patient's clinical examination from nutrition point of view – examination, various signs & symptoms for nutrient deficiency (Examination for hair, eye, tongue, skin, nails, abdomen etc)
- d) Dietary survey: Various methods for dietary survey like food frequency tables, 24 hrs
- e) dietary recall, weighment method, observation method etc

Unit -3: Nutrient metabolism, their sources & requirements –

- a) Carbohydrate – structure, function, types, sources & metabolism of carbohydrate (glycolysis, kreb's cycle, electron transport system)
- b) Protein – structure, function, types, sources & metabolism of protein
- c) Fat – structure, function, types, sources & metabolism of fat
- d) Mineral – structure, function, types, deficiency & excess of minerals

- e) Vitamins – structure, function, types, deficiency & excess of vitamins (fat soluble & water soluble)

Unit- 4: Calculation of patient's nutritional needs – Recommended Dietary Allowances tables and other guidelines for calculating patients nutritional needs, factors affecting BMR, methods of calculating BMR, calculation of total energy requirements on the basis of BEE, physical activity, stress factor etc.

Unit -5: Therapeutic diets –

- a) Weight management,
- b) Diabetes
- c) Cardiac diseases
- d) Renal problems
- e) Enteral parenteral feeds

Unit- 6: National & International agencies & programmes for Nutrition (ICDS, NIDDM, NACP, CARE, UNICEF, NNMB etc.

Vineet Bannur

**Course Co-ordinator
MGOTC**