

FNS 506 FUNCTIONAL FOODS

39 Hr (13× 3 units)

Course outcome:

At the end of this course the students will understand-

- CO 1. Nutraceutical composition
- CO 2. Regulatory issues related to nutraceuticals
- CO 3. Role of functional foods and its impact on health.
- CO 4. The benefits and role played by nutraceuticals in treating various diseases.

Unit I: Introduction to nutraceuticals: Definitions, synonymous terms, basis of claims for a compound as a nutraceutical, regulatory issues for nutraceuticals including FSSAI, CODEX/USFDA, labelling issues. Use of nutraceuticals in traditional health sciences. Role in preventing/controlling diseases.

Unit II: Functional foods: Definition, functional components, types of functional foods, development of functional foods, prebiotics and probiotics – usefulness of probiotics and prebiotics in gastrointestinal health and other benefits. Synbiotics, bioactive peptides and polyphenols.

Unit III: Role of nutraceuticals/functional foods: Benefits of specific nutraceuticals in cardiovascular diseases, cancer, diabetes, cholesterol management, obesity, immune enhancement, age-related macular degeneration, endurance performance, peri-menopausal syndrome – compounds and their mechanisms of action, contra-indications.

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- Robert EC. 2006. Hand book of Nutraceuticals and Functional Foods. 2nd Ed. Wildman.
- Shi J. 2006. Functional Food Ingredients and Nutraceuticals: Processing Technologies. CRC Press.
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