

SEMESTER –I

Natural Sciences

MLD - HERBAL NUTRITION

Credits: 3

Hours 4

Learning Outcomes

Students will be able to

1. gain knowledge on common herbs used as food, their botanical classification and culinary use
2. acquire knowledge on herbs and their drug interactions, toxicity and herbal product regulations

Course Outcomes

1. Acquire more knowledge about the common herbs, their nutritional properties and their regulations
2. Gains more knowledge about the healing properties of common medicinal plants and their use in traditional healthcare systems
3. Utilize these herbs as food and supplements

Unit I

Definition of herb, herbal Nutrition, Selection, identification and authentication of herbs, Processing of herbal raw material. Introduction to Medicinally important Plant parts: Fruits, Leaves, Stem and its modifications (underground and aerial), Roots. Importance of medicinal plants – role in human health care – health and balanced diet.

Unit II

Study of some medicinally important families with reference to systematic position. Diagnostic features and medicinal uses only: Meliaceae, Myrtaceae, Apiaceae, Asclepiadaceae, Solanaceae, Lamiaceae, Euphorbiaceae, Zingiberaceae, Musaceae and Poaceae. Cultivation methods – Crop protection – Harvesting – Storage and Protection – Marketing and utilization - Export of medicinally important (General aspects).

Unit III

Nutritional content of common Indian herbs, Phenolic content, Carotenoids, minerals and essential oils. Significance of common herbs, culinary herbs, cooking methods of herbs – Basil, Cherril, Chimes, Cilantro, Dill, Mint, Oregano, Parsley, Rosemary, Sage, Tarrangon, Thyme, Lemongrass.

Unit IV

Plants in day today life – Ocimum sanctum, Centella asiatica, Solanum trilobatum, Cassia auriculata, Aloe vera. Nutritive and medicinal value of some fruits (Guava, Sapota, Orange, Mango, Banana, Lemon, Pomegranate) and vegetables - Greens (Moringa, Solanum nigrum) Cabbage.

Unit V

Common herbal dietary supplements, possible side effects and drug interactions – Black cohosh, Cranberry, Curcumin, Echinacea, Garlic, Ginkobiloba, Gingeng, Goldenseal, Greentea extract, Kava-kava, Milk thistle, Saw pal,etto, St.John's wort, Valerian, Phrmacokineics of herbal supplements.

Text Books:

1. Gokhale, S.S., C.K.Kokate and A.P. Purohit (1994) Pharmacognosy. Nirali Prakashan. Pune.
3. Faroogi, A.A., and B.S. Sreeramu (2004). Cultivation of Medicinal and Aromatic Crops. University Press (India) Pvt. Ltd., Hyderabad.

References:

1. **Mukherjee, P.W. Quality Control of Herbal Drugs: An Approach to Evaluation of Botanicals. Business Horizons Publishers, New Delhi, India, 2002.**
2. Herb Nutrient and drug interactions: Clinical implications and therapeutic strategies (2008) Mitchell Bebel Stargrove Jonathan Treasure Dwight L. McKee, Published by Elsevier - Health Sciences Division

WEBLINKS

1. Natural Medicines Comprehensive Database. Available at <http://www.naturaldatabase.com> last accessed on April 2, 2013
2. <https://www.aafp.org/pubs/afp/issues/2017/0715/p101.html>