

**B.A (Prog.) with Nutrition and Health Education (NHE) as Non-Major
Category-III**

**DISCIPLINE SPECIFIC CORE COURSE
DSC-NHE-10: Nutritional Approaches to Wellness and Longevity**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title and Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical/ Practice		
Nutritional Approaches to Wellness and Longevity	4	3	1	0	XII Pass	NIL

Learning Objectives

- To familiarize students with the concept of wellness and various diet related approaches for longevity
- To explain the significance of approaches other than diet for wellness and longevity
- To make students aware about various addictions and their relation to longevity

Learning Outcomes

After completion of the course, the students will be able to:

- Understand the several elements of health and wellness
- Describe approaches other than diet for wellness and longevity
- Gain knowledge about the linkage of longevity and wellness with different addictions

SYLLABUS OF DSC-NHE-10

**THEORY
(Credits 3; Hours 45)**

UNIT I: Relation between Disease, Health and Wellness

15 Hours

This unit will familiarize the students with the concept of wellness, health, their determinants and interaction.

- Definitions – longevity, wellness / wellbeing, standard of living, level of living, quality of life, physical quality of life index (PQLI), Human Development Index, Happiness Index
- Dimensions of wellness and health
- Determinants of health
- Epidemiologic concept of interactions of agent, host and environment
- Concept of prevention of illness
- Modes of intervention for combating illness

UNIT II: Diet Related Approaches for Longevity and Wellness

15 Hours

This unit will introduce the concept of various approaches related to diet for longevity and wellness in life.

- Nutritional screening
- Probiotics
- Prebiotics
- Antioxidants
- Immuno-nutrition
- Calorie restricted diets
- Chrono –nutrition
- Nutrigenomics
- Nutrigenetics

UNIT III: Adjuncts to Diet Therapy

8 Hours

This unit will introduce the approaches other than diet for wellness and longevity.

- Physical activity – types, benefits, tracking devices
- Yoga – benefits
- Circadian rhythm
- Psycho-social and mental health
- Stress management – meditation, pranayama, mind training

UNIT IV: Addictions and Longevity

7 Hours

This unit will acquaint the students with relation of addictions and longevity.

- Substance addiction
 - Smoking /Tobacco
 - Alcoholism
 - Drug abuse
- Non substance addiction
 - Overeating
 - Screen

TUTORIALS (Credits 1; Hours 15)

Tutorial classes will involve:

1. Q&A sessions/ Group Discussions/ Problem Solving exercises with the Students
2. Presentation of project/ research activity by students
3. Any other scholastic work related to application of conceptual understanding of the subject
4. Evaluation and feedback by the teacher

ESSENTIAL/RECOMMENDED READINGS

- Park, K. (2021). *Park's textbook of preventive and social medicine* (26th ed.). Banarsidas Bhanot Publishers.
- Uppal, A.K., & Ranganathan, P.P. (2020). *Fitness, wellness and nutrition* (1st ed.).

Friends Publication.

- Caterina, R.D., Martinez, J.A., & Kohlmeier, M. (Eds.). (2020). *Principles of nutrigenetics and nutrigenomics – fundamentals for individualized nutrition*. Academic Press.
- Zou, Z., Wang, H., Uquillas, F., Wang, X., Ding, J., & Chen H. (2017). Definition of substance and non-substance addiction. *Experimental Medicine and Biology*. 1010, DOI 10.1007/978-981-10-5562-1_2
- Chadha, R., & Mathur, P. (Eds). (2015). *Nutrition: A life cycle approach*. Orient Blackswan Private Limited.
- Swarbrick, P., & Yudof, J. (2015). *Wellness in eight dimensions*. Collaborative support programs of NJ.
- Joshi, Y.K. (Ed.). (2009). *Basics of Clinical Nutrition*. (2nd ed.). Jaypee Brothers Medical Publishers (P) Ltd.
- Harvard T.H. Chan School of Public Health. *The nutrition resource: healthy living guide 2022/2023*. <https://www.hsph.harvard.edu/nutritionsource/2023/01/04/healthy-living-guide-2022-2023/> (Accessed on 10 March 2023).
- Harvard T.H. Chan School of Public Health. *The nutrition resource – stress and health*. <https://www.hsph.harvard.edu/nutritionsource/stress-and-health/> (Accessed on 10 March 2023).

SUGGESTED READINGS

- Meiliana, A. & Wijaya, A. (2020). Nutrigenetics, nutrigenomics and precise nutrition. *Indonesian Biomedical Journal*, 12(3), 189–200.
- Savini, I., Gasperi, V., & Catani, V.M. (2016). *Nutrigenetics*. John Wiley & Sons Ltd. 10.1002/9780470015902.a0021028.
- Reen, J.K., Yadav, A.K., & Singh, J. (2015). Nutrigenomics: concepts, advances and applications. *Asian Journal of Dairy & Food Research*, 34(3), 205–212.
- Harvard T.H. Chan School of Public Health. *The nutrition resource: nutrition and immunity*. <https://www.hsph.harvard.edu/nutritionsource/nutrition-and-immunity/> (Accessed on 10 March 2023).
- Harvard T.H. Chan School of Public Health. *The nutrition resource – sleep*. <https://www.hsph.harvard.edu/nutritionsource/sleep/> (Accessed on 10 March 2023).
- Harvard T.H. Chan School of Public Health. *The nutrition resource – staying active*. <https://www.hsph.harvard.edu/nutritionsource/staying-active/> (Accessed on 10 March 2023).
- Harvard T.H. Chan School of Public Health. (2011). *The nutrition resource – happiness and health*. <https://www.hsph.harvard.edu/news/magazine/happiness-stress-heart-disease/> (Accessed on 10 March 2023).
- Harvard T.H. Chan School of Public Health. *The nutrition resource – healthy longevity*. <https://www.hsph.harvard.edu/nutritionsource/healthy-longevity/> (Accessed on 10 March 2023).

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.