INSTITUTE OF SPECIAL EDUCATION University of the Punjab, Lahore

BS Special Education

Nutrition, Health and Prevention

Course Code: SEBS-409

Seventh Semester (3 Credit Hours)

Learning Outcome

After the successful completion of the course the learners will be able to:

- 1. Define various perspectives of nutrition and health.
- 2. Understand the importance of nutrition and health in life
- 3. Know the major components, benefits of nutrition and health
- 4. Apply the preventive measures with the help of proper nutrition.

Contents

Unit-1: Introduction

- 1.1 Definitions
- 1.2 Importance of Food
- 1.3 Nutrients obtained from food

Unit-2: Concept of Human Energy

- 2.1 Definition and Types of Energy
- 2.2 Human Energy System

Unit-3: Carbohydrates

- 3.1 Types and Sources
- 3.2 Metabolism and Functions of Carbohydrates
- 3.3 Carbohydrates Loading
- 3.4 Glycemic Index

Unit-4: Lipids

- 4.1 Role of Lipid in the Body
- 4.2 Lipid as Energy Source and its Reserve

4.3 Use of Lipid During Exercise

Unit-5: Proteins

- 5.1 Functions, Sources, Recommended Intake
- 5.2 Metabolism
- 5.3 Protein and Exercise
- 5.4 BMI (Basal Metabolic Rate)

Unit-6: Vitamins

- 6.1 Introduction
- 6.2 Sources
- 6.3 Types
- 6.4 Importance
- 6.5 Food Supplements: Uses and Importance

Unit-7: Minerals

- 7.1 Introduction
- 7.2 Sources
- 7.3 Types
- 7.4 Importance
- 7.5 Mineral Intake
- 7.6 Supplements

Unit-8: Water

- 8.1 Recommended Water Intake
- 8.2 Functions, Regulation of Body Temperature
- 8.3 Fuel and Electrolyte Losses and Replacements
- 8.4 Body Regulation During Exercise

Unit-9: Weight Management

- 9.1 Concept of Dieting
- 9.2 Physiological Factors of Weight Management
- 9.3 Obesity

Unit-10: Nutrition for Optimal Health & Physical Performance

- 10.1 Balanced Diet
- 10.2 Pre, During and Post Contest Meals
- 10.3 Dietary Recommendations for Health and Physical Performance

Teaching Learning Strategies:

Text Book Review, Presentation, Field Visits

Assignment Types and Number with Calendar

04 Case Studies Development

02 Before Mid Term, 02 after Final Term

Assessment and Examination

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	It takes place at the mid-point of the semester. 9 th Week
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignment and presentations, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It will be a written test.

Suggested Readings

- Ali, A., & Katz, D. L. (2015). Disease Prevention and Health Promotion: How Integrative Medicine Fits. *American journal of preventive medicine*, 49(5 Suppl 3), S230–S240. doi:10.1016/j.amepre.2015.07.019.
- Behzadifar, M., Gorji, H. A., Rezapour, A., &Bragazzi, N. L. (2019). Comparison of prevention, screening and treatment of hepatitis C in Iran, Egypt and Georgia. *Journal* of virus eradication, 5(2), 116–121.
- Ramesh, G., Gerstbacher, D., Arruda, J., Golianu, B., Mark, J., &Yeh, A. M. (2018).
 Pediatric Integrative Medicine in Academia: Stanford Children's Experience. *Children* (*Basel, Switzerland*), 5(12), 168. doi:10.3390/children5120168
- Wang, C., Preisser, J., Chung, Y., & Li, K. (2018). Complementary and alternative medicine use among children with mental health issues: results from the National Health Interview Survey. *BMC complementary and alternative medicine*, 18(1), 241. doi:10.1186/s12906-018-2307-5

- Ali, A., Rosenberger, L., Weiss, T. R., Milak, C., & Perlman, A. I. (2017). Massage Therapy and Quality of Life in Osteoarthritis of the Knee: A Qualitative Study. Pain medicine (Malden, Mass.), 18(6), 1168–1175. doi:10.1093/pm/pnw217
- Dominick, J. R. (2010). *The dynamics of mass communication: Media in the digital age*. Tata: McGraw-Hill Education.
- Grisogono, V., Griffin, J., & Sharp, C. (1991). Children and sport: fitness, injuries and diet. Murray.

Kibler, W. B. (1990). The sport pre-participation fitness examination. Human Kinetics.

Mughal, A. W. (2012). Sports nutrition. Islamabad.

Webb, G. P. (2002). Nutrition: a health promotion approach. (No. ed. 2). Arnold.

Williams, M. H. (1999). Nutrition for health, fitness and sport. (No. ed. 5). McGraw-Hill.