QUICK GUIDE TO COURSES IN NUTRITION & DIETETICS

HERE IS SOME GOOD FOOD FOR THOUGHT!
INTRODUCTION

AS LIFESTYLE DISEASES INCREASE ACROSS ALL AGE GROUPS, DIET AND NUTRITION PRODUCTS ARE THE MOST SOUGHT-AFTER GOODS.

Say ‘yes’ to green tea. No to Pizzas. Super-foods, organic and antioxidants-enriched foods are seen in almost any grocery shop now. The emphasis is on health through proper diet and nutritional intake. This has catapulted fast moving consumer goods (FMCG) and pharmaceutical industries to pack best of nutrients in almost any product. With the increase in lifestyle diseases across all age groups, diet and nutrition products are the most sought-after goods at supermarkets and even on the Internet.

The fast-paced lifestyles have brought with it diseases and discomforts. Lack of exercise and sedentary work has escalated the need to feed the body with energy-packed and healthy foods. This has also got reflected in more students going for a degree course in nutrition-related studies.

“Earlier, the attention was towards finishing and grooming courses such as cooking and textile

Project Editors S. Rajaram
Research Shiphony Pavitran Suri, Prerna Singh
Art Director Anshul Sharma
Asst. Art Director Rajesh Chawla

Copyright © Pathfinder Publishing Pvt. Ltd., New Delhi

All Rights Reserved
No part of this book may be reproduced, stored in a retrieval system or transmitted in any form or means electronic, mechanical, photocopying, recording or otherwise, without prior permission of Pathfinder Publishing Pvt. Ltd.

Editor: B Mahesh Sarma
Cover Design: Rajesh Chawla
management. But nutrition education started gaining visibility in the early 1960s. At present, with new areas of practice, the nutrition domain has taken tremendous strides,” says Prof. Santosh Jain Passi of Institute of Home Economics (IHE).

Nutrition occupies a central place in treatment and prevention of diseases. “India the global capital for diabetes and other diseases (cardiovascular disorders, hypertension, heart disease, cancers) needs both curative and preventive nutrition,” says IHE’s Director, Kumud Khanna.

A nutritionist’s job entails researching the nutritive value of food while understanding the food components. Advisory roles exercised by them at hospitals and clinics are specific to the lifestyle and medical condition of the patient. Nutritionists communicate specific dietary requirements through diet plans that are reviewed from time to time.

Indian as well as international universities have well-designed course modules leading to a degree in Nutrition. “You must look into the course curriculum and syllabi of the institute closely before taking admission,” Prof. Passi, advises.

Department of Food and Nutrition at Punjab Agricultural University offers 3-year BSc with an intake of 30 students. The department is well equipped with infrastructural facilities such as laboratories in Diet Counselling and Animal Nutrition among others.

Lady Irwin College at Delhi University conducts a 4-year degree programme in BSc (Home Science) with multiple degree options and flexibility of taking up Food and Nutrition as Discipline Course-II starting from third semester.

SELECTING AN INSTITUTE

LOOK INTO THE COURSE CURRICULUM AND SYLLABI OF THE INSTITUTE CLOSELY BEFORE TAKING ADMISSION.
The entry to this course is through merit cut-off list prepared on the aggregate in four subjects including English in 10+2. Students with science in 10+2 are given an additional relaxation of 5 percent.

**COURSE STRUCTURE**

The three-year BSc degree programme trains you for a career in hospitals, research and FMCG companies globally.

The course fosters understanding of food intake on our health and the skills of communication and research in the field.

At Kanpur University, during the first year, subjects in Human Physiology, Basic Biochemistry and nutrition are studied. It is complemented by ‘on the job’ training as a part of practical work.

Food microbiology and community nutrition are highlighted in the second year at Annamalai University. The objective is to impart knowledge in human nutrition in the first two semesters.

Students have the flexibility to choose electives from the fifth semester onwards at Thiruvalluvar

**ELIGIBILITY**
- 10+2 with PCB/M
- Admission is merit-based.
- Some institutes conduct entrance exams
University. Coursework in health and fitness and entrepreneurship management comprise the electives.

The final year at Annamalai University is centred on Advanced Dietetics, quality control and human development. The project work develops core competencies.

Hands-on experience and project training will equip you with communication, management and research skills necessary for professional endeavours.

Food nutrition and diet is highly valued both in research and education worldwide. King’s College London offers a three-year programme in nutrition. It is recognized by Association for Nutrition and permits direct entry of graduates to UK Voluntary Register of Nutritionists. Registered nutritionists find placements in pharmaceutical, foods, beverages and public health programmes.

**WHAT AFTER GRADUATION?**

You can apply for a specialised MSc Food and Nutrition degree course that enables enhanced skills and experience required for better job prospects. Such a specialised course allows you to acquire in-depth knowledge in Therapeutic Nutrition, Public Health Nutrition and Food Science.

There are abundant research opportunities in India. “We take MSc nutritionists for PhD or research work. We hold seminars and symposia, and bring out recommendations. Here, one can finish PhD in five years,” says Prema Ramachandran, Director of Nutrition Foundation of India (NFI). National Institute of Nutrition, Hyderabad pioneers research in the field of nutrition. It’s objective is to provide “optimal nutrition” to the vulnerable sections of the society.
Research & Development and medical marketing form two major functional areas of dieticians across pharmaceutical and FMCG companies. Some of the leading companies in this domain are Nestle, Cadbury’s, Unilever, GSK, Eli Lilly, Novartis, etc. Ruchika Chugh, Senior nutritionist at Global Alliance for Improved Nutrition (GAIN) describes the work profile at such companies. “I used to develop new product concept, work on the claims, interface with different department regulatory and give them technical support,” she says. The job is usually multidimensional in nature. “I used to organise scientific conferences, KOLs (Key Opinion Leaders) management, prepare manuals, flip charts, leaflets, posters for sales force and eventually trained them. We also met doctors frequently to understand if a product is working,” she added.

To practice independently or with any hospital, you should register with Indian Dietetics Association. Registered dieticians are employed at hospitals and clinics for day care and consultation.
Salary of a dietician varies with location, education and experience. A specialised professional with a leading hospital in a metro is likely to earn more. “In government hospitals, with the Sixth Pay Commission, the salaries have risen to Rs. 25,000,” says Namrata Singh, Senior Dietician at Department of Gastroenterology and Human Nutrition, AIIMS.

Several public health departments organise programmes and schemes that require full-time engagement of dieticians. “Depending on the number of vacancies available, UPSC conducts interviews for posts at Food & Nutrition Board (FNB). If recruited you to become a class-I gazetted officer,” says Dr Surindra Jain, Assistant Technical Advisor at Food and Nutrition Board, Ministry of Women and Child Development. Nutritionists also take up advisory roles at different levels of national health programmes, “There are 43 food and nutrition extension/field units across the country where a nutritionist’s support is needed,” she adds.

**DIFFERENCE BETWEEN A DIETICIAN AND NUTRITIONIST**

Dieticians may alternatively be called clinical or therapeutic dieticians, as they are involved in the planning and supervision of diets specific for every patient. “Besides making the rounds of the respective wards, we check the quality and hygiene levels in the hospital kitchen. To excel, dieticians must be in tune with the medical world (diseases, medicines, treatment),” says Namrata Singh.

Major areas of work for nutritionists include food science, community development, research projects and Fast Moving Consumer Goods Companies (FMCG). The research-related work is confined to laboratories in government and private establishments. “They go beyond diets – move into the science of biochemistry, food science. They do not do so much of clinical nutrition as a dietician does,” says Kajali Paintal, Senior Nutrition Specialist, UNICEF, India.
DIRECTOR SPEAK

Kumud Khanna
Director, Institute of Home Economics

Attractive openings even for men!

Q. Both dieticians and nutritionists have the same degrees. Why two different titles?
A. The studies are interlinked and complementary to each other. The career depends on the choice of specialisation you take up at Master’s level. Dietician’s role is restricted to hospitals, hotels, and weight-loss clinics. They know more about clinical nutrition and therapeutic nutrition. A nutritionist’s role is more diverse. They can move into an array of fields - like scientific research, NGOs, UN organisations, food industry, health care centres (sports complex).

Q. Is it compulsory for dieticians to be members of the Indian Dietetics Association?
A. No, but registered dieticians (RD) get some weightage in hospitals, consultancy clinics, etc. For this – graduates/postgraduates can take the all India entrance exam, which is set by IDA once a year. To crack the exam, you must keep abreast of IDA syllabus and current events in the Indian dietetics industry.

Q. Why do fewer men join the profession?
A. There’s a lack of awareness. But there are attractive openings in the food service industry, sports nutrition and scientific research. It is possible to enjoy a challenging and satisfying career as a male nutritionist. We have a lot of nutritionists coming from biochemistry and community medicine lines.

Q. What is the focus of nutrition today?
A. Earlier, India was addressing only the problem of malnutrition. Today, the health scenario has changed drastically. Despite economic boom, India has enormous under/over-nutrition problem. So, our national plans and nutritional advice targets these two issues.

Q. What type of study is involved?
A. Unlike pure science, nutrition is an applied science. It brings out effective and sustainable solutions to problem. To be eligible, one should be from a science background (PCB). The study also supports other aspects like psychology, sociology and history.
EXPERT TALK

Kajali Paintal
Nutrition Specialist, UNICEF

Attractive openings even for men!

**Q.** Tell us about your job profile at UNICEF.
**A.** I manage infant and young child nutrition programmes, and focus on the first two years of a child’s life. There are cases of a child getting mental disorders because of malnutrition. I focus on the prevention of malnutrition in those years. I tackle essential nutritional interventions to address malnutrition.

**Q.** What is UNICEF’s role in this field?
**A.** UNICEF gives technical advice and support to government bodies like Integrated Child Development Services (ICDS) and the National Rural Health Mission (NRHM). We work in different tie-ups – at community, district, state and national level. So, we do both downstream (community level) and upstream work (advises the government).

**Q.** How many nutritionists does UNICEF hire?
**A.** In India, UNICEF has more than 35 nutritionists working in 14 states. UNICEF also has a good bulk of consultants. There are about 100 consultants working countrywide. The distribution of nutritionists depends on the magnitude of the problem in each state.

**Q.** Do we need community-level nutritionists?
**A.** We need enthusiasm, energy and the drive to work at the grassroots level. Nutritionists may have to work with villagers/illiterate masses and give them solutions, which are practical for them to actually implement it. But most don’t want to work in the development sector – because it’s hard work! They would rather work in urban set-ups. Graduates are moving more into diet management, obesity consultancies and hospitals. There’s a dearth of public health nutritionists.

**Q.** Opportunities in the government sector...
**A.** They are gradually opening up. Now we have missions like ICDS and NRHM that have started hiring nutritionists. You also have Public Health Foundation of India (PHFI), Diabetic Foundation of India, Nutrition Foundation of India, and Indian Council for Medical Research (ICMR) that keep nutritionists in the research domain.
STUDENT SPEAK

Anushree Shiroor
Degree: MSc Food and Nutrition, Lady Irwin College
Specialisation: Public Health Nutrition (PHN)

“Community work is my calling”

While cleaning out her mother’s bookshelf, Anushree stumbled upon her mother’s Class 8 Socially Useful Productive Work (SUPW) notes. It ranged from caring for pests, hygiene, textile management, and cooking and nutrition. Fascinated, she took up Home Science as a subject in Class 11, alongside PCB.

After securing 90%, she joined the BSc Home Science Honour’s programme at Lady Irwin. She specialised in food and nutrition, and in Public Health Nutrition (PHN) during MSc.

She interned with Salam Balak Trust, an NGO that works for street children in her second year. She worked on a kitchen project with a focus on low cost recipes. The challenge was to make food from low-cost seasonal vegetables. For instance, she added carrots, peas and dal to staples like upma, poha and roti.

Anushree also completed a one-month internship with GlaxoSmithKline - Consumer Healthcare (Nutrition and Claims Support Department). “I was exposed to nutritional product research, marketing, communicating product,” she says. But her true calling was different. “I am interested in the masses, and want to address community-level problems,” concludes Anushree.

Select Institutions

<table>
<thead>
<tr>
<th>Course</th>
<th>Location</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lady Irwin College (University of Delhi)</td>
<td>New Delhi</td>
<td><a href="http://www.ladyirwin.edu.in">www.ladyirwin.edu.in</a></td>
</tr>
<tr>
<td>SNDT Women’s University</td>
<td>Mumbai</td>
<td>sndt.digitaluniversity.ac</td>
</tr>
<tr>
<td>Institute of Home Economics</td>
<td>New Delhi</td>
<td><a href="http://www.ihe-du.co.in">www.ihe-du.co.in</a></td>
</tr>
<tr>
<td>Avinashilingam University for Women</td>
<td>Coimbatore</td>
<td><a href="http://www.avinashilingam.edu">www.avinashilingam.edu</a></td>
</tr>
<tr>
<td>Samrath Prithviraj Chauhan Degree College</td>
<td>Uttar Pradesh</td>
<td><a href="http://www.prithvirajchauhancollege.com">www.prithvirajchauhancollege.com</a></td>
</tr>
<tr>
<td>Women’s Christian College</td>
<td>Chennai</td>
<td><a href="http://www.wcc.edu.in">www.wcc.edu.in</a></td>
</tr>
<tr>
<td>J D Birla Institute</td>
<td>Kolkata</td>
<td><a href="http://www.jdbimanagerment.org.in">www.jdbimanagerment.org.in</a></td>
</tr>
<tr>
<td>Maharaja Sayajirao University of Baroda</td>
<td>Gujarat</td>
<td><a href="http://www.msubaroda.ac.in">www.msubaroda.ac.in</a></td>
</tr>
<tr>
<td>Institute of Health Systems (IHS)</td>
<td>Hyderabad</td>
<td><a href="http://www.ihs.org.in">www.ihs.org.in</a></td>
</tr>
<tr>
<td>Banasthali University</td>
<td>Jaipur</td>
<td><a href="http://www.banasthali.org/">www.banasthali.org/</a></td>
</tr>
<tr>
<td>Guru Jambheshwar University of Science &amp; Technology (GJUS&amp;T), Hisar</td>
<td>Haryana</td>
<td><a href="http://gjust.ac.in">http://gjust.ac.in</a></td>
</tr>
<tr>
<td>Punjab Agricultural University</td>
<td>Ludhiana</td>
<td><a href="http://www.pau.edu">www.pau.edu</a></td>
</tr>
<tr>
<td>G. B. Pant University of Agriculture &amp; Tech</td>
<td>Uttarakhand</td>
<td><a href="http://www.gbpuat.ac.in/">www.gbpuat.ac.in/</a></td>
</tr>
</tbody>
</table>

JOB PROFILES

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Job functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Service, Institutional Catering</td>
<td>Plan, supervise and prepare nutritious and well-balanced meals for schools, colleges, restaurants, factories or office cafeterias</td>
</tr>
<tr>
<td>Health Care field</td>
<td>Prepare diet charts and monitor and maintain records of eating habits etc (hospitals, health resorts, spas, fitness centres)</td>
</tr>
<tr>
<td>Research and Development</td>
<td>Conduct research on various food items that provides a balanced mix of the essentials like vitamins, minerals etc.</td>
</tr>
<tr>
<td>Food product companies</td>
<td>Plan and research new products and check the nutritional quality</td>
</tr>
<tr>
<td>Research and field work</td>
<td>Research on various issues relating to health in universities, specialist institutions, food product manufacturing companies and hospitals</td>
</tr>
<tr>
<td>Govt and UN Organisations</td>
<td>Social welfare. Public health departments at community levels</td>
</tr>
<tr>
<td>Education</td>
<td>Schools, colleges, hospitals need specialists in nutrition and dietetics</td>
</tr>
<tr>
<td>Media houses</td>
<td>Books &amp; programmes on diet (TV, radio, magazines, newspapers)</td>
</tr>
</tbody>
</table>
ASPIRE FOR A REWARDING CAREER
QUICK GUIDE TO COURSES IN
BACHELOR OF DENTAL SURGERY