

Nutritional Sciences Career Snapshot

What mechanisms turn a high-protein diet into a fat-producing diet? Why does your body turn harmless chemicals into toxins? What is the connection between diet and chronic diseases like cancer? In the **Nutritional Sciences (NS)** major, these are some of the questions we explore to learn how nutrients, phytochemicals, and toxicants influence human health.

There are two areas of specialization, each based in biological and chemical sciences. **Physiology and Metabolism** combines a foundation in natural sciences with advanced course work in nutrition and the study of nutrient utilization and food properties. **Dietetics** students at the junior and senior levels take course work emphasizing the application of nutritional knowledge through dietetic practice. Students who would like to pursue the career option of becoming a Registered Dietician (RD) must complete a dietetic internship and pass a national examination. The major is offered by the Department of Nutritional Sciences and Toxicology (NST): <http://nst.berkeley.edu>

Key Skills

- Prepare for upper division work in the major and sharpen your technical skills by building a strong foundation in the core science requirements (chemistry, organic chemistry, biology, biochemistry).
- Learn techniques of research and analysis by participating in an undergraduate research project, of your own design or through a research program.
- Develop proficiency in all forms of communication, including public speaking and writing, as well as one-on-one advising or tutoring.
- Cultivate leadership, problem-solving, and team-building skills by participating in student organizations and activities.
- Familiarize yourself with the dynamics of a work setting through informational interviews, internships, and volunteer experiences.
- Diversify your life experience by immersing yourself in a foreign culture (e.g., study abroad) or a new environment (e.g., rural, urban).

Career Pathways

Our research and courses cover a spectrum of topics, including the delivery of food nutrients to mammalian cells, the benefits and hazards of chemical agents, the cultural and socioeconomic determinants of human diets, and the development of programs and policies to address human and environmental health and safety. The depth and breadth of the Nutritional Sciences major prepares graduates to become professionals working toward the advancement of the health and well-being of individuals in a variety of settings. Our program also provides an excellent foundation for graduate education in the biological sciences or professional programs in medicine or public health.

Public and Non-Profit Sector Jobs

- **Community or public health organizations:** Coordinate programs aimed at improving health and preventing disease in the community. Develop consumer education materials regarding food and nutrient supplement products. Consult for agencies providing humanitarian assistance. Serve as a nutritionist for public schools or county agencies.
- **Various governmental agencies:** Develop laws and policies to ensure food product safety. Advise and create policy for California agencies such as Agriculture or Health Services, or for federal agencies such as the Food and Drug Administration and U.S. Department of Agriculture.
- **Education:** Teach nutrition and the biological sciences in educational institutions. Conduct research in the biological sciences for universities or governmental organizations.
- **Research:** Investigate nutrient needs, functions, or interactions in humans or animals. Study the chemical, physical, and nutritional properties of foods and the changes that occur during preparation, processing, and storage. Investigate the delivery of nutrients from foods to cells, the function of

nutrients in energy metabolism, and the mechanisms that generate human metabolic response to changes in the nutritional environment. Assess dietary patterns causing nutrient imbalances and the effects they have on human health. Advance techniques in molecular biology and biomedical sciences.

Private Sector Jobs

- **Health organizations:** Become a health professional in medicine, dentistry, pharmacy, optometry, physical therapy, and so on. Provide nutritional counseling and dietetics counseling. Coordinate food service or assistance programs.
- **Food and health industry:** Advise in the development, production, and marketing of food, beverage, nutrient supplement, and pharmaceutical products. Advise for health and fitness centers.
- **Biotechnology firms:** Conduct research and development for new applied technologies.
- **Consulting and media companies:** Consult and/or write for print and broadcast media regarding nutrition and health topics.

Recent Alumni: Where Are They Now?

Courtesy of the UC Berkeley Career Center: <http://career.berkeley.edu/Major/major.stm>

Accenture, Process Analyst
Applied Biosystems, Production Chemist
Argonaut Technologies Inc, Recruiter
Arvesta Corp, Technical Assistant
Community Child Care Council of Santa Clara
County, Nutritionist
E. J. De La Rosa, Financial Advisor
Gallo Institute, Research Assistant
Genentech, Bioprocess Technician
Intel Corp, Web Publisher
Kaiser Permanente, Nutrition Assistant
Lifespring Nutrition Inc, Nutrition Research
Associate
Marcus & Millichap, Marketing Coordinator
Northern California Cancer Center, Research
Assistant

Nova Group, Teacher
San Francisco General Hospital, Dietetic Assistant
Sangamo Biosciences, Research Assistant
Sequoia Analytical, Extraction Chemist
Software Inc, User Interface Designer
University of California, San Francisco, Research
Assistant

Epidemiology, Masters, University of California,
Berkeley
Medical Sciences, MD, Columbia University
Nutritional Sciences, Masters, Tufts University
Pharmaceutical Sciences, PharmD, University of
California, San Francisco
Public Health, Masters, University of
California, Berkeley

Internship & Career Resources

- **CNR Newslines:** The College of Natural Resources Newslines is a moderated listserv that will keep you in the loop about research opportunities, internships, job opportunities, and more. To subscribe to *CNR Newslines*, send an email from your primary email account to majordomo@listlink.berkeley.edu. Leave the subject heading blank. In the body of the message, type the following command: **subscribe cnr_newsline**
- **CareerMail:** These Career Center mailing lists target specific career fields and topics, so you can choose whichever ones are ideal for you.
<http://career.berkeley.edu/MailList/MailList.asp>
- **What Can I Do With a Major In...Nutritional Sciences?**
<http://career.berkeley.edu/Major/NutSci.stm>
- **CalJobs:** Search this comprehensive database for full-time, part-time, internship, and summer jobs, both on and off campus.
<http://career.berkeley.edu/Jobs/CalJobs.stm>
- **UC Berkeley Career Center**
<http://career.berkeley.edu>