

UC Berkeley Rausser College of Natural Resources

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 (NST/NMB)** majors, these are some of the questions we explore to learn how nutrients and phytochemicals influence human health. These majors are offered by the [Department of Metabolic Biology & Nutrition \(MBN\)](#)

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 nutrition. Consult for agencies providing humanitarian assistance. Serve as a nutritionist for public schools or county agencies. Conduct forensic work related to establishing cause of death or important clues to solve crimes. Investigate public health concerns by working with Poison Control Centers.
- **Governmental Agencies:** Develop laws and policies to ensure food product safety, proper chemical production and disposal, and environmental protection. 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. Conduct forensic work related to establishing a cause of death or important clues to solve crimes. Investigate public health concerns by working with Poison Control Centers. Conduct lab and field research for municipal departments (e.g.,

water, utilities, parks) or for governmental agencies, such as the Food and Drug Administration or Environmental Protection Agency.

- **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. Characterize the mode of action of naturally occurring carcinogens and cancer protective agents in food. Study food-borne illness and the microbiological safety of our food and water supply. Investigate environmental and cellular toxins and DNA damage. Identify the antimicrobial activity of natural products.

Private Sector Jobs

- **Health organizations:** Become a health professional in medicine, dentistry, pharmacy, optometry, physical therapy, dietetics, and so on. Become a clinical dietitian in a hospital or health clinic and provide nutritional 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.
- **General Consumer Businesses:** Develop new and useful products such as pharmaceuticals, industrial chemicals, and consumer products such as soaps, paints, cosmetics, and food additives.
- **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.

Internship & Career Resources

- **[Rausser College Virtual Bulletin Board](#):** Our constantly updated bulletin board of College announcements, job & internship opportunities, scholarships, student org events, and more!
- **[CareerMail](#):** These Career Center mailing lists target specific career fields and topics, so you can choose whichever ones are ideal for you.
- **[Handshake](#):** For a list of current jobs and internships, career center events and networking opportunities, visit the Handshake website Access 1000s of jobs/internships, RSVP for Career Center events, Schedule a counseling appointment *for Cal students & eligible alumni
- **[UC Berkeley Career Engagement](#):** Whether you are seeking to clarify your career plans, enhance your career competitiveness or make connections with employers and alumni, the Career Center is committed to providing you the best service. Their services are free and available to all undergraduate and graduate students as well as alumni within 5 years of graduation.