THE FIELD

The foods we consume daily are central to our health and well-being, as seen at a whole person, community, and cellular level. Nutrition is the science of the relationship among foods, food consumption and human health. The study of nutrition focuses on the actions, interactions, and balance in relation to health and disease of macronutrients, micronutrients, phytochemicals, and other bioactive compounds in foods. In addition, the study of nutrition explores the social, economic, cultural, and psychological factors that influence the selection, preparation, consumption, and utilization of foods by individuals and population groups. The adverse effects of poor nutritional status are not limited to one segment of society. Diabetes, cardiovascular disease, cancer, and other chronic diseases, as well as malnutrition, food insecurity, and deficiency diseases, are present across the U.S. and worldwide. In addition, people with various health conditions and at different stages of life have special nutrient needs that must be understood by nutrition professionals. Food safety and the hazards of residues or contaminants in foods, as well as access to a healthy food supply, are also of concern.

Interdisciplinary training is required to equip nutrition professionals with the ability to assess nutritional needs, provide counseling and education, and implement dietary plans compatible with the optimal health of individuals or groups. Nutrition professionals work with patients in various healthcare settings, with individuals and populations at risk for health conditions or poor nutrition, for schools, public health programs, fitness and wellness programs, businesses and non-profit organizations, as well as in private practice. If you have an interest in science and enjoy working with people, the field of nutrition offers a unique opportunity to apply your talents on a personal level by helping individuals and populations improve their health and well-being. The study of nutrition is a pathway to a career as a dietitian or nutritionist while it also provides excellent preparation for other professions in the health and medical sciences such as for physicians, physician assistants, dentists, pharmacists, nurses, and biomedical researchers.

THE MAJOR

Nutrition majors follow one of three tracks: nutrition and society, nutrition and health sciences, or dietetics. Students on all three tracks complete a core of science courses, which includes two or three semesters of chemistry, one semester each of biology, biochemistry, and microbiology; two semesters of anatomy and physiology. All students also complete a core of nutrition courses that provides an understanding of foods and their nutritional content, physiological and biochemical aspects of nutrients in the body, nutrient requirements throughout the life span, food selection and preparation, the effects of excessive or inadequate intake of nutrients, and important issues of health and nutrition in the United States. Transfer students must enter with some science courses completed, or they will need to take summer courses and/or at least one extra semester to graduate.

DIETETICS: The dietetics track is accredited by the Accreditation Council of Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics and fulfills the Didactic Program in Dietetics (DPD) requirements, which allows students to enter a supervised practice program, also called a Dietetic Internship (DI), and become a Registered Dietitian Nutritionist (RDN). After graduation, prospective RDNs must participate in a Dietetic Internship and take the RDN qualifying exam. Beginning in 2024, a master’s degree will be required for the RDN qualification. The UMass Nutrition department has developed a 4+1 master of science (MS) program to help students earn an MS at an accelerated rate. RDNs are Allied Health Professionals, vital members of the health care teams in most medical facilities, including hospitals, specialty clinics, primary care health centers, and long-term care centers. They also apply their expertise to the areas of community, public health, sports and food service nutrition, as well as in recipe development and nutrient analysis. In addition to the courses above, students on the dietetics track complete courses in medical nutrition therapy, nutrition counseling, food service management, and community nutrition. Students who want to follow the dietetics track begin as nutrition majors with an undeclared track and must earn at least a B in Nutrition 230 and have a cumulative GPA of 2.5 or higher to be admitted into the dietetics track.

NUTRITION AND SOCIETY: The nutrition and society track prepares students to pursue careers or graduate training in international nutrition, public health, community health, fitness and wellness, social work, education, and other applied professional careers. It is also well-suited for students planning on applying to post-grad nursing, physician assistant, or secondary science education programs. Students on this track gain a strong base of knowledge in nutrition science while being guided toward a career path that can encompass general health and well-being of individuals and communities. This is the most flexible track and thus, works well for students interested in double majoring in nutrition and another major. In addition to the core nutrition and science courses, students take a community nutrition course and two required electives geared toward their career goals.
NUTRITION AND HEALTH SCIENCES: The nutrition and health sciences track satisfies most requirements for medical and dental school. It prepares students well for medical school, physician assistant programs, dentistry, osteopathy, naturopathic medicine, pharmacy, and other advanced health science degrees, as well as graduate programs in the biomedical sciences. In addition to the core courses, students on this track take additional science and laboratory courses.

STUDY ABROAD
Majors may choose to study abroad if it supports their academic and career goals. Students should contact the International Programs Office (413-545-2710, umass.edu/ipo) and work closely with their academic advisor to choose the appropriate courses in preparation.

HONORS
Contact the departmental honors coordinator for information on how to pursue honors opportunities within the major.

CAREER OPPORTUNITIES
Nutrition majors pursue diverse and interesting careers, dedicated to improving the health and well-being of individuals and communities. Opportunities can be found in medical centers, community service agencies, educational institutions, research institutions, health and wellness facilities, corporate wellness programs, government agencies, public and international health organizations, and the food service and development industries.

Many students major in nutrition in preparation for careers as physicians, doctors of osteopathy, dentists, physician assistants, nurses, pharmacists, chiropractors, and other types of health-care practitioners. Nutrition majors also go on to graduate-level study aimed at careers in research in nutrition science and areas of biomedical science.

A career as a clinical nutrition professional requires the registered dietitian (RDN) credential. RDNs are vital members of the health care teams in most medical facilities. They assess the nutrition needs of patients, ensure they receive a diet most suitable to their condition, and counsel them. They also provide nutrition and health assessments along with nutrition education at outpatient clinics and community health centers. Dietitians can work in private practice as consultants to individuals, corporations, clinics, medical care groups, long-term care facilities, and athletes. Dietitians can also contribute to clinical research. Nutritionists are needed by the food industry to develop and provide nutrient analysis of new products and recipes. Public Health programs that provide healthy food and nutrition education to disadvantaged populations, such as Women, Infants and Children (WIC), the Supplemental Nutrition Assistance Program (SNAP), ElderCare, Cooperative Extension, and school nutrition programs, as well as international development agencies, depend on nutritionists.

The roles of dietitians and nutritionists and the importance of a strong nutrition science background are expanding, and as such, our graduates are finding employment in increasingly varied areas. In addition to those cited above, graduates of our program have found careers in: food policy advocacy, athletic and fitness-related industries, nutrition-related technology companies, health and science writing, health and science teaching, counseling, medical and pharmaceutical sales and quality control, and more.

SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES
The School of Public Health and Health Sciences encompasses four undergraduate majors—communication disorders, human nutrition, kinesiology, and public health sciences—all of which focus on enhancing the health and well-being of the public. Students examine nutrition, speech pathology, muscle physiology and mechanics, as well as fitness and wellness. The curriculum provides grounding in the sciences of the human body and takes an interdisciplinary approach to apply that knowledge to the health needs of our communities. Graduates work as researchers, consultants, administrators, therapists, trainers, community health workers, fitness trainers, and other careers related to improving the public’s health. Many students pursue graduate work in exercise psychology and biomechanics, speech pathology, audiology, preventive medicine, physical therapy, and other fields.

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