

NATUROPATHIC MEDICINE: AN OVERVIEW OF PROFESSIONAL EDUCATION

A licensed naturopathic physician (ND) attends a four-year, graduate-level naturopathic medical school and is educated in all of the same basic sciences as an MD, but also studies holistic and nontoxic approaches to therapy with a strong emphasis on disease prevention and optimizing wellness. In addition to a standard medical curriculum, the naturopathic physician also studies clinical nutrition, homeopathic medicine, botanical medicine, psychology, and counseling. A naturopathic physician takes rigorous professional board exams so that he or she may be licensed by a state or jurisdiction as a primary care general practice physician.



Academic Prerequisites

There are currently seven accredited naturopathic schools in North America. These belong to the [Association of Accredited Naturopathic Medical Colleges \(AANMC\)](#), and require a base of undergraduate science courses that include biology as well as general and organic chemistry. Anatomy, biochemistry, botany, developmental psychology, and physiology courses may also be specified.

Academic Curriculum

Naturopathic medicine students learn to treat all aspects of family health and wellness, from pediatrics to geriatrics. They attend four-year graduate-level programs at accredited institutions, where they are educated in the same biomedical sciences as allopathic physicians.

During their first two years of study, the curriculum focuses on basic and clinical sciences and diagnostics, covering:

- Anatomy
- Biochemistry
- Human physiology
- Histology
- Human pathology
- Immunology
- Macro- and microbiology
- Neuroscience
- Pharmacology

For at least the final two years of their medical program, students intern in clinical settings under the close supervision of licensed professionals, learning various therapeutic modalities including:

- Botanical medicine
- Clinical nutrition
- Counseling
- Homeopathy
- Laboratory & clinical diagnosis
- Minor surgery
- Naturopathic physical medicine
- Nutritional science

Some member schools in the AANMC actually require more hours of basic and clinical science than many top allopathic medical schools. Students of naturopathic medicine use the Western medical sciences as a foundation on which to build a thorough knowledge of holistic, non-toxic therapies and develop skills in diagnosis, disease prevention and wellness optimization.

Accreditation

All AANMC member institutions have been accredited by one of the regional accrediting agencies approved by the U.S. Department of Education.

In addition, all of the naturopathic medicine programs of the member schools have been accredited by the [Council on Naturopathic Medical Education \(CNME\)](#), the recognized accreditor for naturopathic medical programs in North America.

Every state, province, and other jurisdiction that licenses naturopathic physicians as primary care health practitioners relies on CNME program accreditation and standards to quality applications for state or province licensure. Naturopathic professional schools and associations in North America rely on the CNME to establish and maintain the highest standards for naturopathic education. This is similar to the way standard medical schools rely on the Association of American Medical Colleges and the American Medical Association to sponsor a national accrediting authority for their medical programs.

CNME evaluators conduct periodic campus visits and staff/faculty interviews in order to monitor the schools' activity on an ongoing basis.

Graduation from a naturopathic medicine program that is accredited or is a candidate for accreditation guarantees eligibility to sit for the **Naturopathic Physicians Licensing Examinations (NPLEX)**, the passage of which is required to obtain licensure.

CNME is also the only naturopathic accreditor with membership in the [Association of Specialized and Professional Accreditors \(ASPA\)](#). This organization accepts as members those accreditors recognized by the Secretary of Education or that meet ASPA's own criteria. Among the almost 50 agencies that belong to ASPA are the recognized accreditors for allopathic (M.D.), osteopathic (D.O.), chiropractic (D.C.), acupuncture, and dental programs. Other naturopathic accrediting agencies accredit correspondence and other schools that do not prepare students to practice as licensed naturopathic physicians. None is recognized by the Secretary of Education, and none of the schools or programs they accredit has institutional accreditation from a recognized regional accrediting agency.

Comparison of ND and MD Curricula

When considering becoming a naturopathic doctor, the impulse to compare and contrast NDs' and MDs' educations is almost unavoidable. After all, an MD is the more common medical degree; it only makes sense to use it as a basis for comparison. And plenty of differences, as well as similarities, certainly do exist between the two, both in education and in medical practice. But when comparing the training and philosophies of NDs and MDs, it's important to remember that there is no right or wrong: each field is unique and offers distinct benefits to patients and the medical field as a whole.

Medicine can be seen as analogous to a tree. There are many different branches of medicine, each branch possessing its own tools and methodologies. But just as branches belong to a single tree and share common roots, so too are all medical fields based on the same founding principle: the protection and improvement of the patient's health. NDs and MDs represent two distinct branches of the medical tree, each sharing the same foundation, or "trunk." So if you want to become a health care practitioner, understanding the similarities and the differences between the two branches of medicine is essential to determining which branch may suit you best.

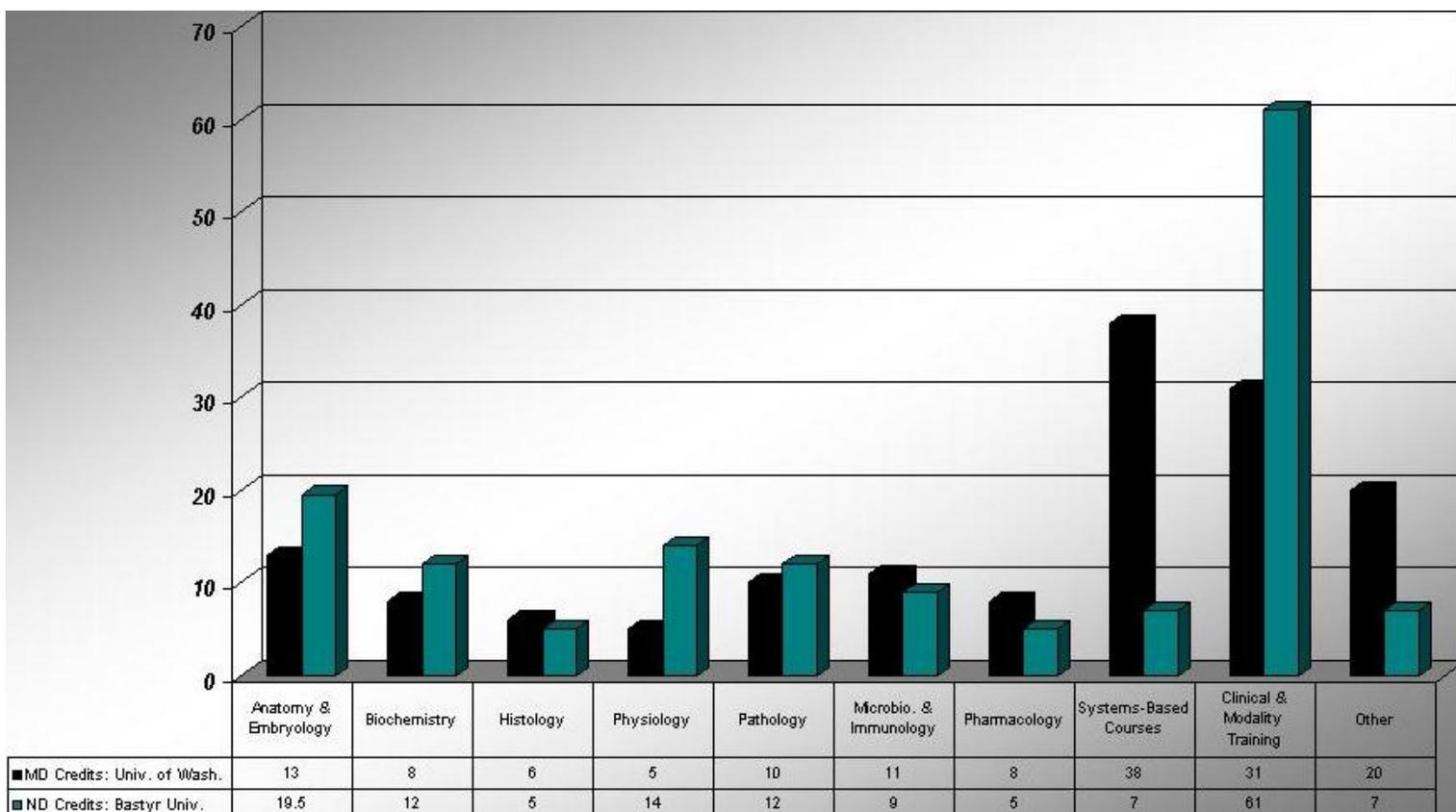
The First Two Years: A Strong Science Background

Naturopathic medical education is imbued with a unique philosophy grounded in the six principles of naturopathic medicine, which include holistic, nontoxic approaches, along with an emphasis on disease prevention and optimizing wellness. Accordingly, ND school curricula include certain areas of study not covered in conventional med school, such as clinical nutrition, homeopathic medicine and psychological counseling. However, future NDs also receive training in many of the same biomedical and diagnostic sciences as their MD counterparts, and the result is a comprehensive and well-rounded medical education.

The general educational structure is very similar for both ND and MD students. In both programs, the first year emphasizes the biomedical sciences, such as anatomy and biochemistry. During the second year, classes focus on the diagnostic sciences, including areas like evidence-based medicine and physiological assessment. Both programs progressively increase students' problem-based learning and integrated coursework, allowing students to comprehend how the different learned concepts affect one another.

During the first two years, ND students' credit loads are almost identical to those of MD students. In nearly every biomedical science, ND students are required to complete as many credits as, if not more than, MD students. Specifics vary by school, but a 2010 course comparison of the University of Washington's MD program and Bastyr University's ND program shows that during the first two years, University of Washington MD students completed a total of 150 credits and Bastyr ND students completed 151.5 credits, most of them in comparable biomedical and diagnostic science courses.

Credit Comparison
ND & MD Programs: The first two years



Some key aspects of ND education reflected in the bar graph:

- The first two years of the ND curriculum also include early introduction to naturopathic modalities, such as homeopathy, nutrition and botanical medicine. This exposure occurs in many different courses over these two years, and therefore is not called out separately in the ND school course catalogue.
- While many conventional medical schools use a systems-based approach to medical education, most naturopathic medical programs currently do not. In a systems-based approach, anatomy, physiology, pathology and diagnostic skills are each taught individually for each body system (i.e., respiratory, digestive, nervous system, etc.). And although some ND schools may be moving toward a more systems-based approach to education, classes in a typical ND program are not divided by system, but rather focus on how a symptom in one part of the body may affect the patient's entire anatomy and well-being.
- Some ND school curricula also begin clinical training during the first and second years, just as some MD school curricula initiate observational shifts at that time.

Third and Fourth Years: Hands-on Experience via Clinical Training

After the first two years, both ND and MD curricula focus on applying medical knowledge to real-life situations; simultaneous classroom studies support this training. Both curricula strive to maximize the synchronization of classroom and clinical training during these key years, thereby improving the quality and practicality of the students' educations.

However, it is during these later years that MDs' educations begin to differ noticeably from those of NDs. MDs complete clerkships, which are courses in various medical specialties, and although MD students see plenty of patients during these clerkships, their roles are primarily observational: they are not primarily responsible for patient care.

Third- and fourth-year ND students have increasing opportunities for hands-on clinical training and practice, often at their schools' teaching clinics and off-site clinics, which offer diverse patient populations. This period of clinical training goes well beyond the observation and is absolutely essential to NDs' educations – so much so that clinical training is now being introduced during the first and second years of education at several AANMC-member schools. As a result, naturopathic medical students graduate prepared to begin practice and to diagnose and treat patients, whereas MD students are required to complete residencies after graduation in order to gain clinical experience.

Post-graduation: Residencies and Shadowing

Examining third- and fourth-year clinical training brings up another major difference: medical residencies.

- MD residencies are mandated and regulated by conventional medical schools. As a result, an abundance of such opportunities exist at a wide variety of medical facilities all across North America. Every graduate of conventional med school must expect to complete a post-graduation residency.
- Naturopathic residency opportunities, on the other hand, are not nearly as common because unlike conventional medical residencies, they are not yet required or funded by the federal government. Only 5 to 10 percent of new NDs participate in formally approved residency positions, all of which are associated with colleges approved as residency sponsors by the Council on Naturopathic Medical Education (CNME). There are some naturopathic residency opportunities available, and the naturopathic medical community is working to create more all the time, but such programs are not required (except in Utah). In place of a residency, many new NDs choose to practice with or shadow an experienced ND before setting up their own practices.

North American Board of Naturopathic Examiners

All AANMC-school graduates are in good stead with the [North American Board of Naturopathic Examiners \(NABNE\)](#), which examines graduates to determine minimal competency to be safe practitioners. Regulatory authorities then use exam results to determine eligibility for licensure.

Every ND who wants to qualify for state or province licensure must first pass the Naturopathic Physicians Licensing Examinations (NPLEX). Administered by NABNE, these North American board exams cover:

- *NPLEX Part I – Basic Science Examinations* – tests scientific knowledge as a foundation for clinical training.
- *NPLEX Part II – Clinical Science Examinations* – tests competency required to practice as an entry-level naturopathic physician.

Only students and graduates of AANMC-member schools (accredited by CNME or candidates for accreditation) are eligible to take the NPLEX.

A final note: the naturopathic licensing agencies mentioned above do not consider correspondence schools to provide an adequate education for preparing students to become practicing physicians; nor do naturopathic professional associations accept correspondence-school graduates as part of the naturopathic profession.