# Naturopathy

**Naturopathy**, or **naturopathic medicine**, is a form of <u>alternative medicine</u>.<sup>[1]</sup> A wide array of <u>pseudoscientific</u> practices branded as "natural", "non-invasive", or promoting "self-healing" are employed by its practitioners, who are known as **naturopaths**. Difficult to generalize, these treatments range from outright <u>quackery</u>, like <u>homeopathy</u>, to widely accepted practices like <u>psychotherapy</u>.<sup>[2][3][4]</sup> The ideology and methods of naturopathy are based on <u>vitalism</u> and <u>folk medicine</u> rather than <u>evidence-based medicine</u> (EBM), although some practitioners may use techniques supported by EBM.<sup>[5][6][7]</sup> Naturopathic practitioners commonly recommend against following <u>modern medical practices</u>, including but not limited to <u>medical testing</u>, <u>drugs</u>, <u>vaccinations</u>, and <u>surgery</u>.<sup>[8][9][10][11]</sup> Instead, naturopathic practice relies on unscientific notions, often leading naturopaths to diagnoses and treatments that have no factual merit.<sup>[12][13]</sup>

Naturopathy is considered by the <u>medical profession</u> to be ineffective and harmful, raising <u>ethical</u> issues about its practice. [12][14][15] In addition to condemnations and criticism from the medical community, such as the <u>American Cancer Society</u>, [16] naturopaths have repeatedly been denounced as and accused of being charlatans and practicing quackery. [12][17][18][19][20][21]

Naturopaths are known for their frequent campaigning for legal recognition in the <u>United States</u>. It is illegal in two <u>U.S. states</u> and tightly regulated in many others. Some states have lax regulations, however, and may allow naturopaths to perform minor surgery or even prescribe drugs. While some schools exist for naturopaths, and some jurisdictions allow such practitioners to call themselves doctors, the lack of accreditation and scientific medical training means they lack the competency of true medical doctors.

## Contents History Practice

Methods

Evidence basis



Hepar sulph – homeopathy can be	
offered as part of naturopathic treatment. <sup>[1]</sup>	
Claims	"Nature Cure"
Related	Alternative medicine
fields	
Original	Benedict Lust;
proponents	Sebastian Kneipp

MeSH	D009324
See also	Humorism, heroic
	medicine, <u>Vitalism</u>

Traditional naturopaths

Political activity in the United States

Licensed naturopaths Education

Safety of natural treatments

#### Regulation

Australia

Vaccination

**Practitioners** 

India

North America

Canada

**United States** 

Switzerland

United Kingdom

See also

References

**Further reading** 

**External links** 

## History

The term "naturopathy" originates from "natura" (Latin root for birth) and "pathos" (the <u>Greek</u> root for suffering) to suggest "natural healing". [22] Naturopaths claim the ancient Greek "Father of Medicine", <u>Hippocrates</u>, as the first advocate of naturopathic medicine, before the term existed. [22][23] Naturopathy has its roots in the 19th-century <u>Natural Cure movement</u> of <u>Europe</u>. [24][25] In <u>Scotland</u>, <u>Thomas Allinson</u> started advocating his "Hygienic Medicine" in the 1880s, promoting a natural diet and exercise with avoidance of tobacco and overwork. [26][27]

Naturopathy - Wikipedia

The term *naturopathy* was coined in 1895 by John Scheel,<sup>[28]</sup> and purchased by <u>Benedict Lust</u>, whom naturopaths consider to be the "Father of U.S. Naturopathy".<sup>[29]</sup> Lust had been schooled in <u>hydrotherapy</u> and other natural health practices in <u>Germany</u> by Father <u>Sebastian Kneipp</u>; Kneipp sent Lust to the <u>United States</u> to spread his drugless methods.<sup>[18]</sup> Lust defined naturopathy as a broad discipline rather than a particular method, and included such techniques as hydrotherapy, <u>herbal medicine</u>, and homeopathy, as well as eliminating overeating, tea, coffee, and alcohol.<sup>[1]</sup> He described the body in <u>spiritual</u> and vitalistic terms with "absolute reliance upon the cosmic forces of man's nature".<sup>[30]</sup> According to the <u>Merriam-Webster Dictionary</u>, the first known use of "naturopathy" in print is from 1901.<sup>[31]</sup>

From 1901, Lust founded the American School of Naturopathy in <u>New York</u>. In 1902, the original North American Kneipp Societies were discontinued and renamed "Naturopathic Societies". In September 1919, the Naturopathic Society of America was dissolved and Benedict Lust founded the American Naturopathic Association to supplant it.<sup>[29][32]</sup> Naturopaths became licensed under naturopathic or drugless practitioner laws in 25 states in the first three decades of the twentieth century.<sup>[29]</sup> Naturopathy was adopted by many <u>chiropractors</u>, and several schools offered both Doctor of Naturopathy (ND) and Doctor of Chiropractic (DC) degrees.<sup>[29]</sup> Estimates of the number of naturopathic schools active in the United States during this period vary from about one to two dozen.<sup>[16][28][29]</sup>

After a period of rapid growth, naturopathy went into decline for several decades after the 1930s. In 1910, the <u>Carnegie Foundation for the</u> <u>Advancement of Teaching</u> published the <u>Flexner Report</u>, which criticized many aspects of medical education, especially quality and lack of scientific rigour. The advent of <u>penicillin</u> and other "miracle drugs" and the consequent popularity of modern medicine also contributed to naturopathy's decline. In the 1940s and 1950s, a broadening in scope of practice laws led many chiropractic schools to drop their ND degrees, though many chiropractors continued to practice naturopathy. From 1940 to 1963, the <u>American Medical Association</u> campaigned against heterodox medical systems. By 1958, practice of naturopathy was licensed in only five states.<sup>[29]</sup> In 1968, the <u>United States Department of</u> <u>Health, Education, and Welfare</u> issued a report on naturopathy concluding that naturopathy was not grounded in medical science and that naturopathic education was inadequate to prepare graduates to make appropriate diagnosis and provide treatment; the report recommends against expanding <u>Medicare</u> coverage to include naturopathic treatments.<sup>[16][33]</sup> In 1977 an Australian committee of inquiry reached similar conclusions; it did not recommend licensure for naturopaths.<sup>[34]</sup>

Beginning in the 1970s, there was a revival of interest in the <u>United States</u> and <u>Canada</u>, in conjunction with the "holistic health" movement.<sup>[29][1]</sup> As of 2009, fifteen U.S. states, Puerto Rico, the US Virgin Islands and the District of Columbia licensed naturopathic doctors,<sup>[35]</sup> and the State of Washington requires insurance companies to offer reimbursement for services provided by naturopathic physicians.<sup>[36][37]</sup> On the other hand, some states such as South Carolina and Tennessee prohibit the practice of naturopathy.<sup>[38][39][40]</sup>

The United States IHS (Indian Health Service) began accepting naturopathic doctors in their clinics and practice in 2013, also making loan repayment available to ND's. [41]

In 2015, a former naturopathic doctor, <u>Britt Marie Hermes</u>, began writing critically about her experience being trained in and practicing naturopathic medicine. [42][43] Her blog garnered a large following among <u>skeptics</u> while enraging some proponents of alternative medicine. [44]



Sebastian Kneipp c. 1898, Benedict Lust c. 1902, the Britt Marie Hermes c. a Bavarian priest and founder of naturopathy in 2016, forefather naturopathy.[18]

of the US [29]

а former naturopathic doctor and major critic of naturopathic medicine<sup>[43]</sup>

## **Practice**

The practice of naturopathy is based on a belief in the body's ability to heal itself through a special vital energy or force guiding bodily processes internally.<sup>[12]</sup> Diagnosis and treatment concern primarily alternative therapies and "natural" methods that naturopaths claim promote the body's natural ability to heal.<sup>[1][48]</sup> Many naturopaths in India now use modern diagnostic techniques in their practice.[49] Naturopaths focus on a holistic approach, avoiding the use of surgery and conventional medicines.<sup>[16]</sup> Naturopaths aim to prevent illness through stress reduction and changes to diet and lifestyle, often rejecting the methods of evidence-based medicine. [5][50]

A consultation typically begins with a comprehensive patient interview assessing lifestyle, medical history, emotional tone, and physical features, as well as physical examination.<sup>[1]</sup> Many naturopaths present themselves as primary care providers, and some naturopathic physicians may prescribe drugs, perform minor surgery, and integrate other conventional medical approaches such as diet and lifestyle counselling



A patient undergoing a hydrotherapy session.

with their naturopathic practice.<sup>[1][51]</sup> Traditional naturopaths deal exclusively with lifestyle changes, not diagnosing or treating disease.

Naturopaths do not generally recommend vaccines and <u>antibiotics</u>, based in part on the early views that shaped the profession, and they may provide alternative remedies even in cases where evidence-based medicine has been shown effective. [15]

### Methods

Naturopaths are often opposed to mainstream medicine and take an <u>antivaccinationist</u> stance.<sup>[15]</sup>

The particular modalities used by a naturopath vary with training and scope of practice. These may include herbalism, homeopathy, <sup>[45]</sup> acupuncture, nature cures, physical medicine, applied kinesiology, <sup>[52]</sup> colonic enemas, <sup>[18][46]</sup> chelation therapy, <sup>[17]</sup> color therapy, <sup>[52]</sup> cranial osteopathy, hair analysis, iridology, <sup>[52]</sup> live blood analysis, ozone therapy, <sup>[16]</sup> psychotherapy, public health measures and hygiene, <sup>[50]</sup> reflexology, <sup>[52]</sup> rolfing, <sup>[32]</sup> massage therapy, and traditional Chinese medicine. *Nature cures* include a range of therapies based on exposure to natural elements such as <u>sunshine</u>, fresh air, or heat or cold, as well as <u>nutrition</u> advice such as following a vegetarian and whole food diet, fasting, or abstention from alcohol and <u>sugar</u>, <sup>[53]</sup> Physical medicine includes naturopathic, osseous, or soft tissue <u>manipulative</u> therapy, sports medicine, exercise, and hydrotherapy. Psychological counseling includes <u>meditation</u>, relaxation, and other methods of stress management. <sup>[53]</sup>

A 2004 survey determined the most commonly prescribed naturopathic therapeutics in Washington state and <u>Connecticut</u> were botanical medicines, vitamins, minerals, homeopathy, and allergy treatments.<sup>[45]</sup> An examination published in 2011 of naturopathic clinic websites in <u>Alberta</u> and <u>British Columbia</u> found that the most commonly advertised therapies were homeopathy, botanical medicine, nutrition, acupuncture, lifestyle counseling, and detoxification.<sup>[46]</sup>



A nutritional supplement of <u>Chromium(III)</u> <u>picolinate</u>, Chromax II.



<u>Homeopathic</u> preparations are commonly used by naturopaths.[45][46] The practice is considered a pseudoscience.[47]

In 2020, a survey of methods used by naturopaths in fourteen countries reported that 27% of clients received accupuncture, 22% homeopathy, 16% "other energetic medicines", and 13.5% were given hydrotherapy. A mean of 4.0 "treatments" were provided to each customer. One-third (33%) of patients consulted with only the naturopath to manage their primary health concern. [54]

### **Evidence basis**

Naturopathy as a whole lacks an adequate scientific basis, [5] and it is rejected by the medical community. [5] Although it includes valid lifestyle advice from mainstream medicine (healthy sleep, balanced diet, regular exercise), [15] it typically adds a range of pseudoscientific beliefs. [22] Some methods rely on immaterial "vital energy fields", the existence of which has not been proven, and there is concern that naturopathy as a field

#### Naturopathy - Wikipedia

tends towards isolation from general scientific discourse.  $^{[22][57][58]}$  Naturopathy is criticized for its reliance on and its association with unproven, disproven, and other controversial alternative medical treatments, and for its vitalistic underpinnings.  $^{[15][16]}$  Natural substances known as <u>nutraceuticals</u> show little promise in treating diseases, especially cancer, as laboratory experiments have shown limited therapeutic effect on <u>biochemical pathways</u>, while clinical trials demonstrate poor <u>bioavailability</u>.  $^{[59]}$  According to the <u>American Cancer Society</u>, "scientific evidence does not support claims that naturopathic medicine can cure <u>cancer</u> or any other disease".  $^{[16]}$  According to Britt Hermes, naturopath student programs are problematic because "As a naturopath [student], you are making justifications to make the rules and to fudge the standards of how to interpret research all along the way. Because if you don't, you're not left with anything, basically".  $^{[60]}$ 

In 2015, the <u>Australian Government's Department of Health</u> published the results of a review of alternative therapies that sought to determine if any were suitable for being covered by <u>health insurance</u>; Naturopathy was one of 17 therapies evaluated for which no clear evidence of effectiveness was found.<sup>[61]</sup>

Kimball C. Atwood IV writes, in the journal Medscape General Medicine, [12]

Naturopathic physicians now claim to be primary care physicians proficient in the practice of both "conventional" and "natural" medicine. Their training, however, amounts to a small fraction of that of medical doctors who practice primary care. An examination of their literature, moreover, reveals that it is replete with pseudoscientific, ineffective, unethical, and potentially dangerous practices.

In another article, Atwood writes that "Physicians who consider naturopaths to be their colleagues thus find themselves in opposition to one of the fundamental ethical precepts of modern medicine. If naturopaths are not to be judged "nonscientific practitioners", the term has no useful meaning". [17]

A former licensed naturopathic doctor, <u>Britt Marie Hermes</u>, states that "any product that is sold by a naturopath almost guarantees that there is no reliable scientific data to support whatever health claims are made, [62] and that while some naturopaths claim to only practice evidence based medicine, "the problem is, all naturopaths in an accredited naturopathic program are required to extensively study homeopathy, herbal medicine, energy healing, chiropractic techniques, water therapy" and other pseudoscientific practices. [60] Hermes further notes that, while some naturopaths claim that their method can be effective treatments for psychological disorders, "no naturopathic treatment has been clinically proven to be safe and effective for bipolar disorder or any other condition."[63]



Equipment for administering large <u>enemas</u>, a bag and a bucket, each holding a gallon. Enemas and <u>colonic</u> <u>irrigation</u> are commonly used by naturopaths for a wide range of medical conditions,[46] for which there are no known health benefits.[55]



A rectal bulb syringe for injecting a small enema.

#### Naturopathy - Wikipedia

According to <u>Arnold S. Relman</u>, the *Textbook of Natural Medicine* is inadequate as a teaching tool, as it omits to mention or treat in detail many common ailments, improperly emphasizes treatments "not likely to be effective" over those that are, and promotes unproven herbal remedies at the expense of pharmaceuticals. He concludes that "the risks to many sick patients seeking care from the average naturopathic practitioner would far outweigh any possible benefits".<sup>[64]</sup>

The Massachusetts Medical Society states, "Naturopathic practices are unchanged by research and remain a large assortment of erroneous and potentially dangerous claims mixed with a sprinkling of non-controversial dietary and lifestyle advice."<sup>[65]</sup>

### Safety of natural treatments



Person undergoing ozone IV therapy with ultraviolet irradiation. According to the <u>FDA</u>, "Ozone is a toxic gas with no known useful medical application in specific, adjunctive, or preventive therapy."[56]

Naturopaths often recommend exposure to naturally occurring substances, such as <u>sunshine</u>, <u>herbs</u> and certain foods, as well as activities they describe as natural, such as <u>exercise</u>, <u>meditation</u> and <u>relaxation</u>. Naturopaths claim that these natural treatments help restore the body's innate ability to heal itself without the adverse effects of conventional medicine. However, "natural" methods and chemicals are not necessarily safer or more effective than "artificial" or "synthetic" ones, and any treatment capable of eliciting an effect may also have deleterious <u>side effects</u>. [16][18][66][67]

Certain naturopathic treatments offered by naturopaths, such as <u>homeopathy</u>, <u>rolfing</u>, and <u>iridology</u>, are widely considered <u>pseudoscience</u> or <u>quackery</u>. [68][69][70] Stephen Barrett of QuackWatch and the <u>National Council Against Health Fraud</u> has stated that naturopathy is "simplistic and that its practices are riddled with quackery". [18][71] "Non-scientific health care practitioners, including naturopaths, use unscientific methods and deception on a public who, lacking in-depth health care knowledge, must rely upon the assurance of providers. Quackery not only harms people, it undermines the ability to conduct scientific research and should be opposed by scientists", says <u>William T. Jarvis</u>. [72] In the 2018 Australian case against Marlyin Bodnar, who advised a mother to treat her infant son's eczema with a raw food diet which nearly led to the child's starvation death, Judge Peter Berman said, "Well intentioned but seriously misguided advice is, as the facts of this case demonstrate, capable of causing great harm and even death to vulnerable children."[73] Furthermore, Britt Hermes criticizes the "pervasive culture of patient blaming" among naturopathic practitioners, where "when something doesn't work for the patient and the patient is not experiencing all of the positive effects and zero side-effects that are promised with the therapy, it's never because the therapy doesn't work, it's because the patient didn't do something right."[60]

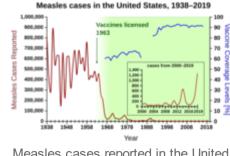
### Vaccination

Many naturopathy practitioners voice their opposition to vaccination. The reasons for this opposition are based, in part, on the early views which shaped the foundation of this occupation. [74] A naturopathy textbook, co-authored by Joseph Pizzorno, recalls anti-vaccine beliefs associated with the founding of naturopathy in the United States: "a return to nature in regulating the diet, breathing, exercising, bathing and the employment of

various forces" *in lieu* of the smallpox vaccine. [75]

In general, evidence about associations between naturopathy and pediatric vaccination is sparse, but "published reports suggest that only a minority of naturopathic physicians actively support full vaccination". [76][77] In Washington state from 2000 to 2003, children were significantly less likely to receive immunizations if they had seen a naturopath. [76] A survey of naturopathic students published in 2004 found that students at the Canadian College of Naturopathic Medicine became less likely to recommend vaccinations to their patients and became more distrustful of public health and conventional medicine as they advanced in the program. [10]

The British Columbia Naturopathic Association lists several major concerns regarding the pediatric vaccine schedule and vaccines in general, [78] and the group's policy is to not advocate for or against vaccines. [79] The Oregon Association of Naturopathic Physicians reports that many naturopaths "customize" the pediatric vaccine schedule. [80]



<u>Measles</u> cases reported in the <u>United</u> <u>States</u> fell dramatically after the introduction of the measles vaccine.

As of 2016, the American Association of Naturopathic Physicians, which is the largest professional organization for licensed naturopaths in the U.S., is "still discussing its stance on vaccinations." [81]

## Practitioners

Naturopath practitioners can generally be categorized into three groups: 1) those with a government issued license; 2) those who practice outside of an official status ("traditional naturopaths"); 3) those who are primarily another kind of health professional who also practices naturopathy.  $\frac{[16][82][83][84][85]}{[16][82][83][84][85]}$ 

In Switzerland, these divisions fall between those with a federal diploma, those recognized by health insurances, and those with neither federal diploma nor recognition by health insurances. Naturopaths with federal diploma can be divided into four categories: European traditional medicine, Chinese traditional medicine, ayurvedic medicine and homeopathy.  $\frac{[86][87]}{[87]}$  The number of listed naturopaths (including traditional healers) in Switzerland rose from 223 in 1970 to 1835 in 2000.  $\frac{[88]}{[87]}$ 

### Licensed naturopaths

Licensed naturopaths may be referred to as "naturopathic doctors" or "naturopathic physicians" in 26 US states or territories and 5 Canadian provinces.<sup>[89]</sup> Licensed naturopaths present themselves as primary care providers.<sup>[1][51]</sup> Licensed naturopaths do not receive comparable training to medical doctors in terms of the quality of education or quantity of hours.<sup>[12][13]</sup>

In <u>British Columbia</u>, legislation permits licensed naturopaths to use the title "doctor" or "physician".<sup>[90]</sup> However, section 102 of the bylaw of the College of Naturopathic Physicians of British Columbia (CNPBC), the terms "naturopathic" or "naturopathic medicine" must be included anytime the term doctor or physician is used by a member of the CNPBC.<sup>[91][92][93][94]</sup>

### Education

Licensed naturopaths must pass the <u>Naturopathic Physicians Licensing Examinations</u> (NPLEX) administered by the North American Board of Naturopathic Examiners (NABNE)<sup>[95]</sup> after graduating from a program accredited by the Council on Naturopathic Medical Education (CNME).<sup>[51][96]</sup> Training in CNME-accredited programs includes basic medical diagnostics and procedures such as rudimentary physical exams and common <u>blood tests</u>, in addition to pseudoscientific modalities, such as homeopathy, acupuncture, and energy modalities.<sup>[12][17][18][1]</sup> These accredited programs have been criticized for misrepresenting their medical rigor and teaching subjects that are antithetical to the best understandings of science and medicine.<sup>[18][97][08]</sup> The CNME as an accrediting authority has been characterized as unreliable and suffering from conflicts of interest.<sup>[99][100][101]</sup> The naturopathic licensing exam has been called a mystery by those outside the naturopathic profession<sup>[17][65]</sup> and criticized for testing on <u>homeopathic</u> remedies,<sup>[97]</sup> including for the use to treat <u>pediatric</u> emergencies.<sup>[42]</sup>

Naturopathic doctors are not eligible for <u>medical residencies</u>, which are available exclusively for medical doctors and doctors of osteopathic medicine. There are limited post-graduate "residency" positions available to naturopathic doctors offered through naturopathic schools and naturopathic clinics approved by the CNME.<sup>[102]</sup> Most naturopathic doctors do not complete such a residency,<sup>[45]</sup> and naturopathic doctors are not mandated to complete one for licensure,<sup>[16]</sup> except in the states of Utah and Connecticut.<sup>[103]</sup> Continuing education in naturopathic modalities for health care professionals varies greatly.<sup>[52]</sup>

### Political activity in the United States

Naturopaths affiliated with the CNME-accredited schools lobby state, provincial, and federal governments for medical licensure and participation in social health programs.<sup>[81][104]</sup> The American Association of Naturopathic Physicians represents licensed naturopaths in the United States;<sup>[81]</sup> the Canadian Association of Naturopathic Doctors represents licensed naturopaths in Canada.<sup>[104]</sup> Naturopathic lobbying efforts are funded by vitamin and supplement makers<sup>[81]</sup> and focus on portraying naturopathic education as comparable to <u>medical education</u> received by <u>physicians</u> and on having high professional standards.<sup>[104][105]</sup> Medical societies and advocacy groups dispute these claims by citing evidence of licensed naturopaths using pseudoscientific methods without a sound evidence basis and lacking adequate clinical training to diagnose and treat disease competently according to the <u>standard of care</u>.<sup>[81][105][106][107]</sup> Jann Bellamy has characterized the process by which naturopaths and other practitioners of pseudoscience convince lawmakers to provide them with medical licenses as "legislative alchemy".<sup>[108]</sup>



National University of Natura Medicine trains students in naturopathic medicine who are eligible to become licensed in some jurisdictions in North America.

#### Naturopathy - Wikipedia

Since 2005, the <u>Massachusetts Medical Society</u> has opposed licensure based on concerns that NDs are not required to participate in residency and concerns that the practices of naturopaths included many "erroneous and potentially dangerous claims".<sup>[109]</sup> The Massachusetts Special Commission on Complementary and Alternative Medical Practitioners rejected their concerns and recommended licensure.<sup>[110]</sup> The Massachusetts Medical Society states:<sup>[65]</sup>

Naturopathic medical school is not a medical school in anything but the appropriation of the word medical. Naturopathy is not a branch of medicine. It is a hodge podge of nutritional advice, home remedies and discredited treatments ... Naturopathic colleges claim accreditation but follow a true "alternative" accreditation method that is virtually meaningless. They are not accredited by the same bodies that accredit real medical schools and while some courses have similar titles to the curricula of legitimate medical schools the content is completely different.

In 2015, a former naturopathic doctor, <u>Britt Marie Hermes</u>, who graduated from <u>Bastyr University</u> and practiced as a licensed ND in <u>Washington</u> and <u>Arizona</u>, began advocating against naturopathic medicine. [111][42][112] In addition to opposing further licensure, she believes that NDs should not be allowed to use the titles "doctor" or "physician", [42] and be barred from treating children. [113][114] She states: [115]

Naturopaths aggressively lobby for laws to issue them medical licenses. I would characterize this political effort as a perverted redefinition of the words "physician", "doctor", "medical school", and "residency" in order to mask the inadequacy of the training provided in naturopathic programs. ND students do not realize that they are taking educational shortcuts and therefore do not possess any demonstrable competencies found in modern medicine.

### **Traditional naturopaths**

Traditional naturopaths are represented in the United States by the American Naturopathic Association (ANA), representing about 1,800 practitioners<sup>[116]</sup> and the American Naturopathic Medical Association (ANMA).<sup>[29]</sup>

The level of naturopathic training varies among traditional naturopaths in the United States. Traditional naturopaths may complete non-degree certificate programs or undergraduate degree programs and generally refer to themselves as naturopathic consultants. These programs often offer online unaccredited degrees, but do not offer comprehensive biomedical education or clinical training.



The herb garden at <u>Bastyr</u> <u>University</u>, another naturopathic program whose graduates can become licensed naturopaths in some North American jurisdictions.

#### Naturopathy - Wikipedia

Traditional naturopathic practitioners surveyed in Australia perceive evidence-based medicine to be an ideological assault on their beliefs in vitalistic and holistic principles.<sup>[5]</sup> They advocate for the integrity of natural medicine practice.<sup>[5]</sup>

Naturopaths graduating from accredited programs argued in 2002 that their training used evidence-based scientific principles unlike traditional naturopathic programs, [117] but this claim remains inaccurate. [12][18]

## Regulation

Naturopathy is practiced in many countries and is subject to different standards of regulation and levels of acceptance. The scope of practice varies widely between jurisdictions. The practice of naturopathy is illegal in two U.S. states. [38][39][40]

### Australia

In 1977, a committee reviewed all colleges of naturopathy in Australia and found that despite having syllabuses appearing to cover the basic biomedical sciences, actual lectures had little connection to those syllabuses and no significant practical work was available. In addition, there did not appear to be significant or systematic coverage of techniques favoured by naturopaths, such as homeopathy, Bach's floral remedies, or mineral salts.<sup>[34]</sup>

The position of the <u>Australian Medical Association</u> is that "evidence-based aspects of complementary medicine can be part of patient care by a medical practitioner", but it has concerns that there is "limited efficacy evidence regarding most complementary medicine. Unproven complementary medicines and therapies can pose a risk to patient health either directly through misuse or indirectly if a patient defers seeking medical advice." The AMA's position on regulation is that "there should be appropriate regulation of complementary medicine practitioners and their activities".<sup>[118]</sup>

In 2015, the Australian government found no clear evidence of effectiveness for naturopathy. [61] Accordingly, In 2017 the Australian government named naturopathy as a practice that would not qualify for insurance subsidy, saying this step would "ensure taxpayer funds are expended appropriately and not directed to therapies lacking evidence". [119]

### India



Hugh Mercer Apothecary in Fredericksburg, Virginia. Like all naturopaths, traditional naturopaths have a strong adversion to modern medicine and rely heavily on practices using herbs to treat diseases.

In India, naturopathy is overseen by the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH); there is a  $5^{1/2}$ -year degree in "Bachelor of Naturopathy and Yogic Sciences" (BNYS) degree that was offered by twelve colleges in India as of August 2010.<sup>[120]</sup> The National Institute of Naturopathy in <u>Pune</u> that operates under AYUSH, which was established on December 22, 1986 and encourages facilities for standardization and propagation of the existing knowledge and its application through research in naturopathy throughout India.<sup>[121][122]</sup>

### **North America**

In five Canadian provinces, seventeen U.S. states, and the <u>District of Columbia</u>, naturopathic doctors who are trained at an accredited school of naturopathic medicine in North America are entitled to use the designation ND or NMD. Elsewhere, the designations "naturopath", "naturopathic doctor", and "doctor of natural medicine" are generally unprotected or prohibited. [40][83]

In North America, each jurisdiction that regulates naturopathy defines a local scope of practice for naturopathic doctors that can vary considerably. Some regions permit minor surgery, access to prescription drugs, spinal manipulations, midwifery (natural childbirth), and gynecology; other regions exclude these from the naturopathic scope of practice or prohibit the practice of naturopathy entirely. [40][123]

### Canada

Five Canadian provinces license naturopathic doctors: <u>Ontario</u>, <u>British Columbia</u>, <u>Manitoba</u>, <u>Saskatchewan</u>, and <u>Alberta</u>.<sup>[124][125]</sup> British Columbia has the largest scope of practice in Canada, allowing certified NDs to prescribe pharmaceuticals and perform minor surgeries.<sup>[126]</sup>

### **United States**

- U.S. jurisdictions that currently regulate or license naturopathy include Alaska, Arizona, California, Connecticut, Colorado, District of Columbia, Hawaii, Kansas, Maine, Maryland, Minnesota, Montana, New Hampshire, North Dakota, Oregon, Puerto Rico,<sup>[127]</sup> US Virgin Islands, Utah, Vermont, and Washington.<sup>[35]</sup> Additionally, Florida and Virginia license the practice of naturopathy under a grandfather clause.<sup>[40]</sup>
  - U.S. jurisdictions that permit access to prescription drugs: Arizona, California, District of Columbia, Hawaii, Kansas, Maine, Montana, New Hampshire, Oregon, Utah, Vermont, and Washington.
  - U.S. jurisdictions that permit minor surgery: Arizona, District of Columbia, Kansas, Maine, Montana, Oregon, Utah, Vermont, and Washington.
- U.S. states which specifically prohibit the practice of naturopathy: South Carolina<sup>[38][40]</sup> and Tennessee.<sup>[39][40]</sup>

### Switzerland

The <u>Swiss Federal Constitution</u> defines the Swiss Confederation and the <u>Cantons of Switzerland</u> within the scope of their powers to oversee complementary medicine.<sup>[128]</sup> In particular, the Federal authorities must set up diplomas for the practice of non-scientific medicine. The first of such diplomas has been validated in April 2015 for the practice of naturopathy.<sup>[86]</sup> There is a long tradition of naturopathy and traditional medicine in Switzerland.<sup>[129]</sup> The <u>Cantons of Switzerland</u> make their own public health regulations. Although the law in certain cantons is typically monopolistic, the authorities are relatively tolerant with regard to alternative practitioners.<sup>[87]</sup>

### **United Kingdom**

Naturopathy is not regulated in the <u>United Kingdom</u>. In 2012, publicly-funded universities in the United Kingdom dropped their alternative medicine programs, including naturopathy. [130]

## See also

- Arnold Ehret
- Essential nutrient
- Friedrich Eduard Bilz
- Barbara O'Neill
- Health freedom movement
- Heilpraktiker
- Kneipp facility
- List of ineffective cancer treatments

- List of topics characterized as pseudoscience
- Megavitamin therapy
- Metamorphic technique
- Naturopathic Physicians Licensing Examinations
- Orthomolecular medicine
- Osteopathy and osteopathic medicine
- Phytonutrient
- Therapeutic nihilism

## References

- Boughton RJ, Frey B (2005). "Naturopathic Medicine" (http://www.enc yclopedia.com/topic/Naturopathic\_Medicine.aspx). Gale Encyclopedia of Alternative Medicine (2nd ed.). Gale. Archived (http s://web.archive.org/web/20130624073748/http://www.encyclopedia.c om/topic/Naturopathic\_Medicine.aspx) from the original on June 24, 2013. Retrieved March 21, 2015.
- Baran GR, Kiana MF, Samuel SP (2014). "Science, Pseudoscience, and Not Science: How Do They Differ?". *Chapter 2: Science, Pseudoscience, and Not Science: How Do They Differ?. Healthcare and Biomedical Technology in the 21st Century*. Springer. pp. 19– 57. doi:10.1007/978-1-4614-8541-4\_2 (https://doi.org/10.1007%2F9 78-1-4614-8541-4\_2). ISBN 978-1-4614-8540-7. "within the traditional medical community it is considered to be quackery"

#### 3. Paul S. Boyer (2001). <u>The Oxford companion to United States</u> <u>history (https://archive.org/details/oxfordcompaniont00paul\_0)</u>. p. <u>630</u> (https://archive.org/details/oxfordcompaniont00paul\_0/page/630). <u>ISBN 9780195082098</u>. Retrieved January 15, 2013. "After 1847, when regular doctors organized the American Medical Association (AMA), that body led the war on "quackery", especially targeting dissenting medical groups such as homeopaths, who prescribed infinitesimally small doses of medicine. Ironically, even as the AMA attacked all homeopathy as quackery, educated homeopathic physicians were expelling untrained quacks from their ranks."

#### Naturopathy - Wikipedia

- 4. Psychotherapy can be evidence based, or pseudoscientific however, see:
  - Lilienfeld, Scott O. (December 2015). "Introduction to special section on pseudoscience in psychiatry" (https://www.ncbi.nlm.nih. gov/pmc/articles/PMC4679160). The Canadian Journal of Psychiatry. 60 (12): 531–533.

doi:10.1177/070674371506001202 (https://doi.org/10.1177%2F 070674371506001202). PMC 4679160 (https://www.ncbi.nlm.nih. gov/pmc/articles/PMC4679160). PMID 26720820 (https://pubme d.ncbi.nlm.nih.gov/26720820). "Although the boundaries separating pseudoscience from science are fuzzy, pseudosciences are characterized by several warning signsfallible but useful indicators that distinguish them from most scientific disciplines. ... In contrast to most accepted medical interventions, which are prescribed for a circumscribed number of conditions, many pseudoscientific techniques lack boundary conditions of application. For example, some proponents of Thought Field Therapy, an intervention that purports to correct imbalances in unobservable energy fields, using specified bodily tapping algorithms, maintain that it can be used to treat virtually any psychological condition, and that it is helpful not only for adults but also for children, dogs, and horses."

- Lee, Catherine M.; Hunsley, John (December 2015). "Evidencebased practice: separating science from pseudoscience" (https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC4679161). The Canadian Journal of Psychiatry. 60 (12): 534–540.
  - doi:10.1177/070674371506001203 (https://doi.org/10.1177%2F 070674371506001203). PMC 4679161 (https://www.ncbi.nlm.nih. gov/pmc/articles/PMC4679161). PMID 26720821 (https://pubme d.ncbi.nlm.nih.gov/26720821). "TFT, a treatment applied to mood, anxiety, and trauma-related disorders, is a prime example of practice founded on pseudoscience. TFT is based on the premise that bodily energy imbalances cause negative emotions. Treatment is purported to rectify imbalances by tapping on acupuncture meridians. Virtually no peer-reviewed research supports this treatment rationale. With only methodologically weak reports available in the literature, the so-called science cited to support TFT is primarily anecdotal and does not rule out placebo effects. Despite these criticisms, the TFT website continues to advance unsupported claims about TFT's ability to cure almost any emotional problem."
- Jagtenberg T, Evans S, Grant A, Howden I, Lewis M, Singer J (April 2006). "Evidence-based medicine and naturopathy". *Journal of Alternative and Complementary Medicine*. **12** (3): 323–8.
   doi:10.1089/acm.2006.12.323 (https://doi.org/10.1089%2Facm.200 6.12.323). PMID 16646733 (https://pubmed.ncbi.nlm.nih.gov/166467 33).
- Tabish, Syed Amin (2008). "Complementary and Alternative Healthcare: Is it Evidence-based?" (https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3068720). International Journal of Health Sciences. 2 (1): V–IX. ISSN 1658-3639 (https://www.worldcat.org/issn/1658-3639). PMC 3068720 (https://www.ncbi.nlm.nih.gov/pmc/articles/PM C3068720). PMID 21475465 (https://pubmed.ncbi.nlm.nih.gov/21475 465).

 "Shifting attitudes towards research and evidence-based medicine within the naturopathic medical community: The power of people, money and acceptance" (https://www.sciencedirect.com/science/articl e/abs/pii/S2212958817300952). Advances in Integrative Medicine.
 4 (2): 49–55. August 1, 2017. doi:10.1016/j.aimed.2017.08.003 (http s://doi.org/10.1016%2Fj.aimed.2017.08.003). ISSN 2212-9588 (http s://www.worldcat.org/issn/2212-9588).

Wilson K, Busse JW, Gilchrist A, Vohra S, Boon H, Mills E (March 2005). "Characteristics of pediatric and adolescent patients attending a naturopathic college clinic in Canada" (https://doi.org/10.1542%2F peds.2004-1901). Pediatrics. 115 (3): e338-43. doi:10.1542/peds.2004-1901 (https://doi.org/10.1542%2Fpeds.2004 -1901). PMID 15741360 (https://pubmed.ncbi.nlm.nih.gov/15741360).

- Busse JW, Wilson K, Campbell JB (November 2008). "Attitudes towards vaccination among chiropractic and naturopathic students". *Vaccine*. 26 (49): 6237–43. doi:10.1016/j.vaccine.2008.07.020 (http s://doi.org/10.1016%2Fj.vaccine.2008.07.020). PMID 18674581 (http s://pubmed.ncbi.nlm.nih.gov/18674581).
- Wilson K, Mills E, Boon H, Tomlinson G, Ritvo P (January 2004). "A survey of attitudes towards paediatric vaccinations amongst Canadian naturopathic students". *Vaccine*. 22 (3–4): 329–34. doi:10.1016/j.vaccine.2003.08.014 (https://doi.org/10.1016%2Fj.vaccine.2003.08.014). <u>PMID</u> 14670313 (https://pubmed.ncbi.nlm.nih.gov/ 14670313).
- 11. Mielczarek EV, Engler BD (2014). "Selling Pseudoscience: A Rent in the Fabric of American Medicine" (http://www.csicop.org/si/show/selli ng\_pseudoscience\_a\_rent\_in\_the\_fabric\_of\_american\_medicine/). *Skeptical Inquirer.* **38** (3). Archived (https://web.archive.org/web/2015 0905100846/http://www.csicop.org/si/show/selling\_pseudoscience\_a rent\_in\_the\_fabric\_of\_american\_medicine/) from the original on September 5, 2015. Retrieved September 2, 2015.

- 12. Atwood KC (December 2003). <u>"Naturopathy: a critical appraisal" (htt</u> p://www.medscape.com/viewarticle/465994). *MedGenMed*. **5** (4): 39. PMID 14745386 (https://pubmed.ncbi.nlm.nih.gov/14745386). Archived (https://web.archive.org/web/20130302030226/http://www.m edscape.com/viewarticle/465994) from the original on March 2, 2013. Retrieved September 4, 2013.(registration required)
- 13. "Family Physicians versus Naturopaths" (http://www.aafp.org/dam/AA FP/documents/advocacy/workforce/gme/ES-FPvsNaturopaths-11081 0.pdf) (PDF). *aafp.org*. American Academy of Family Physicians. Archived (https://web.archive.org/web/20150616081319/http://www.a afp.org/dam/AAFP/documents/advocacy/workforce/gme/ES-FPvsNat uropaths-110810.pdf) (PDF) from the original on June 16, 2015. Retrieved July 20, 2015.
- 14. Gorski DH (October 2014). "Integrative oncology: really the best of both worlds?". *Nature Reviews. Cancer.* 14 (10): 692–700. doi:10.1038/nrc3822 (https://doi.org/10.1038%2Fnrc3822).
  PMID 25230880 (https://pubmed.ncbi.nlm.nih.gov/25230880).
  S2CID 33539406 (https://api.semanticscholar.org/CorpusID:3353940
  6).
- 15. Singh S, Ernst E (2009). *Naturopathy* (https://books.google.com/boo ks?id=nWnR1JI7G6gC&pg=PT197). *Trick or Treatment?: Alternative Medicine on Trial*. Transworld. pp. 197–. ISBN 978-1-4090-8180-7. Archived (https://web.archive.org/web/20160206135211/https://book s.google.com/books?id=nWnR1JI7G6gC&pg=PT197) from the original on February 6, 2016. Retrieved January 27, 2016. "many naturopaths are against mainstream medicine and advise their patients accordingly – for instance many are not in favour of vaccination."
- Russell J, Rovere A, eds. (2009). American Cancer Society Complete Guide to Complementary and Alternative Cancer Therapies (Second ed.). Atlanta: American Cancer Society. pp. 116– 119.

17. Atwood KC (March 2004). "Naturopathy, pseudoscience, and medicine: myths and fallacies vs truth" (https://www.ncbi.nlm.nih.gov/p mc/articles/PMC1140750). *MedGenMed*. 6 (1): 33. PMC <u>1140750 (h</u> ttps://www.ncbi.nlm.nih.gov/pmc/articles/PMC1140750).

PMID 15208545 (https://pubmed.ncbi.nlm.nih.gov/15208545).

- Barrett S (November 26, 2013). <u>"A close look at naturopathy" (http://w</u>ww.quackwatch.org/01QuackeryRelatedTopics/Naturopathy/naturopathy.html). <u>QuackWatch</u>. Archived (https://web.archive.org/web/201104 06111422/http://www.quackwatch.org/01QuackeryRelatedTopics/Naturopathy/naturopathy.html) from the original on April 6, 2011. Retrieved March 21, 2015.
- 19. Harvey C (July 11, 2015). "Don't duck the law by sending kids to quacks" (http://www.dailytelegraph.com.au/news/opinion/claire-harvey -dont-duck-the-law-by-sending-kids-to-quacks/story-fni0cwl5-122743 8195104). The Daily Telegraph. Archived (https://web.archive.org/we b/20200629155845/https://www.dailytelegraph.com.au/news/opinion/ claire-harvey-dont-duck-the-law-by-sending-kids-to-quacks/news-stor y/6ee0fc3e8309651cad4c7bca9ca3ff06?nk=491ab653730ddb53d3 432a602091cceb-1593446324) from the original on June 29, 2020. Retrieved September 2, 2015.
- 20. Chivers T (November 10, 2014). "How does naturopathy work? A bit like a flying vacuum-cleaner to Mars" (https://web.archive.org/web/201 70905094710/https://health.spectator.co.uk/how-does-naturopathy-w ork-a-bit-like-a-flying-vacuum-cleaner-to-mars/). *Spectator*. Archived from the original (http://health.spectator.co.uk/how-does-naturopathywork-a-bit-like-a-flying-vacuum-cleaner-to-mars/) on September 5, 2017. Retrieved September 2, 2015.
- 21. Caulfield T (January 22, 2013). "Don't legitimize the witch doctors" (htt p://news.nationalpost.com/full-comment/timothy-caulfield-dont-legitimi ze-the-witch-doctors). *National Post*. Retrieved September 2, 2015.
- 22. Jarvis WT (January 30, 2001) [copyright 1997]. "NCAHF Fact Sheet on Naturopathy" (http://www.ncahf.org/articles/j-n/naturo.html). National Council Against Health Fraud. Archived (https://web.archive.org/web/ 20110927173337/http://www.ncahf.org/articles/j-n/naturo.html) from the original on September 27, 2011. Retrieved April 17, 2009.

- 23. "What is Naturopathy?" (http://www.naturopathy-uk.com/home/home-w hat-is-naturopathy/). College of Naturopathic Medicine website. East Grinstead, England. Archived (https://web.archive.org/web/20100918 040756/http://www.naturopathy-uk.com/home/home-what-is-naturopat hy/) from the original on September 18, 2010. Retrieved September 16, 2015.
- 24. Brown PS (April 1988). "Nineteenth-century American health reformers and the early nature cure movement in Britain" (https://www. ncbi.nlm.nih.gov/pmc/articles/PMC1139856). *Medical History*. **32** (2): 174–94. doi:10.1017/S0025727300047980 (https://doi.org/10.101 7%2FS0025727300047980). PMC 1139856 (https://www.ncbi.nlm.ni h.gov/pmc/articles/PMC1139856). PMID 3287059 (https://pubmed.nc bi.nlm.nih.gov/3287059).
- 25. Langley S. <u>"History of Naturopathy" (https://web.archive.org/web/2012</u> 0829125721/http://www.naturopathy-uk.com/blog/2007/11/28/historyof-naturopathy/). *College of Naturopathic Medicine website*. UK. Archived from the original (http://www.naturopathy-uk.com/blog/2007/1 1/28/history-of-naturopathy/) on August 29, 2012.
- 26. "How it all began" (http://www.allinsonflour.co.uk/history/). <u>Allinson</u> <u>Flour website</u>. Silver Spoon, <u>British Sugar</u>, <u>Associated British Foods</u>. Archived (https://web.archive.org/web/20100813230535/http://www.al linsonflour.co.uk/history/) from the original on August 13, 2010. Retrieved September 3, 2008.
- 27. Beard JA (May 3, 2008). <u>"A system of hygienic medicine (1886) and</u> The advantages of wholemeal bread (1889)" (https://www.ncbi.nlm.ni h.gov/pmc/articles/PMC2364871). <u>BMJ</u>. Views & Reviews: Medical Classics. **336** (7651): 1023. doi:10.1136/bmj.39562.446528.59 (http s://doi.org/10.1136%2Fbmj.39562.446528.59). <u>PMC</u> 2364871 (http s://www.ncbi.nlm.nih.gov/pmc/articles/PMC2364871).

- 28. "Report 12 of the Council on Scientific Affairs (A-97)" (https://web.arc hive.org/web/20131105123407/http://www.idt.mdh.se/kurser/ct3340/a rchives/ht03/assignment-2d-extra-articles/Alternative%20Medicine.pd f) (PDF). American Medical Association. 1997. Archived from the original (http://www.idt.mdh.se/kurser/ct3340/archives/ht03/assignme nt-2d-extra-articles/Alternative%20Medicine.pdf) (PDF) on November 5, 2013. Retrieved September 3, 2013.
  - Lay summary in: "1997 Annual Meeting of the American Medical Association: Summaries and Recommendations of the Council on Scientific Affairs" (https://web.archive.org/web/201401021908 20/http://www.ama-assn.org/resources/doc/csaph/csaa-97.pdf) (PDF). American Medical Association. 1997. Archived from the original (http://www.ama-assn.org/resources/doc/csaph/csaa-97.p df) (PDF) on January 2, 2014.
- 29. Baer HA (September 2001). "The sociopolitical status of U.S. naturopathy at the dawn of the 21st century". *Medical Anthropology Quarterly*. **15** (3): 329–46. doi:10.1525/maq.2001.15.3.329 (https://d oi.org/10.1525%2Fmaq.2001.15.3.329). PMID 11693035 (https://pub med.ncbi.nlm.nih.gov/11693035).
- 30. Lust, Benedict cited in: Whorton JC (2002). <u>Nature Cures : The</u> <u>History of Alternative Medicine in America: The History of</u> <u>Alternative Medicine in America (https://archive.org/details/naturecur</u> eshisto00whor). Oxford: Oxford University Press. p. 224 (https://archiv e.org/details/naturecureshisto00whor/page/224). ISBN 9780195349788. Retrieved September 3, 2013.
- 31. "Naturopathy Definition of Naturopathy by Merriam-Webster" (http:// www.merriam-webster.com/dictionary/naturopath). Archived (https://w eb.archive.org/web/20151119131441/http://www.merriam-webster.co m/dictionary/naturopath) from the original on November 19, 2015. Retrieved October 27, 2015.
- 32. Beyerstein BL, Downie S (May 12, 2004). <u>"Naturopathy: A Critical</u> Analysis" (http://www.naturowatch.org/general/beyerstein.html). *NaturoWatch*. QuackWatch. <u>Archived (https://web.archive.org/web/20</u> 090307135314/http://naturowatch.org/general/beyerstein.html) from the original on March 7, 2009. Retrieved March 21, 2009.

- 33. "HEW Report on Naturopathy (1968)" (http://www.quackwatch.org/01 QuackeryRelatedTopics/Naturopathy/hew.html). QuackWatch. August 30, 1999. Archived (https://web.archive.org/web/20100814052625/htt p://www.quackwatch.org/01QuackeryRelatedTopics/Naturopathy/hew. html) from the original on August 14, 2010. Retrieved September 3, 2013. Citing: Cohen WJ (1969). Independent Practitioners Under Medicare: A Report to the Congress. United States Department of Health, Education, and Welfare. OCLC 3000280 (https://www.worldca t.org/oclc/3000280).
- 34. "Naturopathy: Report of the Australian Committee of Inquiry (1977)" (h ttp://www.naturowatch.org/hx/australia.html). NaturoWatch. QuackWatch. December 25, 2003. Archived (https://web.archive.org/ web/20100906221113/http://www.naturowatch.org/hx/australia.html) from the original on September 6, 2010. Retrieved September 3, 2013. Citing: Webb EC, et al. (1977). Report of the Committee of Inquiry into Chiropractic, Osteopathy, Homoeopathy and Naturopathy. Canberra: Australian Government Publishing Service. ISBN 978-0642922878.
- 35. "Licensed States & Licensing Authorities" (https://web.archive.org/we b/20091130234327/http://naturopathic.org/content.asp? contentid=57). American Association of Naturopathic Physicians website. 2009. Archived from the original (http://www.naturopathic.org/ content.asp?contentid=57) on November 30, 2009.
- 36. "Washington Administrative Code: Title 284, Chapter 43, Section 205: Every category of health providers" (http://apps.leg.wa.gov/WAC/ default.aspx?cite=284-43-205). Washington State Legislature. August 28, 1999. Archived (https://web.archive.org/web/20111011211 431/http://apps.leg.wa.gov/WAC/default.aspx?cite=284-43-205) from the original on October 11, 2011. Retrieved November 19, 2010. (effective)
- 37. Minott R (July 3, 1996). "Insuring Alternatives". <u>NewsHour with Jim</u> <u>Lehrer</u>. PBS. Online NewsHour transcript (https://www.pbs.org/newsh our/bb/health/july96/alt\_medicines\_7-3.html).

- 38. "Title 40, Chapter 31, Sections 10 & 20" (https://web.archive.org/web/ 20090112214025/http://www.scstatehouse.gov/code/t40c031.htm). South Carolina Code of Laws (Unannotated), Current through the end of the 2007 Regular Session. South Carolina Legislative Council. Archived from the original (http://www.scstatehouse.gov/cod e/t40c031.htm) on January 12, 2009.
- State of Tennessee (2013). "Title 63 Professions of the Healing Arts, Chapter 6 Medicine and Surgery, Part 2 General Provisions" (http://la w.justia.com/codes/tennessee/2010/title-63/chapter-6/part-2/63-6-20 5/). Tennessee Code Annotated. Justia. 63.6.205 Practice of naturopathy. Archived (https://web.archive.org/web/20131007015741/ http://law.justia.com/codes/tennessee/2010/title-63/chapter-6/part-2/6 3-6-205) from the original on October 7, 2013. Retrieved September 7, 2013.
- 40. AMA Scope of Practice Data Series: Naturopaths (http://www.legis.st ate.ak.us/BASIS/get\_documents.asp?session=26&docid=5692). *American Medical Association* (Report). 2009. Archived (https://web. archive.org/web/20160629235905/http://www.legis.state.ak.us/BASI S/get\_documents.asp?session=26&docid=5692) from the original on June 29, 2016. Retrieved July 30, 2016 – via The Alaska State Legislature.
- 41. "https://newsmaven.io/indiancountrytoday/archive/introducingnaturopathic-doctors-to-indian-health-service-clinics-Rn\_RipOYh0Kgd9KR-5Ou\_A/ Archived (https://web.archive.org/web/ 20191005024641/https://newsmaven.io/indiancountrytoday/archive/in troducing-naturopathic-doctors-to-indian-health-service-clinics-Rn\_Ri pOYh0Kgd9KR-5Ou\_A/) October 5, 2019, at the Wayback Machine"
- 42. Senapathy K (May 31, 2016). "Why Is Big Naturopathy Afraid Of This Lone Whistleblower?" (https://www.forbes.com/sites/kavinsenapathy/ 2016/05/31/why-is-big-naturopathy-afraid-of-this-lone-whistleblower). Forbes. US. Archived (https://archive.today/20200322212737/https:// www.forbes.com/sites/kavinsenapathy/2016/05/31/why-is-big-naturop athy-afraid-of-this-lone-whistleblower/%233d54f5de7ee4) from the original on March 22, 2020. Retrieved September 5, 2017.

- 43. Thielking M (October 20, 2016). <u>"'Essentially witchcraft:' A former</u> naturopath takes on the field" (https://www.statnews.com/2016/10/20/ naturopath-critic-britt-hermes/). *STAT*. Archived (https://web.archive.o rg/web/20161025031403/https://www.statnews.com/2016/10/20/natur opath-critic-britt-hermes/) from the original on October 25, 2016. Retrieved October 30, 2016.
- 44. Devlin, Hannah (March 27, 2018). <u>"The naturopath whistleblower: 'It is</u> surprisingly easy to sell snake oil' " (https://www.theguardian.com/lifea ndstyle/2018/mar/27/naturopath-whistleblower-snake-oil-multi-billiondollar). *Guardian*. Retrieved August 23, 2021.
- 45. Boon HS, Cherkin DC, Erro J, Sherman KJ, Milliman B, Booker J, et al. (October 2004). "Practice patterns of naturopathic physicians: results from a random survey of licensed practitioners in two US States" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC529271). BMC Complementary and Alternative Medicine. 4: 14. doi:10.1186/1472-6882-4-14 (https://doi.org/10.1186%2F1472-6882 -4-14). PMC 529271 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 529271). PMID 15496231 (https://pubmed.ncbi.nlm.nih.gov/1549623 1).
- 46. Caulfield T, Rachul C (September 2011). "Supported by science?: what canadian naturopaths advertise to the public" (https://www.ncbi.n lm.nih.gov/pmc/articles/PMC3182944). Allergy, Asthma, and Clinical Immunology. 7: 14. doi:10.1186/1710-1492-7-14 (https://doi.org/10.1 186%2F1710-1492-7-14). PMC 3182944 (https://www.ncbi.nlm.nih.g ov/pmc/articles/PMC3182944). PMID 21920039 (https://pubmed.ncb i.nlm.nih.gov/21920039).
- 47. Smith K (2012). <u>"Homeopathy is Unscientific and Unethical" (https://z</u> enodo.org/record/1035885). *Bioethics*. **26** (9): 508–512. doi:10.1111/j.1467-8519.2011.01956.x (https://doi.org/10.1111%2Fj.1 467-8519.2011.01956.x). S2CID 143067523 (https://api.semanticsch olar.org/CorpusID:143067523). Archived (https://web.archive.org/we b/20171029012949/https://zenodo.org/record/1035885) from the original on October 29, 2017. Retrieved October 28, 2017.

- 48. Carroll RT (March 7, 2015). "Naturopathy" (http://skepdic.com/natpath y.html). *The Skeptic's Dictionary*. Archived (https://web.archive.org/w eb/20100901033549/http://www.skepdic.com/natpathy.html) from the original on September 1, 2010. Retrieved March 21, 2015.
- 49. Nair, Pradeep MK; Nanda, Awantika (2014). <u>"Naturopathic medicine</u> in India" (https://onlinelibrary.wiley.com/doi/abs/10.1111/fct.12125). *Focus on Alternative and Complementary Therapies*. **19** (3): 140– 147. doi:10.1111/fct.12125 (https://doi.org/10.1111%2Ffct.12125). ISSN 2042-7166 (https://www.worldcat.org/issn/2042-7166).
- 50. Pizzorno JE (1999). "Naturopathy: Practice Issues" (https://books.goo gle.com/books?id=cwYnA1qunUwC&pg=PA57). In Clark CC, Gordon RJ (eds.). Encyclopedia of Complementary Health Practice. Springer Publishing. pp. 57–59. ISBN 9780826117229. Archived (htt ps://web.archive.org/web/20180413121208/https://books.google.co m/books?id=cwYnA1qunUwC&pg=PA57) from the original on April 13, 2018. Retrieved September 3, 2013.
- 51. "Handbook of Accreditation for Naturopathic Medicine Programs" (htt ps://web.archive.org/web/20170209083708/http://www.cnme.org/reso urces/2007\_hoa.pdf) (PDF). Council on Naturopathic Medical Education. 2007. Archived from the original (http://www.cnme.org/reso ources/2007\_hoa.pdf) (PDF) on February 9, 2017. Retrieved November 20, 2010.
- 52. Hough HJ, Dower C, O'Neil EH (September 2001). *Profile of a Profession: Naturopathic Practice* (https://web.archive.org/web/2008 1002072928/http://www.pewscholars.com/pdf\_files/Naturo2.pdf) (PDF). Center for the Health Professions, University of California, San <u>Francisco</u>. p. 54. Archived from the original (http://www.pewscholars.c om/pdf\_files/Naturo2.pdf) (PDF) on October 2, 2008.
- 53. Young J (2007). "Chapters 8 & 13". Complementary Medicine for Dummies. Chichester, England: Wiley. ISBN 9780470026250. OCLC 174043853 (https://www.worldcat.org/oclc/174043853).

- 54. Steel A, Foley H, Bradley R, Van De Venter C, Lloyd I, Schloss J, et al. (February 2020). "Overview of international naturopathic practice and patient characteristics: results from a cross-sectional study in 14 countries" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 7076821). BMC Complementary Medicine and Therapies. 20 (1): 59. doi:10.1186/s12906-020-2851-7 (https://doi.org/10.1186%2Fs12 906-020-2851-7). PMC 7076821 (https://www.ncbi.nlm.nih.gov/pmc/a rticles/PMC7076821). PMID 32070338 (https://pubmed.ncbi.nlm.nih. gov/32070338).
- 55. Ernst E (June 1997). "Colonic irrigation and the theory of autointoxication: a triumph of ignorance over science" (http://www.jcg e.com/pt/re/jclngastro/abstract.00004836-199706000-00002.htm). *Journal of Clinical Gastroenterology*. **24** (4): 196–8. doi:10.1097/00004836-199706000-00002 (https://doi.org/10.1097% 2F00004836-199706000-00002). PMID 9252839 (https://pubmed.nc bi.nlm.nih.gov/9252839).
- 56. "Code of Federal Regulations Title 21, Sec. 801.415 Maximum acceptable level of ozone" (http://www.accessdata.fda.gov/scripts/cdr h/cfdocs/cfcfr/CFRsearch.cfm?fr=801.415). U.S. Food and Drug Administration. April 1, 2015. Archived (https://web.archive.org/web/2 0160304035650/http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/c fcfr/CFRSearch.cfm?FR=801.415) from the original on March 4, 2016. Retrieved May 18, 2016.
- 57. Herbert V, Barrett S (1994). *The Vitamin Pushers: How the "Health Food" Industry is Selling America a Bill of Goods* (https://archive.or g/details/isbn\_9780879759094). Buffalo, NY: Prometheus Books. ISBN 9780879759094.
- 58. Barrett S, Raso J (1993). *Mystical Diets: Paranormal, Spiritual, and* Occult Nutrition Practices (https://archive.org/details/mysticaldietspar 0000raso). Buffalo, New York: Prometheus Books. <u>ISBN 978-</u> 0879757618.

- Sentin A, Ginnebaugh KR, Li Y, Padhye SB, Sarkar FH (January 2015). "Molecular targets of naturopathy in cancer research: bridge to modern medicine" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC43 03842). Nutrients (Review). 7 (1): 321–34. doi:10.3390/nu7010321 (https://doi.org/10.3390%2Fnu7010321). PMC 4303842 (https://www. ncbi.nlm.nih.gov/pmc/articles/PMC4303842). PMID 25569626 (http s://pubmed.ncbi.nlm.nih.gov/25569626).
- 60. "Episode #050, feat. Britt Hermes" (http://theesp.eu/podcast\_archive/ episode\_050\_britt\_hermes.html). *The European Skeptics Podcast.* Archived (https://web.archive.org/web/20180909000353/http://thees p.eu/podcast\_archive/episode\_050\_britt\_hermes.html) from the original on September 9, 2018. Retrieved September 15, 2018.
- 61. Baggoley C (2015). "Review of the Australian Government Rebate on Natural Therapies for Private Health Insurance" (https://web.archive.or g/web/20160626024750/http://www.health.gov.au/internet/main/publis hing.nsf/content/0E9129B3574FCA53CA257BF0001ACD11/\$File/N atural%20Therapies%20Overview%20Report%20Final%20with%20 copyright%2011%20March.pdf) (PDF). Australian Government – Department of Health. Archived from the original (http://www.health.go v.au/internet/main/publishing.nsf/content/0E9129B3574FCA53CA25 7BF0001ACD11/\$File/Natural%20Therapies%20Overview%20Repo rt%20Final%20with%20copyright%2011%20March.pdf) (PDF) on June 26, 2016. Retrieved December 12, 2015.
  - Lay summary in: Gavura, S. (November 19, 2015). "Australian review finds no benefit to 17 natural therapies" (https://www.scienc ebasedmedicine.org/australian-review-finds-no-benefit-to-17-natu ral-therapies). Science-Based Medicine.
- 62. Haglage A, Mak T (May 25, 2016). "Trump Vitamins Were Fortified With B.S." (http://www.thedailybeast.com/articles/2016/05/25/inside-d onald-trump-s-vitamin-scam.html) *The Daily Beast.* Archived (https:// web.archive.org/web/20210114003653/https://www.thedailybeast.co m/trump-vitamins-were-fortified-with-bs) from the original on January 14, 2021. Retrieved June 24, 2016.
- 63. Hermes B (April 2020). "Dubious claims in psychotherapy for youth". *Skeptical Inquirer.* **44** (2): 50.

- 64. Relman AS (April 10, 2002) [January 9, 2001]. "Textbook of Natural Medicine" (http://www.quackwatch.org/01QuackeryRelatedTopics/Nat uropathy/relman1.html). QuackWatch. Archived (https://web.archive.or g/web/20110511175643/http://www.quackwatch.org/01QuackeryRelat edTopics/Naturopathy/relman1.html) from the original on May 11, 2011. Retrieved April 17, 2009.
- 65. "MMS Testimony in Opposition to H. 1992 and S. 1205, An Act to Create a Board of Registration in Naturopathy" (http://www.massmed. org/Advocacy/MMS-Testimony/MMS-Testimony-in-Opposition-to-H--1 992-and-S--1205,-An-Act-to-Create-a-Board-of-Registration-in-Natur opathy/#.VtgJaZMrKrO). *Massachusetts Medical Society*. Massachusetts Medical Society. <u>Archived (https://web.archive.org/we</u> b/20160522130005/http://www.massmed.org/Advocacy/MMS-Testim ony/MMS-Testimony-in-Opposition-to-H--1992-and-S--1205,-An-Act-t o-Create-a-Board-of-Registration-in-Naturopathy/#.VtgJaZMrKrO) from the original on May 22, 2016. Retrieved July 30, 2016.
- 66. Carroll R (November 26, 2012). <u>"Natural" (http://skepdic.com/natural.h</u> tml). *The Skeptic's Dictionary*. Archived (https://web.archive.org/web/ 20110514011749/http://skepdic.com/natural.html) from the original on May 14, 2011. Retrieved September 8, 2013.
- 67. "NCAHF Position Paper on Over the Counter Herbal Remedies (1995)" (http://www.ncahf.org/pp/herbal.html). National Council Against Health Fraud. 1995. Archived (http://webarchive.loc.gov/all/20 110707163329/http://www.ncahf.org/pp/herbal.html) from the original on July 7, 2011. Retrieved April 17, 2009.
- 68. National Science Board (January 15, 2002). "Chapter 7 Science and Technology: Public Attitudes and Public Understanding, Section: Belief in Alternative Medicine" (https://web.archive.org/web/2016061 6181809/http://www.nsf.gov/statistics/seind02/c7/c7s5.htm#c7s5l2a). Science and Engineering Indicators - 2002. Arlington, VA: Division of Science Resources Statistics, National Science Foundation. Archived from the original (https://www.nsf.gov/statistics/seind02/c7/c 7s5.htm#c7s5l2a) on June 16, 2016. Retrieved April 6, 2018.

- Wahlberg A (December 2007). <u>"A quackery with a difference-new</u> medical pluralism and the problem of 'dangerous practitioners' in the United Kingdom" (https://curis.ku.dk/ws/files/49590510/Wahlberg.200 7.Aquackerywithadifference.pdf) (PDF). *Social Science & Medicine*.
   65 (11): 2307–16. doi:10.1016/j.socscimed.2007.07.024 (https://doi. org/10.1016%2Fj.socscimed.2007.07.024). PMID 17719708 (https:// pubmed.ncbi.nlm.nih.gov/17719708). Archived (https://web.archive.or g/web/20210114003657/https://curis.ku.dk/ws/files/49590510/Wahlb erg.2007.Aquackerywithadifference.pdf) (PDF) from the original on January 14, 2021. Retrieved December 10, 2019.
- 70. Barrett S (March 28, 2008). "Iridology is Nonsense" (http://www.quack watch.com/01QuackeryRelatedTopics/iridology.html). QuackWatch. Archived (https://web.archive.org/web/20110406120005/http://www.q uackwatch.com/01QuackeryRelatedTopics/iridology.html) from the original on April 6, 2011. Retrieved September 8, 2013.
- 71. "Homeopathy" (https://www.nhs.uk/conditions/homeopathy/). nhs.uk. October 18, 2017. Archived (https://web.archive.org/web/202005131 90309/https://www.nhs.uk/conditions/homeopathy/) from the original on May 13, 2020. Retrieved May 21, 2020.
- 72. Jarvis WT (August 1992). "Quackery: a national scandal". *Clinical Chemistry*. **38** (8B Pt 2): 1574–86. <u>PMID</u> <u>1643742 (https://pubmed.n cbi.nlm.nih.gov/1643742)</u>.
- 73. Sutton C (April 5, 2018). "Naturopath jailed in starving baby case" (htt ps://web.archive.org/web/20180424055207/http://www.news.com.au/ national/nsw-act/courts-law/naturopath-faces-sentencing-in-starving-b aby-case/news-story/bc594346e08341bfee402f19471b830d). *news.com.au*. Archived from the original (http://www.news.com.au/nati onal/nsw-act/courts-law/naturopath-faces-sentencing-in-starving-baby -case/news-story/bc594346e08341bfee402f19471b830d) on April 24, 2018. Retrieved April 24, 2018.

- 74. Ernst E (October 2001). "Rise in popularity of complementary and alternative medicine: reasons and consequences for vaccination". *Vaccine*. 20 Suppl 1 (Suppl. 1, 5th European Conference on Vaccinology: A Safe Future with Vaccination): S90-3, discussion S89. doi:10.1016/S0264-410X(01)00290-0 (https://doi.org/10.1016%2FS 0264-410X%2801%2900290-0). PMID 11587822 (https://pubmed.nc bi.nlm.nih.gov/11587822).
- 75. Pizzorno JE, Murray MT (2011). *Textbook of Natural Medicine eedition: Text with Continually Updated Online Reference, 2-Volume Set* (third ed.). Elsevier. p. 43. <u>ISBN 9781455705276</u>. "To understand how revolting these products are, let us just refer to the vaccine matter which is supposed to be an efficient preventive of smallpox. [...] The natural system for curing disease is based on a return to nature in regulating the diet, breathing, exercising, bathing and the employment of various forces to eliminate the poisonous products in the system, and so raise the vitality of the patient to a proper standard of health."
- 76. Downey L, Tyree PT, Huebner CE, Lafferty WE (November 2010). "Pediatric vaccination and vaccine-preventable disease acquisition: associations with care by complementary and alternative medicine providers" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2924961). *Maternal and Child Health Journal*. **14** (6): 922–30. doi:10.1007/s10995-009-0519-5 (https://doi.org/10.1007%2Fs10995 -009-0519-5). PMC 2924961 (https://www.ncbi.nlm.nih.gov/pmc/articl es/PMC2924961). PMID 19760163 (https://pubmed.ncbi.nlm.nih.gov/ 19760163). Quote is taken from introduction to paper, not from results of research presented in this paper.
- 77. Herzog R, Álvarez-Pasquin MJ, Díaz C, Del Barrio JL, Estrada JM, Gil Á (February 2013). "Are healthcare workers' intentions to vaccinate related to their knowledge, beliefs and attitudes? A systematic review" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC36 02084). BMC Public Health. 13: 154. doi:10.1186/1471-2458-13-154 (https://doi.org/10.1186%2F1471-2458-13-154). PMC 3602084 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3602084).
  PMID 23421987 (https://pubmed.ncbi.nlm.nih.gov/23421987).

- 78. "BCNA Vaccination Position Paper" (http://www.bcna.ca/files\_3/articl es-vaccination.php). British Columbia Naturopathic Association. Archived (https://web.archive.org/web/20140719051132/http://www.b cna.ca/files\_3/articles-vaccination.php) from the original on July 19, 2014. Retrieved July 15, 2014.
- 79. Brown H (December 21, 2007). "Influenza Virus, Vaccination and Naturopathic Practice" (http://ndnr.com/nature-cure/influenza-virus-vac cination-and-naturopathic-practice/). Naturopathic Doctor News and Review. Archived (https://web.archive.org/web/20210114003701/http s://ndnr.com/nature-cure/influenza-virus-vaccination-and-naturopathicpractice/) from the original on January 14, 2021. Retrieved October 20, 2016.
- 80. "Naturopathic Primary Care" (http://www.thelundreport.org/sites/defaul t/files/u967/ND%20Primary%20Care%20in%20Oregon%20White%2 OPaper%20-%20Final.pdf) (PDF). Oregon Association of Naturopathic Physicians. Archived (https://web.archive.org/web/2013 0614203253/http://www.thelundreport.org/sites/default/files/u967/N D%20Primary%20Care%20in%20Oregon%20White%20Paper%20-%20Final.pdf) (PDF) from the original on June 14, 2013. Retrieved July 15, 2014.
- 81. Robins R (May 17, 2016). <u>"Funded by vitamin makers, naturopaths</u> push to expand in US" (https://www.statnews.com/2016/05/17/naturop aths-go-mainstream/). *STAT*. Archived (https://web.archive.org/web/2 0210114003710/https://www.statnews.com/2016/05/17/naturopaths-g o-mainstream/) from the original on January 14, 2021. Retrieved May 18, 2016.
- 82. "Naturopathy: An Introduction" (http://nccih.nih.gov/health/naturopathy/ naturopathyintro.htm?nav=gsa). National Center for Complementary and Integrative Health, National Institutes of Health, United States Department of Health and Human Services. March 2012 [Created April 2007]. Archived (https://web.archive.org/web/20150223110947/ https://nccih.nih.gov/health/naturopathy/naturopathyintro.htm?nav=gsa) from the original on February 23, 2015. Retrieved March 16, 2013.

- 83. lowa Board of Medicine (February 7, 2002). <u>"A Policy Statement on</u> Naturopathy" (https://web.archive.org/web/20130412204820/http://me dicalboard.iowa.gov/policies/naturopathy.html). lowa Department of Public Health, State of lowa. Archived from the original (http://medical board.iowa.gov/policies/naturopathy.html) on April 12, 2013. Retrieved September 1, 2013.
- 84. The Platform of the American Naturopathic Association as drawn up by the Golden Jubilee Congress. July 27th – August 2nd, 1947
- 85. Naturopathy Work Group. "Traditional Naturopathy Working Session Summary September 23 and October 1, 2008" (https://web.archive.or g/web/20110726104027/http://www.health.state.mn.us/divs/hpsc/hop/ nawg/summary092308.pdf) (PDF). Minnesota Department of Health. Archived from the original (http://www.health.state.mn.us/divs/hpsc/ho p/nawg/summary092308.pdf) (PDF) on July 26, 2011. Retrieved November 20, 2010.
- 86. "Naturopathe avec diplôme fédéral" (https://web.archive.org/web/201 50904074545/http://www.sbfi.admin.ch/bvz/hbb/index.html?detail=1&t yp=hfp&lang=fr&item=834&abfragen=Chercher). CH: State Secretariat for Education, Research and Innovation. Archived from the original (http://www.sbfi.admin.ch/bvz/hbb/index.html?detail=1&typ =hfp&lang=fr&item=834&abfragen=Chercher) on September 4, 2015.
- 87. "Legal Status of Traditional Medicine and Complementary/Alternative Medicine: A Worldwide Review" (https://web.archive.org/web/201507 05180602/http://apps.who.int/medicinedocs/en/d/Jh2943e/7.19.html). World Health Organization. Archived from the original (http://apps.wh o.int/medicinedocs/en/d/Jh2943e/7.19.html) on July 5, 2015. Retrieved July 4, 2015.
- "Swiss Federal Statistical Office" (https://web.archive.org/web/20150 708081400/http://www.bfs.admin.ch/bfs/portal/fr/index/themen/14/03/ 04/key/01.html). Switzerland. Archived from the original (http://www.bf s.admin.ch/bfs/portal/fr/index/themen/14/03/04/key/01.html) on July 8, 2015. Retrieved July 11, 2015.

- 89. "Naturopathic Doctors are Now Licensed in Wisconsin" (https://aanm c.org/naturopathic-news/naturopathic-doctors-wisconsin-licensure/). AANMC. February 17, 2022. Retrieved February 21, 2022.
   "Wisconsin has just become the 26th U.S. state/territory to regulate naturopathic doctors."
- 90. "Health Professions Act: Naturopathic Physicians Regulation" (http:// www.bclaws.ca/civix/document/id/complete/statreg/282\_2008). Victoria, British Columbia: Queen's Printer. October 2008. B.C. Reg. 282/2008 M242/2008. Archived (https://web.archive.org/web/202101 14003734/https://www.bclaws.gov.bc.ca/civix/document/id/complete/s tatreg/282\_2008) from the original on January 14, 2021. Retrieved August 18, 2016.
- 91. Bylaws of the College of Naturopathic Physicians of British Columbia (http://www.cnpbc.bc.ca/wp-content/uploads/2019-12-27-CNPBC-Byl aws-Consolidation.pdf)
- 92. "Surrey city councillor and naturopath Allison Patton fined and suspended for calling herself a "physician" " (https://www.straight.com/ news/1360161/surrey-city-councillor-and-naturopath-allison-patton-fin ed-and-suspended-calling). February 13, 2020. Archived (https://web. archive.org/web/20210114003702/https://www.straight.com/news/13 60161/surrey-city-councillor-and-naturopath-allison-patton-fined-and-s uspended-calling) from the original on January 14, 2021. Retrieved April 14, 2020.
- 93. "Surrey councillor fined, suspended from naturopathy for misusing 'physician' title" (https://www.surreynowleader.com/news/surrey-counci llor-fined-suspended-from-naturopathy-for-misusing-physician-title/). February 12, 2020. Archived (https://web.archive.org/web/202101140 03717/https://www.surreynowleader.com/news/surrey-councillor-finedsuspended-from-naturopathy-for-misusing-physician-title/) from the original on January 14, 2021. Retrieved April 14, 2020.

- 94. "Complaint filed against Surrey naturopath-turned-councillor who campaigned as 'physician' " (https://www.cbc.ca/news/canada/britishcolumbia/complaint-filed-against-surrey-naturopath-turned-councillorwho-campaigned-as-physician-1.4907555). Archived (https://web.arc hive.org/web/20210114003716/https://www.cbc.ca/news/canada/briti sh-columbia/complaint-filed-against-surrey-naturopath-turned-councill or-who-campaigned-as-physician-1.4907555) from the original on January 14, 2021. Retrieved April 14, 2020.
- 95. "About Us" (https://www.nabne.org/home/about/). North American Board of Naturopathic Examiners. Archived (https://web.archive.org/w eb/20131005181153/https://www.nabne.org/home/about/) from the original on October 5, 2013. Retrieved September 3, 2013.
- 96. "Naturopathy" (https://www.nccih.nih.gov/health/naturopathy). *NCCIH*. Archived (https://web.archive.org/web/20200331033317/https://www. nccih.nih.gov/health/naturopathy) from the original on March 31, 2020. Retrieved May 27, 2020.
- 97. <u>Gorski D</u> (February 21, 2011). <u>"Naturopathy and Science" (https://ww</u> w.sciencebasedmedicine.org/naturopathy-and-science/). ScienceBasedMedicine.org. <u>Archived (https://web.archive.org/web/2</u> 0210114003753/https://sciencebasedmedicine.org/naturopathy-andscience/) from the original on January 14, 2021. Retrieved March 3, 2016.
- 98. Hermes B (March 13, 2015). "ND Confession, Part 1: Clinical training inside and out" (https://www.sciencebasedmedicine.org/nd-confessio n-part-1-clinical-training-inside-and-out). Science-Based Medicine. Archived (https://web.archive.org/web/20210114003703/https://scien cebasedmedicine.org/nd-confession-part-1-clinical-training-inside-an d-out/) from the original on January 14, 2021. Retrieved July 23, 2016.
- 99. Mangan KS (December 2, 1999). "Report Recommends Stripping Naturopathy Council of Its Accrediting Authority" (http://chronicle.com/ article/Report-Recommends-Stripping/113719). The Chronicle of Higher Education. Archived (https://web.archive.org/web/202101140 03742/https://www.chronicle.com/article/report-recommends-stripping -naturopathy-council-of-its-accrediting-authority/) from the original on January 14, 2021. Retrieved July 23, 2016.

- 100. Hermes B (August 29, 2015). "ND Confession, Part II: The Accreditation of Naturopathic "Medical" Education" (https://www.scien cebasedmedicine.org/nd-confession-part-ii-the-accreditation-of-natur opathic-medical-education/). *Science-Based Medicine*. Archived (htt ps://web.archive.org/web/20160710155040/https://www.sciencebase dmedicine.org/nd-confession-part-ii-the-accreditation-of-naturopathic -medical-education/) from the original on July 10, 2016. Retrieved July 23, 2016.
- 101. Society for Science-Based Medicine (2014). Report to the Maryland Board of Physicians Naturopathic Advisory Committee: Recommendations for Naturopathic Regulation (http://sfsbm.org/inde x.php?option=com\_content&view=article&id=486:naturopathic-board &catid=52:legislative&Itemid=435) (Report). Archived (https://web.arc hive.org/web/20210114003654/http://sfsbm.org/index.php?option=co m\_content&view=article&id=486%3Anaturopathic-board&catid=52% 3Alegislative&Itemid=435) from the original on January 14, 2021. Retrieved July 23, 2016.
- 102. "Handbook on CNME Postdoctoral Naturopathic Medical Education Sponsor Recognition Process and Standards (2005)" (https://web.arc hive.org/web/20060615111625/https://cnme.org/resources/residency handbook.pdf) (PDF). Council on Naturopathic Medical Education. Archived from the original (http://www.cnme.org/resources/residency handbook.pdf) (PDF) on June 15, 2006.
- 103. "Application for Licensure: Naturopathic Physician" (https://web.archiv e.org/web/20100629150914/http://dopl.utah.gov/licensing/forms/appli cations/072\_naturopathic\_phys.pdf) (PDF). *Division of Occupational and Professional Licensing, Utah Department of Commerce*. State of Utah. February 17, 2012. p. 1. Archived from the original (http://ww w.dopl.utah.gov/licensing/forms/applications/072\_naturopathic\_phys. pdf) (PDF) on June 29, 2010. Retrieved September 8, 2013.

- 104. Carly W (April 29, 2016). "Are we being served by the regulation of naturopaths? Not if patients are still being misled" (https://www.theglo beandmail.com/life/health-and-fitness/health/canadian-naturopaths-ne ed-to-follow-the-rules-if-they-want-regulation/article29785140/). *The Globe and Mail*. Archived (https://web.archive.org/web/20210114003 753/https://www.theglobeandmail.com/life/health-and-fitness/health/ca nadian-naturopaths-need-to-follow-the-rules-if-they-want-regulation/art icle29785140/) from the original on January 14, 2021. Retrieved July 23, 2016.
- 105. "ND vs MD -- Battle Lines Drawn in California" (http://www.medpaget oday.com/publichealthpolicy/workforce/51917). June 3, 2015. Archived (https://web.archive.org/web/20160725123138/http://www.m edpagetoday.com/publichealthpolicy/workforce/51917) from the original on July 25, 2016. Retrieved July 24, 2016.
- 106. Frosch D (February 21, 2011). "Licensing Naturopaths Incites Debate in Colorado" (https://www.nytimes.com/2011/02/22/health/22license.ht ml?\_r=0). The New York Times. Archived (https://web.archive.org/we b/20170202003854/http://www.nytimes.com/2011/02/22/health/22lice nse.html?\_r=0) from the original on February 2, 2017. Retrieved July 24, 2016.
- 107. Lambeck L (May 24, 2016). "New law could let Connecticut naturopathic physicians write prescriptions" (http://www.ctpost.com/lo cal/article/New-law-could-let-Connecticut-naturopathic-7942677.php). *Connecticut Post*. Archived (https://web.archive.org/web/201608281 30127/http://www.ctpost.com/local/article/New-law-could-let-Connecti cut-naturopathic-7942677.php) from the original on August 28, 2016. Retrieved July 25, 2016.
- 108. Bellamy J (May 15, 2014). "Legislative Alchemy 2014 (so far)" (http s://www.sciencebasedmedicine.org/legislative-alchemy-2014-so-far/). Science-Based Medicine. Archived (https://web.archive.org/web/201 60220135945/https://www.sciencebasedmedicine.org/legislative-alch emy-2014-so-far/) from the original on February 20, 2016. Retrieved July 21, 2016.

- 109. "Massachusetts Medical Society Testifies in Opposition to Licensing Naturopaths" (https://web.archive.org/web/20110716132319/http://ww w.massmed.org/AM/PrinterTemplate.cfm?Section=Home&CONTENT ID=12458&TEMPLATE=%2FCM%2FContentDisplay.cfm). Massachusetts Medical Society. May 11, 2005. Archived from the original (http://www.massmed.org/AM/PrinterTemplate.cfm?Section= Home&CONTENTID=12458&TEMPLATE=/CM/ContentDisplay.cfm) on July 16, 2011. Retrieved April 17, 2009.
- 110. The Special Commission on Complementary and Alternative Medical Practitioners (January 2002). "Majority Report of the Special Commission on Complementary and Alternative Medical Practitioners: A Report to the Legislature" (http://www.quackwatch.co m/01QuackeryRelatedTopics/Naturopathy/majority.pdf) (PDF). Massachusetts: The Special Commission on Complementary and Alternative Medical Practitioners. Archived (https://web.archive.org/w eb/20120121012802/http://www.quackwatch.com/01QuackeryRelate dTopics/Naturopathy/majority.pdf) (PDF) from the original on January 21, 2012. Retrieved November 10, 2010.
- 111. Hermes B (April 2020). "Beware the naturopathic cancer". *Skeptical Inquirer*. **44** (2): 38–44.
- 112. <u>Belluz J</u> (September 2, 2015). <u>"Why one naturopath quit after</u> watching her peers treat cancer patients" (https://www.vox.com/2015/ 9/2/9248713/britt-hermes). Vox. Archived (https://web.archive.org/we b/20171014084313/https://www.vox.com/2015/9/2/9248713/britt-her mes) from the original on October 14, 2017. Retrieved June 13, 2017.
- 113. Jim Brown (April 10, 2016). "Former naturopathic doctor calls for an end to naturopathic pediatrics" (http://www.cbc.ca/radio/the180/a-for mer-naturopath-speaks-out-why-precarious-work-can-be-good-and-w ill-assisted-death-come-to-rural-canada-1.3525870/former-naturopat hic-doctor-calls-for-an-end-to-naturopathic-pediatrics-1.3525946). *The 180.* CBC. Archived (https://web.archive.org/web/20160612215 149/http://www.cbc.ca/radio/the180/a-former-naturopath-speaks-outwhy-precarious-work-can-be-good-and-will-assisted-death-come-to-r ural-canada-1.3525870/former-naturopathic-doctor-calls-for-an-end-t o-naturopathic-pediatrics-1.3525946) from the original on June 12, 2016. Retrieved June 8, 2016.

- 114. Kirkey S (April 4, 2016). <u>"Should naturopaths be restricted from</u> treating children after tragic death of Alberta toddler?" (http://news.nat ionalpost.com/news/canada/should-naturopaths-be-restricted-from-tr eating-children-in-wake-of-death-of-alberta-toddler). <u>National Post</u>. Retrieved June 8, 2016.
- 115. Britt H (June 21, 2016). "How A Former Naturopath Can Help Unravel The Trickery Of Alternative Medicine" (http://www.science20.com/britt marie\_hermes/how\_a\_former\_naturopath\_can\_help\_unravel\_the\_tri ckery\_of\_alternative\_medicine-175036). Science 2.0. Archived (http s://web.archive.org/web/20210114003748/https://www.science20.co m/britt\_marie\_hermes/how\_a\_former\_naturopath\_can\_help\_unravel\_ the\_trickery\_of\_alternative\_medicine-175036) from the original on January 14, 2021. Retrieved July 30, 2016.
- 116. Swartout KA, ed. (2006). *Encyclopedia of Associations* (https://book s.google.com/books?id=Wf6PPHSMD4IC) (44 ed.). Thomson Gale. pp. 1777–1778. <u>ISBN 9780787682866</u>. Archived (https://web.archiv e.org/web/20161203184157/https://books.google.com/books?id=Wf 6PPHSMD4IC) from the original on December 3, 2016. Retrieved September 4, 2013.
- 117. Smith MJ, Logan AC (January 2002). "Naturopathy". *The Medical Clinics of North America*. **86** (1): 173–84. <u>doi:10.1016/S0025-</u> 7125(03)00079-8 (https://doi.org/10.1016%2FS0025-7125%2803% 2900079-8). <u>PMID</u> 11795088 (https://pubmed.ncbi.nlm.nih.gov/11795 088).
- 118. "AMA Position Statement: Complementary Medicine 2012" (https:// web.archive.org/web/20150402150707/https://ama.com.au/positionstatement/complementary-medicine-2012). Australian Medical Association. August 28, 2012. Archived from the original (https://ama. com.au/position-statement/complementary-medicine-2012) on April 2, 2015. Retrieved March 21, 2015.
- 119. Paola S (October 17, 2017). "Homeopathy, naturopathy struck off private insurance list" (https://ajp.com.au/news/homeopathy-naturopat hy-struck-off-private-insurance-list/). *Australian Journal of Pharmacy*. Archived (https://web.archive.org/web/20210114003745/https://ajp.co m.au/news/homeopathy-naturopathy-struck-off-private-insurance-list/) from the original on January 14, 2021. Retrieved January 11, 2018.

- 120. Ministry of AYUSH. Page updated August 21, 2010 <u>AYUSH:</u> Naturopathy (http://indianmedicine.nic.in/index2.asp?slid=34&sublinki d=22&lang=1) Archived (https://web.archive.org/web/201503060437 24/http://www.indianmedicine.nic.in/index2.asp?slid=34&sublinkid=2 2&lang=1) 2015-03-06 at the <u>Wayback Machine</u>. Page accessed March 21, 2015
- 121. Ministry of AYUSH. Page updated September 23, 2010 <u>AYUSH:</u> National Institute of Naturopathy, Pune (http://indianmedicine.nic.in/ind ex3.asp?sslid=191&subsublinkid=84&lang=1) Archived (https://web. archive.org/web/20150220002629/http://indianmedicine.nic.in/index 3.asp?sslid=191&subsublinkid=84&lang=1) 2015-02-20 at the Wayback Machine. Page accessed March 21, 2015
- 122. "About: National Institute of Naturopathy" (http://punenin.org/about.ht m). Archived (https://web.archive.org/web/20150306211356/http://pun enin.org/about.htm) from the original on March 6, 2015. Retrieved March 21, 2015.
- 123. "2008 Sunrise Review: Naturopathic Physicians" (https://web.archive. org/web/20081002001141/http://www.dora.state.co.us/opr/archive/20 08NaturopathicPhysiciansSunrise.pdf) (PDF). *Department of Regulatory Agencies*. State of Colorado. January 4, 2008. pp. 18– 19. Archived from the original (http://www.dora.state.co.us/OPR/archiv e/2008NaturopathicPhysiciansSunrise.pdf) (PDF) on October 2, 2008.
- 124. "Questions: Education and Regulation" (http://www.cand.ca/index.ph p?40). Canadian Association of Naturopathic Doctors website. Archived (https://web.archive.org/web/20110706170455/http://www.c and.ca/index.php?40) from the original on July 6, 2011. Retrieved September 6, 2013.
- 125. "History of Naturopathic Medicine" (http://www.cand.ca/index.php?51 &L=0). www.cand.ca. Archived (https://web.archive.org/web/20210114 003735/https://www.cand.ca/?51&L=0) from the original on January 14, 2021. Retrieved February 17, 2016.

- 126. "B.C. gives naturopaths right to prescribe drugs" (http://www.cbc.ca/n 128 ews/health/story/2009/04/10/bc-naturopaths.html). CBC News. April 10, 2009. Archived (https://web.archive.org/web/20120820102601/htt p://www.cbc.ca/news/health/story/2009/04/10/bc-naturopaths.html) from the original on August 20, 2012. Retrieved September 6, 2013.
  127 "Lev para Reglamentar el Ejercicio de la Medicina Naturopática en 128
- 127. "Ley para Reglamentar el Ejercicio de la Medicina Naturopática en Puerto Rico [Law to Regulate the Practice of Naturopathic Medicine 129. in Puerto Rico]" (https://web.archive.org/web/20081002072926/http:// www.oslpr.org/download/ES/1997/208s0783.pdf) (PDF) (in Spanish).
  December 30, 1997. Archived from the original (http://www.oslpr.org/d 130. ownload/ES/1997/208s0783.pdf) (PDF) on October 2, 2008.
- 128. "Federal Constitution of the Swiss Confederation" (https://www.admi n.ch/opc/en/classified-compilation/19995395/index.html#a118a/). CH. Art. 118a Complementary medicine. Archived (https://web.archiv e.org/web/20160621000507/https://www.admin.ch/opc/en/classifiedcompilation/19995395/index.html#a118a/) from the original on June 21, 2016. Retrieved July 4, 2015. (English translation)
  - 129. "Swiss take an holistic approach" (https://www.irishtimes.com/news/h ealth/swiss-take-an-holistic-approach-1.771119). The Irish Times. Retrieved November 29, 2021.
  - 30. Bevanger L (January 18, 2012). <u>"UK universities drop alternative</u> medicine degree programs" (http://www.dw-world.de/dw/article/0,,156 73133,00.html). *Deutsche Welle*. Archived (https://web.archive.org/w eb/20120125180218/http://www.dw-world.de/dw/article/0,,15673133, 00.html) from the original on January 25, 2012. Retrieved February 5, 2012.

## **Further reading**

- Gorski D (February 21, 2011). "Naturopathy and science" (http://www.sciencebasedmedicine.org/naturopathy-and-science/). Science-Based Medicine. Retrieved July 30, 2016. "Unfortunately, naturopathy is a hodge-podge of mostly unscientific treatment modalities based on vitalism and other prescientific notions of disease."
- Hermes B (March 13, 2015). "ND Confession, Part 1: Clinical training inside and out" (https://www.sciencebasedmedicine.org/nd-confession-part -1-clinical-training-inside-and-out/). <u>Science-Based Medicine</u>. Retrieved July 30, 2016. "...naturopathic training is not as the profession presents. I'll say it anyway: naturopathic education is riddled with pseudoscience, debunked medical theories, and experimental medical practices."

## **External links**

- Naturopathy (https://curlie.org/Health/Alternative/Naturopathy) at Curlie
- Council on Naturopathic Medical Education (http://www.cnme.org)
- American Naturopathic Medical Association (http://www.anma.org/)
- American Association of Naturopathic Physicians (http://www.naturopathic.org/)
- Canadian Association of Naturopathic Doctors (http://www.cand.ca/)

Retrieved from "https://en.wikipedia.org/w/index.php?title=Naturopathy&oldid=1074607225"

This page was last edited on 1 March 2022, at 04:16 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License 3.0; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.