A Close Look at Naturopathy

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Naturopathy, sometimes referred to as "natural medicine," is a largely pseudoscientific approach said to "assist nature" [1], "support the body's own innate capacity to achieve optimal health" [2], and "facilitate the body's inherent healing mechanisms." [3] Naturopaths assert that diseases are the body's effort to purify itself, and that cures result from increasing the patient's "vital force." They claim to stimulate the body's natural healing processes by ridding it of waste products and "toxins." At first glance, this approach may appear sensible. However, a close look will show that naturopathy's philosophy is simplistic and that its practices are riddled with quackery [4].

The notion of a "vital force" or "life force"—a nonmaterial force that transcends the laws of chemistry and physics—originated in ancient times. Historians call it the doctrine of vitalism. No scientific evidence supports this doctrine, but a huge body of knowledge, including the entire discipline of organic chemistry, refutes it. Vitalistic practitioners maintain that diseases should be treated by "stimulating the body's ability to heal itself" rather than by "treating symptoms." Homeopaths, for example, claim that illness is due to a disturbance of the body's "vital force," which they can correct with special remedies, while many acupuncturists claim that disease is due to imbalance in the flow of "life energy" (chi or Qi), which they can balance by twirling needles in the skin. Many chiropractors claim to assist the body's "vital force." They claim to stimulate the body's natural healing processes by ridding it of waste products and "toxins." At first glance, this approach may appear sensible. However, a close look will show that naturopathy's philosophy is simplistic and that its practices are riddled with quackery [4].

The American Association of Naturopathic Physicians (AANP) has stated that "naturopathic medicine has its own unique body of knowledge, evolved and refined for centuries" and is "effective in treating all health problems, whether acute or chronic." [5] According to a 1989 AANP brochure:

The main difference [between naturopathic and conventional medicine] is in philosophic approach. Naturopathic physicians treat patients by restoring overall health rather than suppressing a few key symptoms. Naturopathic physicians are more concerned with finding the underlying cause of a condition and applying treatments that work in alliance with the natural healing mechanisms of the body rather than against them. Naturopathic treatments result less frequently in adverse side effects, or in the chronic conditions that inevitably arise when the cause of disease is left untreated." [6]

Naturopaths offer treatment at their offices. A few operate spas where patients may reside for several weeks. Their offerings include fasting, "natural food" diets, vitamins, herbs, tissue minerals, homeopathic remedies, cell salts, manipulation, massage, exercise, colonic enemas, acupuncture, Chinese medicine, natural childbirth, minor surgery, and applications of water, heat, cold, air, sunlight, and electricity. Radiation may be used for diagnosis, but not for treatment. Many of these methods are said to "detoxify" the body. Some states permit naturopaths to prescribe various drugs that are listed in a formulary maintained or
What’s Wrong with the Above Picture?

Scientific research has identified measurable, causative factors and specific methods of preventing and/or treating hundreds of health problems. Naturopaths have done little more than create glib generalities. The above theories are simplistic and/or clash with science-based knowledge of body physiology and pathology. For example:

- "Balance," "vitality," and "harmony with the body" are vitalistic concepts. Like "optimal health" or "supporting" of the body, these concepts are vague and cannot be objectively measured or scientifically tested.
- Naturopaths pretend that precise medical treatment is less important than "maintaining body balance."
- Whether infectious disease occurs depends on the degree of exposure to an infectious organism, the virulence of the organism, and the body's ability to resist. A person does not need to be "toxic" or "imbalanced" in order to catch a cold.
- Some diseases are an inevitable result of genetic make-up. Others have little to do with hereditary factors.
- The general concept of treating disease by "strengthening the immune system" is unsubstantiated and clashes with the fact that in some conditions, such as allergies or autoimmune diseases, the immune system is overreactive.
- Naturopathy's claim that "natural methods" can treat cancer by strengthening the immune system is unsubstantiated, and the notion that cancer represents a failure of the immune system is simplistic [7]. In the late 1950s, it was hypothesized that the immune system guards against cancer cells in ways similar to its protection against infectious organisms. However, subsequent research has demonstrated that relationships between cancers and the immune system are highly complex and that successful tumors develop "tolerance" mechanisms that enable them to invade the body without activating immune responses that would destroy them. The rapidly developing science of cancer immunotherapy is aimed at detecting and defeating these mechanisms. One way might be to mobilize T-cell to attack and destroy cancers, but this will not be simple to do [8]. Merely increasing the number of such cells won't work. Thus the odds that any dietary measure, herb, or other "alternative" approach will solve the problem of cancer by increasing immune surveillance should be regarded as zero.

Naturopaths assert that their "natural" methods, when properly used, rarely have adverse effects because they do not interfere with the individual's inherent healing abilities. This claim is nonsense. Any medication (drug or herb) potent enough to produce a therapeutic effect is potent enough to cause adverse effects. Drugs should not be used (and would not merit FDA approval) unless the probable benefit is significantly greater than the probable risk. Moreover, medically used drugs rarely "interfere with the healing processes." The claim that scientific medical care "merely eliminates or suppresses symptoms" is both absurd and pernicious.

Most of the things naturopaths do have not been scientifically substantiated; and some—such as homeopathy—clearly are worthless. In many cases, naturopaths combine sensible dietary advice (based on medically proven strategies) with senseless recommendations for products.

A Brief History

Modern-day naturopathy can be traced to the concepts of Sebastian Kneipp (1821-1897), Benedict Lust (1872-1945), Henry Lindlahr (1853-1925), Bernarr Macfadden (1868-1955), and John H. Tilden, M.D. (1851-1940). Father Kneipp, a German priest, opened a "water cure" center after becoming convinced that he and a fellow student had cured themselves of tuberculosis by bathing in the Danube River. Kneipp also developed herbal methods using whole plants. Lust, also German, was treated by Kneipp and in 1892 was commissioned to establish Kneipp's practices in the United States. In 1895, he opened the Kneipp Water-Cure Institute in New York City and began forming Kneipp Societies whose members had been using Kneipp's methods or other "drugless therapies." Subsequently, he acquired degrees in osteopathy, chiropractic, homeopathic medicine, and eclectic medicine [9].

In 1901, Lust organized a national convention and chaired a committee that endorsed the use of massage, herbs, homeopathy, spinal manipulation, and various types of occult healing. In 1902, he purchased the rights to the term "naturopathy" from John H. Scheel, another Kneipp disciple, who had coined it in 1895. That same year, he began referring to himself as a naturopath, opened the American Institute of Naturopathy, and replaced the Kneipp Societies with a national naturopathic organization. Lindlahr further systematized naturopathy and opened a sanitarium and a school in a Chicago suburb. Macfadden popularized exercise and fasting. Tilden contributed notions about "auto-intoxication" (said to be caused by fecal matter remaining too long in the intestines) and "toxemia" (alleged to be "the basic cause of all diseases"). [10]

Naturopathy's grandiose claims attracted the sharp pen of Morris Fishbein, M.D., who edited the Journal of the American Medical Association and spearheaded the AMA's antiquackery campaign for several decades. He noted:

Whereas most cults embrace a single conception as to the cause and healing of disease, naturopathy embraces everything in nature . . .

The real naturopaths were, of course, such healers as Father Kneipp . . . and others who advocated natural living and healed by use of sunlight, baths, fresh air, and cold water, but there is little money to be made by these methods. Hence the modern naturopath embraces every form of healing that offers opportunity for exploitation. [11]

The practices Fishbein debunked included:

- Aeropathy: baking the patient in a hot oven
The leading accredited school, training, many naturopaths claim that their education is equivalent. There are several working in outpatient clinics. Because medical school programs also last four years that include two years of basic science schools follows a pattern similar to that of chiropractic schools: available from five full-time schools of naturopathy.

Today, within the United States, a “doctor of naturopathy” (N.D.) degree was still available at several chiropractic colleges, but by 1957, the last of these colleges stopped issuing it. The National College of Naturopathic Medicine (NCNM) was founded in 1956 in Portland, Oregon, but, until the mid-1970s, had very few students. From 1960 through 1968, the average enrollment was eight and the total number of graduates was 16. [1]

The quality of medical school programs is vastly superior to those of naturopathic schools. Medical school faculties are much larger and better trained, and the scope and depth of clinical experience are much greater because people going to medical school clinics encompass the full gamut of disease.

Most of these methods disappeared along with their creators, but some (or their offshoots) are still used today.

The total number of naturopathic practitioners in the United States is unknown but includes chiropractors and acupuncturists who practice naturopathy. The AANP was founded in 1985 and is closely allied with the 4-year naturopathic colleges. Its membership is said to be limited to individuals who are eligible for licensing in states that issue licenses. Its online directory contains about 1300 names. The American Naturopathic Medical Association (ANMA), founded in 1981, claims to represent about 2,000 members worldwide. Although some have recognized credentials in other health disciplines, others merely have an “ND” degree obtained through a nonaccredited correspondence school. The Homeopathic Academy of Naturopathic Physicians (HANP), which requires a recognized professional degree and additional homeopathic training, lists about 50 members in the United States and Canada.

The AANP published the Journal of Naturopathic Medicine six times between 1990 and 1996. The issues ran from about 80 to 100 pages. The third issue was devoted to “Non-Standard HIV/ARC/AIDS Management.” The fifth, which attacked immunization, contained papers suggesting that vaccines may be a factor in causing cancer and that homeopathic prophylaxis using nosodes would be effective and safer than standard vaccines. (Nosodes are homeopathic products made from pathological organs or tissues: causative agents such as bacteria, fungi, ova, parasites, virus particles and yeast; disease products; or excretions. There is no scientific evidence that nosodes are effective, and the FDA has ordered several manufactures to stop making preventive claims for them. The sixth issue of the journal promoted the use of “natural” products for cancer and contained an absurd article claiming that measuring the electrical resistance of the skin may be a useful way to diagnose the early stages of cancer and AIDS.

In December 2009, the AANP, partnered with publisher Karolyn A. Gazella, began producing the online Journal of Naturopathic Medicine, which is published monthly.

Education

A 1927 AMA study listed 12 naturopathic schools with fewer than 200 students among them [12]. During the 1920s and 1930s, about half the states passed laws under which naturopaths and/or “drugless healers” could practice. However, as modern medicine developed, many of these laws were repealed and all but a few mail-order schools ceased operations. The doctor of naturopathy (N.D.) degree was still available at several chiropractic colleges, but by 1957, the last of these colleges stopped issuing it. The National College of Naturopathic Medicine (NCNM) was founded in 1956 in Portland, Oregon, but, until the mid-1970s, had very few students. From 1960 through 1968, the average enrollment was eight and the total number of graduates was 16. [1]

Today, within the United States, a “doctor of naturopathy” (N.D.) or “doctor of naturopathic medicine” (N.M.D.) credential is available from five full-time schools of naturopathy and several nonaccredited correspondence schools. Training at the full-time schools follows a pattern similar to that of chiropractic schools: two years of basic science courses and two years that include working in outpatient clinics. Because medical school programs also last four years that include two years of basic science training, many naturopaths claim that their education is equivalent. There are several big differences, however.

- The quality of medical school programs is vastly superior to those of naturopathic schools. Medical school faculties are much larger and better trained, and the scope and depth of clinical experience are much greater because people going to medical school clinics encompass the full gamut of disease.
- Much of naturopathy’s coursework embraces practices—such as homeopathy—that have zero validity.
- Some naturopathic graduates take an additional year of postgraduate training where they work in an outpatient setting. However, most go directly into practice. Nearly all medical school graduates undergo 3-6 years of additional full-time specialty training that includes work with hospital inpatients.

The leading accredited school, Bastyr University, in Seattle, Washington, was founded in 1978. Besides its N.D. program, Bastyr
Naturopathy schools receive much of their financial support from companies that market dietary supplements, homeopathic products, and/or herbal remedies.

The naturopathic programs offered by correspondence schools span much less time and include no experience with actual patients.

**Accreditation**

In 1987, the U.S. Secretary of Education approved the Council on Naturopathic Medical Education (CNME) as an accrediting agency for the full-time schools. As with acupuncture and chiropractic schools, this recognition was not based upon the scientific validity of what is taught but on such factors as record-keeping, physical assets, financial status, makeup of the governing body, catalog characteristics, nondiscrimination policy, and self-evaluation system. NCNM, Bastyr, and Southwest became accredited.

In 1999, the U.S. Department of Education staff and the National Advisory Committee on Institutional Quality and Integrity (NACIQI) asked U.S. Secretary of Education Richard W. Riley to deny CNME's application for renewal of recognition. The recommendation was based on evidence that CNME did not respond appropriately to violations of its standards at Southwest College. The staff report [13] and testimony at a NACIQI meeting [14] indicated that in 1997 and 1998, the school underwent an administrative upheaval that had nearly led to its closure. Several officials resigned or were abruptly fired, classes were suspended for two weeks, and the school's bank accounts were temporarily frozen after the school's chief financial officer was fired. CNME testified at the hearing that it had closely followed the situation and urged school officials to correct the problems. However, the Department of Education staff and a majority of NACIQI members concluded that CNME had failed to issue a timely order to show cause why Southwest should not have its candidacy for accreditation ended [14].

In January 2001, Riley agreed that CNME’s approval should not be renewed [15]. However, CNME reapplied, was approved in 2003, and has remained approved since that time.

**Legal Status**

Naturopaths are licensed as independent practitioners in 16 states (Alaska, Arizona, California, Connecticut, Hawaii, Idaho, Kansas, Maine, Minnesota, Montana, New Hampshire, North Dakota, Oregon, Utah, Vermont, and Washington), the District of Columbia, and the U.S. Territories of Puerto Rico and the Virgin Islands [16]. They can also legally practice in a few others. Efforts are on the way to press for licensure in the remaining states. Graduates of the 4-year schools assert that licensing is needed to protect the public from unqualified practitioners. However, the existing naturopathic licensing boards have done little or nothing to protect the public from naturopathy’s widespread quackery.

Since the proposed laws would set educational requirements that many of ANMA’s members could not meet, ANMA has vigorously opposed the licensing efforts. The National Council Against Health Fraud has pointed out:

> The difference between more and less educated naturopaths is . . . . like comparing more and less educated witch doctors. It could actually be argued that less-schooled naturopaths are safer because they may have a smaller bag of tricks and, because they don't consider themselves “primary health physicians” are more apt to refer patients to M.D.’s for additional care [17].

Naturopathic services are not covered by Medicare or most insurance policies. Expansion of naturopathic licensing will make naturopaths appear more legitimate and could help them gain passage of "insurance equality" laws that force insurance companies to cover their services.

**Scope of Practice**

Most naturopaths allege that virtually all diseases are within their scope. The most comprehensive naturopathic publications that illustrate this belief are the *Textbook of Natural Medicine* [18-21] and the *Encyclopedia of Natural Medicine* [22-24]. The textbook, now in its fourth edition, was written for students and professionals; the encyclopedia, now in its third edition, was written for the general public. Joseph E. Pizzorno, Jr., N.D., president (later president emeritus) of Bastyr University, and Michael T. Murray, N.D., a faculty member, edited the textbook and co-authored the encyclopedia.

Both books recommend questionable dietary measures, vitamins, minerals, and/or herbs for more than 70 health problems ranging from acne to AIDS. For many of these conditions, daily administration of ten or more products is recommended—some in dosages high enough to cause toxicity. Some treatments are recommended even though the authors indicate that the evidence supporting them is preliminary, speculative, or even conflicting. The textbook discuss many dubious diagnostic tests as though
Many of the treatments recommended in the Textbook . . . are not likely to be effective, and treatments proven to be effective are often totally ignored. This could endanger the health and safety of patients with serious diseases who relied solely on care from a naturopathic practitioner [25].

The third edition of the Encyclopedia recommends inappropriate testing that could lead to the diagnosis of nonexistent problems and inappropriate treatment of many if not most patients who consult naturopaths. For example:

- The chapter on hypothyroidism claims (incorrectly) that taking one's armpit temperature upon awakening is a reliable test for thyroid function and that naturopaths prefer treating hypothyroidism with desiccated thyroid. The book also states that "health-food-store thyroid preparations . . . may provide enough support" to help a mild thyroid problem, even though the FDA requires such products to be hormone-free. Scientific physicians consider desiccated thyroid (made from dried animal glands) inferior because its potency can vary from batch to batch. Synthetic thyroid hormone does the job efficiently. Using a product that might contain no hormone is even more ridiculous.

- The chapter on "detoxification" improperly links dental amalgams to "fatigue, headache, insomnia, nerve disorders, high blood pressure, impaired memory and concentration," falsely claims that 25% of Americans suffer from heavy metal poisoning, and advocates periodic fasting plus various supplements and herbs.

- Page 112 states that the best way to determine the "body load" of heavy metals is through challenge testing. This advice is pernicious because most people have trace amounts of lead and mercury circulating harmlessly in their blood stream. In challenge testing (also called provoked testing), a chelating agent is administered that temporarily increases excretion. The resultant test report typically suggests abnormalities for which the practitioner recommends "detoxification." [26] The widespread involvement of naturopaths with nonexistent metal toxicity is illustrated by searching with Google. In November 2013, my search for "naturopath + metal toxicity" yielded 31,300 hits and my search for "Naturopath + amalgam" yields 2.3 million hits.

- The "Candidiasis" chapter espouses Dr. William Crook's fad diagnosis of "candidiasis hypersensitivity" and includes Crook's three-page questionnaire for determining the probability that "yeast-connected problems are present." The questionnaire does not have the slightest validity.

- The chapter on angina gives a glowing recommendation for chelation therapy, which the scientific community regards as worthless.

- The chapter on "cellulite" falsely claims that a gotu kola extract has "demonstrated impressive results."

In The Complete Book of Juicing Murray recommends juices for treating scores of ailments. He also advises everyone to use supplements because "even the most dedicated health advocate . . . cannot possibly meet the tremendous nutritional requirements for optimum health through diet alone." [27] These ideas lack scientific validity.

In another book, Murray claims that juicing is valuable because fresh juice provides the body with "live" enzymes [28]. This idea is absurd. The enzymes in plants help regulate the metabolic function of plants. When ingested, they do not act as enzymes within the human body, because they are digested rather than absorbed intact into the body [29].

Pizzorno and Murray have claimed that "in most instances, the naturopathic alternative offers significant benefits over standard medical practices." That statement is preposterous. For the few illnesses where their encyclopedia acknowledges that medical treatment is essential (because otherwise the patient may die), they propose naturopathic treatment in addition. In many passages, they describe prevailing medical practices inaccurately.

A Revealing Anecdote

Pizzorno's book Total Wellness: Improve Your Health By Understanding Your Body's Healing Systems contains a chapter titled "Strengthen Your Immune System," in which the following anecdote is used to illustrate how naturopaths regard "immune suppression" as an underlying cause of disease:

Several years ago I began to develop large warts on several of my fingers. Warts are an interesting phenomenon; they tend to grow or recede according to how well the immune system is functioning. Although I treated them several times with thuja oil (a standard naturopathic treatment for warts), they had not responded very well. I was perplexed because I was living a pretty healthful lifestyle and using a therapy I'd used successfully for a lot of patients.

Then I visited the dentist. As I've only had one cavity, I hadn't been to the dentist for several years. Surprisingly, X-rays revealed an abscess in that one tooth—the filling had not been sealed properly. A week of antibiotics cleared the infection, and within three months all my warts were gone. Even though I had had no other symptoms, the abscess was continually draining my immune system. [30]

Any sensible preventive dental-care program should include visits every 6-12 months for professional cleaning (to remove gumline calculus to prevent gum disease), a check for early signs of tooth decay (cavities), and occasional x-ray examination to look for hidden problems. How come Pizzorno—despite all his talk about prevention—does not believe he should have dental check-ups like the rest of us? What does it mean that he permitted large warts to develop on his fingers without seeking medical treatment? (You can decide this for yourself.)
References


I am a student of naturopathic medicine, and upon perusing your web site felt the need to comment to you. I am furious and at the same time saddened, if that is possible; how dare you write articles titled "Ayurvedic Mumbo-Jumbo" and "Aromatherapy, Making Dollars out of Scents"? Why do you need to be so incredibly flippant and dismissing, what are you afraid of? It is you who are unfairly misleading the public. You critique/critize and dismiss medicinal practices (ayurvedic, CTM, herbalism), from countries that are thousands of years old, seducing the general public with stats, tests and the scientific method. What you are forgetting to mention to people is that Allopathic (western) medicine is less than 400 years old, a mere infant in the life cycle of medicine and healing. Allopathic medicine is responsible for countless numbers of deaths due to poor diagnosis, deadly drug interactions, using human beings as guinea pigs for new and improved drugs (only to find years later the damage many of these drugs have caused) and the 'instant fix', band-aid approach to healing.

I look forward to reading ALL of the articles on this site, I am sure that doing this will further my faith in Alternative Medicine. You see, alternative medicine is not interested in insulting western medicine in order to further its healing practices; to be fair to all, why don't you include articles on the many dangers and deaths of modern medicine? I think it would round out this site nicely.
Links to Recommended Vendors

- PharmacyChecker.com: Compare drug prices and save money at verified online pharmacies.
- ConsumerLab.com: Evaluates the quality of dietary supplement and herbal products.
- Amazon.com: Discount prices, huge inventory, and superb customer service
- OnlyMyEmail: Award-winning anti-spam services.
- 10Types: Website design, development, and hosting with superb technical support.