

## Why Homeopathy Makes Sense and Works

by Dana Ullman, MPH ©2005

### OPENING REMARKS:

Many people confuse homeopathic medicine with herbal remedies or with the broad field of alternative or natural medicine. As you will learn from this article, homeopathic medicine has its own sophisticated system of using substances from the plant, mineral, chemical, and animal kingdoms. This article will describe--in a modern and even futuristic fashion--this fascinating and powerful method of strengthening the body's own defense system.

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**Here** is a shorter and less technical version of this article.

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Dana Ullman is the owner of **Homeopathic Educational Services**, America's leading resource for homeopathic books, tapes, medicines, software, and distance learning courses. Besides access to purchasing high quality information and products, this website has more than 100 free articles on homeopathy. He has also developed "*Natural Treatment Protocols*" for severe common ailments, along with detailed instruction on how to optimize the healing potential from these natural medicines.

### Introduction

The word "homeopathy" is derived from two Greek words: *homoios* which means "similar" and *pathos* which means "suffering." Homeopathy's basic premise is called the "principle of similars," and it refers to recurrent observation and experience that a medicinal

substance will elicit a healing response for the specific syndrome of symptoms (or suffering) that it has been proven to cause when given to a healthy person in overdose.

The beauty of the principle of similars is that it not only initiates a healing response, but it encourages a respect for the body's wisdom. Because symptoms represent the best efforts of our body in its defenses against infection or stress, it makes sense to utilize a medicine that helps and mimics this defense rather than that inhibits or suppresses it. The principle of similars may be one of nature's laws that, when used well, can be one of our most sophisticated healing strategies.

It is important to note that immunizations and allergy treatments are two of the very few applications in modern medicine today that actually stimulate the body's own defenses in the prevention or treatment of specific diseases, and it is NOT simply a coincidence that both of these treatments are derived from the homeopathic principle of similars.

Homeopathic medicine is so widely practiced by physicians in Europe that it is no longer appropriate to consider it "alternative medicine" there. Approximately 30% of French doctors and 20% of German doctors use homeopathic medicines regularly, while over 40% of British physicians refer patients to homeopathic doctors, and almost half of Dutch physicians consider homeopathic medicines to be effective. The fact that the British Royal Family has used and supported homeopathy since the 1830s reflects its longstanding presence in Britain's national health care system.

Homeopathic medicine also once had a major presence in American medical care and in American society. In 1900 there were 22 homeopathic medical schools in the US, including Boston University, University of Michigan, New York Medical College, Hahnemann University, University of Minnesota, and even the University of Iowa. Further, many of America's cultural elite were homeopathy's strongest advocates, including Mark Twain, William James, John D. Rockefeller, Susan B. Anthony, Louisa May Alcott, Henry Wadsworth Longfellow, Henry David Thoreau, and Harriett Beecher Stowe, amongst many others. (For a more extensive list of famous people past and present who are known advocates of homeopathy, [click here](#).)

In his Pulitzer Prize-winning book *The Social Transformation of American Medicine*, Paul Starr noted, "Because homeopathy was simultaneously philosophical and experimental, it seemed to many people to be more rather than less scientific than orthodox medicine."

This article will present a strong case for homeopathy in light of the most recent developments in science and medicine. That said, I want to apologize to those people who have an open mind about homeopathy but who have been introduced to it by individuals who have not adequately explained this science and art in a clear and convincing fashion. It is hoped that both skeptics *and* those open-minded but inadequately informed people will benefit from this overview of the homeopathic system.

## **The Wisdom of Symptoms—**

### **The Underlying Basis of Modern Physiology and Homeopathy**

The underlying principle of homeopathy is also at the heart of modern physiology. It is commonly understood in medicine today that symptoms are not just something "wrong" with the body, but rather, they represent the efforts of the body and mind to defend and heal

itself from a variety of infective agents and/or stresses. The body creates fever, inflammation, pain, discharge, or whatever is necessary in order to heal itself. While these symptoms represent the body's best efforts to heal, they are not always successful in doing so. Ultimately, homeopathic medicines are some of the most powerful natural drugs available today to help augment the body's ability to heal itself (more on this topic later).

Medical science today is increasingly recognizing symptoms as adaptive responses of the body. Standard texts of pathology define the process of inflammation as the manner in which the body seeks to wall off, heat up, and burn out infective agents or foreign matter. The cough has long been known as a protective mechanism for clearing breathing passages. Diarrhea has been shown to be a defensive effort of the body to remove pathogens or irritants more quickly from the colon. Discharges are understood as the body's way of ridding itself of dead bacteria, viruses, and cells. Even high blood pressure is an important defense and adaptation to the internal and external stresses that a person experiences.

The derivation of the word "**symptom**" is helpful to better understanding of the disease process and the healing process. The word "**symptom**" comes from a Greek root and refers to "something that falls together with something else." Symptoms are a "sign" or a "signal" of something else, and treating them doesn't necessarily change that "something else." Just because a drug gets rid of a symptom does not mean that the person is cured. In fact, drugs that suppress or inhibit a symptom tend to provide only a guise of success and usually lead to a longer and more serious illness. Using drugs to suppress symptoms is akin to pulling the plug on your car's oil pressure warning light. Just because the light is turned off doesn't mean that your car's oil pressure is "cured." In fact, ignoring that light may lead to your car's breakdown.

It should be noted that people often incorrectly assume that conventional drugs have "side effects." Actually, in purely pharmacological terms, drugs do NOT have side effects; drugs only have "effects," and physicians arbitrarily differentiate between those effects that they like as the effects of the drug, while they call those symptoms that they don't like "side effects." This is akin to saying that the effects of a bomb are that it destroys buildings, but its side effects are that it kills people. Needless to say, one cannot truly separate out one effect from the other.

The reason that drugs create "side effects" that are often worse than the original disease is that these drugs tend to suppress the symptoms the sick person is experiencing and push them deeper into the person's body. This observation may explain why people today are experiencing more serious chronic illnesses at earlier and earlier ages and why there is such an epidemic of mental illness (physical disease is suppressed deeply enough that the disease is pushed into the psyche).

Once one recognizes that symptoms are important and useful defenses of the body, it makes less sense to use drugs that inhibit or suppress this wisdom of the body. Instead of using drugs to suppress symptoms, it makes sense to use medicines to strengthen the body's own defense system so that the body can more effectively heal itself. Here is where it makes sense to use homeopathic medicines.

## Medicines That Respect the Wisdom of the Body

The use of the principle of similars in healing actually has ancient roots ([Coulter, 1975](#)). In the 4th century B.C., Hippocrates is known to have said, "Through the like, disease is produced, and through the application of the like it is cured." The famed Delphic Oracle in Greece proclaimed the value of the law of similars, stating, "that which makes sick shall heal." Paracelsus, a well-known 16th century physician and alchemist, used the law of similars extensively in practice and referred to it in writings. His formulation of the "Doctrine of Signatures" spoke directly of the value in using similars in healing. He affirmed, "You there bring together the same anatomy of the herbs and the same anatomy of the illness into one order. This simile gives you understanding of the way in which you shall heal."

This principle of similars (using a substance to treat the similar symptoms that it causes) is also used in conventional medicine, with immunizations being the most obvious example, that is, small doses of a "weakened" pathogen are used to prevent what larger doses cause. None other than the "father of immunology," Dr. Emil Adolph Von Behring (1906), directly pointed to the origins of immunizations when he asserted, "(B)y what technical term could we more appropriately speak of this influence than by Hahnemann's\* word 'homeopathy'." (\*Samuel Hahnemann, MD, 1755-1843, was a renowned German physician and the founder of homeopathy.). Modern allergy treatment, likewise, utilizes the homeopathic approach by the use of small doses of allergens in order to create an antibody response.

Conventional medical treatment also uses homeopathy's principle of similars in choosing radiation to treat people with cancer (radiation causes cancer), digitalis for heart conditions (digitalis creates heart conditions), and Ritalin for hyperactive children (Ritalin is an amphetamine-like drug which normally causes hyperactivity). Other examples are the use of nitroglycerine for heart conditions, gold salts for arthritic conditions, and colchicine for gout, all of which are known to cause the similar symptoms that they are found to treat.

For a historical discussion of various homeopathic drugs that have been incorporated into conventional medicine, see Dr. Harris Coulter's [\*Homoeopathic Influences in Nineteenth Century Allopathic Therapeutics\*](#) as well as his more detailed book on homeopathy's history, [Divided Legacy: The Conflict Between Homeopathy and the A.M.A.](#)

It should be acknowledged that although the conventional medical treatments mentioned above may be homeopathic-like, they do not follow other fundamental principles of homeopathy. Immunizations and allergy treatments are given to prevent or cure special ailments, while homeopathic medicines are substances individually prescribed based on the overall syndrome of body and mind symptoms the person is experiencing, and therefore a homeopathic medicine is thought to strengthen the person's overall body-mind constitution, not just to prevent or treat a specific illness. Also, these conventional medical treatments are not individually prescribed to the high degree of selectivity that is common in homeopathy, and they are not prescribed in as small or as safe a dose.

And speaking of dose, this subject is vital, and homeopaths have uncovered an amazing and initially confusing power of the human organism. Homeopaths have found that sick people develop hypersensitivity to substances that cause the similar symptoms that they are experiencing. Further, by giving very small doses of this substance, a person can and will experience an immunological and therapeutic benefit without a toxic burden.

## **Determining What a Medicine Can Cure**

For over 200 years, hundreds of thousands of homeopaths throughout the world have carefully catalogued and now computerized the idiosyncratic physical, emotional, and mental symptoms that thousands of substances have caused in healthy people (Note: There are now **simple computerized programs as well as sophisticated expert system software** to help provide highly individualized prescriptions to people based on their specific and unique symptomatology). Homeopaths have thereby created the most extensive body of toxicological information available today, though this information focuses on the symptoms that these substances cause, not on the dose in which they cause them. Homeopaths have found and verified that whatever a substance has been found to cause, it will also cure in specially prepared homeopathic doses.

Thousands of substances have undergone toxicological studies, which homeopaths call “drug provings.” These experiments are conducted on human subjects, not animals, to determine what various substances from the plant, mineral, animal, or chemical kingdom cause in overdose. Homeopaths have found that these experiments lay the foundation for what symptoms each substance causes, and thus, what affinity each substance has to the human body.

Then, when homeopaths see patients, they obtain the unique and detailed symptomatological history of each patient, and seek to find the specific substance from the plant, mineral, animal, or chemical kingdom that would cause the similar syndrome of symptoms that the patient is experiencing. It is not surprising that large numbers of homeopaths throughout the world today use sophisticated expert system software to help them individualize medicinal substances to their patients.

After finding a match between a substance’s toxicology and the patient’s specific symptom pattern, the homeopath gives a specially prepared microdose of this medicinal agent. The details of how homeopathic medicines are made are described below. It is now time to direct our attention to homeopathy’s most fascinating and most controversial observation...the power of homeopathic “nano-doses.”

## **Homeopathic Medicine: Nano-doses, Powerful Results**

Homeopathic medicine presents a significantly different pharmacological approach to treating sick people. Instead of using strong and powerful doses of medicinal agents that have a broad-spectrum effect on a wide variety of people with a similar disease, homeopaths use extremely small doses of medicinal substances that are highly individualized to a person’s physical and psychological syndrome of disease, not simply an assumed localized pathology.

Homeopathic medicines are so small in dose that it is appropriate to refer to them as a part of the newly defined field of “nanopharmacology” (the prefix “nano” derives from Latin and means dwarf; today, the prefix is used to refer to “nanotechnology” or the “nanosciences” which explore the use of extremely small technologies or processes, at least one-billionth of a unit, designated as  $10^{-9}$ ). To understand the nature and the degree of homeopathy’s nanopharmacology, it is important to know the following characteristics of how homeopathic medicines are made.

## Making Homeopathic Medicines

- Most homeopathic medicines are made by diluting a medicinal substance in a double-distilled water. It should be noted that physicists who study the properties of water commonly acknowledge that water has many mysterious and amazing properties. Because homeopaths use a double-distilled water, it is highly purified, enabling the medicinal substance to solely infiltrate and imprint the water. For the serious scientifically-minded people, I strongly encourage you to review the website of **Dr. Martin Chaplin\*** of London South Bank University for impressively sophisticated information and research on water. It is amazing how ill-informed and uninformed skeptics of homeopathy are on the physics of water.
- Each substance is diluted, most commonly, 1 part of the original medicinal agent to 9 or 99 parts double-distilled water. The mixture is then vigorously stirred or shaken. The solution is then diluted again 1:9 or 1:99 and vigorously shaken. This process of consecutive diluting and shaking or stirring is repeated 3, 6, 12, 30, 200, 1,000, or even 1,000,000 times. Simply “diluting” the medicines without vigorously shaking them doesn’t activate the medicinal effects.
- It is inaccurate to say that homeopathic medicines are extremely diluted; they are extremely “potentized.” “Potentization” refers to the specific process of sequential dilution with vigorous shaking. Each consecutive dilution infiltrates the new double-distilled water and imprints upon it the fractal form of the original substance used (fractal refers to the specific consecutively smaller pattern or form within a larger pattern). Ultimately, some type of fractal or hologram of the original substance may be imprinted in the water.

Over 200 years of experience by homeopaths throughout the world has shown that the more that a substance undergoes potentization (the process of sequential dilution with vigorous shaking in-between each dilution), the more powerful the medicine becomes, the longer it acts, and the less doses are generally needed. Because of these observations and experiences, homeopaths refer to medicines that have been potentized 200 times or more as “high potencies” and those that have been potentized less than 12 times as “low potencies.”

In this light, homeopaths insist that their medicines are NOT extremely small doses. Instead, they assume that the double-distilled and purified water is changed and becomes imprinted and activated.

Homeopaths will be the first to acknowledge that their medicine will not have any effect at all, unless the person taking them has a hypersensitivity to the medicine. A person will have this hypersensitivity if and when they exhibit the syndrome of symptoms that the substance has previously been found to cause.

Still, it is admittedly difficult to initially accept the possibility that such nanopharmacological doses can have any effect at all. And yet, some highly respected basic scientific research has begun to verify the claims that homeopaths have made since its inception in the 1800s.

## Principle and Power of Resonance

Before discussing these scientific studies, it may be helpful to make brief reference to a subject for which there is common knowledge. Basic principles of physics teach us that hypersensitivity exists when there is “resonance.” An example from music is helpful here: Whenever a “C” note is played on a piano (or any instrument), other “C” notes reverberate, while other notes are not affected at all. Even when one instrument is relatively far away from another, its C strings will reverberate when a C note is played.

Ultimately, homeopathy is a medical system based on resonance (commonly referred to as the “principle of similars”). Two hundred years of experience by hundreds of thousands of homeopaths have consistently discovered that specially prepared, extremely small doses of medicine can powerfully augment a person’s healing response when there is a similarity between the toxicology of the medicine and the symptom complex of the sick person. One of the special features of homeopathy is that whenever a patient is given a homeopathic medicine that does not match his or her symptoms, nothing happens. But when there is a match, people experience significant improvement in their overall health.

## Other Evidence on the Power of Nano-Doses

There is a significant body of conventional scientific research that has verified the powerful biochemical effects of extremely low concentrations of biological agents. Chemicals in the brain called beta-endorphins are known to modulate natural killer cell activity in dilutions of 10<sup>-18</sup> (this dilution means that a substance was diluted 1:10 eighteen times). Interleukin 1, an important part of our immune system, has been found to exhibit increased T-cell clone proliferation at 10<sup>-19</sup>. And pheromones (hormones emitted externally by various animals and insects) will result in hypersensitive reaction when as little as a single molecule is received. (For an excellent review of many substances that have significant biological activity in extremely small doses, see Drs. P. Bellavite and A. Signorini’s *Emerging Science of Homeopathy: Complexity, Biodynamics, and Nanopharmacology*; see also Eskinazi, 1999).

The doses mentioned immediately above are still in the molecular dose range, and as such, they do not in themselves create cause for a revolution in science or medicine. However, few scientists and physicians are knowledgeable of the power and potential of nanodoses commonly used by homeopaths all over the world. This is particularly disappointing because it is commonly observed that organisms experience a biphasic response to various chemicals, that is, extremely small doses of a substance exhibit different and sometimes opposite effects than what they cause in high concentrations. For instance, it is widely recognized that normal medical doses of atropine block the parasympathetic nerves, causing mucous membranes to dry up, while exceedingly small doses of atropine causes increased secretions to mucous membranes (Goodman and Gilman, 2001).

This fact that drugs can have two phases of action, depending upon their concentration, is a little known but consistently observed phenomenon. In fact, many medical and scientific dictionaries refer to “hormesis” or “the Arndt-Schulz law” (listed in leading medical and scientific dictionaries under the word “law”) as the observations that weak concentrations of biological agents stimulate physiological activity, medium concentrations of agents depress

physiological activity, and large concentrations halt physiological activity.

There is a significant body of research on hormesis (hundreds of studies) conducted by conventional scientists, none of whom even mention homeopathy (Stebbins, 1982; Oberbaum and Cambar, 1994). Even the journal, *Health Physics* devoted an entire issue to this subject (May, 1987). For further information on hormesis, [click here](#).

Just as humankind went west to explore new frontiers and is now exploring the frontier of space, today scientists and physicians are exploring nanotechnologies and nanopharmacologies. It is only a matter of time before scientists and physicians learn that homeopathic medicine presents a fertile ground for exploring and exploiting the power of these powerful nanodoses.

### **The Clinical Evidence for Homeopathy**

Before discussing the recent well-controlled and double-blind clinical trials, it is important to make reference to homeopathy's history in order to provide additional evidence for the clinical efficacy of homeopathic nanopharmacology.

Homeopathy first developed a significant popularity in Europe and the United States primarily because of the astounding successes it experienced in treating people suffering from the various infectious disease epidemics in the 19<sup>th</sup> century. The death rates in the homeopathic hospitals from cholera, scarlet fever, typhoid, yellow fever, pneumonia, and others was typically one-half to even one-eighth of conventional medical hospitals (Bradford, 1900; [Coulter, 1973](#)). Similar good results were also observed in mental institutions and prisons under the care of homeopathic physicians compared to those under the care of conventional doctors. These consistent and significant results could not be attributed to a placebo effect. In other words, there is clear empirical evidence that homeopathic medicines were highly effective in treating various infectious diseases and in psychiatric disorders.

Unfortunately, conventional physicians and scientists have continually provided misinformation about the status of scientific evidence about homeopathic medicine. They have frequently and incorrectly asserted that there is no research to prove that homeopathic medicines work, and they further have asserted that there is no way that the extremely small doses can have any effect whatsoever.

This type of statement simply reflects ignorance of the scientific literature. It is remarkable to note that some of the earliest placebo-controlled and double-blinded studies ever performed were actually conducted by homeopathic physicians. For a detailed history of the 19<sup>th</sup> century and early 20<sup>th</sup> century studies, see [The Trials of Homeopathy](#) by Dr. Michael Emmans Dean. For those people who want an excellent summary of this history, it is a part of a special e-book, [Homeopathic Family Medicine](#) (anyone interested in a comprehensive, historical, and up-to-date review of clinical research testing homeopathic medicines would benefit from obtaining and subscribing to this e-book). Another source of modern basic science and clinical research on homeopathic medicine is the [Samueli Institute](#).

A short summary of some of the modern placebo-controlled and double-blind studies is reported below.

An independent group of physicians and scientists evaluated homeopathic clinical research prior to October, 1995 (Linde, 1997). They reviewed 186 studies, 89 of which met

their pre-defined criteria for their meta-analysis. They found that on average patients given a homeopathic medicine were 2.45 times more likely to have experienced a clinically beneficial effect. When reviewing only the highest quality studies and when adjusting for publication bias, the researchers found that subjects given a homeopathic medicine were still 1.86 times more likely to experience improved health as compared with those given a placebo. The researchers have also noted that it is extremely common in conventional medical research for more rigorous trials to yield less positive results than less rigorous trials.

The most important question that good scientists pose about any clinical research is: have there been replications of clinical studies by independent researchers? When at least three independent researchers verify the efficacy of a treatment, it is considered to be a valid and effective treatment.

Four separate bodies of researchers have conducted clinical trials in the use of a homeopathic medicine (**Oscillococcinum 200C**) in the treatment of influenza-like syndromes (Ferley, 1989; Casanova, 1992; Papp, 1998). Each of these trials was relatively large in the number of subjects (487, 300, 100, and 372), and all were multi-centered placebo-controlled and double-blinded (two of the three trials were also randomized). Each of these trials showed statistically significant results. Even the highly respected Cochrane Collaboration acknowledged that these results were "promising" (Vickers, 2007).

One other body of research in the use of *Galphimia glauca* in the treatment of hay fever was replicated successfully seven times, but this research was conducted by the same group of researchers (Wiesenauer, Ludtke, 1996), and thus far, this work has not been conducted by any other researchers.

A body of clinical research in homeopathy that has been consistently recognized as some of the highest quality scientific research has been conducted by a group of researchers at the University of Glasgow and Glasgow Homeopathic Hospital. They conducted four studies on people suffering from various respiratory allergies (hay fever, asthma, and perennial allergic rhinitis) (Taylor, Reilly, Llewellyn-Jones, et al, 2000). In total, they treated 253 patients and found a 28% improvement in visual analogue scores in those given a homeopathic medicine, as compared with a 3% improvement in patients given a placebo ( $P=.0007$ ) (The "P" refers to the "probability" of these results occurring simply by chance, and thus, the lower the number, the greater the likelihood that the treatment used is effective. When "P" equals .05, this means that there are 5 chances out of 100 that the effective of a specific treatment happened by chance, and scientists today consider this 5% chance as adequate evidence of a treatment's effectiveness. In this study, however, there was an extremely high likelihood that the treatment was effective because there were only seven chances out of 10,000 (!) that this result happened by chance.)

In the hay fever study, homeopathic doses of various hayfever-inducing flowers were prescribed, and in the other studies, the researchers conducted conventional allergy testing to assess to which substance each person was most allergic. The researchers then prescribed the 30C (100 -30) of this allergic substance (House dust mite 30C was the most commonly prescribed homeopathic medicine).

The researchers called this type of prescribing "homeopathic immunotherapy," and they concluded from their research that either homeopathic medicines work or controlled clinical

trials do not.

One of the most impressive studies ever conducted testing homeopathic medicines was in the treatment of people with chronic obstructive pulmonary disease (COPD). COPD is a general term for a group of respiratory ailments and is the fourth leading cause of death in the U.S. Chronic bronchitis and emphysema are two conditions that are included in the more broad diagnosis of COPD.

At the University of Vienna Hospital a prospective, randomized, double-blind, placebo-controlled study with parallel assignment was performed to assess the influence of sublingually administered Kali bichromicum (potassium dichromate) 30C on the amount of tenacious, stringy tracheal secretions in critically ill patients with a history of tobacco use and COPD (Frass, Dielacher, Linkesch, et al, 2005). The amount of tracheal secretions was reduced significantly in patients given the homeopathic medicine ( $p < 0.0001$ ). Extubation (the removal of obstructive mucus from the lung with a tube) could be performed significantly earlier in group 1 ( $p < 0.0001$ ). Similarly, length of stay was significantly shorter in group 1 (4.20 +/- 1.61 days vs 7.68 +/- 3.60 days,  $p < 0.0001$  [mean +/- SD]). This data suggest that potentized (diluted and vigorously shaken) Kali bichromicum may help to decrease the amount of stringy tracheal secretions in COPD patients.

Three studies of children with diarrhea were also conducted and published in peer-review scientific journals (Jacobs, Jonas, Jimenez-Perez, Crothers, 2003). A meta-analysis of the 242 children who were involved in these three studies showed that the children who were prescribed a homeopathic medicine experienced a highly significant reduction in the duration of diarrhea, as compared with the children who were given a placebo ( $P=0.008$ ). The World Health Organization has deemed that childhood diarrhea is the most serious public health problem today because several million children die each year as a result of dehydration from diarrhea. The fact that homeopathy is not included in the standard of care for diarrhea in children could be considered malpractice.

One other study is worth mentioning. This study was on 53 patients with fibromyalgia, which is a newly recognized syndrome that includes musculoskeletal symptoms, fatigue, and insomnia (Bell, Lewis, Brooks, et al, 2004). Participants given individually chosen homeopathic treatment showed significantly greater improvements in tender point count and tender point pain, quality of life, global health and a trend toward less depression compared with those on placebo. "Helpfulness from treatment" in homeopathic patients as compared to those given a placebo was very significant ( $P=.004$ ). What is also extremely interesting about this study was that the researchers found that people on homeopathic treatment also experienced changes in EEG readings. Not only did subjects who were given a homeopathic medicine experience improved health, they were shown to experience different changes in the brain wave activity. This evidence of clinical benefits and objective physiological action from homeopathic medicines in people with chronic symptoms constitutes very strong evidence that these nanodoses can have observable effects.

The above body of evidence should be adequate for verifying that homeopathic medicines can have therapeutic benefits, but there is even evidence that these nanodoses can have significant biological activity. One important study was led by a professor of chemistry who was formerly a skeptic of homeopathy (Dr. Madeleine Ennis) but who now recognizes

that these medicines have significant effects (Belon, Cumps, Ennis, et al., 2004). Four independent laboratories, each associated with a university, conducted a series of 3,674 experiments using dilutions of histamine beyond Avogadro's number, by which we mean the dose in which there should be in all probability no remaining molecules of the original substance remaining (the 15th through 19th centesimal dilution, that is 100<sup>-15</sup> to 100<sup>-19</sup>). The researchers found inhibitory effects of histamine dilutions on a type of white blood cell called basophils. The overall effects were substantially significant ( $p < 0.0001$ ). The test solutions were made in independent laboratories, the participants were blinded to the content of the test solutions, and the data analysis was performed by a biostatistician who was not involved in any other part of the trial.

It should be mentioned and even highlighted that the BBC (British Broadcasting Corporation) has a science show called "Horizon" which conducted **a "test" of homeopathy in 2002**. They claimed on air that they were "repeating" Professor Ennis' experiment. However, this television experiment did not get the same results as Ennis' or the other three university laboratories. This "reality TV science" experiment created a tremendous amount of media and suggested that homeopathy didn't work after all.

In 2004, American television's 20/20 program also sought to repeat Ennis' experiment. However, just before the experiment started, the experimenter sent me (Dana Ullman) a copy of his protocol, and I sent it to Professor Ennis. She was shocked to discover that there were several significant differences in this experiment, all of which led to the negative result. For details about these differences, see **Professor Ennis's email** as well as **other evidence** of the serious problems with this television experiment.

Despite knowing prior to the experiment that they were conducting a flawed study and one that was not a "repeat" of any other research that had ever been performed, the 20/20 producer still filmed the study as though it was valid. The narrator of the program noted that "Dana Ullman questioned the design of the study," though they quickly asserted that "their" experts confirmed that the study was well-designed and properly conducted, even though they conducted the wrong experiment.

The website of the **New Scientist**, one of the world's most respected popular science magazines, includes articles it has published on homeopathy, with numerous positive studies and comments from world renowned physicists, chemists, physicians, biologists, and other scientists.

For example, Nobel Laureate and physicist Brian D. Josephson (1997) of the University of Cambridge wrote to the *New Scientist* :

"Simple-minded analysis may suggest that water, being a fluid, cannot have a structure of the kind that such a picture would demand. But cases such as that of liquid crystals, which while flowing like an ordinary fluid can maintain an ordered structure over macroscopic distances, show the limitations of such ways of thinking. There have not, to the best of my knowledge, been any refutations of homeopathy that remain valid after this particular point is taken into account. A related topic is the phenomenon, claimed by Yolene Thomas and by others to be well established experimentally, known as the 'memory of water'. If valid, this would be of greater significance than homeopathy itself, **and it attests to the limited vision of the modern scientific community that, far from hastening to test such**

**claims, the only response has been to dismiss them out of hand.”**

### **Possible Explanations for Nano-Doses**

Precisely how homeopathic medicines work remains a mystery according to present scientific thinking. And yet, despite the paradox of homeopathic medicines, nature and new technologies are replete with striking examples of the powerful effects from extremely small doses.

It is commonly known that certain species of moths can smell pheromones of its own species up to two miles in distance. It is no simple coincidence that species only sense pheromones from those in the same species who emit them (akin to the homeopathic principle of similars), as though they have developed exquisite and specific receptor sites for what they need to survive and to propagate their species. Likewise, sharks are known to sense blood in the water at distances, and when one considers the volume of water in the ocean, it becomes obvious that sharks, like all living creatures, develop extreme hypersensitivity for whatever will help ensure their survival.

It is therefore not surprising that renowned astronomer Johann Kepler once said, “Nature uses as little as possible of anything.”

One metaphor that may help us understand how and why extremely small doses of medicinal agents may work derives from present knowledge of modern submarine radio communications. Normal radio waves simply do not penetrate water, so submarines must use an extremely low frequency radio wave. However, the terms “extremely low” are inadequate to describe this specific situation because radio waves used by submarines to penetrate water are so low that a single wavelength is typically several miles long!

If one considers that the human body is 70-80% water, perhaps the best way to provide pharmacological information to the body and into intercellular fluids is with nanodoses. Like the above mentioned extremely low frequency radio waves, it may be necessary to use extremely low (and activated) doses as used in homeopathic medicines, in order for a person to receive the medicinal effect.

It is important to understand that nanopharmacological doses will not have any effect unless the person is hypersensitive to the specific medicinal substance. Hypersensitivity is created when there is some type of resonance between the medicine and the person. Because the system of homeopathy bases its selection of the medicine on its ability to cause in overdose the similar symptoms that the sick person is experiencing, homeopathy’s “principle of similars” is simply a practical method of finding the substance to which a person is hypersensitive.

The homeopathic principle of similars makes further sense when one considers that modern physiologists and pathologists recognize that disease is not simply the result of breakdown or surrender of the body but that symptoms are instead representative of the body’s efforts to fight infection or adapt to stress.

Using a nanodose that is able to penetrate deeply into the body and that is specifically chosen for its ability to mimic the symptoms that the sick person is experiencing helps to initiate a profound healing process. It is also important to highlight the fact that a homeopathic medicine is not simply chosen for its ability to cause a similar disease that a

person has but for its ability to cause a similar syndrome of symptoms of disease, of which the specific localized disease is a part. By understanding that the human body is a complex organism that creates a wide variety of physical and psychological symptoms, homeopaths acknowledge biological complexity and have a system of treatment to deal with it.

Although no one knows precisely how homeopathic medicines initiate the healing process, there is over 200 years of experience by hundreds of thousands of clinicians and tens of millions of patients that these medicines they have powerful effects. One cannot help but sense and anticipate the veritable treasure-trove of knowledge that further research in homeopathy and nanopharmacology will bring in this new millennium.

## Quantum Medicine

Quantum physics did not disprove Newtonian physics; it simply extended our understanding of extremely small and extremely large systems. Likewise, homeopathy does not disprove conventional pharmacology; instead, it extends our understanding of extremely small doses of medicinal agents.

The founder of homeopathic medicine, Samuel Hahnemann, MD, rewrote and updated his seminal work on the subject five times in his lifetime, each time refining his observations. Homeopaths continue to refine this system of nanopharmacology. While there is not always agreement on the best ways to select the correct remedy or the best nanopharmacological dose to use, the system of homeopathic medicine provides a solid foundation from which clinicians and researchers exploring nanopharmacologies can and should explore.

Samuel Hahnemann is buried in Pere Larchese, the most famous cemetery in Paris, and his tombstone bears the Latin words, “Aude sapere” which means: dare to know, to taste, and to understand. Such is the challenge that homeopathy and nanopharmacology present to us.

A special issue of the *Homeopathy*, the journal of the British Faculty of Homeopathy, was published in July, 2007:

([http://www.elsevier.com/wps/find/journaldescription.cws\\_home/623042/description#description](http://www.elsevier.com/wps/find/journaldescription.cws_home/623042/description#description)). Scientists from the Czech Republic, France, Germany, Italy, Russia, USA as well as the UK present remarkably convergent views from groups using entirely different methods, indicating that large-scale structural effects can occur in liquid water and can increase with time. Such effects might account for claims of memory of water effects. People with a technical background will benefit greatly from this collection of articles. The bottomline is that homeopathic nanodoses do not break any known laws of nature, and in fact, homeopathic nanodoses are verified by present laws of physics and material sciences.

## Resources to Learning about Homeopathy

If homeopathy makes sense to you or if you simply want to learn more about it, you can access an excellent summary of what are the best books for learning different aspects of it by clicking anyone of the subjects below:

## Learning Homeopathy

### The 1st Steps...

- **Introductory** (learn what homeopathy is)
- **Family Medicine** (learn how to use homeopathic medicines for common acute ailments in everyone)
- **Specialized Self-Care** (learn how to use homeopathic medicines in specialized situations)
- **Children's Health Care** (learn how to use homeopathic medicines to treat infants and children—this subject is extremely important!)

### Homeopathic Thinking

- **Philosophy**
- **Methodology**

### The Next Steps...

- **History**
- **Research**
- **Constitutional Types**
- **Materia Medica**
- **Repertories**
- **Clinical Guidebooks**
- **New and Cutting Edge**
- **Software**
- **Audiotapes**
- **Schools and Distance Learning Courses**
- **Study Groups**
- **Beyond Books and Study Groups**

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