Homeopathic Research
Evidence that it Works

• There is actually a lot more scientific evidence that homeopathic medicines work than most people realize. There is certainly strong evidence that homeopathic medicines are more than a placebo.

• Before discussing formal scientific studies, there are other types of evidence and information that homeopathic medicines are biologically active and clinically therapeutic.
New discoveries in the sphere of his activities, which cast the bread-fed scholar down, delight the philosophical mind. Perhaps they fill a gap which had still disfigured the growing whole of his conceptions, or they set the stone still missing in the edifice of his ideas, which then completes it. Even should these new discoveries leave it in ruins, a new chain of thoughts, a new natural phenomenon, a newly discovered law in the material world overthrow the entire edifice of his science, no matter: He has always loved truth more than his system, and he will gladly exchange the old, insufficient form for a new one, more beautiful.
Two thousand years were wasted by physicians in endeavoring to discover the invisible internal changes that take place in the organism in diseases, and in searching for their proximate causes and a priori nature, because they imagined that they could not cure before they had attained to this impossible knowledge. Little as we mortals know of the operations that take place in the interior economy in health - which must be hidden from us as certainly as they are patent to the eye of the all-seeing Creator and Preserver of His creatures - just as little can we perceive the operations that go on in the interior in disturbed conditions of life, in diseases.

From the Introduction to the Organon der Heilkunst 6th Edition
Samuel Hahnemann

1790

Hahnemann translates Cullen's *Materia Medica*, and decides to test Cinchona upon himself.

Cullen had defended the existing medical *opinion* that the efficacy of *Cinchona* was due to its *astringent* and *bitter* qualities, rendering it a “tonic to the stomach”. Cullen writes: “I consider the Peruvian bark ...to be a substance in which the qualities of bitter and astringent are conjoined. ... As we have before shown that these qualities in their separate state give tonic medicines, so it will be readily allowed, that, conjoined together, they may give one still more powerful; ... That the bark [in intermittent fever] operates by a tonic power exerted in the stomach...”
Hahnemann translates Cullen's *Materia Medica*, and decides to test Cinchona upon himself.

I took, for several days, as an experiment, four drams of good china twice daily. My feet and finger tips, etc., at first became cold; I became languid and drowsy; then my heart began to palpitate; my pulse became hard and quick; an intolerable anxiety and trembling (but without a rigor); prostration in all the limbs; then pulsation in the head, redness of the cheeks, thirst; briefly, all the symptoms usually associated with intermittent fever appeared in succession, yet without the actual rigor. This paroxysm lasted from two to three hours every time, and recurred when I repeated the dose and not otherwise. I discontinued the medicine and I was once more in good health.
Over the next six years, Hahnemann continued in a series of experiments, before publishing his observations in the prestigious *Hufeland’s Journal*, in an article entitled:

**Versuch über ein neues Princip zur Auffindung der Heilkkräfte der Arzneisubstanzen, nebst einigen Blicken auf die bisherigen.**

_In Search of a new Principle for Discovering the Curative Powers of Drugs, with some glimpses at those presently employed._
Genus Epidemicus

1799

During the summer of 1799, the last year of his stay in Königslutter, an epidemic of scarlet fever occurred, during which Hahnemann discovered the great value of Belladonna as a prophylactic and in the treatment of this serious disease.
Hahnemann is severely attacked for his use of Belladonna in the treatment of scarlet fever. However, in the year 1838 the Prussian Government ordered the doctors of the country to use Belladonna in small doses against the epidemics of scarlet fever which were very prevalent at that time.
Genus Epidemicus

1800 - 1808

*Aconite* proved to be the specific for a subsequent Scarlatina epidemic sweeping Germany between 1800 and 1808.
Aphorism 108

Therefore there is no other possible way to unerringly experience the peculiar actions of medicines upon the human condition—there is no single, surer, more natural arrangement for this intent than to administer each single medicine experimentally, in a moderate amount, to healthy persons in order to learn what alterations, symptoms and signs of its impinging action each medicine particularly brings forth in the condition of body and soul, that is, what disease elements each medicine is able to and tends to arouse. As has been shown (§24-§27), all of a medicine's curative power lies in its power to alter the human condition; this is illuminated from observation of the human condition.
The year of 1813 was one of triumph for Hahnemann. The contagious typhus fever, the typhus of the camps, prevailed throughout the length of Germany. Hahnemann attended cases of this terrible disease with a success that silenced his critics, and proved the superiority of the new method and of the truth of his principle. From Bradford’s Life and Letter of Hahnemann
Samuel Hahnemann

1814

Hahnemann publishes *Treatment of the Typhus or Hospital Fever at Present Prevailing*. In this work, Hahnemann gives an account of his successes with *Bryonia* and *Rhus toxicodendron*. 
1822
Hering commences his work in order to disprove homœopathy.

But going through Hahnemann's works for the sake of making quotations, he came across the famous 'nota bene for my reviewers' in the preface to the third volume of 'Materia Medica Pura', which said, among other things, "The doctrine appeals not only chiefly, but solely to the verdict of experience - 'repeat the experiments', it cries aloud, repeat them carefully and accurately and you will find the doctrine confirmed at every step' - and it does what no medical doctrine, no system of physic, no so-called therapeutics ever did or could do, it insists upon being judged by the result."
Hering commences his work in order to disprove homœopathy.

Hering decided to accept the challenge. The first step was to repeat the cinchona experiment. The result was what Hahnemann had predicted. Hering began to see the truth in homœopathy. Further study of the homœopathic 'Materia Medica' convinced him about Hahnemann's conclusions. The book against Homœopathy thus never saw the light of day.

Nota bene is an Italian and Latin phrase meaning “note well”. The phrase first appeared in writing circa 1721.
“It has been my rule through life never to accept anything as true, unless it came as near mathematical proof as possible in its domain of science; and, on the other hand, never to reject anything as false, unless there was stronger proof of its falsity.”

Preface, *Hering’s Guiding Symptoms*
Hering wrote, “My enthusiasm grew. I became a fanatic. I went about the country, visited inns, where I got up on tables and benches to harangue whoever might be present to listen to my enthusiastic speeches on homeopathy. I told the people that they were in the hands of cut-throats and murderers. Success came everywhere. I almost thought I could raise the dead.”

Calvin B. Knerr summed Hering up by writing: “I began to suffer under the strain of trying to keep up with the man of iron constitution, who never seemed to tire, or to need time for rest or relaxation.”
Samuel Hahnemann

1830
Beginning of cholera epidemic in Germany

Hahnemann publishes four pamphlets for gratuitous distribution detailing the use of Camphor, Cuprum, and Veratrum for treatment of the epidemic, with recommendations for sanitation and hygiene. The remarkable result of the use of Camphor for prevention, treatment and disinfection, and the successful use of Cuprum and Veratrum for established cases, assured the grateful recognition of Homœopathy throughout Europe. Hahnemann ascribes the cause of the cholera to "infinitely small, invisible living organisms."
1830's
In the 1830s the practice of homoeopathy was illegal in Austria. Despite being illegal, many people used homoeopathy during the cholera epidemic of 1831.
Statistics show that those with cholera who tried homoeopathy had a mortality rate between 2.4 to 21.1%; whereas more than 50% of those with cholera died under conventional treatment.
Cholera Epidemic

Oh Camphora, freezing cold
  The utter chill of you
I've seen you throw the covers off
  Your face an icy blue
When cholera was on the rise
  You earned your claim to fame
'Twas Hahnemann who did prescribe
  And many learned your name
The patients didn't drop as flies
  You shone just like the sun
The allopaths you did surprise
  In 1831
You're good for shock
  You fear the dark
A restlessness indeed
  Where life meets death
With chilly breath
  Your pulse a dying seed
I'll think of you when I see blue
  In those so freezing cold
Who want to be uncovered
  Whose face is wrinkled old
And hopefully before collapse
  The pulse a weakened thread
I'll have the sense to mention you
  Before the ill are dead.
First Masked Placebo Studies

1885
The earliest record of masking and placebo in medicine. The AIH transactions from the late 19th century demonstrates that homœopathic provings incorporated masked studies and the use of placebo more than 40 years before orthodox medicine did.

Double Blind study reveals no effect for homœopathy...

I don't see any effect from homœopathy.
Neither do I.
1971

*Homœopathy in Epidemic Diseases* by Dorothy Shepherd, MD

One of the few books that discusses epidemics and the use of homœopathic prophylaxis in preventing epidemic diseases.
Research Steps

• Identification of research problem
• Literature review
• Specifying the purpose of research
• Determine specific research questions
• Specification of a Conceptual framework - Usually a set of hypotheses
• Choice of a methodology (for data collection)
• Data collection
• Analyzing and interpreting the data
• Reporting and evaluating research
• Communicating the research findings and, possibly, recommendations
Clinical trials are experiments done in clinical research. Such prospective biomedical or behavioral research studies on human participants are designed to answer specific questions about biomedical or behavioral interventions, including new possible treatments.
Blind Experiment

A **blind** or **blinded experiment** is an experiment in which information about the test is kept from the participant. Bias may be intentional or unconscious. If both tester and subject are blinded, the trial is a **double-blind** experiment.
Placebo Groups

Merely giving a treatment can have nonspecific effects. These are controlled for by the inclusion of patients who receive only a placebo. Subjects are assigned randomly without informing them to which group they belonged. Many trials are doubled-blinded so that researchers do not know to which group a subject is assigned.
Randomized Control Trial

A randomized controlled trial (or randomized control trial; RCT) is a type of scientific (often medical) experiment, where the people being studied are randomly allocated one or other of the different treatments under study. The RCT is considered the gold standard for a clinical trial.
Cohort Study

A cohort study is a form observational study used in medicine. It is an analysis of risk factors and follows a group of people who do not have the disease, and uses correlations to determine the absolute risk of subject contraction. It is one type of clinical study design and should be compared with a cross-sectional study. Cohort studies are largely about the life histories of segments of populations, and the individual people who constitute these segments.
Cross-Sectional Study

In medical research and social science, a cross-sectional study (also known as a cross-sectional analysis, transversal study, prevalence study) is a type of observational study that involves the analysis of data collected from a population, or a representative subset, at one specific point in time—that is, cross-sectional data.
Meta Analysis

**Meta-analysis** is a statistical technique for combining the findings from independent studies. **Meta-analysis** is most often used to assess the clinical effectiveness of healthcare interventions; it does this by combining data from two or more randomized control trials.
Homœopathic Research

1988

The “implausibility” myth was recently debunked by Professor Rustum Roy during an internationally televised debate at the University of Connecticut. “We don’t have a ‘Law of Implausibility’ in science,” he said. “If we did, science and its fruit, technology, would have ground to a halt long ago. Cars would not drive and planes would not fly.”
Iris Bell, MD, PhD, is a psychiatrist, university professor, and has been a researcher in areas related to complementary and alternative medicine for 30 years. She was chosen as one of the Best Doctors in the Pacific region of the US in 1996 and in the US in 1998. Dr. Bell has served on the faculties at Harvard Medical School, University of California San Francisco, and the University of Arizona. She graduated magna cum laude in biology from Harvard University and then received her PhD in Neuro and Biobehavioral Sciences and MD from Stanford University.
Dr. Luc Montagnier
The April 20-22, the JAHC 2012 Conference convened an historic event: Over the exciting 3-day weekend, eminent speakers from around the world presented compelling evidence from both laboratory and clinic, that homœopathy has fully proven itself and rightfully deserves its standing as one of the world’s most widely chosen systems of medicine. **Featured Speaker: Nobel laureate and co-discoverer of HIV, Dr. Luc Montagnier.**
TRANSDUCTION OF DNA SEQUENCES FROM PATHOGENIC MICROORGANISMS THROUGH HIGH DILUTIONS OF WATER

Luc Montagnier, Washington, April 21, 2012
A new technology for detecting bacteria and viral DNA's

Based on the production of electromagnetic waves
I – DNA’s emit EMS
II – EMS are produced by water nanostructures (naneons)
III – EMS are producing naneons
IV – Naneons and EMS carry specific DNA information
Capture of the signals

Sample

Sensor coil

X 500

Amplifier

Signal Analysis software

Computer
Properties of the structures in water at the origin of EMS

The ULF signals are produced in water by nanostructures (naneons) whose size is proportional to that of the micro-organism from which they are derived.

a) For classical bacteria, between 100 and 20 nM (retained by 20nM, not retained by 100nM filters)

b) For mycoplasma, L forms and large viruses: naneons are present in both 100nM and 20nM filtrates (more in 20nM filtrates for viruses)

c) For small viruses (which pass through 100nM filters): naneons are only present on 20 nM filters

Their titer is calculated from the highest positive dilution.
Nanoparticles

Does Water Have Memory?

REMEMBER THE TIME WHEN WE GOT POLLUTED IN CHICAGO?

How could I FORGET?!!
Nanopharmacology

There is also a significant body of conventional scientific research that has verified that various extremely low concentrations of biological agents can exhibit powerful biochemical effects in very low concentrations. Beta-endorphins are known to modulate natural killer cell activity in dilutions of $10^{-18}$. Interleukin 1, an important part of our immune system, has been found to exhibit increased T-cell clone proliferation at $10^{-19}$. And pheromones, which are externally emitted hormones that various animals and insects are known to create, will result in hypersensitive reaction when as little as a single molecule is received (scientists have no way at present to assess the effects of less than a molecule).
How Many Scientist Know?

These doses 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 “nanopharmacological” doses. 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, 1975).
The Arndt-Schulz law

This observation that drugs can have two phases of action, depending upon their concentration, is a little known but rarely questioned observation. In fact, many medical and scientific dictionaries refer to “hormesis” or “the Arndt-Schulz law” (listed under “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.

![Diagram](image-url)
There is also 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). Most recently, the respected journal, *Human and Experimental Toxicology* (July, 2010), published an entire issue on the link between homeopathy and hormesis: [http://het.sagepub.com/content/vol29/issue7/](http://het.sagepub.com/content/vol29/issue7/)
Nanoparticles

New high tech research in 2010 has confirmed that the 6C, 30C, and 200C potencies have evidence of the original molecular structure in their solutions (Chikramane PS, Suresh AK, Bellare, 2010). Using market samples of metal-derived medicines from reputable manufacturers, scientists at the Department of Engineering at the Indian Institute of Technology have demonstrated for the first time using Transmission Electron Microscopy (TEM), electron diffraction by Selected Area Electron Diffraction (SAED), and chemical analysis by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES), the presence of physical entities in these extreme dilutions in the form of nanoparticles of the starting metals and their aggregates. These modern technologies found a similar number of nanoparticles of each of the six metals tested at the similar amount in ALL of the potencies!
Water Memory

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 nano doses.
Systematic Memory Hypothesis

One of the most simple yet sophisticated explanations for how homeopathic doses maintain an active biological effect has been developed by two professors at the University of Arizona, Drs. Gary Schwartz and Linda Russek, and further characterized by two MD/homeopaths, Iris Bell, MD, PhD and David Riley, MD. They postulate the “systematic memory hypothesis” (Schwartz and Russek, 1999; Schwartz, Russek, Bell, Riley, 2000). They assert that the water retains a memory of the medicinal substance, even after repeated dilutions. Further, they postulate that information and energy (IE) is stored in complex dynamical systems and that “By reducing the material concentration (the physical dosage) of molecular systems in a diluent (such as water) and at the same time increasing the IE concentration (the IE dosage) in the diluent through repeated succussions (vigorous shakings) leading to increased systemic memory, IE resonance effects may be enhanced” (Schwartz, Russek, Bell, Riley, 2000).
The concept of memory is actually not without precedence and acceptance within chemistry. Martin Chaplin, PhD, CChem, professor at South Bank University (London) notes: “There is a similar strange occurrence to homeopathy in enzyme chemistry where an effectively non-existent material still has a major effect; enzymes prepared in buffers of known pH retain (remember) those specific pH-dependent kinetic properties even when effectively dry; these molecules seemingly having an effect in their absence somewhat against common sense at the simplistic level. Water does store and transmit information, concerning solutes, by means of its hydrogen-bonded network. Changes to this clustering network brought about by solutes may take some time to re-equilibrate. Succussion may also have an effect on the hydrogen bonded network (shearing encourages destructuring) and gaseous solutes (with critical effect on structuring (Chaplin, 2002).”
Biophysical Difference

Another basic science experiment that has provided evidence that there is a biophysical difference between a homeopathic medicine and a placebo was a well-controlled study using gas discharge visualization (Bell, Lewis, Brooks, et al., 2003). Researchers at the University of Arizona applied a brief electrical impulse at four different voltage levels to both homeopathic medicine and placebos. The resultant burst of electron-ion emission and optical radiation in the visual and ultraviolet ranges were measured. The researchers found that at the two highest voltage levels (17 kV and 24 kV) the image values of the homeopathic medicines were significantly different than that from the placebos.
Thermoluminescence

One study tested the thermoluminescence on nanopharmacological doses of specific substances, notably lithium chloride and sodium chloride, in water with deuterium oxide (Rey, 2003). A Swiss physicist bathed a chilled sample with radiation and then observed a pattern of light that reflects the sample’s atomic structure and that is released when the sample is warmed. Lithium chloride was chosen because it suppresses hydrogen bonds, and the authors theorized that thermoluminescence is dependent upon the hydrogen-bond network.
Different Hydrogen Structures

The researchers found that after repeated experimentation the 15C potency of lithium chloride and sodium chloride had substantially different thermoluminescence glows. Compared with pure water, the homeopathic doses of lithium and sodium chloride solutions had substantially different thermoluminescence peaks in their measurement of light emitted. Although the structure of hydrogen bonds in pure water should be the same as those in the homeopathic dilutions of lithium and sodium chloride, this research showed that the hydrogen structures are actually quite different from each other.
Hydrogen Bonds

Ultimately, this important study verifies that solutions that are made through the homeopathic pharmaceutical process of dilution and succussion (vigorous shaking) have an effect on hydrogen bonds. This study confirms that water can be imprinted with molecular information that is different from simple pure water.
Water Structure

The scientific field of “material sciences” is a specialty area that integrates the newest research from physics, chemistry, and engineering. Rustum Roy, PhD (the head of the material sciences lab at Penn State that the Information Science Institute has ranked as the BEST in the world), William Tiller, PhD (the former chairman of the department of material sciences at Stanford University), Iris Bell, MD, PhD (the research director of the Program in Integrative Medicine at the University of Arizona), and M.R. Hoover, PhD (Assistant Professor, Materials Research Institute, Penn State) wrote an important article and editorial asserting that conventional scientists have long assumed that homeopathic medicines contain nothing, but they have ignored how the STRUCTURE of water can be changed by pressure applied through the process of succussion (vigorous shaking used in the making of these medicines). They assert, "the single argument used against homeopathy, that because there are no molecules of the remedy left in the final product it cannot be different, is completely negated" (Roy, Tiller, Bell, Hoover, 2005).
The authors refer to a well-known but inadequately appreciated phenomenon called EPITAXY. They write: "Epitaxy is the transmission of structural information from the surface (hence "epi") of one material (usually a solid) to another (usually a liquid). Subtleties of terminology appear in various papers, but it is 'information' that is definitely transferred. No matter is transferred, hence 'concentration above or below Avogadro's limit' is actually totally irrelevant."
Water Remembers

The work of P.W. Bridgman, a Nobel Prize-winning physicist (1946) and professor at Harvard, is revealing. He wrote several books, including the *The Physics of High Altitudes*. Bridgman researched the effects of freezing water at various altitudes and found that freezing water at higher altitudes created different ice crystallization patterns than at lower altitudes. And yet, when he melted the ice that was frozen at a high altitude and then refroze it at a low altitude, the ice maintained the crystallization pattern of the higher altitude.
Homeopathy vs. Placebo

1) Homeopathic medicines are commonly effective in treating acute and chronic conditions in various animals, often times providing dramatic results. While animals can be influenced by tenderness and love, it is unlikely that they would receive the same impressive results that veterinarians and others using homeopathic medicines obtain.

2) Homeopathic medicines are commonly effective in treating infants. Infants are also susceptible to a placebo effect, but once again, the dramatic results that are experienced using homeopathic medicines to treat teething or colicky infants or those suffering from a raging ear infection are rarely experienced with a simple placebo.

3) Approximately 20% of people with chronic diseases who are prescribed homeopathic medicines experience a healing crisis; that is, they temporarily experience an exacerbation of certain symptoms prior to a significant improvement in their chronic disease and their overall health. It is rare for people who are given a placebo to have experienced this frequency of initial worsening of symptoms prior to improvement.
Review of the Literature

Boericke and Tafel publishes Thomas Bradford’s Logic of Figures

The Logic of Figures statistically demonstrates the superiority of Homœopathic treatment over allopathic treatment in a variety of conditions prevalent during the early to late 1800s in the United States of America, especially focusing on epidemic diseases.
Homœopathic Hospitals

1904 - ?
Allentown State Homœopathic Hospital
Homœopathic Hospitals

1904 - ?
Homœopathic State Hospital, Allentown, Pennsylvania

1,429 beds. 7 homœopaths, 2 allopaths. The State hospital was entirely homœopathic by legislative enactment. The hospital originally opened in 1904. As of 1997 the hospital was still operating as a psychiatric hospital. There is no record as to when the practice of homœopathy ceased.
Homoeopathic Hospitals

1904 - 1940s
Norwich State Hospital
Homœopathic Hospitals

1904 - 1940s
Norwich State Hospital, Norwich, Connecticut

2,652 beds.
6 homœopaths,
Homœopathic Research

1994

Pediatrics publishes Dr. Jennifer Jacobs' successful clinical trial of homœopathy for diarrhea in Nicaraguan children. This is the first time that a clinical trial of homœopathy is published in any of the conventional medical journals from the United States.
Homœopathic Research

1994

*The Lancet* publishes Dr. David Reilly's research supporting effectiveness of homœopathy in different allergic conditions.

Does Homœopathy work? Have a look at the two scatter plots below - one shows 100 conventional trials, the other 110 homœopathic trials. If the oft repeated statement “There is no evidence for homœopathy” is true, then one set of dots should show this (dots to the left of the vertical dotted line are showing an effect greater than placebo). Do you think both show evidence of effect, or is it clear one set of data worked and the other did not? Most meta-analyses have said “yes” to both sets. But in 2005 Shang et al went on to say “no” to homœopathy - based only on their small sub-group sub-analysis on 8 homœopathy and 6 orthodox trials of their choosing. An accompanying high-profile editorial suggested “The end of homœopathy”. In synchrony, some campaigners targeted removal of homœopathy from the UK health service “because there is no evidence” What do you think?
Homoeopathic Research

110 conventional vs 110 Homoeopathic trials.

"finding is compatible with the notion that the clinical effects of homoeopathy are placebo effects."


Lancet Editorial (Anonymous)

“The End Of Homoeopathy”

Odds ratio <1

"indicates beneficial intervention"
Homœopathic Research

1997

*The Lancet* publishes a meta-analysis of over 89 studies showing that homœopathy is 2.45 times more effective than placebo.
Clinical Studies

In the light of clinical studies, a team of German and American physicians and scientists published in *The Lancet* a review of 89 clinical studies (Linde, 1997). They found that on average those patients given a homeopathic medicine were 2.45 times more likely to experience a positive result than those given a placebo. This review of research evaluated various experiments that tested the efficacy of homeopathic remedies in the treatment of hay fever, asthma, migraine headache, ear infection, upper respiratory infection, rheumatoid arthritis, diarrhea, indigestion, influenza, childbirth, post-surgical complications, varicose veins, sprains and strains, amongst many others.
In addition to double-blind, placebo-controlled research, there is also a body of outcomes research evaluating consecutive cases of patients suffering from specific conditions. One international study involved 30 clinicians in 6 clinics in 4 countries who enrolled 500 consecutive patients with upper respiratory tract complaints, lower respiratory tract complaints, or ear complaints (Riley, Fischer, and Singh, 2002). 82.6% of patients receiving homeopathic care experienced improvement, while only 68% of those receiving a conventional medication experienced a similar degree of improvement. 67.3% of homeopathic patients experienced improvement with homeopathy within 3 days, while only 56.6% of patients given conventional medicines experienced improvement (16.4% of homeopathic patients improved within 24 hours; 5.7% in other group). In both treatment groups, 60% of patient visits lasted 5-15 minutes. 84% of homeopathic patients received no conventional drugs, suggesting that homeopathy is usually a substitute for conventional drugs, not an adjunctive treatment.
Prospective Cohort Study

In a prospective, multicenter cohort study was conducted with 103 primary care practices with medical doctors who were certified in classical homeopathy in Germany or Switzerland. Data from all patients (age > 1 year) consulting the physician for the first time was observed. The main outcome measures were: Patient and physician assessments (numeric rating scales from 0 to 10) and quality of life at baseline, and after 3, 12, and 24 months. A total of 3,981 patients were studied including 2,851 adults and 1,130 children. The most frequent diagnoses were allergic rhinitis in men, headache in women, and atopic dermatitis in children. The average severity of the chronic diseases was reduced by approximately 50% after 3 months of homeopathic treatment, and it maintained this level of improvement throughout the study. Physicians’ assessments yielded similar results. For adults and young children, major improvements were observed for quality of life, whereas no changes were seen in adolescents. Younger age and more severe disease at baseline were factors predictive of better therapeutic success.
Another clinical outcomes trial was conducted at the Glasgow Homeopathic Hospital (Reilly, 2003). They have conducted a rigorous system of patient feedback from 1,348 consecutive patients, all of whom filled out a survey in which the patients rated the results they received on a +4 to a −4 score. +4 = Cured/daily living is back to normal; +3 = Major improvement (that has a major effect on daily living); +2 = Moderate improvement (that has an effect on daily living); +1 = Slight improvement (but no effect on daily living). The negative numbers represent the same gradation of symptoms but with a worsening degree of limitations to daily living.
Glasgow Homeopathic Hospital

According to the survey through early 2003, 76% of the 1,348 patients experienced a 2 or greater level of improvement of their health. Of the additional 197 patients lost to follow-up, 66% of them still had an impressive 2 or greater level of improvement from their last contact with the hospital. Of those patients who experienced a chronic disease, an impressive 69.3% experienced a +2 of greater level of improvement in their health.
Royal London Homeopathic Hospital

A survey at the Royal London Homeopathic Hospital evaluated 541 questionnaires that were given to adult outpatients who had at least three visits, 506 of which were returned, and 499 analyzed (Sharples and van Haselen, 2000). 63% had had their main problem for more than 5 years. 80% reported that their main problem had very much, moderately or slightly improved, and 90% were satisfied or very satisfied with their care. Of the 262 patients who were using a conventional drug, 76 (29%) had stopped and 84 (32%) had decreased their usage since receiving homeopathic care.
In addition to a wide range of clinical studies, there is an even larger number of basic science trials that have been conducted testing homeopathic medicines. The HomBRex database includes details of about 1,500 basic research experiments in homeopathy. A general overview on the experiments listed in the HomBRex database is presented, focusing on high dilutions and the different settings in which those were used. Though often criticized, many experiments with remedies diluted beyond Avogadro's number demonstrate specific effects. **A total of 830 experiments employing high potencies was found; in 745 experiments of these (90%), at least one positive result was reported.** Animals represent the most often used model system (n=371), followed by plants (n=201), human material (n=92), bacteria and viruses (n=37) and fungi (n=32). Arsenicum album (Ars.) is the substance most often applied (n=101), followed by Sulphur and Thuja (n=65 and 48, respectively). Proving, prophylactic and therapeutic study designs have all been used and appear appropriate for homeopathy basic research using high dilutions.
Bad Studies
Lancet “meta-analysis”

The *Lancet* published a “meta-analysis” of 110 homeopathic studies and sought to compare them with a “matched” group of 110 studies testing conventional medications (Shang, et al, 2005). All of these studies were clinical trials using a placebo. Although the idea of comparing studies might have been a good idea, the way that this group of researchers conducted this comparison is a real embarrassment to the definitions of “science” and “meta-analysis,” and it is shocking that the Lancet would publish this extremely highly questionable comparison.
Lancet “meta-analysis”

Finding a “matched” set of clinical trials is extremely challenging because it is hard to find studies that are really comparable. The fact that this group of researchers was led by a professor (M. Eggers) who is a known antagonist to homeopathy already biased the study, but his and his teams actions added to this problem. First, the team decided correctly to only evaluate those studies that met certain criteria for “high quality” scientific investigations. They found that 21 of the homeopathic studies fit this definition but only 9 of the conventional studies did so. Ultimately, the researchers did not provide any analysis of this group of higher quality studies, and in fact, they didn’t even provide a list of which studies were included or excluded from their list (in scientific circles, such actions are considered highly suspect and are a part of most researchers definitions of “low quality” research). These researchers instead choose to evaluate only those high quality studies that tested “large” numbers of patients. Because all of the larger studies that tested homeopathic medicines do not individualize homeopathic treatment to the patient but instead use a one-medicine-fits all approach, this comparison set homeopathy up to fail.
A Critique of the Lancet

For a detailed critique of this study, see the December 17, 2005, issue of the *Lancet*. The esteemed physicians and researchers, Dr. Klaus Linde and Wayne Jonas even asserted that the Lancet should be “embarrassed” by the editorial they published along with the article (Linde, Jonas, 2005).

New re-analyses of the same data has found different interpretations that are considerably more positive towards beneficial effects from homeopathic medicines (Lüdtke, Rutten, 2008; Rutten, Stopler, 2008).

Further critique of the paper noted that they omitted certain high quality studies in homeopathy (was it a coincidence that the vast majority of these omitted studies had a positive result?), how they defined what is “high quality” is open to question (initially, the authors didn’t even report which studies were defined as “high quality,” and today, there is no clarity on the point score for each study), their decision to never evaluate or compare all of the “high quality” studies (the authors assert that high quality randomized, double-blind and placebo controlled studies are actually “biased” unless they are over 98 subjects in homeopathic studies but magically conventional medical trials are only biased if they are under 146 subjects).
The Swiss government has a long and widely respected history of neutrality, and therefore, reports from this government on controversial subjects need to be taken more seriously than other reports from countries that are more strongly influenced by present economic and political constituencies. When one considers that two of the top five largest drug companies in the world have their headquarters in Switzerland, one might assume that this country would have a heavy interest in and bias toward conventional medicine...but such assumptions would be wrong.
Government Truth?

In late 2011, a comprehensive report on homeopathy was formerly commissioned by the Swiss government, and it represents the most comprehensive evaluation of homeopathic medicine ever written for a government. In 2011, it was published in book form in English (Bornhoft and Matthiessen, 2011). This report determined that homeopathy is both effective and cost-effective and that treatment should be reimbursed by the national health insurance program.
Conventional vs. Homeopathic

Most studies testing homeopathic medicines test them against a placebo, while only a small number have compared homeopathic and conventional medicines. One of the problems when such studies are conducted is that they usually evaluate clinical care over a relatively short period of time and are not able to adequately evaluate the long-term side effects that are known from conventional drugs. Also, such studies tend to evaluate only a specific disease or symptom rather than the overall improvement in a person’s health. Just because a conventional drug can effectively suppress a specific symptom does not necessarily mean than it is “more effective” than a homeopathic medicine that provides a therapeutic benefit for a smaller percentage of people (but sometimes for a longer period of time).