



**SELINUS UNIVERSITY**  
OF SCIENCES AND LITERATURE

**HOMEOPATHY – A DILEMMA FOR  
CONTEMPORARY MEDICINE**  
**A quantum therapy misunderstood**

By Dr Elke Helene Browne

2022

## Declaration

I do hereby attest that I am the sole author of this research paper/dissertation titled: “Homeopathy – A Dilemma for Contemporary Medicine”, submitted for the Award of Doctor of Philosophy (Ph. D) in Homeopathy to the Faculty of Natural Health Science, Silenus University of Science and Literature, is my original work.

I do hereby attest that the contents are the result of the readings and research I have undertaken, and the professional experience I have acquired over the past 23 years as a practicing Homeopath.

I hereby declare that all the information in this research was obtained and presented in accordance with academic rules and ethical conduct. All the materials, various schools of thoughts and other academics consulted and are so quoted in these research work and dissertation are fully and duly acknowledged.

Date: October 2022

Dr Elke Helene Browne



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I dedicate this dissertation to my life partner, soul mate and husband of over 30 years who contributed to my studies, work and research by providing quality assurance, a listening ear, and great discussions. He has always shown encouragement and belief in my abilities, and provided his scientific skills, knowledge and his never-failing love, for which I am eternally grateful.

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Date: 2022



Signature Dr Elke Browne

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## Abstract

**Background:** Homeopathy, a more than 225-year-old medical system based on the axiom that 'likes-cures-like' and consisting of revitalized potencies of natural substances in ultra-high dilution, was founded by the German Doctor Samuel Hahnemann in 1796. Since its inception, Homeopathy has divided the medical/scientific and homeopathic community; its efficacy often explained away by the placebo effect only. The main objection by the scientific community against Homeopathy is the fact that in ultra-high dilutions no trace of the original substance or mother tincture is left. Yet, allopathy already uses energetic therapies such as radiation, light therapy and UV therapy, all of which work on the transfer of electromagnetic frequencies and do not contain any pharmaceutical or chemical substances.

**Aim:** This dissertation aims to explain that a homeopathic remedy, carrying specific information about the electromagnetic field of the original substance, can affect biochemical processes in the cellular aspects of a patient, without the need for molecules of the mother tincture to be present in the remedy. It presents a quantum physics approach to Homeopathy with the premise that each atom, molecule, or even complex set of molecules has a range of associated electromagnetic frequency characteristics. The precise frequency signatures of homeopathic substances in high dilutions can be shown to be transferred to Oxygen-Hydrogen (OH) bonds in a liquid (H<sub>2</sub>O/Ethanol) via the process of succussion or dynamization as identified in this research.

**Conclusion:** As this dissertation portends, different potencies of homeopathic dilutions can be differentiated from each other and from their diluent medium of aqueous ethanol with the latest analytical techniques such as NMR, FTIR, UV, IR and Raman Spectroscopy. Homeopathy therefore incorporates the principles of both physics - specifically quantum physics, the study of energy at the basis of all so called 'matter', and chemistry – specifically valence electron-electron cloud interactions. The research in this dissertation concludes that Homeopathy is an electromagnetic frequency transfer model containing quantum information of the initial substances or mother tinctures, which can balance the distorted energy frequencies in the cells at the sub-atomic level to bring about homeostasis.



## Materials and Methods

The method of research employed in this dissertation is informed by the hypothesis that Homeopathy is a valid complementary therapy with its *modus operandi* in quantum physics, whilst still very much misunderstood by contemporary medical science. A controversy exists between homeopathic principles of application and the contemporary medical or allopathic establishment. This controversy has been widened the gap between common Newtonian scientific understanding of separation, reduction and mechanics and the relatively new science of quantum physics, quantum field theory (QFT), quantum electrodynamics (QED), and quantum biology/chemistry in explaining the holistic effects of homeopathic medicines on the organic life form.

This dissertation addresses this problem by presenting a relatively recent scientific concept to understand the workings of Homeopathy and aims to close the gap in knowledge of how Homeopathy affects the organism within the paradigm of holistic medicine on the one hand, and the unwillingness of researchers and medical practitioners to overcome scientific bias and scientific hubris towards the science of Homeopathy on the other hand.

Zukauskas, *et al*, 2018, stipulated that to undertake research ethical constructs need to be established, which lead to aspects of social responsibility. According to Zukauskas, research ethics considers the researcher's philosophy, his/her value proposition, any bias and preconceived perceptions and ideas, and the relationship that has been forged between the researcher as a human being and the outcomes of the research undertaken. These aspects are intrinsically linked, and research ethics can be understood as an integral part of professional ethics, honesty, professional competency and legitimacy, respect for intellectual property and responsible citation. The research philosophy deployed in this dissertation considers a system of philosophy and scientific consideration that is applied to obtain an unbiased and scientifically reliable knowledge base.

The methodology used determines to understand and evaluate the problem or hypothesis, followed by collecting and analyzing the data or results in a logical and easy to follow manner (Zukauskas, *et al*, 2018). This paper endeavours to present

appropriate philosophical, theoretical and scientific justification for the interpretation of the findings, observations, and conclusion free from any personal biases.

**Problem or hypothesis of the research:** Homeopathic medicine is a valid complementary therapy with more than 225 years of clinical observations, whilst still very much misunderstood by contemporary medical science. A controversy exists between homeopathic principles of application and the contemporary medical or allopathic establishment.

**Object of the research:** To present the *modus operandi* of homeopathic medicine through scientific research and application of its principles in quantum physics, quantum chemistry, Quantum Field Theory (QFT) and quantum biology terms, and through selected clinical studies with the aim to show that sceptics of this science do not understand the governing principles nor the biochemical frequency interactions of homeopathic preparations.

**Purpose of the research:** Defining Homeopathy as a valid complementary medicine, and to explain its mode of action via correct application of scientific research and analytical techniques in the context of homeopathic principles.

**Important aspects of the research:**

- to define the fundamental principles of Homeopathy; and
- to present a scientific case for the application of Homeopathy as a valid treatment modality via recent research on the quantum aspect of homeopathics.

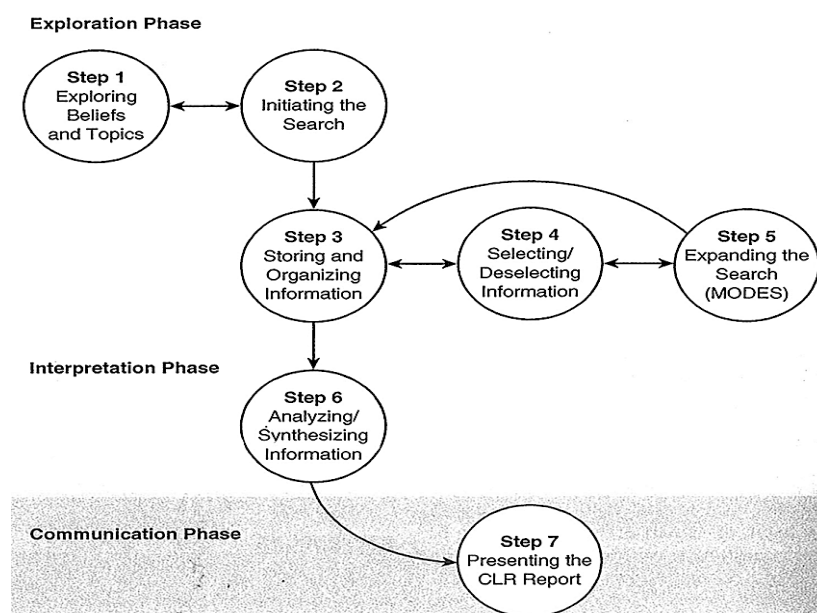
**Inclusions/exclusions of the research:** Scientific research used for the literacy review is to be capped between the years of 2000 to 2022. Textbooks and other material can be included if the publication date is older. Search engines and journals employed included: Nature, PubMed, Homeopathy, Cochrane, PsychInfo, Thiese, CINAHL, Medline, Embase, National Library for Medicine, NCCIH, Imepub, Homeobook, Sciencedirect, NCBI, The Scientist, Primo, Researchgate, the Scientific Society for Homeopathy (WissHom) Germany, and NHS.

**Methods of the research:** The research is prepared by using the methods of analysis and synthesis of academic, professional and scientific literature. The author employed the seven steps for a comprehensive literature review, as follows:

- Step 1: Exploring Beliefs and Topics – Setting the goal for the research.
- Step 2: Initiating the Search – Employing search engines, scientific journals, Homeopathic textbooks, Homeopathic research books, selected case studies.
- Step 3: Storing and Organizing Information – Systematic storing of downloaded and cited information in appropriate and linear order.
- Step 4: Selecting/Deselecting Information – Reading and studying research articles, books, and case studies for their appropriateness and effectiveness to support and underlay the argument set out in this paper.
- Step 5: Expanding the Search – Collating websites, videos and former research on this topic.
- Step 6: Analyzing and synthesizing the information collected.
- Step 7: Presenting this dissertation paper in chronological and logical order.

The methodology of this paper further sets out to present recent qualitative research that focuses on examining the topic of homeopathic principles via age-old practices, cultural phenomena, human behaviours and belief systems through several case studies and clinical trials of homeopathic medicines for common and uncommon ailments drawn from journal papers, case studies of experienced Homeopaths, and phenomenology of clinical practice of the author.

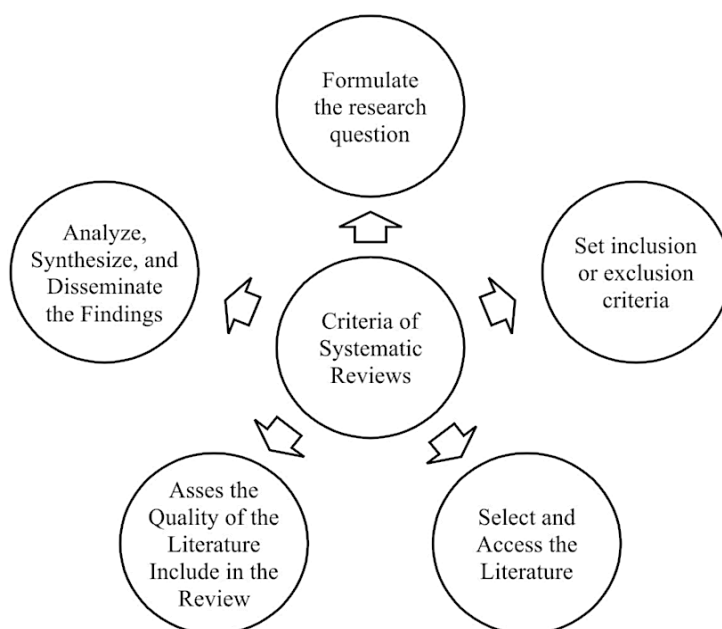
**Figure 1: Seven Steps of a Literature Review**



Onwuegbuzie, *et al*, 2010

This dissertation also includes quantitative research involving empirical investigation of observable and measurable outcomes, variables and limitations in homeopathic research into the quantum interaction of homeopathically prepared medicines and the organic cellular systems via recently conducted and published Random Controlled Trials (RCTs) sourced across the globe. The RCTs are judged on the methods for research design, their analysis and the outcomes. The strength, validity and reliability of the scientific research results depend on the quality of research undertaken, the veracity of data collected and analysed, and a subsequent conclusion drawn.

**Figure 2: Criteria for a Comprehensive Literature Review**



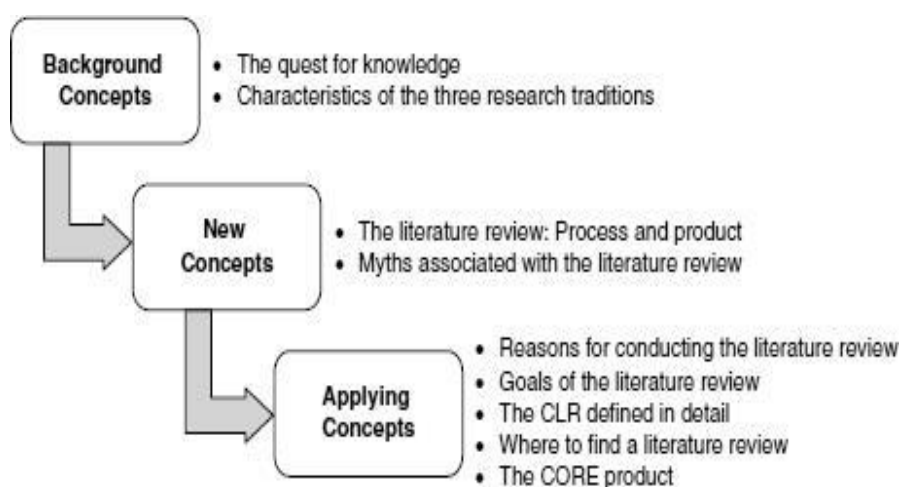
[https://www.researchgate.net/figure/Criteria-used-to-systematic-review\\_fig1\\_311735510](https://www.researchgate.net/figure/Criteria-used-to-systematic-review_fig1_311735510)

The main methodology in this paper is undertaken via an extensive or comprehensive literature review (CLR) that synthesizes available scientific research findings to show evidence on a meta-level that identifies the efficacy of homeopathic medicines and uncover areas in which more research and improved RCT sophistication and application is needed. The CLR is undertaken in three phases:

- Exploration phase.
- Interpretation phase.
- Communication phase.

The exploration phase sets out the background of the research, what is known and understood of the subject and what query or hypothesis is proposed. The exploration phase is important to the reader for context of the research. The interpretation phase includes the main body of the study. It allows the researcher to collect, collate and analyze the literature and to formulate the defence of the dissertation. The communication phase includes the presentation of the findings in a logical sequence and provides discussions and conclusions (Onwuegbuzie, *et al*, 2010).

**Figure 3: Methodology of the CLR**



Onwuegbuzie, A. J., and Frels, Rebecca, 2016

According to Onwuegbuzie, *et al*, 2010, “a literature review in its most comprehensive form includes a synthesis of quantitative findings stemming from quantitative research studies and qualitative findings stemming from qualitative research studies. Synthesizing both quantitative and qualitative findings within the same literature review automatically renders the literature review process as a mixed research study”. In this wide-ranging desk top review, the author conceptualized the project, planned the activity, implemented the research, analysed the findings, and disseminated the paper. The research has been crucial in triangulating the author’s professional experiences with other professionals, but also in supporting this work with formal and scientific data that has, up to now, been overlooked by sceptics of this healing science. The project used multiple sources to draw together evidence and expertise in the field of research, philosophical and epistemological beliefs and assumptions, ontological constructions of perceived reality, and axiological aspects of research applications within the context of a positivist approach.

## Research Credentials

The researcher and author of this dissertation is a Homeopath with more than 23 years clinical experience in Australia, and has lectured in Human Health Sciences, Homeopathy and Biochemistry for more than six years at a Technical College in Australia. The researcher and author has 22 years' experience in executive, management and leadership level positions in Australian State Governments.

### Scientific credentials

- Diploma in Homeopathy, Australasian College of Hahnemannian Homeopathy.
- Bachelor of Health Science in Complementary Medicine, Charles Sturt University, Australia.
- Bachelor of Science in Homeopathy, Bircham International University, Spain.
- Masters in Metaphysical Science (Cum Laude), Thomas Francis University, USA.
- Doctor of Philosophy in Metaphysical Humanistic Science (Suma Cum Laude), Thomas Francis University, USA.

The author is a certified Counsellor and Hypnotherapist and is a life-time member in good standing of the International Church of Metaphysical Humanism. The author is a member of:

- International Metaphysical Practitioners Association.
- Australian Traditional Medical Society.
- International Institute of Complimentary Medicine.

The researcher is a published author of two books available on amazon.com.

### Website

<https://drbrowne.com.au>

**Conflict of Interest:** None declared

## Part One - Introduction

Since its inception in Germany in 1798, Homeopathy, as a medical model, has divided both the scientific and non-scientific community. There seems to be only two phenotypes (the term is used here in a non-medical sense):

- phenotype A – patients and medical professionals that have used Homeopathic remedies with beneficial results and hence are proponents of the modality; and
- phenotype B – sceptics that consider Homeopathy is not a valid treatment modality as homeopathic remedies do not contain any active pharmaceutical substance and can therefore only be placebo.

On the surface, there are numerous reports on either side of the fence. For every scientific research project that stipulate the benefits of Homeopathy, there are as many articles reputing (or debunking) this science. In a recent report by the European Academies' Science Advisory Council (EASAC) in 2017, the EASAC states that: *“Any claimed efficacy of Homeopathic products in clinical use can be explained by the placebo effect or attributed to poor study design, random variation, regression towards the mean, or publication bias. Among these, the placebo effect can be of value to the patient but there are no known diseases for which there is robust, reproducible evidence that Homeopathy is effective beyond the placebo effect”* (EASAC, 2017).

This statement reflects the view of most in the medical community, yet placebo is a phenomenon that is still poorly understood in the mechanistic and reductionistic dogma of contemporary Newtonian science. Whilst most accepted scientific trials include a placebo group, the actual bio-chemical and pathophysiological pathways of the placebo effect can rarely be explained. Professor Ted Kaptchuk of Harvard-affiliated Beth Israel Deaconess Medical Centre, whose research focuses on the placebo effect states: *“The placebo effect is more than positive thinking — believing a treatment or procedure will work. It's about creating a stronger connection between the brain and body and how they work together. Placebos won't lower your cholesterol or shrink a tumour. Instead, placebos work on symptoms modulated by the brain, like the perception of pain. Placebos may make you feel better, but they will not cure you, although they have been shown to be most effective for conditions like pain*

*management, stress-related insomnia, and cancer treatment side effects like fatigue and nausea*”, says Kaptchuk (Harvard Health Publishing, 2021).

In a 2007 scientific study on the placebo effect published in SpringerLink.com and available on PubMed.gov, Ron Eccles, PhD states that: *“The placebo is much more than a control medicine in a clinical trial. The placebo response is the largest component of any allergy treatment and consists of two components: nonspecific effects e.g., natural recovery and a ‘true placebo effect’, that is the psychological therapeutic effect of the treatment”*. Eccles further mentions that belief in the beneficial nature of the treatment is a key component of the true placebo effect and can be enhanced by factors such as interaction with the physician and the sensory impact of the treatment. Negative beliefs can generate a ‘nocebo’ effect that may explain some psychogenic illnesses; this is the basis of much research in psychoneuroimmunology. An understanding of the placebo and nocebo effects is important for general allergy practice and harnessing the power of the true placebo effect is a major challenge to modern medicine (Eccles, 2007).

The above statements are self-contradicting hypotheses. Mind and consciousness, to which proponents of placebo are referring to and attribute a homeopathic effect or cure, is not known to have quantifiable active ingredients that can be measured. It seems a frivolous hypothesis without any current scientific underlying mechanism of action of the mind to cure. The sceptics fail to understand the difference between cure by homeopathic medicines with cure by transcendental powers of the mind or consciousness, beliefs or biases. Contemporary science portends that patients must depend on pharmaceutical substances/medicines and not on alternative or complementary therapies. Yet, what is a medicine?

A medicine is any substance or process that is capable of curing disease(s), transcendental, mental, chemical or biochemical aspects notwithstanding. The preparations of homeopathic remedies are real medicines. The meaning of the term medicine, according to the Cambridge dictionary, is: *‘a substance, especially in the form of a liquid or a pill, that is a treatment for illness or injury’*. According to the Merriam-Webster dictionary, medicine is: *‘a substance or preparation used in treating disease’*. The Collins dictionary describes a medicine as: *‘any drug or remedy for use*



*in treating, preventing, or alleviating the symptoms of disease*'. For the purpose of this dissertation, the term 'medicine' is interchangeable with the term 'remedy'.

The sceptics' denial regarding homeopathic medicines originates from improper understanding of what a medicine is and how this medicine affects the cellular aspect of the organic structure. If placebo is at the base of Homeopathy, then effects of allopathic medicines could also be considered to be placebo. Pharmaceutical companies and medical practitioners prescribing allopathic medicines misunderstand the intricate quantum interaction of frequencies on organic cellular organisms, regardless of the substance used to develop the medicines. To single out Homeopathy against the impartiality of science and failing to accept scientific facts because Homeopathy is an inconvenience or dilemma that has been benefiting humanity for more than two centuries, is nothing less than bias based on dogma and scientific hubris.

Whilst the placebo effect is certainly real, and a positive belief and a sunny disposition play a large part in any successful healing, the notion that the placebo effect alone constitutes or contributes to the efficacy of Homeopathy is questionable since homeopathic medicines work just as well on infants, children, in animals and Veterinary science and in Agriculture, and has shown to be curative across a broad spectrum of disorders, not just pain or allergies as mentioned above. Appendices A and B of this dissertation show selected case studies and the main symptomatologic properties of the main homeopathic remedies.

When Dr. Christian Samuel Hahnemann (Hahnemann) originally deduced and refined the science of Homeopathy in the early 18<sup>th</sup> century, he was neither aware of the placebo effect, nor was he particularly perturbed by any opposition to his methods at the time. Hahnemann believed and strongly followed deductive reasoning, objective observation and research that was based on outcomes. He experimented and recorded the outcomes of his experiments and formulated a science based on results free of bias, assumptions, and preconceptions, something that is missing in contemporary research into Homeopathy today.

With the rise of quantum physics, quantum field theory (QFT), quantum electrodynamics (QED), quantum coherence domains (CDs), quantum chemistry and

quantum biology, our understandings of bodily energy systems have increased, and with it the realisation that space/time or vacuum Planck (smallest indivisible) frequency fluctuations or oscillations, appearing as photons and electrons are at the basis of sub-atomic or elementary particles that compose the reality around us including our bodies. Scientists are just beginning to understand the intricacy of causative factors affecting cellular energy dissonance, bio-photon productions and the subsequent creation of disorders and symptomatology through genetic and epigenetic tendencies (Goswami, 2004, 2011).

Hahnemann absolutely acknowledged the interaction of familiar, now known as genetic and epigenetic phenotype dynamics playing out in families, and differentiated between the severity of physical, mental, and emotional miasms (behavioural or accumulated characteristics or constitutions) that led to chronic ailments on the one hand, and the quick, excitable and short-term or acute energetic distortions on the other. In the 6<sup>th</sup> iteration of the 'Organon of Medicine', Hahnemann writes of chronic or miasmatic, and acute symptomatology and the subsequent repertorization of the Similimum as the correct medicine. He places eminent importance on the causative history of a disorder, and states in 'Aphorism 5' that: *"Useful to the physician in assisting him to cure are the particulars of the most probable exciting cause of the acute disease, as also the most significant points in the whole history of the chronic disease, to enable him to discover its fundamental cause, which is generally due to a chronic miasm"* (Organon of Medicine, 6<sup>th</sup> edition, 2009).

A chronic dysfunction in the allopathic sense is a long-lasting disease the patient suffers from over months, years or decades, without ever experiencing a full recovery. Allopathic pharmaceuticals, in most cases, only band-aid or mask the symptomatology or manage symptoms of the condition, often failing to address the causative factors or bring about a curative remission. Homeopathy sees a chronic condition as part of the energy imbalances in the patient's 'vital force', that is his or her subtle electromagnetic energy field or energy system. Chronic causative factors can be understood as geno or phenotypical predispositions, genetic mutations brought about through the epigenetic up and down regulation of nucleotides within the DNA (deoxyribonucleic acid) double helix strands, often caused by lifestyles or inherited miasmatic, constitutional or environmental disturbances, including the mindset of the patient.

An acute symptomatology, in comparison, identifies itself when symptoms arise that are outside of the patient's organic constitutional picture and presenting with a prodrome (early symptoms) and a zenith (most powerful symptoms). The acute symptomatology is usually self-limiting, it either improves, or results in the deterioration of the patient. An acute symptomatology usually allows a respite from any chronic symptoms, only for these symptoms to return once the acute crisis has been resolved.

The term 'constitution' in Homeopathy has long had numerous and often differentiating and conflicting interpretations, mainly arising in accordance with clinical and professional experience, understandings and expertise by well-known Homeopaths such as Kent, Vithoulkas, Bailey, Vermeulen and Sankaran to name but a few. Strangely, the founder and father of classical Homeopathy, Hahnemann, never referred to the term 'constitutional' remedies. Although Hahnemann mentions constitution in numerous places, albeit in a different context, and mainly refers to the 'inherent in the natural frame', he also understood the core nature of the individual expressed in his/her behaviour and presenting symptoms. He used the German term 'Beschaffenheit', which can loosely be translated as 'constitution'; however, only in relationship to the Latin root 'constitue'. Its correct translation is 'nature, texture or composition', or the way something is put together or established. This paper will explore the traits of 'miasm' and 'constitution' further.

Hahnemann lived in a time of limited understanding and awareness of the way a human body works and interacts with its environment, especially regarding cellular behaviour, biochemical interactions, genetics and the altering of epigenetic methylation processes. These processes can lead to up and down regulation of nucleotide base pairs, hence altering phenotypes, and more importantly how conscious and sub-conscious mental and emotional biases and beliefs influence the biology of cells (Lipton, 2005).

Returning to the EASAC report of 2017, it also states that: "*The scientific claims made for Homeopathy are implausible and inconsistent with established concepts from chemistry and physics*". The main objective by the scientific community against Homeopathy is the fact that in ultra-high dilutions no trace of the original substance or mother tincture is left, hence homeopathic medicines cannot work. Yet, allopathy

already uses energetic therapies such as radiation, X-rays, light therapy and UV and infrared therapy, all of which work on the transfer of electromagnetic frequencies and contain no active pharmaceutical substances.

In March 2015, the Australian National Health and Medical Research Council (NHMRC) published an information paper on Homeopathy. This document concluded that “...*there are no health conditions for which there is reliable evidence that Homeopathy is effective*” (NHMRC, 2013). The report triggered headlines around the world suggesting NHMRC had found that Homeopathy does not work for any condition (The Guardian, 2015). The report also led to the ceasing of private health insurers reimbursing patients for Homeopathic consultations. However, on 26 August 2019, NHMRC CEO Professor Anne Kelso provided the following clarification on the findings of the 2015 Homeopathy Review: ...“*contrary to some claims, the review did not conclude that Homeopathy was ineffective. Rather, it stated that “based on the assessment of the evidence of effectiveness of Homeopathy, NHMRC concludes that there are no health conditions for which there is **reliable evidence** that Homeopathy is effective*” (Kelso AO, 2019).

This research dissertation paper will dispute the above notions and seeks to modulate the scientific narrative that persists after more than 225 years since the inception of this science, through a comprehensive review into recent scientific research via RCTs and scientific studies, and through the explanation of quantum effects of homeopathic medicines to alter pathophysiological and bio-chemical pathways. This research will examine recent studies that use the latest analytical tests including spectroscopy, ultraviolet (UV) and infrared (IR) spectrophotometry, quantum electrodynamics (QED), quantum coherence domains (CDs), Raman spectroscopy, electron spin inversion and the quantum approach to provide new insights into the workings and efficacy of homeopathic medicines.

This dissertation will show that Homeopathy incorporates the principles of both physics - specifically quantum physics, the study of energy at the basis of all so called ‘matter’, and chemistry – specifically valence electron-electron cloud interactions. That is the reason conventional medicine is unable to understand this therapy. If Homeopathy is perceived in the same manner as a pharmaceutical medicine or a naturopathic

supplement, it is never going to be correctly understood. The human body is energetic, with a distinct electromagnetic system, and Homeopathy is 'energy medicine' that acts on the body's electrical pathways. The electromagnetic frequency signatures of remedies can be measured using the appropriate equipment, provided the appropriate level of understanding of homeopathic principles is applied. The correct remedy or Similimum acts as a stimulus to the cellular electrical system to encourage it to bring about resonance balance. This research paper will shed light on the interaction of homeopathically produced medicines and electromagnetic energy of organic life forms. It supports and furthers the validity of Homeopathy as a complementary medicine alongside allopathic approaches; a stand-alone medical modality; or in fact a fundamental quantum medical system to provide it with the appropriate reverence it so deserves.

## Part Two – Synopsis of Homeopathy

### History of Homeopathy

Homeopathy is a system of medicine which recognises the uniqueness of each individual person, and their specific strengths, weaknesses and dissonances. Hence, it is not surprising that when symptoms of illness appear, each person reacts in his or her own way. Even when contracting the same influenza, or lately COVID-19 virus as another person, the immune response and subsequent symptomatology is often quite differently experienced.

Homeopathy arose from herbal lore and early medical praxis in 1796, during the period from the ancient medical teachings about the deficiency or excess of four bodily fluids of blood, yellow bile, black bile, and phlegm, and the medical practices of leaching and bloodletting, to modern sciences, when a German chemist and physician named Dr Samuel Hahnemann (Hahnemann) developed a new and ground-breaking method to preserve and extract healing signatures. He understood these signatures instinctively, today known as electromagnetic frequency signatures, of plants, herbs, minerals, and diseased tissue or bodily fluids and used these as medical remedies. Dr James Tyler Kent (Kent), one of the forefathers of classical Homeopathy and a student of Hahnemann, has been reported saying that *“here are lots of symptoms, but there is no case”*. Kent was pointing out the fact that in Homeopathy, the qualified practitioner will treat the totality of symptoms and not, as in allopathic medicine, a diagnosed case, or isolated symptom picture. A Homeopathic case comprises of mental, emotional and physiological symptoms that, if taken appropriately and with care, provide the totality of a patient. In every case, there exists an individual totality shaped through geno and phenotypical determinants, acquired energetic miasmatic or territorial aspects, sensational and emotional-active behaviours, and local/organ pathological aspects that form layers of morbid trends that reveal the patient picture, provided a Homeopathic practitioner can perceive it (Rowe, 1998).

Homeopathy is an effective and scientific system of healing that assists the natural tendency of the body to self-organise and hence reach a balance point of homeostasis. It recognizes that all symptoms of ill health are expressions of disharmony within the whole person, and that it is the individual person who needs treatment, not the disease

(Kent, 1905). The homeopathic principles or Laws constitute a unified hypothesis whose validity has been tested empirically and clinically over more than 225 years.

Cured patients confirm the hypothesis and modern scientific trials and research can be found to concur, provided the research is undertaken in line with homeopathic principles and Laws. Homeopathic medicines are prepared in a pharmacy or a laboratory, using a technique subject to precise and clearly stated controls. The preparation and administration of homeopathic medicines does not involve mysterious processes; however, they must be undertaken by qualified persons that understand its principles and Laws.

Homeopathy is an increasingly popular complimentary system of medicine whose basic philosophy is viewed sceptically by the orthodox medical and scientific professions because it is difficult to understand within accepted scientific theories of chemistry and physics. Its success with patients, however, has led to its continual growth and development over the past 225+ years, culminating in a resurgence in recent years partly owing to increasing dissatisfaction with the side effects of modern medicines, and the pharmaceutical notion that one size (medicine) often 'fits all'. Whereas the correct remedy, or Similimum, acts as an electromagnetic stimulus to the biological system to encourage it to bring about electromagnetic balance or homeostasis.

### **Homeopathy - a Worldwide Practice**

The World Health Organisation (WHO) describes Homeopathy as the second largest system of medicine in the world today, practised in about 67 countries with over 300 million users (WHO, 2004). Homeopathy is practised in 43 European countries and is officially recognised and included in the national health system in European countries such as France and Germany and, until recently, in the United Kingdom (Chatfield 2005). Haidvogel *et al* (2007) refer to the effective integration of complementary and alternative medicines (CAM) into primary care in most Western countries, with Homeopathy being one of the most frequently used treatments. Ong and Banks (2004) found that CAM is typically used for chronic illnesses, particularly for conditions that respond poorly to conventional treatments. Users also refer to the desire for a positive relationship with a healthcare practitioner (Ong & Banks, 2004).

There is a large market for homeopathic products around the world. In Russia, homeopathic treatments have been actively developing over the last 25 years once it was legalized after the fall of the Soviet Union and Homeopathy has been introduced into the public health system against the continued push-back by the Minister of Health of the Russian Federation (Kosmodemyanski, 2018).

According to the National Institute of Health, US, more than 6 million people in the United States use Homeopathy to treat specific health conditions, and over 200 million people use Homeopathy on a regular basis worldwide (DeWit, 2020). In 2008, Australia spent 7.3 million US dollars on homeopathic medicines; France spent more than 408 million; Germany 346 million; and the United Kingdom more than 62 million US dollars. In the United States, Homeopathy is used by just over 2 per cent of the US population, predominantly for respiratory, otorhinolaryngology, and musculoskeletal complaints, and adults spent 2.9 billion US dollars on homeopathic products (Dorsett & Yeh, 2016).

Homeopathy is popular in much of Asia, including Australia, New Zealand, Pakistan, Bangladesh and Nepal. About 100 million people in India, out of a population of 1148 million use Homeopathy, and the market there is currently growing at 25 per cent annually. Banerjee (2007) refers to the use of Homeopathy in primary care in India, where patients often choose Homeopathy in preference to surgery for very serious pathologies. He attributes this to awareness of the effectiveness and safety of Homeopathy, as well as a family tradition of successful treatment. He also refers to *“faith and expectation that the experienced Homeopath can and will successfully treat pathology”*, which leads to the patient/practitioner trust relationship (Banerjee 2007: 122). India is the only country which officially recognises Homeopathy as the medicine of choice for most of the population. It is also a major source of homeopathic literature, research and prints of homeopathic books which are sold worldwide.

Homeopathy in India is available for patients in 230 hospitals (10,851 beds), and 5,836 dispensaries. Officially registered practitioners' number close to 218,000. Two hundred and sixteen colleges and medical hospitals teach Homeopathy. All these activities are coordinated by the Indian Ministry of Health-Education-Scientific Research. The Ministry promotes that more and more pathogenetic trials, clinical verification, efficiency and efficacy research including cost evaluation and even laboratory research



in an organized and a systematic way is to be undertaken by India's homeopathic colleges and universities. India is emerging as one of the strongest advocates for Homeopathy in the 21<sup>st</sup> century (Browne, 2019).

According to the National Health Service, the UK used to operate five homeopathic hospitals in London, Bristol, Liverpool, Glasgow and Turnbridge Wells. At the time of writing, Glasgow is the only hospital still in operation. Between 1858 and 1945, Sydney, Australia's largest city operated a successful homeopathic hospital, which was unfortunately closed due to pressure from the medical establishment (Armstrong, 2006).

### **Sydney Homeopathic Hospital**



Photograph from "Hospitals & Sanatoriums of the Homeopathic Schools of Medicine" 1916

### **Melbourne Homeopathic Hospital**



The New Melbourne Homeopathic Hospital 1885-1934, St Kilda Road, Melbourne, Victoria, Australia

Melbourne, Australia's second largest city also operated a homeopathic hospital from its inception in 1885 to its unfortunate closure in 1936. In 1923, the Treasurer of the homeopathic Hospital, Melbourne suggested that "in view of the increasing difficulty in obtaining duly qualified homeopathic practitioners, the constitution of the Hospital should be altered and broadened in order to enable the Board to invite the co-operation and assistance from the medical profession and the public generally" (Armstrong 2007).

### Homeopathic Remedy Kingdoms

Since homeopathic remedies are obtained from the natural world, they can also be categorized into the kingdoms of nature such as plant, animal and mineral (Sankaran, 2007). The majority of the remedies depicted in Table 1 are also termed Polycrest remedies or constitutional remedies, due to their ability to treat many acute and chronic ailments across a wide range of symptoms and cellular energetically distortive aspects. The main Polycrest remedies and their areas of actions are depicted in Appendix B.

**Table 1: Homeopathic Kingdoms**

Kingdom	Examples of Remedies	Main aspect of persona
Plant	Pulsatilla, Staphysagria, Lycopodium, Colocynthis, Ignatia, Nux Vomica, Drosera, Agaricus, Aconite, Belladonna, China, Cannabis, Stramonium, Arnica, Ruta, and Rhus Toxicodendron.	Sensitive, soft, passive, emotional, easily hurt, changeable, and lack of structure.
Animal	Sepia, Tarentula, Lachesis, Naja, Crotalus, Venomous snakes, Bufo from toad secretion, Moschus, Apis, Lac caninum, and Lyssin.	Social, hierarchical, attention seeking, beautiful, attention to detail, sexual, adventurous, and competitive.
Mineral	Phosphorus, Iodum, Alumina, Aurum or Sulphur, or salts like Natrum Muriaticum, Calcarea Carbonicum, and Kali Sulphurium.	Structure, organization, safety and security, specific relationships, finances, performance, and goal oriented.

The direct reflection of the nature of disease in homeopathic substances cannot be separated from the knowledge of disease, nor its pathology from the broad knowledge of the remedies. The genius (core) of a case will be directly reflected in the genius of its cure. To understand the totality of the disease of a patient is to understand the Materia Medica of remedies available to a practicing Homeopath, and more importantly, the homeopathic Law of Similars.

## First Principle (Law) of Homeopathy

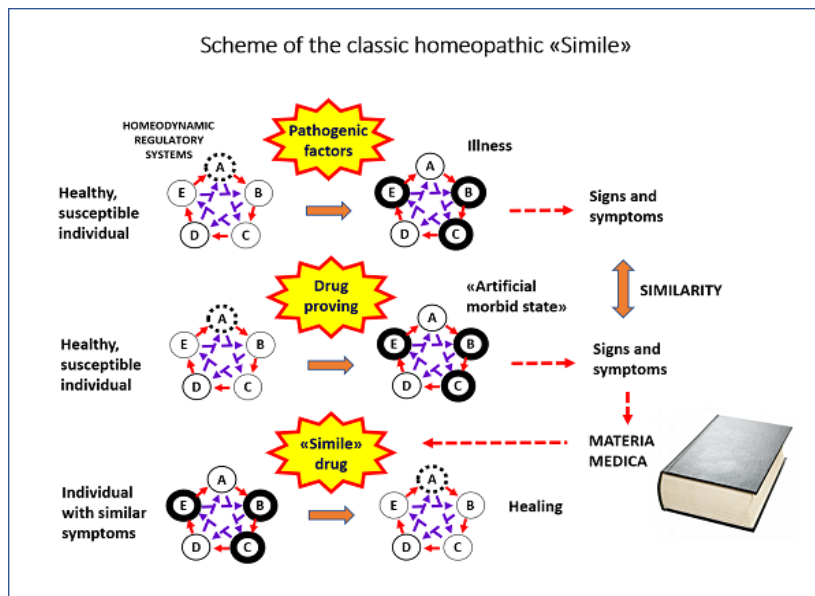
The fundamental principles of Homoeopathy are embodied in a system of doctrine or Laws and rules of practice, which were formulated, named and systematically set forth by Hahnemann in his *Organon of the Rational Art of Healing*. By that, Homoeopathy was given a name, individuality and a character, which defines and identifies it across the last 225+ years. Conventional medicine, or allopathy, groups symptoms, defining them as diagnoses, and offers pharmaceutical or invasive treatments for each diagnosis. However, this only treats parts of the dis-ease in isolation. Hahnemann was disillusioned with the medical system of the time and its barbaric approaches to healing. He developed a medical system that is based on 'Similia Similibus Curentur' or 'like cures like', also called 'similar suffering', which essentially means that a remedy that produces a unique symptomatology in a healthy individual can cure the exact same symptoms in a person that is ill and displays those symptoms.

The word Homeopathy is a Greek derivation of homeos meaning similar, and pathos means suffering. The recognition of the Law of Similimum was proposed prior to Hahnemann, as Paracelsus, Hippocrates, and ancient Ayurvedic texts have mentioned this law. According to this system, the choice of the medicine is fundamentally based on the principle that the medicine must have the capability of producing most similar symptoms of the disease to be cured in healthy persons.

For example, a person suffering from hay fever might be given a remedy prepared from an onion (*Allium Cepa*), because a healthy person chopping an onion usually experiences watering eyes and irritation. Similarly, someone suffering from insomnia might be given a homeopathic remedy of coffee (*Coffea Cruda*).

From an allopathic or contemporary medical viewpoint, the 'like-cures-like' axiom is not completely objectionable, as Hippocrates, the so-called father of medicine once wrote: *'Through the like, disease is produced, and through the application of the like, disease is cured'* (Goswami, 2004).

**Figure 4: The Similimum**



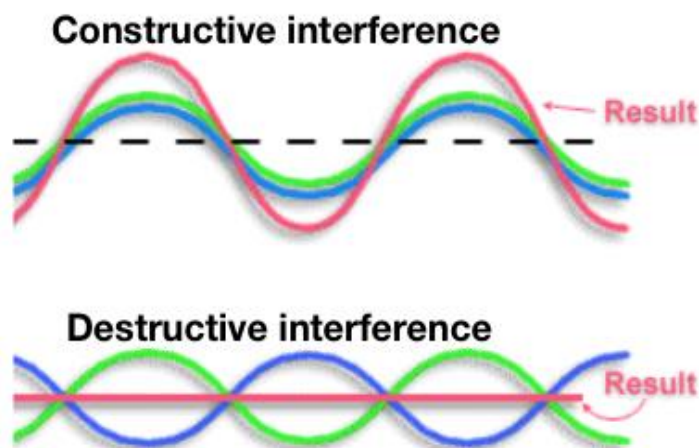
Bellavite P, Arruda-Silva F, Marzotto M. The Science of the “Simile, 2021

A different way to understand the Law of the Similimum or Similitude, or the correct medicine for the symptomatologic picture a patient presents with, is by thinking of it in the term of resonance. If the homeopathic medicine incites the same symptomatology in a healthy person as the symptoms of the disease in an unhealthy individual, must it not mean the energy movement of the remedy and the body’s distorted energy movement that are out of balance, resonate in a certain way and can be balanced by the remedy?

Sound resonance of plucked strings works on the same principle that like attracts like. When the C string of a piano for instance is struck, all the other octave strings of C begin to vibrate. When the C string of a harp is struck, all the C strings of all other harps nearby begin to vibrate. The C strings are in resonance with one another, and by way of enhancing (constructive resonance) or negating (interfering resonance) of wavelength the frequency will alter. Homeopathic remedies mirror resonance of the trauma or dis-ease to the body so that it can self-correct. In other words, vibration and resonance create an environment for self-healing. The remedy therefore must cause pathogenetic manifestations (signs, symptoms, physiological or pathological effects, etc.) similar or identical to the disorders to be cured, i.e., it must resonate at the same frequency and wavelength as the distortions within the patient (Browne, 2019).

A similar use might be made of any type of drug (natural or synthetic) and in any dose (ponderable or infinitesimal) provided the therapeutic Similitude principle is observed. Thus being, modern drugs might be used according to the homeopathic assumptions, provided they induce primary effects (therapeutic, adverse or side effects) similar to the full set of characteristic signs and symptoms exhibited by patients (Teixeira, 2021).

**Figure 5: Wave Interference**



<https://www.fizzics.org/interference-of-waves/>

As every established homeopathic practitioner understands, the ascertainable physical constitution of the patient, his/her intellectual character, his/her occupation and mode of living and habits, his/her social and domestic lifestyle, age, sexual function, and familiar or hereditary disease pictures etc., are all to be taken into consideration when managing a case, especially a chronic one.

Familiar with the concept of the Similimum, Hahnemann first experimented on himself with cinchona bark, the remedy for malaria. The main symptom of malaria is profuse sweats and intermittent fevers. Hahnemann prepared a dose of cinchona bark tincture, which he took over several days and, to his surprise, the tincture produced severe symptoms of malaria in himself, who had never been subjected to the parasites that causes the disease. He proved that the cure for malaria brought on symptoms of the disease in a healthy individual. He named this discovery the Law of Similars, which became the cornerstone of Homeopathy.

## Vital Force, Constitution and Temperament

The human organism has a unique relationship with its environment, which scientists refer to as homeostasis. As such, a healthy living being is self-regulating, with an innate and very much protective tendency to maintain its equilibrium and compensate for disruptive changes. Hahnemann, who recognized the universality of the Law of the Similimum, stressed the existence and operation of energy (vital force) in a living organism and recognized that the human organism is a triune entity consisting of body, mind, and spirit or consciousness. This energy, which is responsible for different manifestations of life, was termed by Hahnemann the 'vital force'. The vital force must respond and adjust to every stimulus it is exposed to; in other words, to be able to self-regulate. To most minor stimuli people are exposed to in daily life, the vital force can respond and adjust easily and unnoticeably. If, however, the strength of the stimulus is stronger than the vital force itself, it is forced to adjust in such a way that the consequences are now perceivable by the body, mind and consciousness.

Homeopathy believes disease to be a disturbance in the vital force or resonance of the system, which may be expressed initially as constitutional (character or susceptibility) traits, and then as signs and symptoms of disease. Susceptibility to a specific disease or distortion of the vital force can be understood as the degree to which a person is vulnerable to an environmental stimulus, and predispositions to certain stimuli may be due to underlying constitutional weaknesses, either familiar or inherited, or accrued due to past and/or current stressors of mental, emotional, or physical nature (Castro, 1999).

The concept of resonance clearly shows that every stimulus influences the vital force, and it either can adjust or respond to it without any symptoms or with remarkable symptoms, depending on whether the stimulus is stronger or weaker than the vital force itself. Since the vital force is considered to be the electromagnetic field around every living organism, and is based on unique energy frequencies, that, if distorted or diseased, must be balanced to achieve a cure. In Homeopathy, this is achieved via energetic or vibrational medicines.

Hahnemann was a great believer in the mental and emotional symptoms of a patient, and the patient's temperament being the most important aspect of the disease, as

proposed in *Aphorism 211* of the Organon. In it, Hahnemann states that ...” *this holds good to such an extent, that the state or temperament of the disposition of the patient often chiefly determines the selection of the homoeopathic remedy, as being a decidedly characteristic symptom, which can least of all remain concealed from the accurately observing physician*”. Temperament can be understood by the psychological and biological organization peculiar to an individual, including one’s character or personality or predisposition, which influences the manner of thoughts, action, biases and general view of life. Temperaments are the patterns of behaviour, the way a person usually responds to certain situations. It is also defined as a person’s nature, one’s usual way of thinking or acting. In case taking, the physical data can be easily elicited, but problems arise in understanding the mental constitution of the patient. In such cases, the knowledge of temperaments can be used as a tool to understand the mentals better. Temperaments are instinctive or familiar responses. Temperaments are formed through sub-conscious programming from conception to adulthood, often phenotypical as well as acquired. Personality, on the other hand, is something that can be changed, modified, developed or enhanced, and is concerned with emotional dispositions and reactions. No temperament type is positive or negative. Each temperament has its own set of strengths and weaknesses. With the correct Similimum, the weakness can be diminished. In Homeopathy, temperaments include sanguine, choleric, melancholic, phlegmatic and nervous attributes.

Sanguine temperaments usually present in a patient who is generally happy, always has a smile no matter how much pain or unwellness he or she is experiencing, wants to please people, and can be seen as optimistic and talkative. They are often social butterflies, and can be jealous, loquacious and vain. Remedies that can be considered when treating a sanguine temperament include Phosphorus, Ferrum, Coffea and Lachesis.

A choleric patient may present as goal-oriented and ambitious, and many people with a choleric temperament are natural born leaders. However, they can also be short tempered even violent due to the nature of their personality. They are extroverted, optimistic and ‘doers’. Remedies that may be considered include Lycopodium, Bryonia, Nux Vom and Veratum Album.

Melancholic patients are mainly downtrodden, have a victim personality and portray a dark temperament. The most gifted, emotional and sensitive person with the deepest depression all wrapped into one package is the ‘melancholic’. They are introverted, pessimistic and often deep thinkers. Remedies to consider here include Natrum Muraticum, Arsenicum Album, Aurum Metallicum, and Ignatia as an acute remedy.

A phlegmatic temperament goes through life doing as little as possible, quietly and expending little energy. These patients are friendly, contented and peaceful people, rightly known as ‘couch potatoes’. They are introverted, pessimistic and succumb to overeating, and often being obese. Remedies include Calcarea Carbonicum, Sepia, Pulsatilla, and Baryta Carb.

The nervous temperament is generally worried about day-to-day issues and treats every problem like a matter of life and death. The patient shows up as the ‘type A’ personality who can’t sit still for a few minutes, and constantly talks about problems in his or her life. They are the typical counselling patients, also known as ‘bread and butter’ clients, as they provide a steady income by consulting Homeopaths on a regular basis. Remedies that can be considered here include Argentum Nitricum, Arsenicum Album, and Agaricus Muscuriu (Sankaran, 2007).

**Table 2: Examples of Mind Rubrics for Temperaments**

<b>Sanguine</b>	<b>Choleric</b>	<b>Phlegmatic</b>	<b>Melancholic</b>	<b>Nervous</b>
Affectionate	Anger, Irascibility	Absent minded	Brooding	Anxiety
Eccentric	Contradiction	Dullness	Despair	Fear
Joyous	Haughty	Indifference	Emotional	Hypochondriacal
Lasciviousness	Industrious	Irresolution	Loathing	Irritability
Meddlesome	Mocking	Slowness	Reserved	Plans, making many
Positiveness	Obstinate	Sulky	Suicidal	Restlessness
Vivacious	Suspicious	Weary of Life	Timid	Presumptuous
Witty	Violent	Sit, inclination to	Weeping	Rest, cannot...



## Repertorization

A Repertory is a symptomatology codex that lists symptoms in alphabetical order, and states remedies that show the symptoms in order of grading from one to four, with four being the most indicated remedy for a particular symptom, often italicized or depicted in bold. To perform a proper analysis of a patient's symptomatology, a Homeopath must pay attention to the diverse causative factors and the different states that arise as a response to the causative stimulus. Different states may need different remedies, and every state will have a different genus, that is an exceptional, rare feature, one which stands out and provides the practitioner with the core heart of the remedy.

The established Repertories consist of Boeninghausen, Boerecke, Boger, Kent, Clark, Lippe, Patak, Roberts, Sherr, and Knerr. More current ones such as Vithoukas and Zandvoort were developed over the past 50 years, as classical Homeopaths discovered more and more remedies to be added. Language in most Repertories can still be quite archaic and difficult to translate into modern terms, for example dipsomania, meaning alcoholism, and ennui, meaning weariness or boredom.

The largest section of most repertorial mind sections is devoted to delusions, i.e., beliefs that are erroneous, acquired and often false. The qualified practitioner must be conscientious of the fact that mental illnesses and biochemical dysfunction of the neural network often are accompanied by delusions, which, when treated inappropriately, can lead to a worsening of the patient's conditions. It is always helpful to converse with the patient's primary psychologist or psychiatrist to ascertain if Homeopathic treatment is warranted in such a case.

A skilled Homeopath must understand the old terms and must be able to transform or translate the patient's modern account of symptoms into the language of the repertories. Today's homeopathic computer software programs are extremely helpful to a practitioner, as they contain a range of older and modern Repertories and can repertorize a case in real time searching all uploaded Repertories in the system at once, provided the Homeopath is knowledgeable to input the correct and often highly specific symptoms. Repertories are constantly added to, as provings of new substances lead to an increase in homeopathically produced remedies available to the practitioner.

Currently, there are thousands of remedies that are available to any practitioner; however, not all new medicines have been included in all Repertories. Remedies also differ from country to country; for instance, the Indian homeopathic suppliers offer a large range of remedies that are unknown to an Australian practitioner as they are specific to India. Most homeopathic manufacturers provide practicing Homeopaths with up-to-date information on new remedies and provings via regular newsletters or emails. With the electronic information age, updates to electronic Repertories are much faster than ever before; however, provings still rely on research or accidental provings in cases such as animal bites or poisonings, where Homeopaths must rely on anecdotal symptoms recorded by patients.

## Second Law - Proving

In treating diseases with remedies that produced the same symptoms in a healthy individual, Hahnemann formulated the second Law of Homeopathy, the 'Proving'. Since the late 1700s, new homeopathic remedies are discovered through the method of proving. In a proving, a homeopathically prepared substance is administered to healthy volunteers in order to ascertain the symptoms specific to that substance, thereby clarifying its inherent curative aspects. During a homeopathic proving the goal is to provoke temporary symptoms or an artificial dis-ease associated with the homeopathic medication. These symptoms are then arranged to form a symptom pattern or remedy picture that is specific to that homeopathic substance. This provides the basis for a better understanding of the possible effects of that remedy in treating patients. In most instances, the duration of these provings is on average six weeks per subject per remedy. The volunteers are asked to journal the symptoms they experience in their own words daily.

During the run-in phase, usually the first week, the volunteers note in their journal their current state of health, the daily rhythm of life, and any signs or symptoms that occur daily. This process enhances familiarity with self-observation and the accurate recording of all signs and symptoms. After completion of this run-in phase, an evaluation including journal check will occur. During the following 4 weeks, the volunteers continue to document all signs or symptoms including amelioration or aggravation of symptoms that occur in the journal until the proving has concluded.

In the case of cinchona bark which Hahnemann experimented with and proved, the most prevalent symptom experienced during proving was intermittent fever, hence the remedy of cinchona is fitting with the drug picture of fever that comes and goes, amongst other symptoms. Each homeopathic remedy has a unique drug picture or frequency, established through many years of voluntary and patient proving, and is essentially individuated to fit a particular person's symptoms and ailments perfectly. In this, Homeopathy is distinctly different to allopathic or orthodox medications, which have only one outcome and are prescribed to numerous individuals with the same complaints. This limited application is also true for many naturopathic remedies, albeit they can have a broader drug picture than synthetic drugs.

## Taking the Case

Homeopathic patient pictures involve not only taking the current and obvious symptoms a patient presents with, but involves a very thorough investigation into family history, previous ailments, previous drugs taken and their side effects. It includes mental idiosyncrasies that might indicate strong beliefs and thought patterns that may have contributed to the current symptoms, lifestyle, alcohol intake, any recreational drug intake, food preferences, patterns of waste elimination, smell and colour of urine and faeces, sleeping patterns and quality of sleep, dream cycles, and any ameliorations and/or worsening effects of the presenting symptoms.

The first consultation with a classical Homeopath can take up to two hours, depending on the severity of the symptom picture. The main aspect of any case taking is asking the hard questions, such as 'how do you feel about this or that'? or 'what was happening when you first experienced or noticed the symptom'? Exploring childhood or other traumas or stressors experienced by the patient throughout life is a beneficial way to ascertain any legacy symptoms caused by an event that may have an underlying causative factor in the disorder. The same is applicable to anxieties, worries, and fears as well as relationships and dreams, especially recurring ones. Cultural aspects of the patient's psyche are often important as they can reveal either familiar and/or cultural miasms, such as in the case of Australian Aboriginal people, or religious aspects that have an influence on the patient's willingness to divulge sensitive information.

Sexual tendencies, sleep patterns, food and drink preferences, cravings and aversions, allergies to foods or medications, taking of any pharmaceutical medications which may interfere in the homeopathic treatment plan, preference of hot or cold environments, familiar medical histories and educational background all provide valuable clues in a patient's case taking, repertorization and remedy selection.

Sankaran's 'stages approach' is preferred in case taking. It can be seen as removing the layers of an onion. Each patient that presents with a disorder can be viewed from four different angles. Stage one is the diagnosed disorder, either allopathically or homeopathically, which deals with the most acute or intense symptoms first.

The second stage of case taking is closely related to the patients patho-physiology, i.e., using remedies based on the patient's common modalities, as well as peculiar and concomitant (connected) symptoms.

Stage three brings in the individual's mental symptomatology, behaviours, idiosyncrasies, never been well since (NBWS), and beliefs and biases, as well as sensitivities or constitutional symptoms. At this stage, psychosomatic symptoms, such as fear, anxiety, dreams, aggravations and ameliorations, and miasmatic or territorial bases are ascertained.

Stage four is ascertaining the disturbance of the vital force itself at its core, before it is expressed as symptoms. It is no longer about mind or body symptoms, but core expressions, sensations and energetic patterns equally expressed at both levels, somewhere at the junction of the body and mind (Sanskaran, 2007).

Following the above, the practitioner will undertake a thorough reading or repertory of the main points of the consultation and find the most appropriate Similimum. In this, Homeopathy takes the whole person into account, a holistic look at all the indicators that show energy is not at ease. The individual comes before the disease, it is largely a matter of understanding the physical, mental, general and constitutional symptoms of the person beyond just his or her disease that individualizes two patients suffering from a similar disease, and thus finding the Similimum.

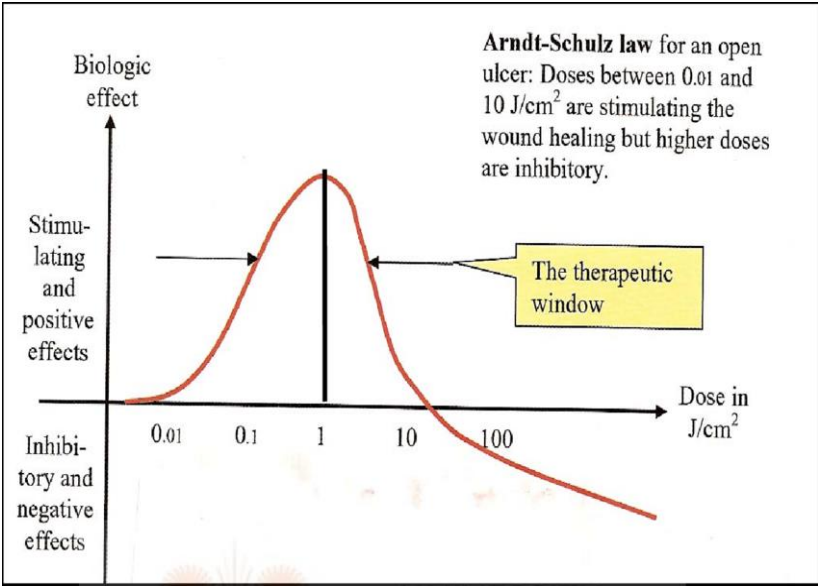
### Third Law – Minimum Dose

The third and most important Law in Homeopathy is ‘the Law of Minimum Dose’. Hahnemann directed that the smallest amount of substance that would bring about healing be used. Hahnemann’s search for a means to deliver the Similimum that would do no harm led to homeopathic ‘micro dosing’. The principle that only the minimum dose should be employed is based upon the understanding that the stimulus of the homeopathic medicine triggers the body’s intrinsic healing response, now considered to be at a quantum biological level. Following this principle, Homeopaths prescribe only enough medicine to initiate this healing response. The response then carries on, driven by the body’s need to maintain homeostasis. The use of the minimum dose has the advantage that it does not produce the gross side effects so often caused by allopathic treatments.

The concept of the minimum dose is similar to the ‘Arndt-Schultz law’, named after the pharmacologist Hugo Schultz and the psychiatrist Rudolf Arndt who formulated this law in 1888. Arndt stated: “Weak stimuli accelerate vital activity, medium stimuli raise it slightly, strong ones suppress it, and very strong ones halt it.” This law is simplified as follows: small doses of electrical excitation on the organism stimulate, medium doses inhibit, and large doses kill. Hence the minimum, potentised dose, discovered by Hahnemann and supported by Arndt and Schulz, is prescribed by Homeopaths (Tunér & Hode, 2002).

To minimize the side effects of homeopathic medicines, Hahnemann developed a dilution and succussion process, which involves vigorous shaking and striking of remedies against a solid surface which he referred to as ‘potentization’ and ‘dynamization’. Contrary to his own expectations, highly diluted concentrations (potencies) provoked stronger healing responses when the correct Similimum was chosen. Furthermore, as the potency increased with dilution, the safety profile of the remedy also increased. This is the opposite to allopathic medicines, which usually exhibit greater toxicity with increased potency and/or dosage.

Figure 6: Arnd-Schultz Law

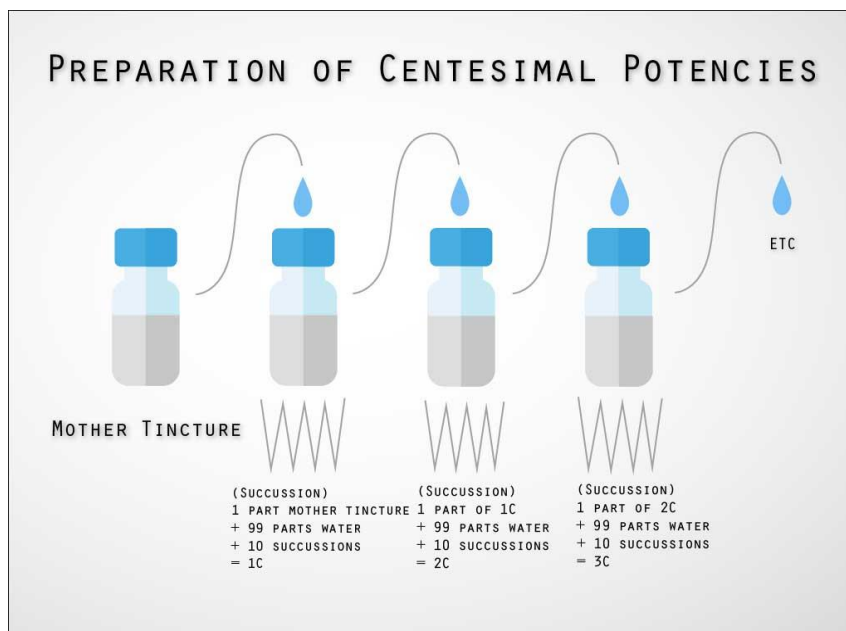


(Tunér and Hode, 2002).

## Fourth Law – Dilution and Potency

To explain the processing of a homeopathic single remedy, the first step in the preparation of a homeopathic remedy from plant, mineral or animal starting material is the preparation of the 'mother tincture' in accordance with the standard of Hahnemannian's Organon of Medicine (Organon of Medicine, 6<sup>th</sup> edition, 2009). From chemical, mineral or animal starting material, a first dilution is made, which can be a liquid dilution with ethanol and water, or a solid dilution or trituration (homogenization) with lactose. Three logarithmic potency scales are in regular use in Homeopathy: the decimal scale (X), the centesimal scale (C and/or M), and the quin- quagintamillesimal scale or fifty millesimal scale (LM).

**Figure 7: Homeopathic Centesimal Dilution Scale**



<https://Homeopathyplus.com/tutorial-4-three-scales-of-potency/>

Hahnemann created the centesimal or C scale, diluting a substance by a factor of 100 at each stage. The centesimal scale was favoured by Hahnemann for most of his life. For example, a 2C dilution requires a substance to be diluted to one part in one hundred, and then 1 drop of that diluted solution diluted by a further factor of one hundred (100 drops of water/ethanol). This second dilution works out to one part of the original substance in 10,000 parts of the solution. A 6C dilution repeats the process six times, ending up with the original material diluted by a factor of  $100^6 = 10^{12}$  (one part in one trillion or 1:1,000,000,000,000).

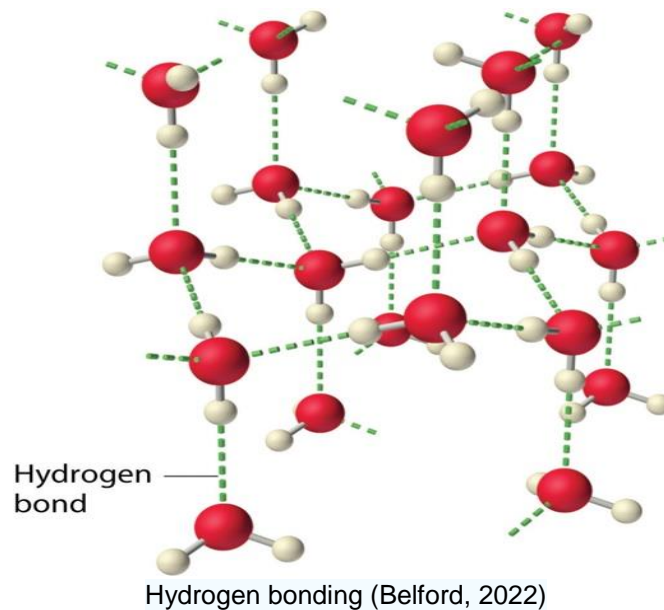


Higher dilutions follow the same pattern, with succussion between each sequential dilution. In Homeopathy, a solution that is more dilute is described as having a higher potency, and more dilute substances are considered by Homeopaths to be stronger and deeper-acting remedies, as these remedies have undergone several more dynamizations or succussions to activate the electromagnetic frequencies within.

All procedures, both the preparation of the mother tincture and the preparation of the first dilution or trituration, are performed according to a homeopathic manufacturing method according to such regulatory agencies as the European Pharmacopoeia, the German Pharmacopoeia, the French Pharmacopoeia, and the Australian Therapeutic Goods Administration (TGA). The tincture or triturate base for non-soluble sources is then diluted sequentially in a water and alcohol (ethanol) solution to reach the desired potency. This dilution process involves potentization at every stage of the dilution. Potentization requires a series of 100 or more vigorous succussive shakes or succussions against a hard, but not glass-breaking, surface such as a rubber mat. This process, as hypothesised in a number of recent scientific journal articles on the action of Homeopathy on cells, creates a narrowing or stretching of the OH stretch band (~3284 nm) towards lower frequencies (Tournier *et al*, 2020).

Hydrogen and oxygen atoms bond together via a dipole-dipole interaction, which is weaker than a covalent (equally sharing of one or more electrons) bond, or ionic (intramolecular) bond. Hydrogen atoms attach to an electro-negative atom, in this case oxygen, without the oxygen removing the valence electron from the hydrogen completely. This creates a dipole, where the oxygen part of the water molecule is negatively charged, and the hydrogen part is positively charged, resulting in a polar covalent bond, which, due to the size of the two hydrogen atoms and their general closeness to the oxygen atom is quite stable and strong (Belford, 2022). The effect of potentization on OH bonds and the transfer of frequencies to the OH bonds via this process will be discussed further in Part three of the dissertation.

**Figure 8: OH Bonding**



Potencies are prepared according to the system of dilution desired, either in a decimal scale (X) or a centesimal scale (C). The number of a homeopathic solution tells how many times the remedy has been diluted, and the letter determines which dilution scale was used to prepare the medicine. Hahnemann advocated 30C dilutions for most purposes, that is, dilution by a factor of  $10^{60}$ . In Hahnemann's time it was reasonable to assume that remedies could be diluted indefinitely, as the concept of the atom or molecule as the smallest possible unit of a chemical substance was just beginning to be recognized. The greatest dilution that is reasonably likely to contain even one molecule of the original substance is 12C.

From a purely physical-chemical perspective, ignoring the energetics of ultra-high dilution preparations, homeopathic remedies should not work, as they are so diluted that no molecule of the mother substance is left. However, the clinical evidence shows that is clearly not the case as Homeopaths and patients of homeopathic remedies can attest to. Conventional science will quickly point out that any positive and curing results for Homeopathy can only be attributed to the placebo effect, and not to the remedy itself.

## Miasms

The classical teachings of miasms have always confounded practicing Homeopaths. Whilst understanding of the notion of a miasmatic picture as explained by Hahnemann, who defined the miasms as the fundamental energetic (vital force) cause of disease or the deep-seated effects of an infection on the vital force, is somewhat taken as gospel. It was not until quantum physics provided an understanding of how our reality, including how the human body might work regarding energy fluctuations that miasmatic pictures make sense. The quantum field of endless probabilities and possibilities as explained by quantum physics, is acknowledged to be present around and inside every living organism, the earth and all celestial bodies. Science is only just beginning to understand how observation, beliefs, and biases influence this field (Braden, 2006).

Miasms and core or constitutional remedies are intricately linked and must absolutely be considered in homeopathic case management as part of a holistic approach (Rosencweig, 2017). In classical Homeopathy, Hahnemann identified three main miasms, the psoric, the syphilitic/luetetic and the sycotic miasms, with the psoric miasm being the most abundant one, and according to Hahnemann, the cause of over 85 per cent of chronic diseases. He attributed all non-venereal disorders such as skin eruptions, hypersensitivity, allergies, most mental, emotional and organ diseases to the psoric miasm (Hahnemann, 39<sup>th</sup> impression, 2018). The main classical remedies for psoric conditions include Sulphur, Natrum Muraticum, Calcarea Carbonica, Arsenicum Album, Lycopodium, Phosphorus, Mezereum, Graphite, Causticum, Hepar Sulph, Petroleum, Silica, Zinc and Psorinum amongst many others.

Many sexual and urinary disorders as well as lung disorders and joint afflictions, such as arthritic conditions, he thought of belonging to the sycotic miasm, mainly based on and arising from viral warty excrescences. Chief remedies for this miasm include Thuja, Lycopodium, Natrum Sulph, Causticum, Kali Sulph, Staphysagria, Calcarea Carbonica and Sepia.

Diseases of the nervous system, mental illnesses, skeletal and cardio-vascular system disorders as well as sensory symptoms he attributed to the syphilitic miasm, mainly created through venereal infections. Chief remedies can be Arsenicum, Aurum, Mercury, Phosphorus, Lycopodium and Nitric Acid.

In addition to these three ancestral miasms, Homeopathy also recognizes the tubercular miasm, created through the *Mycobacterium tuberculosis*, which can be both ancestral or acquired, and the typhoid miasm, caused by the bacterium *Salmonella typhi*. The main remedy for the tubercular miasm is Tuberculinum, a nosode made from sputum or bacterial eruptions of tuberculosis patients. The remedy for typhoid miasm is the nosode Typhoidinum.

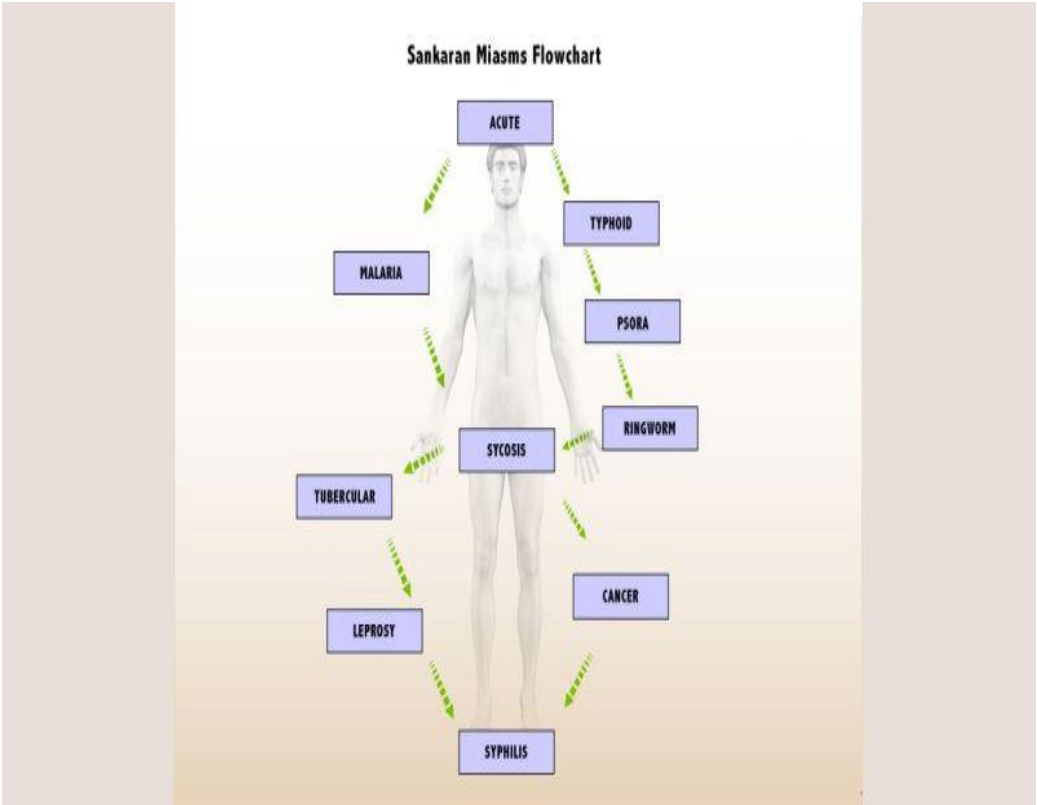
Newer miasms include the fungal ringworm miasm, and the cancer miasm initiated through specific viruses such as the Epstein-Barr virus, the HIV virus, the newly developed COVID-19 virus, carcinogenic influences through DNA mutations and irradiation, and of course as previously mentioned via epigenetic altering of cellular processes through environmental influences, beliefs and behaviours. As traditionally understood, miasmatic tendencies are acquired through familiar or hereditary energetic changes transmitted from ancestral lineage of parents/grandparents to children if one or more ancestors had been affected by the miasmatic disease in the past. If patients were infected themselves in their lifetime, the miasm would be acquired and the patient would present with the symptomatology of the disorder. If untreated, ancestral lineage may transfer a developed miasm to their offspring and beyond.

With the broader knowledge and understanding of genetics, and the up and down regulation of DNA through epigenetics, scientists now know how viruses or bacteria can alter cellular DNA by inserting itself into the strand of Adenine, Thymine, Guanine and Cytosine (ATGC) base pairs, such as in a viral infection, or via an epigenetic signalling modification in case of bacteria. Both changes within the DNA can then be transcribed into daughter cells through the process of mitosis and become part of the normal phenotypical genome picture of the carrier, only to be passed on by reproductive means via the transfer of chromosomes.

Homeopaths with a greater understanding of cellular biology, epigenetics and behavioural influences on cellular molecular modifications are familiar with the miasmatic picture that must form a natural and organic part of case management. In addition, influences might also include sub-conscious programming downloaded from parental, religious and social belief systems, cultural influences and legacy issues of major events throughout one's life, all of which produce a long-lasting imprint in the

sub-conscious of a person, often culminating in a pathological or emotional/mental symptom picture, which can be deemed a miasm, albeit an acquired one. Practicing Homeopaths are acutely aware of miasmatic influences that not necessarily relate to the orthodox applicability of a pathological symptomatology in isolation, and that are driving a pathology, be it physical or biochemical, psychological or mental and emotional through beliefs and biases acquired through childhood or other events. When considering an ancestral or acquired miasm affecting the patient's ability to beneficially react to the repertorized Similimum, situational or constitutional, the applicable nosode is the next logical step in the homeopathic treatment plan. A nosode is a homeopathically prepared remedy acquired from diseased tissue, sputum, phlegm or from a bioscopy, and is in most cases seen as a supporting medicine, and not a constitutional or core remedy.

**Figure 9: Sanskaran Miasmatic Picture**



Allen, 2007

## Fifth Law – Hering’s Law of Cure

Whilst the Law of Cure is not necessarily a distinct homeopathic Law, it has been integrated as part of the strict principles of Homeopathy and therefore needs to be included in this synopsis. The Law or also called ‘principle of cure’, or the direction of cure principles was first developed by Dr Constantine Hering, an American Homeopath and was later adopted by Kent in his book *Kents Lesser Writings*.

Hahnemann determined that a cure was: *"The perfection of a cure consists in restoring health in a prompt, mild and permanent manner: in removing and annihilating disease by the shortest, safest and most certain means, upon principles that are at once plain and intelligible"*.

In a homeopathic cure, the direction of symptoms, according to Hering, should be experienced as follows:

- From above downwards (head to extremities).
- From within outwards (organs to skin).
- From a more important organ to a less important one.
- In the reverse order of their coming (chronic to acute).

Hering observed that the body seeks to externalize disease, noting that symptoms will surface as part of the curative process. According to one of Hering's "Laws", a person's symptoms will appear and disappear in the reverse order of their appearance upon the body. Thus, a patient might re-experience symptoms during the healing process thought already healed. A further observation Hering encountered was that the body heals from top to bottom, and from more vital organs to less vital organs. These guiding principles are used in helping Homeopaths to understand whether a patient's health is improving or deteriorating (Brien *et al*, 2012).

## Part Three – The Complex Human

### The Placebo Effect

The placebo effect is an essential part of any sound and reliable double-blind scientific and/or clinical trial and refers to the positive or negative influence of the mind, thoughts and emotions of the individual. It has been measured countless times in medical experiments, and medical practitioners as well as Homeopaths prescribe placebo medications the world over to prevent hyper-anxious individuals from ingesting too many medicines. Ground-breaking research in recent decades has shown that the human mind has a powerful capacity to heal the body as Dr Joe Dispenza in his 2015 book *You are the Placebo* explains. However, the placebo effect is not guaranteed just because a person believes they will be healed in whatever manner prescribed. Whilst the power of the mind over the cellular system is a fact, it must be applied in a continuous and dedicated fashion.

Scientific research into the effectiveness of Homeopathy often uses the easy way out by stating the efficacy is only due to the placebo effect and has no bearing on the homeopathic remedies. Yet the phenomenon of placebo and/or nocebo (negative effect), or the measurable health response without an active pharmacological or homeopathic medicine is not easily understood by contemporary science. The most common explanation by scientist is that the placebo effect is a psychological or perceptual response on the self or seen as a bio-evolutionary and almost mystical effect (Bellavite *et al*, 2021). All human beings perceive the world according to their sub-conscious programming and their belief system. In Hypnotherapy, a person's perception is guided by the 'event-thought-belief-bias-action' sequence, meaning that all people are exposed to events throughout life that shape their mind and bias towards a certain belief, which in turn directs their responses or reaction to events and shapes the world around them. Placebo is such a bias or belief, if it is strong enough and based on previous experiences or events, placebo will heal. If it is not, placebo will not be effective in any case. Homeopathy, however, works also on babies, small children and animals, and those healing effects have nothing to do with the placebo effect.

In 2016, von Ammon *et al*, published a meta-data study: *Results of original RCTs with individual homeopathy and high potencies versus placebo and standard treatments via*

the Scientific Society for Homeopathy (WissHom), Köthen (Anhalt), Germany. The study compiled an overview of the specific effects of individually prescribed ultramolecular medicines ( $\geq 12C$ ) compared with placebo or standard therapy when used in patients requiring treatment. A total of 24 to 126 patients took part in the nine trials with a mean number of 64 (SD=31, median 64). The clinical spectrum comprised three studies of diarrhoea, and one study for each of the other diagnoses of migraine, anxiety, traumatic brain injury, sepsis and ADHD.

In four of the studies, Homeopathy was used as an add-on to standard treatment. In all nine studies, Homeopathy was compared against placebo. The clinical endpoint of the studies varied between five days and 1.5 years. Outcomes of the study showed that classical Homeopathy is superior to placebo, however, the researchers cautioned that, given that these results were obtained from relatively few studies and small sample sizes, the conclusions must be interpreted with caution. The majority (7 out of 9) of the studies researched indicated that homeopathic medicines have a specific effect, even if the sample size of the individual studies was generally too small to demonstrate, on its own, that Homeopathy was clearly superior. To achieve more definitive results the research paper stated, future clinical studies should be conducted prospectively with larger sample sizes and methods that closely reflect the clinical routine (von Ammon *et al*, 2016).

To understand the placebo effect, one must understand how the mind-body connection interfaces, not just in the event of a dis-ease or ailment of the body, but in the everyday biochemical and electromagnetic activities of cells. The programmed and sub-conscious beliefs of the individual are enormously important in the way our sub-atomic particles within our cells and the DNA (deoxyribonucleic acid) react. Strong and consistent positive beliefs can bring about healing even without the intervention of the medical system, and strong negative belief as in the nocebo effect, can bring about dis-ease or distortions in our vibrational electromagnetic system, which will ultimately lead to malfunctions within the biochemical processes of our cells (Goswami, 2011).



## The Human Cell

The human being is a complex arrangement of 50 – 80 trillion cells plus bacteria in a ratio of 1:1.5, all of which have a complicated, symbiotic and dynamic biochemical and positive or negative energy exchanging rhythms that depend entirely on environmental stimuli. Biosciences have only just come to understand the importance of the microbiome in the human intestinal tract, skin, orifices, the heart, and the subsequent bacterial interaction with the host body. Every cell, including bacterial cells consists of four basic parts. The first part is an outer cellular membrane that engulfs the cell and that is responsible for the communication with other cells, and for the inlet and outlet of molecules and elements the cell needs or produces.

The second part of a cell is the nucleus, responsible for housing the DNA, and responsible for the copying of genetic material through specific enzymes and proteins. These facsimiles then get transported via a transporter protein called messenger ribonucleic acid (mRNA) to the organelles, which turns these copies into the 100,000 or so different proteins a body needs to maintain health. The nucleus is also responsible for the duplication or mitosis of a cell, i.e., copying the genetic material located within tubes called chromosomes (human beings have 46 chromosomes in each cell, 23 from each parent), and all the organelles to form an identical sister cell.

Organelles are the third part. These are tiny organs arranged from mostly protein molecules, have specific responsibilities, such as providing stability to the cell; production of hormones, enzymes and immune response proteins; conversion of glucose or ketone molecules into ATP (adenosine triphosphate), the body's energy molecule; transposing genetic material from the nucleus of the cell to its organelles (ribosomes) in order to manufacture the correct proteins; providing a scaffolding structure to the cell through protein microtubules and filaments; responding to commands from other cells through precursor hormones and other signaling components; and the constant repair of cellular walls and organelles.

The intra-cellular fluid is the fourth part of a cell. This fluid is part of the water content of the body and is derived from extracellular fluid in which all cells reside, which, in turn, is derived from blood. The human body consists of >75 per cent H<sub>2</sub>O.

The intracellular fluid allows for cellular movement of nutrients, proteins and other molecules through osmosis and via the conducting of electric voltages across the cellular bi-layer membrane.

**Figure 10: The Human Cell**

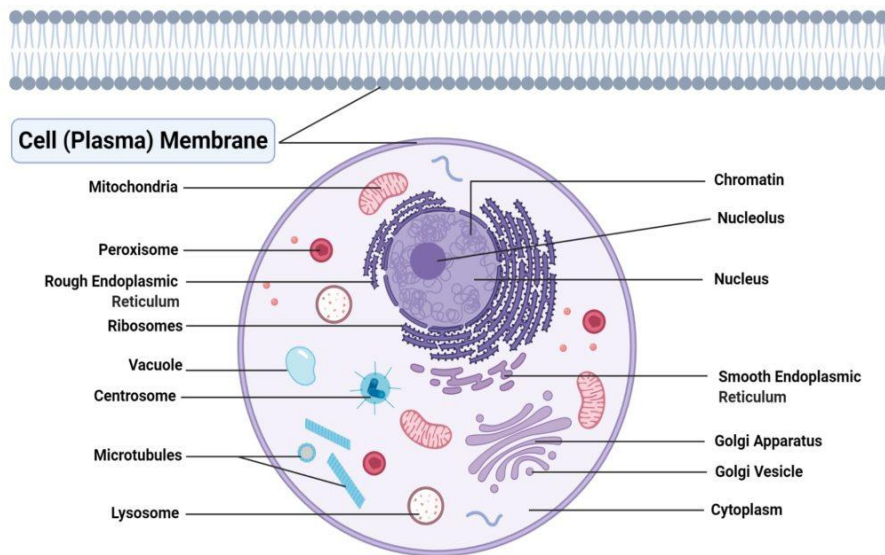


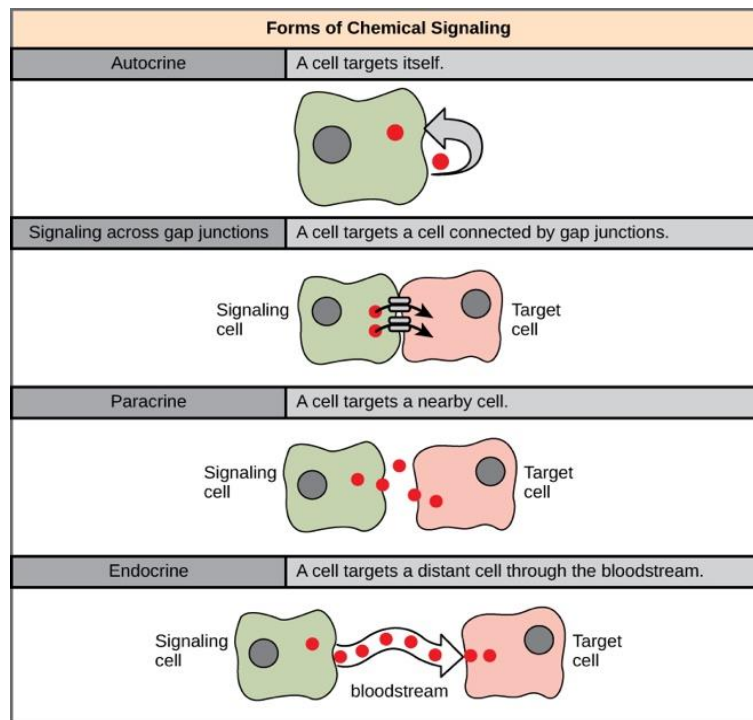
Figure: Animal Cell Structure with Cell (Plasma) Membrane, Image Copyright © Sagar Aryal, www.microbenotes.com

<https://microbenotes.com/category/cell-biology/>

Through integral membrane proteins (IMP's) and their receptor sites embedded within the cellular phospholipid bi-layer membrane, cells receive their biochemical and electromagnetic directions. These receptor proteins are cell specific and sensitive to not only signalling proteins such as hormones, enzymes, and essential minerals and trace elements, but are also sensitive to electromagnetic frequencies produced via thoughts, feelings, emotions, UV, radiation, sound and homeopathic medicines. Cells within a multicellular organism such as the human body need to signal to other cells that are at various distances from the original cell.

In chemical, or more precise, by electron-electron transfer signalling, a cell may target itself (autocrine signalling); or in a cell to cell targeting via gap junctions as in neurons (neurotransmitters); or contacting and influencing a nearby cell (paracrine signalling); or reaching a distant cell via blood or intercellular fluids (endocrine or hormonal signalling).

**Figure 11: Cellular Communication**



<https://openoregon.pressbooks.pub/mhccmajorsbio/chapter/types-of-receptors/>

### DNA Modulation via Epigenetics

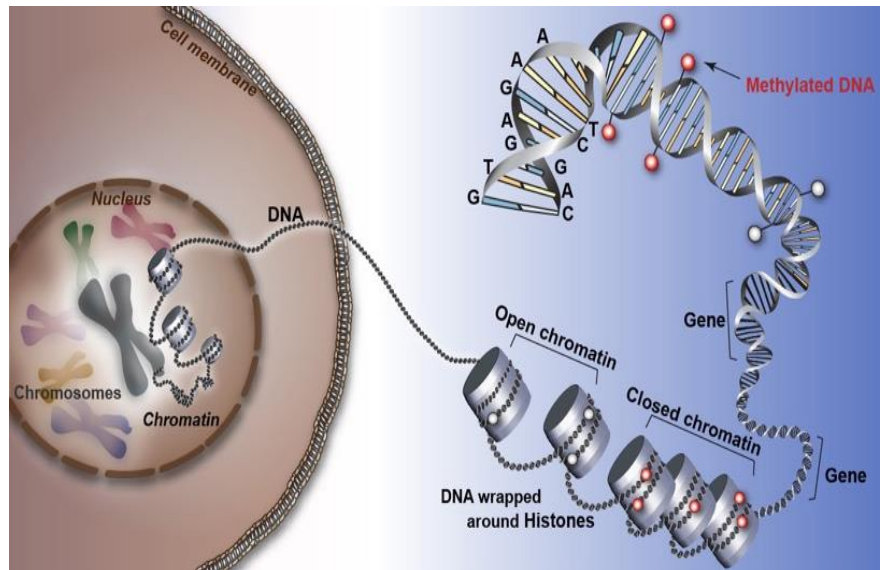
The new scientific field of epigenetics that arose after the Human Genome Project finalised in 2003, allows scientists to understand that stimuli are responsible for the continued DNA sequencing and the up/down regulation of genetic material or nucleotide base pairing, that may lead to changes in the protein production of the ribosome organelles within cells, and hence may affect the health of the body over time. DNA strands react to environmental stimuli through methylation, which is a biochemical process that adds a methyl group (CH<sub>3</sub>) to DNA strands.

DNA methylation is very specific and occurs in a region of the DNA strand where a Cytosine nucleotide is located next to a Guanine nucleotide. Cytosine always pairs with Guanine. The Cytosine nucleotide has a link to a phosphate molecule, which is called a Cytosine-phosphate-Guanine or CpG site. CpG sites are methylated through the action/promotion of one of three enzymes called DNA methyltransferases, or DNMT. By inserting methyl groups into the GC base pairs, it changes the appearance and structure of that part of the DNA strand, modifying or up/down regulating gene expression in the cell's nucleus. That, in turn, modifies base pair transcription to a

mRNA molecule, resulting in fewer, increased or different proteins being manufactured.

DNA methylation is used in some genes to differentiate which gene copy is inherited from the father and which gene copy is inherited from the mother, a phenomenon known as 'imprinting' (Egger *et al.*, 2004).

**Figure 12: DNA, Chromosomes, Histones, Chromatins**



Australian Epigenetic Alliance, Artwork Kate Paterson (2002)

This methylation process is affected by epigenetics, or the 'above-genetic' influences via extracellular regulatory processes initiated by environmental factors as mentioned previously above. Scientific research by Dr. Joe Dispenza (2017), Dr. Amit Goswami (2011), and Dr. Bruce Lipton (2005) amongst others has revealed that cellular receptors respond to our perceptions, or the way we perceive reality around us, including our ability to respond to external and internal stimuli. Our reaction or perception to make decisions, think, feel, and follow through with choices arise from sub-conscious programming instilled during childhood or during life-altering events throughout our life. What this means is that our perceptions, thoughts, beliefs and biases control our cellular receptors just as much or even more so than environmental factors such as how or where we live, and as a result our genetic material and hence our health (Lipton, 2007).

One core remedy or Similimum is often not able to adjust or balance all these DNA modifications or even mutations across a life span. A child, a teenager and an adult are not the same person. Humans are constantly changing, adapting, stepping on and off the homeostatical tight rope, and are affected by the way life and reality is perceived. This cutting-edge science is providing Homeopaths with a new, more dynamic understanding that a constitutional or core remedy, whilst having a place in the treatment of a patient, must only be one of several situational remedies, be it for acute or chronic pictures, that fit the moment the patient finds him or herself in at any one time (Browne, 2019).

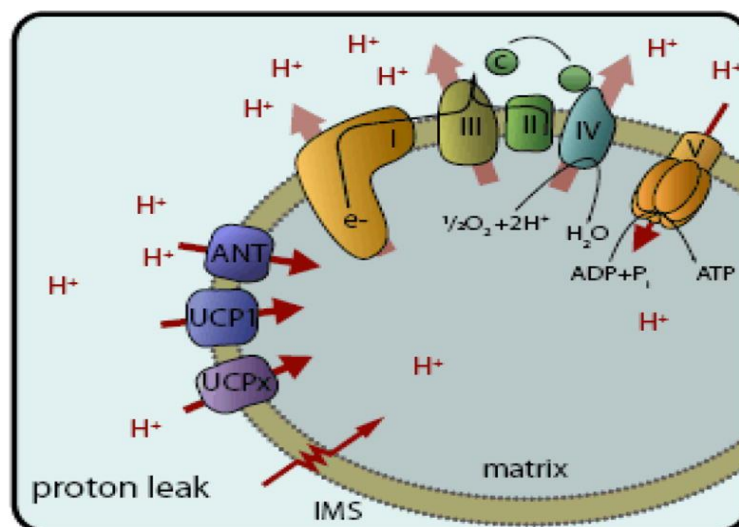
### **Mitochondrial DNA**

Apart from the cellular DNA located within the nucleus of each human cell, the mitochondria, an organelle with surprising ability to regulate the immune response and energy production in the body also contains DNA, in fact it contains maternal DNA or mtDNA. MtDNA contains 37 genes, all of which are essential for normal mitochondrial function. Thirteen of these genes provide instructions to produce enzymes involved in oxidative phosphorylation or mitochondrial electron transfer. Oxidative phosphorylation is a process that uses oxygen and fuel in the form of glucose/ketones to create adenosine triphosphate (ATP), every cell's main energy source. The remaining genes provide instructions for making tRNA and ribosomal RNA (rRNA), which are chemical cousins of DNA. These types of RNA molecules carry the instructions for the assembly of amino acids into functioning proteins as explained above.

Mitochondrial electron transfer is accompanied by proton fluxes and coupled through the redox proton pumps mediated by mitochondrial complexes. Mitochondrial electron transfer establishes electrochemical/electromagnetic potential that is finally used by ATP synthase to generate ATP, or more precisely ADP+P. The removal of one of the phosphate atoms from the ATP molecule results in a bio-photon release, which the cell uses as pure energy frequency. Every cell in the body contains between 100 and 1 million mitochondria, whilst neurons contain the most mitochondria and use the most bio-photon energy produced. Not all potential energy is transformed/converted into ADP+P by the mitochondrial electron pump, as some degree of uncoupling is observed during electrochemical energy transformation into ATP via what is called the Krebs

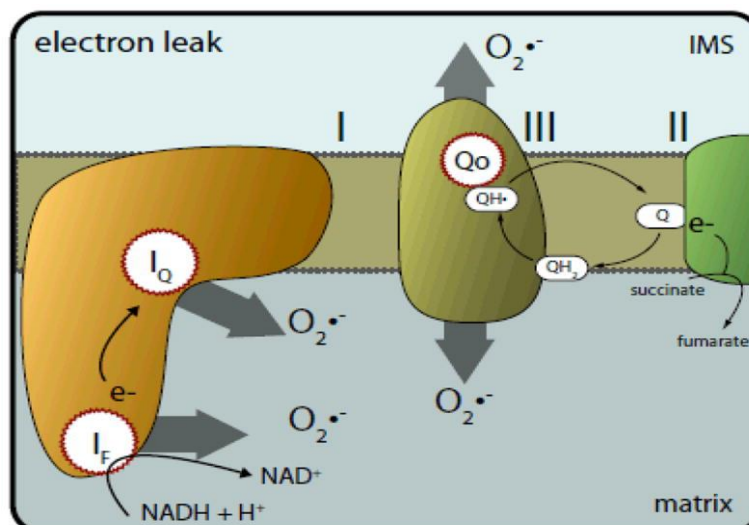
Cycle, a complicated electron-electron transfer chain. This incomplete coupling of electrons across the mitochondrial plasma membrane is thought to occur due to basal and/or inducible proton leaks, which are often unregulated, and through electron leaks, where electrons are transferred through the Krebs cycle without pumping protons into the intermembrane space. Protons can directly escape from the inner mitochondrial space by diffusion through the inner mitochondrial membrane, a process named basal proton leak, and is now believed by the latest research as the main factor in dis-ease formation of cellular biochemistry.

**Figure 13: Mitochondrial Proton Leak**



doi: 10.1042/bse0470053. PMID: 20533900; PMCID: PMC3122475.

**Figure 14: Electron Leaks (loss) from Krebs Cycle during electron transport**

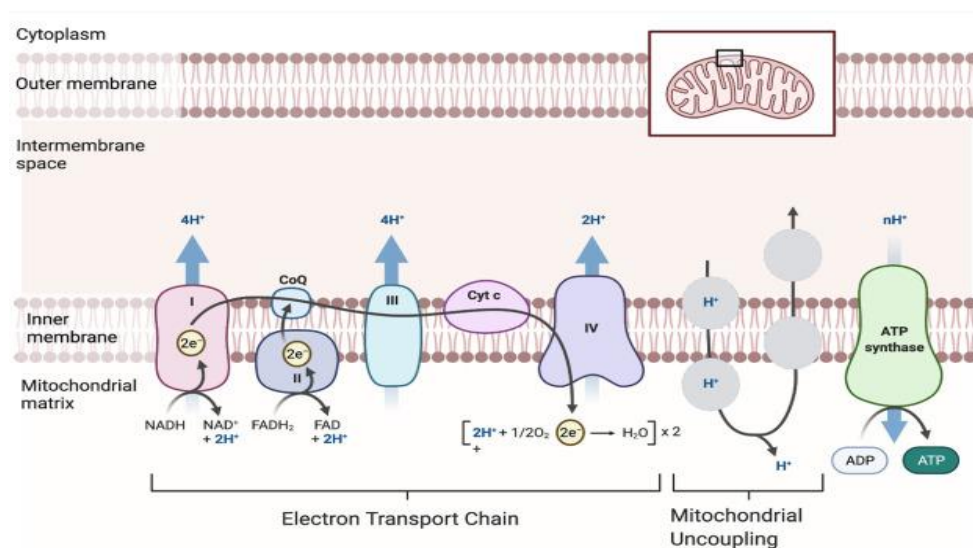


doi: 10.1042/bse0470053. PMID: 20533900; PMCID: PMC3122475.

Mitochondrial uncoupling can be caused by a variety of environmental influences, conditions and ingested molecules/electromagnetic frequencies that exert an influence not only on electron leaks and Krebs Cycle cation cycling, yet also on proton leaks within the Krebs Cycle proton pumps and on the structural integrity of the mitochondria. Proton leaks account for a reduction in ADP+P and therefore bio-photon production for up to 50 per cent in certain cells and are directly linked to environmental or lifestyle factors, and emotional and stress related influences (Carmago *et al*, 2013).

Unhealthy mitochondrial uncouplers are thought to include endogenous physiological uncoupling proteins, a type of enzymes caused by oxidative stresses, biological compounds such as free fatty acids, especially long-chain fatty acids, which contribute to proton leaks in mitochondria. Natural uncouplers such as capsaicins and their derivatives are red capsicum components are known for their capacity to induce the upregulation of endogenous uncoupling proteins, and eicosapentanoic acid (EPA) and docosahexanoic acid (DHA), otherwise known as Omega 6 and Omega 3 fatty acids, also contribute to the increase in basal proton leaks. Synthetic mitochondrial uncouplers with a flair for the increases in proton slips and leaks include anesthetics, as well as carbon-monoxide releasing chemicals which interfere with the proton transfer across the mitochondrial membranes (Demine, Arnauld, 2019).

**Figure 15: Mitochondrial Uncoupling**



<https://doi.org/10.1016/j.molmet.2021.10122>

Whilst mitochondrial uncoupling is seen by science to be a contributor to dis-ease formation in human cells, the process of reducing the ATP/ADP+P production in the body via internal or external uncoupling molecules may be beneficial in regulating thermodynamic activity within cells and assist in managing obesity. Mitochondrial inefficiency through proton leaks as mentioned above, uncouples substrate oxidation from ADP+P phosphorylation, which comprises as much as 30 per cent of the body's basal metabolic rate and is hypothesized to protect cells from conditions that favour reactive oxidation production (Mookerjee, 2010).

Cellular mechanisms that allow protons to bypass the ATP synthase while entering the cellular matrix essentially “short-circuit” the coupling of substrate oxidation to ADP+P phosphorylation. This process is seen to be beneficial in the “uncoupling to survive” hypothesis promoted by Dr Gundry in his 2022 book *The Keto Code*, as the attenuation of reduced oxidation via the Krebs Cycle by partial uncoupling is said to be a potential mechanism for delaying cellular senescence and promote dis-ease free longevity. Mild mitochondrial uncoupling increases metabolic inefficiency in cells, effectively “restricting” caloric conversion into biological/electromagnetic work. Gundry supports mitochondrial uncoupling via specific exogenous uncouplers as mechanism for lifespan extension and disease control through practices that promote cellular homeostasis.

Incidentally, the homeopathic medicine Arnica Montana (2C to 15C) was found in a recent Reverse Transcription Polymerase Chain Reaction (PCR) analysis by Oliosio *et al*, 2016, to contribute to mitochondrial uncoupling processes in cytokines and macrophages, exhibiting the most consistent up-regulation of gene expression. This trial concluded that Arnica Montana has a mitochondrial uncoupling effect in neutrophil recruitment and on angiogenesis (capillary formation) and contributed in a beneficial way to wound healing processes. Oliosio *et al* concluded that: *‘This exploratory study provides new insights into the cellular and molecular mechanisms of action of Arnica Montana as a promoter of healing, since some of the genes it modifies are key regulators of tissue remodelling, inflammation and chemotaxis.*



## Part Four – A Quantum Energy Effect

### Quantum Physics Synopsis

Quantum physics, or the study of matter and energy at the most fundamental level that constitutes our reality, has been studied for more than 100 years. Quantum physics is a metaphysical science that explores the true nature and behaviour of the smallest, indivisible part of the non-physical and emerging aspects of reality. It is also the scientific study of consciousness and reality, of first cause and the nature of being. Amid Goswami, PhD, physicist and author explains in his 2009 book *The Quantum Doctor* that metaphysics, quantum physics and consciousness are inseparably linked, as the collapse of the quantum wave function of photons in the probability field into actualizations is the action of consciousness. The term 'Meta' in metaphysics, meaning above or beyond common Newtonian physics, covers a wide range of subjects from theoretical mathematics to physics, quantum physics, quantum biology, cosmology, behavioural and social sciences, transpersonal behaviours, counselling and psychology, near death experiences, and spiritual phenomena.

Topics within metaphysics includes laws of nature, causation of being, dispositions and behaviour, natural and universal laws, possibility and necessity of mind, explanation of origin, reduction and emergence of consciousness, and space and time. Whilst traditional sciences may ask questions such as: 'how do we know of x', metaphysicians enquire rather: 'what is the nature of x', where x is a placeholder for some entity, situation, or facts discovered or postulated by science, not at the empirical level but rather at the abstract, philosophical and awareness level. Some metaphysical questions such as: 'what is the world ultimately made of', 'how life emerged', and 'what is life' also belong to the domain of the traditional sciences such as physics, biology, chemistry and cosmology. At the scale of atoms, electrons, and subatomic or elementary particles many of the equations of classical mathematics, and physics and chemistry, which describe the movement and interactions of things at everyday sizes and speeds, cease to be useful (Browne, 2019).

Quantum physics accepts that all matter in the known universe, as far as scientists can know, is made of the exact same elementary particles, namely photons or light excitations of the quantum field, which collapse into fermions such as electrons,

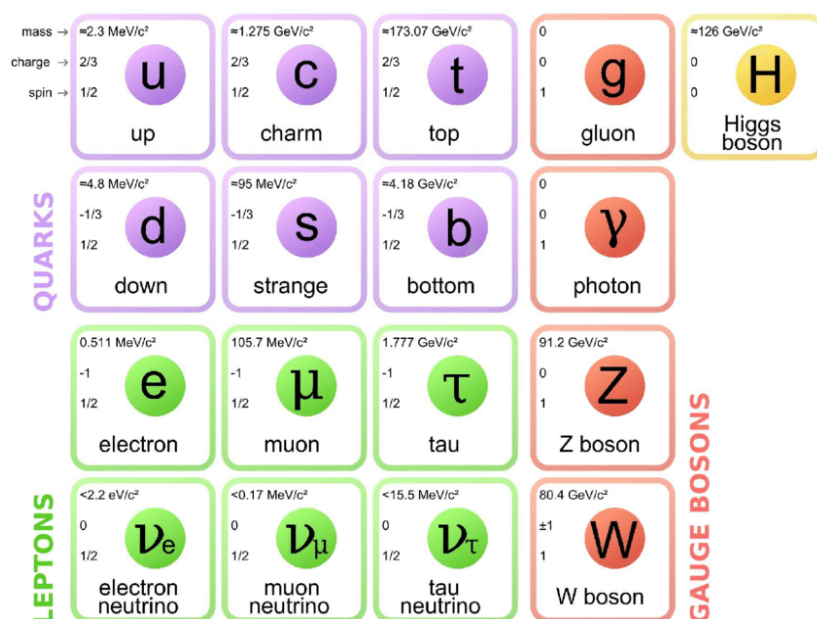
quarks, neutrinos, and bosons, which are energy particles and represent the four known forces that bind the atomic structure, namely the strong force, weak force, electromagnetic force and gravitational force. The energy contained in the quantum field emerges in integer multiples of some fundamental energy or quanta (Zukav, 2001).

A quanta of light is associated with the frequency and wavelength of the electromagnetic spectrum. High-frequency, short-wavelength light has a large characteristic energy, where low-frequency, long-wavelength light has a small characteristic energy. Quantum physicists know that photons, as in fact all elementary particles contained within the nucleus of an atom (proton and neutron), and the electrons in the outer shells can be expressed as waves or particles, depending on the observer, or more precisely on how it is expected to appear by some measurement or the human perception. The objects described by quantum physics; however, are neither particles nor waves, but a third category that shares some properties of waves such as a characteristic electromagnetic frequency and wavelength, some spread over space/time as in a superposition of being both wave and particle at once, and some properties as particles, which are countable and are localized (Goswami, 2004).

Max Planck, one of the fathers of quantum physics, showed in 1900 that everything in this so called 'material' universe is constructed of discrete quanta of light energy. Thanks to Planck, quantum physics has the famous equation  $E=hf$ , where 'E' stands for the energy of a photon, 'f' is the frequency of the light wave, and 'h' is the proportionality constant (Planck's constant  $6.6 \times 10^{-34}$  Joule-seconds) that relates to E and F (Zukav, 2001). The equation, albeit simple at first glance, allowed physicists to determine the smallest amount of energy that any given frequency of waves can carry. When combined with Albert Einstein's famous equation of relativity ' $E=mc^2$ ', which determines the energy of any object in relation to the speed of light, a much simpler explanation emerges. All mass, no matter how complex in its structure, is constructed of discrete quanta of light frequencies or waves that collapse into elementary particles as science knows them, often thought via the conscious or unconscious interaction of an observer.

Elementary particles include fermions, such as electrons that occupy the outer shells of an atom as chemistry describes it, and quarks (up & down), which make up the proton of the atom, and bosons, the forces that hold fermions together. The particles have a charge, electrons have a negative valence or charge, and the proton has an overall positive charge. Neutrons, which are particles that also occupy the nucleus are neutral. Electrons and quarks have, what quantum or elementary particle physics describe as 'spin', a direction of motion that determines their direction to either right or left-handed spin. Left-handed fermions are held together by the charged weak force, where right-handed quarks have no interaction with the weak force. Apart from the directional spins, elementary particles are differentiated by their colour (red, blue, green) as well as their mass and can turn into different species through the interaction of the boson forces as indicated on the diagram below going from left to right (Thomson, 2013).

**Figure 16: Sub-atomic Particles as the Standard Model**



[researchgate.net](https://www.researchgate.net)

Quantum Field Theory (QFT) is a field describing the interaction between all subatomic particles. Physicists believe that elementary particles acquire their energetic and material properties via specific fields, mainly the electromagnetic field. Particles interact with these fields depending on their vibrational frequencies.

In 2012, the Large Hadron Collider at the European Organization for Nuclear Research (CERN) located in Geneva, Switzerland, discovered the Higgs Boson and the Higgs field. This field, believed to be ever so slightly viscous, allows other fermions such as quarks and electrons that pass through it to acquire mass and can then be expressed as 'matter' (Hensen *et al*, 2015). Every atom, molecule, element up to larger aggregations of bonded chemicals such as the human body, animals and in fact the Earth and all celestial bodies such as stars and planets display characteristic electromagnetic fields. Electromagnetic fields (charged particles such as electrons flowing in a field of magnetic force) display vibrational energy frequencies along the whole spectrum of energies traveling across the universe. Electromagnetic energies, through the exchange of electrons in an electron cloud, are made of photons and are expressed in terms of frequencies, as in the Planck equation. Frequency is the measurable rate of electrical energy flow that is constant between any two points. These energies move in waves and of course include the light spectrum we can detect with our eyes and interpret within our brains (Carpra, 2010). Electromagnetic energies also include energy waves humans are unable to detect, but which other creatures on this planet can detect to a certain extent.

**Figure 17: Quantum Wave**

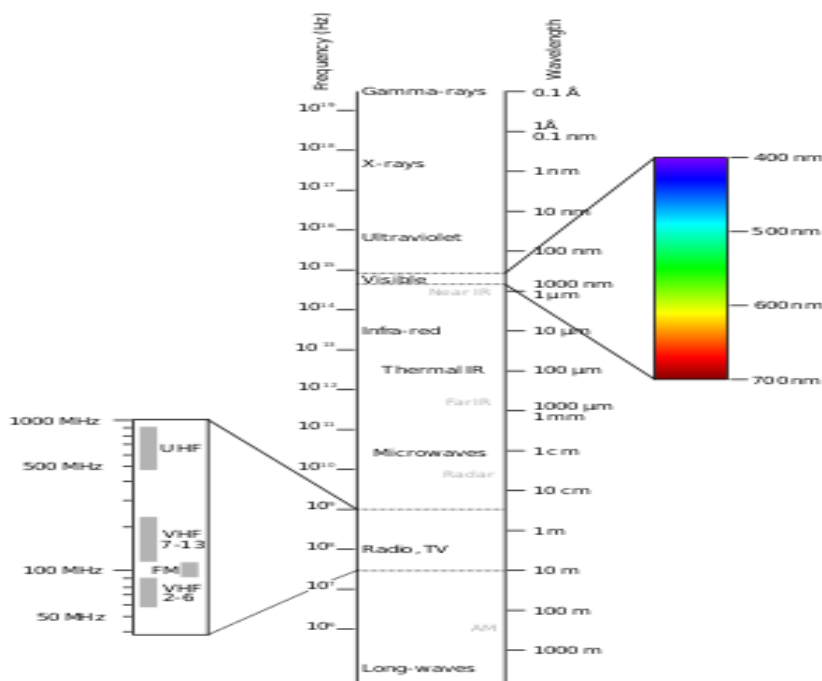


<https://aurumproject.org.au/new-research-in-homeopathy/>

The electromagnetic energy scale ranges from very low-level frequencies such as infrared radiation, radar and radio waves, to higher frequencies such as visible light,

microwaves, ultraviolet light as in sun light, X-rays, and extremely high frequency waves such as Gamma rays and Cosmic rays. Electromagnetic energy or radiation, because all energy radiates to a greater or lesser extent, can be understood as streams of light particles, or photons that travel at the speed of light. The different frequencies these photons vibrate at is measured in cycles per second or Hertz over a distance, or wavelength in meters. Each photon, including those in homeopathic preparations, is made of a certain amount of energy or quanta, and the various frequencies determine the amount of radiation energy present and available. Human beings are only able to detect and interpret approximately 1 per cent of the whole spectrum of energy frequencies within the universe.

**Figure 18: The Electromagnetic Spectrum**



[https://en.wikipedia.org/wiki/Electromagnetic\\_spectrum](https://en.wikipedia.org/wiki/Electromagnetic_spectrum)

Recent advances in quantum biology demonstrate that coherence, as a state of order of matter coupled with electromagnetic fields, is one of the key quantum phenomena of life. Quantum coherence phenomena are well explained by QFT, which, when it is specifically dealing with the interactions between electromagnetic fields and matter, it takes the name of quantum electrodynamics (QED). QED provides a theoretical and experimental framework for modelling the fundamental role of quantum electromagnetic fields and electron potentials in multidimensional coherent structures

in living organisms, i.e., cells. According to QED, all levels of a living being are characterized by their own specific frequency and wave functions whose phases are perfectly orchestrated in an all-over coherent oneness. In cases where this coherence is broken, a dis-ease emerges. (Manzalini & Galeazzi, 2019).

### Modifying Action of Homeopathic Medicine on Cellular Structures

Several scientific methodologies can be employed for the investigation of homeopathic medicines on biological structures. They allow the study of proteins, metals, salts, and minerals via vibrational or resonance Raman spectroscopy, electron magnetic resonance, nuclear magnetic resonance, Inductively Coupled Plasma-Atomic Emission Spectroscopy, UV and Near UV and Infrared spectroscopy, quantum electrodynamics, and magnetic susceptibility, all of which can be employed in the appropriate studies of homeopathic remedies. Research studies have used a number of these approaches to investigate the mechanisms of Homeopathy.

**Figure 19: Methods for Biological Systems Investigations**



Crichton, 2012, J Med Life. 2020 Jul-Sep; 13(3): 278–282

Communication via electromagnetic frequencies or electron transfer pathways of cells are interrupted when dis-ease sets in via the changes in spin directions of electrons

and protons/quarks. Cellular communication via the IMPs have already been mentioned in this report, as well as mitochondrial electron/proton transport chains and the importance of environmental stimuli on these receptor proteins and/or charged particles to effectively manage biochemical and vibrational communication flow from extracellular fluid to intracellular fluid, nucleus and organelles through the process of epigenetics is now scientifically confirmed. These receptors on the cellular bi-laminar membrane are cell specific and can reach between 10,000 to 10 million depending on stresses or stimuli provided, and the terrain they are finding themselves in (Lipton, 2010).

As a stand-alone blueprint, DNA is, in simple terms, an inactive molecular code, unable to self-organize without the stimulation of activation messengers in the form of proteins such as hormones, enzymes, vitamins, minerals, trace elements, sometimes pharmaceuticals, and more importantly vibrational frequencies arising from thoughts, feelings and emotions. These stimuli provide the commands for DNA, whether nuclear or mitochondrial to unravel from its histones, expose a relevant section of the bi-layer code of base pairs to be transcribed just like a facsimile, only to be read through mRNA transcription and then, and only then provide the blueprint for the manufacturing of a particular protein. Without this process DNA would be an inert coding system (Browne, 2019). Our cells are incredibly active, producing up to 50,000 different chemical reactions, including the production of proteins, a second. Quantum biology or biosemiotics is discovering more and more how individual human beings affect and control these processes via cell receptor stimulation, both positively and negatively, and most often unconsciously.

Hypotheses by which homeopathic remedies stimulate these receptors can be found in various books and scientific journal articles. Rosencweig (2017) in his book *Third Millennium Homeopathy*, proposes that the action of remedies could be related to the vast network of 72,000 Nadis or Meridian system and its numerous Acupuncture points Eastern philosophies have always identified as the electromagnetic energy transportation highways of the body. Rosencweig postulates that the vast connective tissue system of the body, consisting of H<sub>2</sub>O fluid expressed as connective tissue such as blood and extra/intracellular fluids or lymph, to the denser varieties of collagen-based fasciae, ligaments, tendons and bones could provide a piezoelectric crystalized

matrix that is activated through stressors, tension or pressure, acting as a mediator between the cells and neurons of the body.

Water, as a medium, occurs as liquid, solid ice, and vapour or steam. Recent research into homeopathics point towards the enormous ability of water to store information or water memory in the form of electromagnetic frequencies within the hydrogen bonds of H<sub>2</sub>O molecules. Seeing the human body is made of >75 per cent water, with the rest consisting of proteins, minerals, fatty acids and trace elements, it can be surmised that the H<sub>2</sub>O molecule, consisting of two hydrogen atoms polar covalently bonded to a single oxygen atom, has a part to play in the way homeopathic medicines affect the system.

Water molecules can display different densities as in heavy water used in nuclear reactions for instance. Water has adhesive and cohesive properties with the ability to attract molecules. Water is a neutral polar molecule with an asymmetrical inner distribution of a partial positive charge on the hydrogens, and partial negative charge on the oxygen, in an overall bend structure because oxygen is more electronegative, meaning that it is more effective than hydrogen at attracting other electrons. Water also displays a specific heat capacity, i.e., boiling and freezing points. Water is also less dense as a solid or ice as it floats on top of water, and it is a universal solvent, meaning other molecules such as salts dissolve easily in water. When in contact with other molecules, H<sub>2</sub>O molecules may form lattice crystalline structures or clathrates, changing their neutral charge to a negative or positive charge depending on the guest molecule, and creating a controlled electrical field, which is thought to be the transportation mechanism for many if not all pharmaceuticals within the body, as well as cell to cell communication processes. A clathrate, also known in chemistry as a hydrate, is an inclusion compound that traps ionic substances and soluble gases in a type of chemical cage (Rosencweig, 2017).

Considering the preparation of homeopathic remedies rely on dilution beyond the threshold whereby there are no molecules of the original substance left, homeopathic remedies above the 24X (10<sup>-24</sup> dilution) potency possibly represent no actual molecular ability to form a clathrate structure with the water it is diluted into. It has become a 'sub-molecular' medicine. Rosencweig postulated in the example of the remedy Natrum



Muraticum, or common table salt - NaCl, which, when dissolved in water, splits into Na<sup>+</sup> and Cl<sup>-</sup> ions, and forms two different clathrate structures with the H<sub>2</sub>O molecules. He also describes this process in a solid trituration with lactose, forming lactose-water-NaCl clathrates as the basis to transport Nat Mur as a homeopathic remedy throughout the body.

## Part Five – Properties of Water

### Water as a Homeopathic Information Carrier

The hypothesis that H<sub>2</sub>O molecules are possible information carrier in homeopathic medicines has been favoured for over 30 years. Jacques Benveniste, a French Immunologist and research scientist published a well-known paper in 1988 in support of Homeopathy and the memory of water. As part of his position as Senior Director at the French medical research organization INSERM's Unit 200, he studied immunology of allergies and inflammation. He experimented with white blood cells, called basophils, which are produced by the body's immune system in activation to an immune response. Benveniste proposed and later verified that a solution of antibodies, diluted and succussed as a homeopathic remedy can, when given to a healthy person, induce an immune response even though the biomolecules of the antibodies were no longer present in the solution.

The results were ground-breaking and showed that water retained the memory of the antibody frequencies, which then initiated basophil activity in an immune response. He claimed that not only does one not need the diluted solution to incur an effect, but biomolecules give off an electromagnetic low frequency that can be digitally copied. When played back to living tissue, the result of the immune response is the same as when taking the homoeopathically produced solution. Benveniste proposed that transmission of the signal somehow involves the quantum-coherent domains, a point that now seems to be more plausible to understand considering quantum physics and quantum biology. Benveniste thought that there is a wave inherent to every molecule. When the wave is propagated from a molecule and is transferred to a cell receptor on the outer membrane of a cell through the medium of water, the wave can induce resonance of a receptor initiating intracellular signal transmission (Davenas, 1988).

Professor Luc Montagnier, a French virologist and 2008 Nobel Prize Laureate who won the Nobel Prize for his discovery of the AIDS virus, surprised the scientific community in 2010 when he strongly supported Homeopathy as a medicine of the future. Montagnier, a follower of his colleague Benveniste, took up further research into the memory of water as part of his AIDS study after Benveniste's death in 2004. Montagnier, who is also founder and president of the World Foundation for AIDS

Research and Prevention, asserted in an interview: '*I can't say that Homeopathy is right in everything. What I can say now is that the high dilutions used in Homeopathy are right. High dilutions of something are not nothing. They are water structures which mimic the original molecules.*' Montagnier's research verified that electromagnetic signals of the original substance remain in the water, and produce structural changes to water molecules, which have dramatic biological effects even though the original substance underwent sequential dilutions and vigorous succussions in-between. He and his team proved that DNA, especially viral and bacterial DNA (nosode), once diluted and succussed, transfers electromagnetic signatures to the water that can be measured (Montagnier *et al*, 2009).

Around the same time as Montagnier's research, research into homeopathic medicine conducted at the respected Indian Institutes of Technology confirmed the presence of nanoparticles of the starting materials even at extremely high dilutions. Researchers demonstrated by Transmission Electron Microscopy (TEM), electron diffraction and chemical analysis by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES), the presence of physical entities in these extreme dilutions. Considering this research, it can now be asserted that anyone who portends or claims that there is 'nothing' in homeopathic medicines is uninformed as to the latest discoveries in quantum medicine. The researchers received confirmation of the existence of nanoparticles at two different Homeopathic potencies at 30C ( $10^{60}$ ) and 200C ( $10^{400}$ ). They tested four different medicines such as Zincum Met (zinc); Aurum Met (gold); Stannum Met (tin); and Cuprum Met (copper). The researchers concluded that this study provided concrete evidence of the workings of Homeopathy (Chikramane *et al*, 2010).

In a series of experiments in 2015, Konar *et al* showed that treatment of a plant or an animal with a diluted and potentized homeopathic remedy might affect other plants or animals connected to the former by the capillary water in cotton threads. The aim of the study was to establish whether drug effect could be transferred via a cell-free medium. Two test tubes, each containing 1ml of 1 per cent starch solution and 1ml of  $\alpha$ -amylase, were connected by wet cotton threads encased in a polythene tube. One of the tubes also contained Mercurius Corrosivus (Merc-c) 30C and the other an ethanol solution (control). The enzyme activity was stopped after 15 minutes, and the

breakdown product of starch and maltose was determined. A third separate tube contained all the tested materials except for Merc-c and the control solution. In a second experiment two tubes, one containing 1,200ppm and the other 200ppm of maltose, were similarly connected. Both experiments were repeated 20 times. The researchers found that in the first experiment, the amount of maltose was similar in both connected tubes, but it was significantly lower in the unconnected tube. In the second experiment, maltose concentration in both tubes remained unchanged. They concluded that information of Merc-c 30C was effectively transferred through capillary water between two tubes in a cell-free medium. The report stated that water seemed to be the most probable carrier of information in diluted and potentized solutions (Konar *et al*, 2015).

In 2015, a Korean biochemist by the name of Won H Kim researched the memory of water focusing on the hydrogen bonds between water molecules. He focused on the quantum wave aspect of water molecules, proposing that the wave function prior to collapsing into an elementary particle is faster than the speed of light, and would exist even after the wave function has collapsed into elementary particles. Kim stipulated that the 3D quantum wave could exist in water as a field in the shape of the original matter. When transferring this to the field of Homoeopathy, he stipulated that each mother tincture has a unique 3D wave form, which, when succussed, is transferred into the water/alcohol solution and can affect the receptors on the outer membrane of cells in the body. He proposed that, if the interaction is fast enough to induce cellular signal transduction, there is no need to rely on chemistry, which cannot explain such a fast biological reaction as is observed in homeopathic medicines. The interaction of the quantum wave of the molecule transferred to water with a cellular receptor could lead to intracellular signal transmission, which has the potential to explain water memory (Kim WH, 2015).

Also in 2015, a team of researchers at the University in Stanford, UK. published an article *Synchronous universal droplet logic and control*, which described the use of water droplets as an information carrier in computer modelling. The researchers found that water droplets can be trained to follow a Boolean logic circuit, scaled to the incredible sub-nanolitre regime of diameter of  $1 \times 10^{-10} \mu\text{m}$ , and achieved magnetisation of H<sub>2</sub>O molecules that interacted with logic gates to produce a binary coding system of

zeros and ones. The article proposed that water droplets can be used as information carriers in quantum computing, and the capability of synchronous logic-based droplet control would enable algorithmic manipulation of materials at the intersection of computer science and fabrication. The researchers predicted that the capabilities presented will enable integrated autonomous parallel droplet manipulation using logic on a large scale in an integrated fashion, analogous to the scaling seen in digital electronics (Katsikis *et al*, 2015).

The above research followed a 2011 article by Zhang *et al*, that demonstrated a uniquely designed microfluid or H<sub>2</sub>O logic gate with universal functionality, which could conduct 16 logic operations in one chip, with different input voltage combinations. The article describes this chip as a smart colloid, giant electrorheological (GER) fluid, functioning as the translation media among fluidic, electronic and mechanical information, with the capability of performing large integrations either on-chip or off-chip. The article continues to state that the on-chip hybrid circuit is formed by the interconnection of the electric components and fluidic channels, where the individual microdroplets of water travelling in a channel represents a bit, either zero or one. The universal logic gate reveals the possibilities of achieving a large-scale microfluidic processor with more complexity for on-chip processing for biological, chemical as well as computational experiments (Zhang *et al*, 2011).

Whilst the two articles above are not specifically geared towards Homeopathy, the research shows quantum computing application that work on similar principles, namely that water is able to carry information in the form of electromagnetic frequencies on the OH bonds.

In 2017, German scientists at the Aerospace Institute of the University of Stuttgart revealed a ground-breaking discovery in water droplets and proposed that water has a memory. By examining individual drops of water at an incredibly high magnification, scientists were able to physically see that each droplet of water has its own individual microscopic pattern, each distinguishable from the next and uniquely beautiful. A scientific experiment was carried out whereby a group of students were all encouraged to obtain one drop of water from the same body of water, all at the same time.

Close examination of the individual droplets showed that each produced a different image. A second experiment was then carried out where a real flower was placed into a body of water, and after a while a sample droplet of the water was examined. The result produced a mesmerizing pattern when magnified, but all the droplets of this water looked similar. When the same experiment was performed with a different species of flower, the magnified droplet looked completely different albeit the droplets of this water were again similar, thereby determining that the electromagnetic frequency of a particular flower is evident in each droplet of water (Kroeplin, 2017). The research again shows the ability of OH bonds to carry information in form of electromagnetic frequencies, even of substances that have not been dynamized or diluted.

In 2018, Wang, Wei and Li published a study on the effect of magnetic fields on water properties. In this study, the effect of magnetic field (MF) on the physical properties of water are reported. Tap water (TW) and 4 types of magnetized water (MW) were measured under the same conditions. The researchers found that the properties of TW were changed following the MF treatment, shown as the increase of evaporation amount, the decrease of specific heat and boiling point. The changes depended on the magnetization effect. Further research by Amor *et al* in the same year showed that MFs change the pH of water, with a direct correlation of strength of the MF to the pH changes. Seyfi *et al*, (2017) looked at the effect of MFs on evaporation levels of water, showing a direct effect on water evaporation when exposed to a MF. The research stated the following outcomes:

- 18 per cent increase in magnetic water evaporation.
- Weakening hydrogen bonds due to magnetic field.
- Magnetic field memory effect in water.
- Magnetic field affects charged molecules dangling bonds on interface.

The above research shows the effect of magnetic fields on the properties of the H<sub>2</sub>O molecules due to their diamagnetic properties, i.e., negative/positive poles or dipoles of water molecules.

## Part Six – Comprehensive Literature Review

### Homeopathy and the Heisenberg Uncertainty Principle

In 2000, Michael Wilkinson at the Centre for High Performance Computing published an article in the *Annals of Improbable Research* in which he proposed that quantum mechanics might be able to interpret the workings of homeopathic remedies. Wilkinson stated that *“temporal dilution in homeopathic exercise is explained in terms of Heisenberg's theory of energy-time indeterminacy”*. Heisenberg's uncertainty principle is used here, which states that a quantum wave only collapses into an elementary particle when observed. The uncertainty principle (for position and momentum of electrons in a field) states that one cannot assign exact simultaneous values to the position and momentum of a physical system. Rather, these quantities can only be determined with some characteristic or “uncertainties” that cannot become arbitrarily small simultaneously (Chiribella & Spekkens, 2016).

Wilkinson goes on to state that: *“the results are fully compatible with thought experiments of the eminent physicist and cat specialist Erwin Schrödinger.”* Wilkinson proposed that the mental experiential Schrödinger's cat notion, which is deemed to be both alive and dead when super-positioned over each other depending on the observer, explains the quantum tunnelling effect of electrons observed in quantum physics through areas of space/time, and that this phenomenon is applicable to homeopathic preparations.

Wilkinson, in his article refers to the probability notion that homeopathic medicine only collapses into curative state when not observed or interfered with by the practitioner. He continues to say that: *“Nonlinear dynamics and chaos theory predict that in a highly nonlinear, or chaotic system, such a small change in net energy (as contained in a homeopathic dilution) may have a profound effect (the famous "butterfly effect"). Many humans are notoriously chaotic, so the Homeopathic treatment should have an effect. However, it is to be stressed that none of these effects can, or indeed should be observed, directly or indirectly, since this would collapse the wave function into a definite state, obliterating the subtle, quantum nature of the treatment”* (Wilkinson, 2000).

## Quantum Coherence Domains Research

Tournier proposed in an article in the Homeopathic Research Institute Newsletter in 2010 a theory which was initially formulated by G. Preparata in 1995 on quantum coherence domains (CDs) as a scientific explanation of how homeopathic medicines might work. Organic life forms are coherent systems with dynamic coherence in the case of electromagnetically coupled particles in water. The permanent nonvanishing electromagnetic fields are always present and are trapped in the coherent systems. The dynamics of enzyme reactions in biochemistry is an outcome of the coherent electromagnetic structure of living matter, as enzymes, as catalysts of biochemical reactions, work with CDs to dynamize reactions (Gludice, 2009). Tournier's theory presented here is an extension of the conventionally accepted Quantum Electrodynamics (QED) originally formulated in the late 1920s by R. Feynman and others to describe how light interacts with matter. Preparata added the possibility of polarised particles interacting with external electromagnetic fields, hence opening a new area of research of possible phenomena.

The theory suggests the presence of CDs in condensed matter, or normal liquids and solids. In the case of water, these CDs would be small volumes of water each one acting as a single 'quanta' entity rather than a collection of H<sub>2</sub>O molecules randomly colliding with each other. Tournier stated that one can think of these domains as the remnants of the quantum domains which exist in superconductors and superfluids at very low temperatures, as the CDs occupy most of the volume of the material at low temperature and endowing the liquid with quantum properties of superfluidity/superconductivity. As the temperature rises the author explains, these CDs are eroded by the surrounding normal, 'not-quantumly-coherent' material, and break into smaller domains. The scientific prediction is that at room temperatures these CDs would account for 28 per cent of the volume of the material, the average size of a CD is estimated to be 250Å (where an Angstrom is 10<sup>-10</sup>m), which is the size of an atypical protein. These CDs are potentially interesting for Homeopathy as they 'lock-in' the electromagnetic field signatures present at the time of the mother tincture titration.



CDs, the author continued, would register the electromagnetic frequency characteristic of any given mother tincture. This process could capture the signature of specific DNA fragments as in the experiments by Montagnier (op. cit.), or indeed of any other substance. CDs of similar electromagnetic characteristics are also predicted to tend to clump together via the process of potentization, thus requiring an external force to separate them out. The serial dilution and subsequent succussion process could then be understood as distributing the CDs carrying the specific frequency information around the remedy, while eventually removing all trace of the original chemical substance through ultra-high dilutions (Tourier, 2010).

## Nuclear Magnetic Resonance Imaging Research

Jean Louis Demangeat, a French researcher with the Department of Nuclear Medicine, General Hospital, Haguenau, France, published an article in 2018: '*Towards a Rational Insight into the Paradox of Homeopathy*'. In it, he explains that homeopathic remedies are manufactured through an iterative dilution/dynamization procedure which induces collateral phenomena, especially nanobubbles and release of silica from the glass container. His NMR (Nuclear Magnetic Resonance Imaging) studies and subsequent review of the literature showed that dilutions could contain much more molecules than expected, in the form of nanoparticulate forms which increased with each dilution. Dilution/dynamization beyond a threshold of  $10^{-6}$  to  $10^{-8}$  generates superstructures associated with the solute, which grew at each step by affixing layers of nanobubbles and silica, or by self-assembly. Sizes from 1 to 2nm to hundreds of nanometres were demonstrated by electron microscopy.

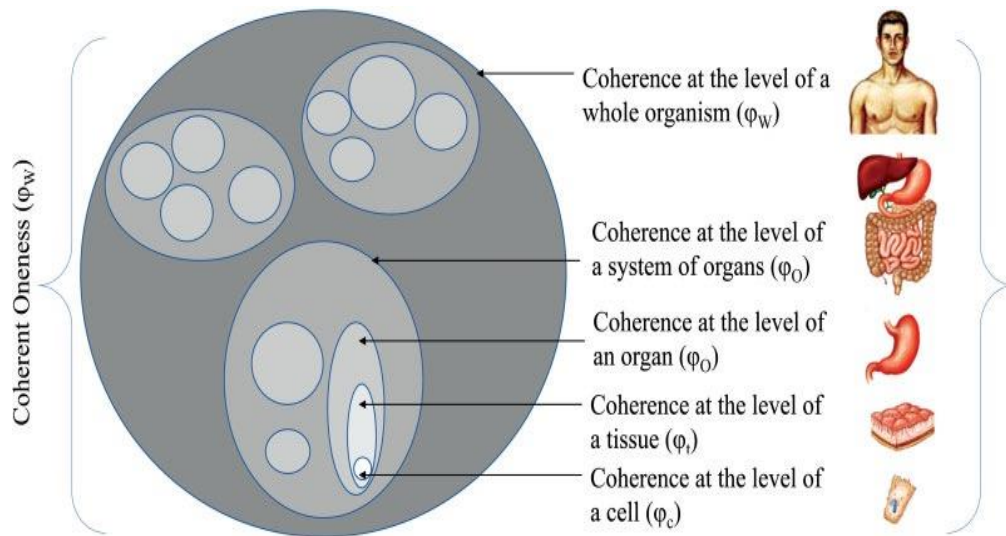
Dynamization appears crucial, by producing specific superstructures (distinguishable according to the dissolved substance) and inducing paradoxical biological effects. Demangeat stated that superstructures are neither observed without dynamization nor at low dilution, where even a paradoxical chaotropic effect on the solvent is observed by NMR. Thus, a dual structure of the homeopathic medicine is highlighted. He postulated that dynamization and nanobubbles ensure formation, stereospecificity, growth and transfer of superstructures across dilutions. He further stated that the sampling tip may play a major role by catching the superstructures and conveying the encaged remedy across the successive dilutions. Some studies managed to show the presence of the remedy source, as a non-zero asymptote, in ultrahigh dilutions, far beyond the molecular dilution limit. Owing to this physical duality, low dilutions would act on organ receptors through ligand-receptor interactions, and high dilutions on systemic size-dependent targets, due to peculiar properties of nanoparticles, able, as a function of size, to cross physiological barriers, stimulate endocrine and cellular systems, or enter nerves to directly reach the brain. Inverse effects, observed within the  $10^{-6}$  to  $10^{-8}$  dilution range might correspond to the onset of the nanoparticulate form. In summary, Demangeat states that the number of dynamizations or succussions could be the true factor for biological activity, rather than the rate of dilution (Demangeat, 2018).

## Quantum Electrodynamics Research

Antonio Manzalini, an independent researcher in Turin, Italy, and Bruno Galeazzi, MD, a Homeopath in Bassano de Grappa, Italy, published a study in 2019 through the Journal of Homeopathy named *Homeopathy and Quantum Electrodynamics*. In it, Manzalini & de Grappa state that every living organism is an open system operating far from thermodynamic equilibrium and exchanging energy, matter and information with an external environment. These exchanges are performed through non-linear interactions of billions of different biological components, at different levels, from the quantum to the macro-dimensional. He summarised that the concept of quantum coherence is an inherent property of living cells, used for long-range interactions such as synchronization of cell division processes. There is support from recent advances in quantum biology, which demonstrate that coherence, as a state of order of matter coupled with electromagnetic fields, is one of the key quantum phenomena supporting life dynamics. Coherent phenomena are well explained by QFT, a well-established theoretical framework in quantum physics. Water is essential for life, being the medium used by living organisms to carry out various biochemical reactions and playing a fundamental role in coherent phenomena.

Manzalini & de Grappa implied that QED, which is the relativistic QFT of electrodynamics, deals with the interactions between EM fields and matter. QED may provide theoretical models and experimental frameworks for the emergence of a model of multi-level coherence for living organisms in which fractal phase oscillations of H<sub>2</sub>O molecules can link and regulate a biochemical reaction. A mathematical approach, based on the 'eigenfunctions' of a Laplace operator in hyper-structures, was explored by Manzalini & de Grappa as a valuable framework to stipulate and explain the oneness dynamics of multi-level coherence in life. The preparation process of a homeopathic medicine was analyzed according to QED principles, thus providing a scientific explanation for the theoretical model of "information transfer" from the substance to the water solution. A subsequent step explored the action of a homeopathic medicine in a living organism according to QED principles and the phase-space attractor's dynamics, which can be understood as a transition or coherence adjustment in a closed system (Weisstein, 2022).

**Figure 20: Multi-level Coherence Structures in a Living Organism**



Each level of coherence is characterized by its own phase  $\phi$  and macro-wavefunction:  $\psi = \psi_0 e^{j\phi}$

Homeopathy and Quantum Electrodynamics Manzalini & Galeazzi, 2019

Manzalini & de Grappa explained that, according to the developed model, all levels of a living organism such as organelles, cells, tissues, organs, organ systems, and the whole organism are characterized by their own specific electromagnetic wave functions or frequencies, whose phases are perfectly orchestrated in a multi-level coherence oneness. When this coherence is broken, a dis-ease emerges. When taking a QED model as the basis for the homeopathic effectiveness, the progressive dilution/succussion processes created the conditions for the emergence of coherence domains (CDs) in the aqueous solution. Those domains code the mother tincture information in terms of phase oscillations, or the difference between two frequency vibrations, and can transfer said information by phase resonance to the coherent structures of the living cells.

The article concludes with the encouragement that QED principles and explanations become embodied in the fundamental teachings of the science of Homeopathy, thus providing the Homeopath with a firm grounding in the practice of rational medicine. Systematic efforts in this direction, Manzalini & de Grappa stated, should include multiple disciplines, such as quantum physics, quantum biology, conventional and homeopathic medicine and psychology.

QED and, in general QFT, confirm, according to Manzalini & de Grappa, Hahnemann's intuitions and provide Homeopaths with the opportunity to upgrade the language and explanations of the mechanism of action of homeopathic medicines. QED can assist in the understanding of the potential non-local effects of intentionality, observations, perceptions, and states of mind of both the practitioner and the patient, thus underlying the practical impossibility of separating the therapist from the patient, as they are not isolable entities according to QED (Manzalini & Galeazzi, 2019).

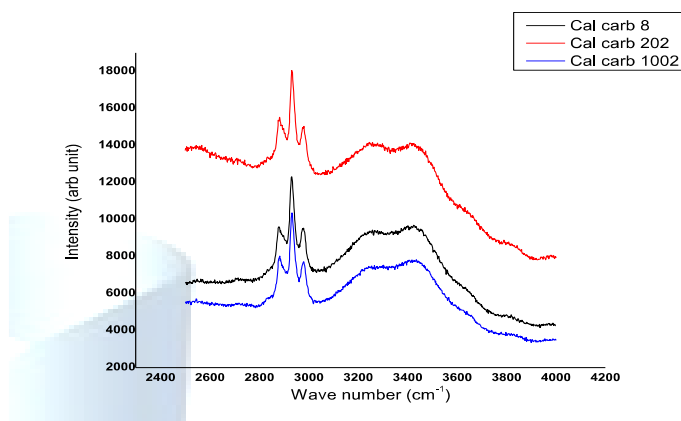
The entanglement of practitioner, patient and possibly the homeopathic remedy is an interesting concept, however, not entirely new. In psychology, counselling and hypnotherapy the aspect of transference and countertransference of emotions and feelings is well understood and something all practitioners must guard against. Taking QED principles into the equation will allow for a more fundamental explanation of these interactions and entanglements, as human beings are not as quite as separate entities as understood by contemporary science.

## Raman Spectroscopy Research

In 2016, Konar *et al* published a research article in the International Journal of High Dilution named *Research Raman spectroscopy reveals variation in free OH groups and hydrogen bond strength in ultrahigh dilutions*. The aim of the study was to decipher the nature of water structure in two ultrahigh diluted homeopathic medicines by Laser Raman Spectroscopy. The homeopathic remedies of Calcarea Carbonica (Calc Carb) and Sepia Officinalis (Sepia) were used in 8C, 202C, and 1002C potencies in 25 per cent ethanol/water mixture, with the identical diluent medium of ethanol, in 8C and 202C as controls.

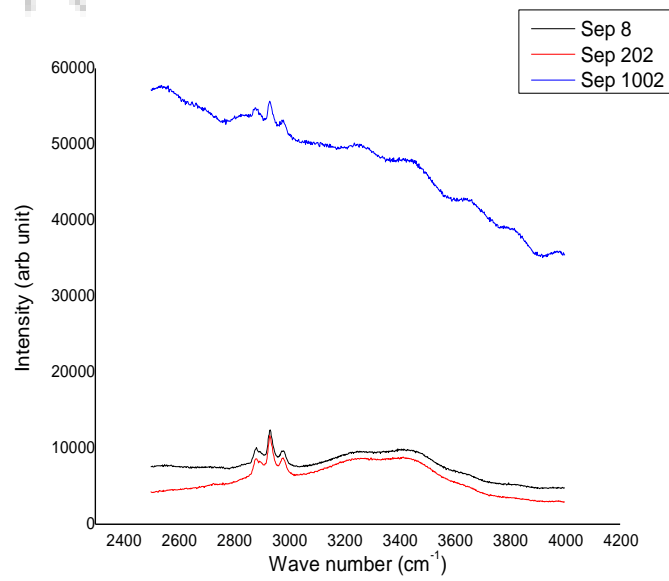
Laser Raman spectra of all the samples were obtained in the wave number region of 2400–4200 $\text{cm}^{-1}$ . Researchers calculated the intensity ratio at frequencies between 3200 and 3420 $\text{cm}^{-1}$  (R1 values) and between 3620 and 3420 $\text{cm}^{-1}$  (R2 values) for each potency of the medicines. The articles stated that the spectra showed a marked difference in intensities in the stretching vibrations of Carbon-Hydrogen (CH) and OH groups of all the samples. The 3200 and 3420 $\text{cm}^{-1}$  (R1) values for the three potencies of Calcarea Carbonica and Sepia showed negative and positive relationships, respectively. In the case of values for the 3620 and 3420 $\text{cm}^{-1}$ , the R2 relationship in the three potencies shows that 8C was less than the 202C, which in turn showed more than the 1002C potency for Calcarea Carbonica, and 8C more than 202, and 202C less than 1002C for Sepia; whilst the control case of ethanol dilution both showed a negative relationship.

**Figure 21: Raman Spectra of OH Bands in Calc Carb**



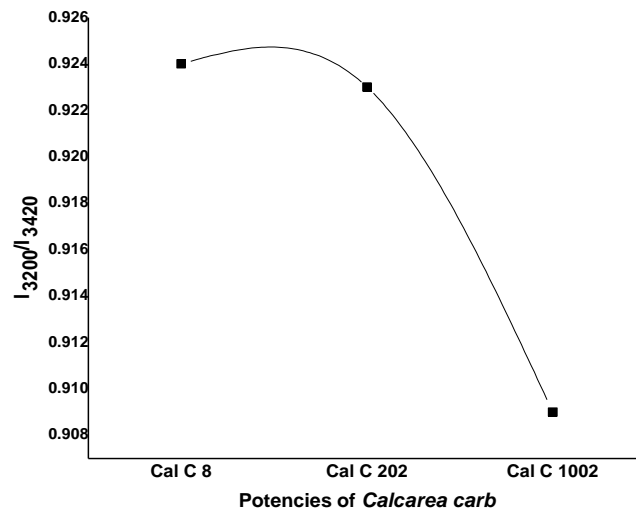
Konar et al, 2016 - Raman Spectra of Calc Carb 8C, 202C, 1002C showing CH and OH bands

**Figure 22: Raman Spectra of OH Bands in Sepia**



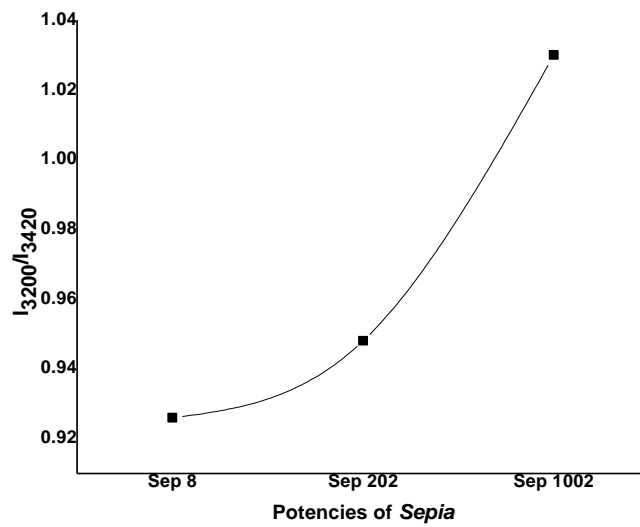
Konar et al, 2016 - Raman Spectra of Sepia 8C, 202C, 1002C showing CH and OH bands

**Figure 23: Intensity Ratio(R1) of Calc Carb**



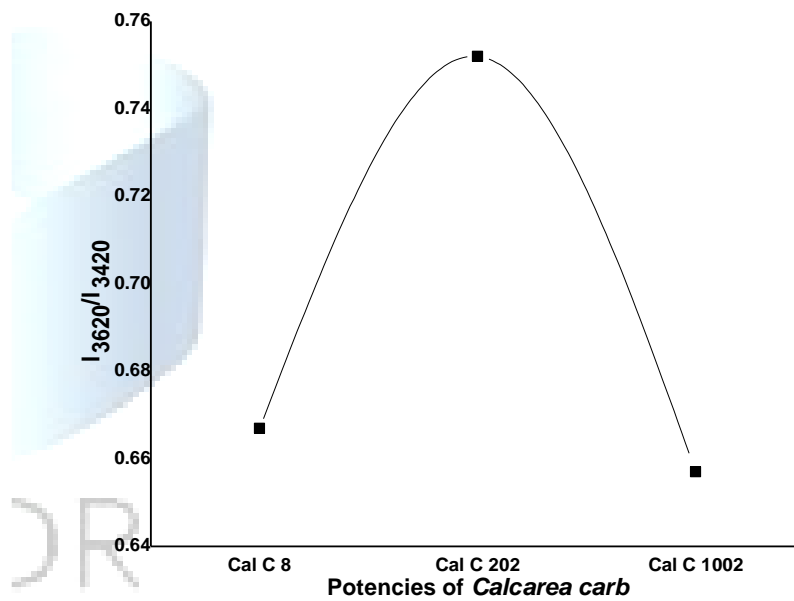
Konar et al, 2016 – R1 Ratio of Calc Carb 8C, 202C, 1002C showing negative relationship

**Figure 24: Intensity Ratio(R1) of Sepia**



Konar et al, 2016 – R1 Ratio of Sepia 8C, 202C, 1002C showing positive relationship

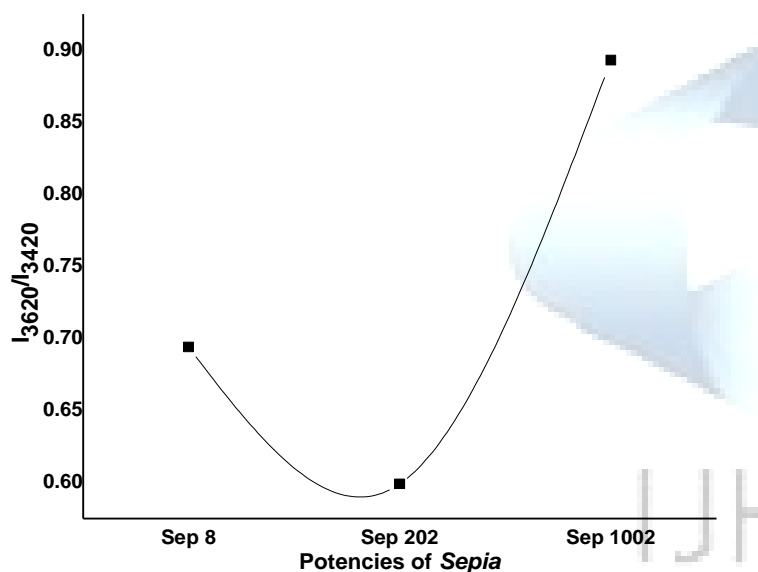
**Figure 25: Intensity Ratio (R2) of Calc Carb Potencies**



Konar et al, 2016 – R2 Ratio of Sepia 8C, 202C, 1002C



**Figure 26: Intensity Ratio (R2) of Sepia Potencies**



Konar et al, 2016 – R2 Ratios of Sepia 8C, 202C, 1002C

The researchers explained that the intensity of Raman scattering is proportional to the electric dipole-electric dipole polarization ability of charge. A water molecule, in which two hydrogen atoms are at a perpendicular arm on one side and form together with the oxygen atom at a  $105^\circ$  vertex angle, constitutes a permanent electric dipole. The oxygen side of the molecule is always negative and the hydrogen side positive. Raman spectroscopy is dependent on the vibrational energy levels of the ground electronic states of any sample. The article reported that the  $3200$  and  $3420\text{cm}^{-1}$  (R1) spectra denoted a relative number of OH groups with strong and weak bonds. The hydrogen bond dipole was found to decrease with increased potency where the bond energy has been altered by the transfer of energy signatures of the mother tincture through the potentization process.

The  $3620$  and  $3420\text{cm}^{-1}$  spectra indicated the relative number of OH groups with broken and weak H-bonds. The two homeopathic medicines and the ethanol control showed different results from each other with respect to hydrogen bond strength of OH groups, and the number of free OH groups or non-hydrogen bonded water molecules. In turn, the different potencies showed distinct variation with respect to the electric dipole-electric dipole polarization of the combined water-ethanol molecules. The report

stated that when a molecule is placed in a static electric field its positively charged nucleus is attracted to the negative pole, and negatively charged electrons attracted to the positive pole. This causes an induced dipole moment in the molecule, which is thus polarized. The results clearly show the variation in the OH-bond strength with respect to the homeopathic medicines and their potency levels, with different medicines showing differing OH-bond energy interactions (Konar *et al*, 2016).

Bhattacharya *et al* in 2019, in an article in the Homeopathic Journal, formerly the British Homeopathic Journal, undertook research into homeopathic medicines whilst considering emerging techniques in material science, using vibrational Raman spectroscopy for providing information on different states of hydrogen bonding as an effect of potentization. The associated change in electrical properties is said to correlate with this effect, and the study showed correlations between vibrational and electrical properties of homeopathic medicines. The vibrational spectra of changes in OH bonding due to dilution followed by unidirectional vigorous shaking or potentization of 91 percent ethanol.

Two homeopathic medicines Chininum Purum and Acidum Benzoicum were studied. The aim of the study was to correlate the vibrationally specific result with the change in the electrical properties of the medicines. Raman spectroscopy was used to study the vibrational spectra. A U-shaped glass tube (electrochemical cell), where one arm contained distilled water and the other arm alcohol/homeopathic medicine (the arms being separated by a platinum foil), was used to measure the voltage generated across two symmetrically placed platinum electrodes. The report stated that for the samples, it was observed that potentization affected the intensity of OH stretching bands at the frequencies  $3240\text{cm}^{-1}$ ,  $3420\text{cm}^{-1}$  and  $3620\text{cm}^{-1}$ , corresponding to strong hydrogen bonds, weak hydrogen bonds and broken hydrogen bonds, respectively.

With the increase in potency, in the presence and absence of the two medicines in ethanol, the number of OH groups linked by strong hydrogen bonds decreased, while the number of OH groups with weak hydrogen bonds increased. With the increase in potentization, the number of OH groups with broken hydrogen bonds showed a difference in the presence and absence of the medicine. The voltage measurements for ethanol showed that, with appropriate succussion/dynamization the magnitude of

voltage increased with both sample medicines at lower potencies, but not at higher potency where the voltage is lower. The report stated that Acidum Benzoicum, which is acidic in nature, had higher voltage values (113mV, 130 mV and 118 mV at 6C, 30C and 200C, respectively), compared with Chininum Purum, which is basic in nature (20mV, 85mV and 65mV at 6C, 30C and 200C, respectively). The researchers concluded that the experimental results indicated a correlation between the vibrational and electrical properties of the homeopathic medicines Acidum Benzoicum and Chininum Purum at different potencies (Bhattacharya *et al*, 2019).

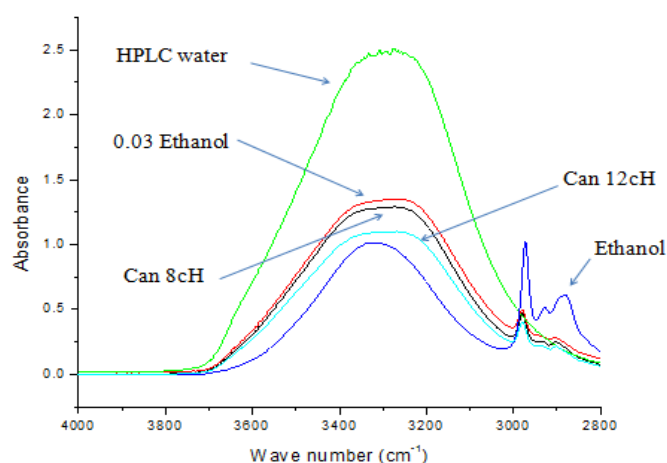
In the Indian Journal of Natural Sciences, an article published in February of 2022 named *Raman Spectroscopy of High Dilutions of Two Drugs in Aqueous Ethanol Solution Shows Variation in Clathrate Hydrate Crystals*, Sukul *et al*, studied two potencies of two homeopathic medicines, namely Medorrhinum and Psorinum, both nosodes, and analysed them by Laser Raman spectroscopy. The article stated that spectra showed differences in intensity of CH and OH stretching vibrations in the potencies and the control. The contour shape of each spectrum as analysed by intensity ratios at two frequencies showed variation in the hydrogen bonding strength in different potencies. The chemical nature of the drugs and different levels of succussions appeared to have contributed to the variation in the hydrogen bonding strength of the OH groups in potencies.

The report stated that clathrate hydrate crystals appeared to vary in the potencies of the remedies tested. The researchers determined that succussion assisted in the nucleation of the crystals and hence played an important role in the preparation of potencies. The crystals, they surmised, may be responsible for the biological effects of homeopathic medicines and contribute to one of the components in the water structure of a potency (Sukul *et al*, 2022).

## Fourier Transform Infrared Spectroscopy (FTIR) Research

Chakraborty *et al* published a research article in 2014 in the International Journal for High Dilution Research: *Variation in free and bound water molecules in different homeopathic potencies as revealed by their Fourier Transform Infrared Spectroscopy (FTIR)*. In this research, the hypothesis was made that different homeopathic potencies having fixed ethanol content show variation in FTIR spectra and free H<sub>2</sub>O molecules. The homeopathic remedies of Natrum Muraticum, Cantharis and Nux Vomica were selected in potencies of 8C and 32C, with a fixed ethanol concentration of 0.03 molar fraction across all three remedies. The control was aqueous ethanol at the same concentration. The researchers also took the spectrum of pure reference water. FTIR absorption spectra were obtained in the wave number region of 4000 – 2800cm<sup>-1</sup>. The report stated that the half-width at half-maximum was measured for each spectrum. The difference spectrum (absorbance of remedy solution and absorbance of reference water) for each medicine and the control was obtained by the researchers. The report depicted that FTIR spectra showed variation in absorbance intensity on both the high and low frequency side of the OH stretching band in different potencies as well as the control. The CH stretching band of 2977cm<sup>-1</sup> also showed variation in intensity in the different homeopathics. In the difference spectra the absorbance intensity at the dip at 3630cm<sup>-1</sup> varied in the different potencies and remedies, and the control.

**Figure 27: FTIR Spectra Cantharis**

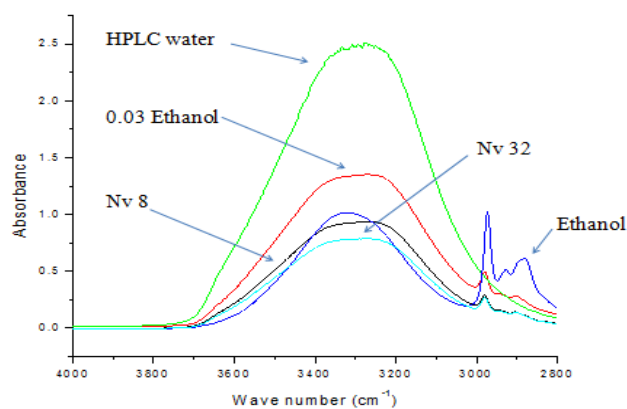


FTIR spectra of Cantharis 8C and 32C, water, 0.03 molar ethanol (control) and dehydrated ethanol.

The drugs and the control solutions were in 0.03 molar fraction of ethanol.

<https://doi.org/10.51910/ijhdr.v13i49.716>

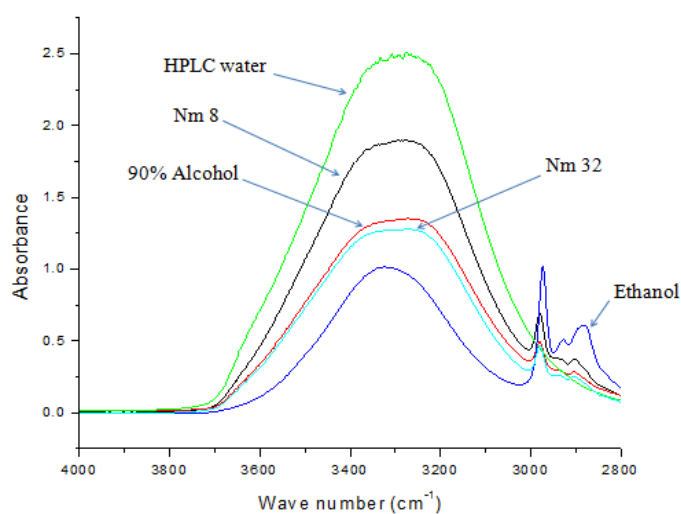
**Figure 28: FTIR Spectra Nux Vomica**



FTIR spectra of Nux vomica 8C and 32C, water, 0.03 molar ethanol (control) and dehydrated ethanol. The drugs and the control solutions were in 0.03 molar fraction of ethanol.

<https://doi.org/10.51910/ijhdr.v13i49.716>

**Figure 29: FTIR Spectra Natrum Muraticum**



FTIR spectra of Natrum Mur 8C and 32C water, 0.03 molar ethanol (control) and dehydrated ethanol. The remedies and the control solutions were in 0.03 molar fraction of ethanol.

<https://doi.org/10.51910/ijhdr.v13i49.716>

The report concluded that the remedies and the control solution showed distinct variation in their FTIR spectra, with the homeopathic remedies having different levels of bound and free water molecules although their ethanol concentration was identical (Chakraborty *et al*, 2014).

## Inductively Coupled Plasma – Atomic Emission Spectrometry Research

In 2020, Joshi *et al* undertook a study on the supercontinuum generation in water doped with homeopathic medicines. The systematic study was to investigate the effect on supercontinuum generation in water using 40 fs (femtosecond  $10^{-18}$ /sec) laser pulses when infused with homeopathic medicines. The study used five series of medications with different levels of dilution ( $10^{-30}$  to  $10^{-100000}$ ). The water was scanned at a supercontinuum spectrum that span from 400-1050nm. The scientists monitored the area under the curve in the range 450-750nm for each sample at a fixed incident laser energy. Observations indicated that the yield of supercontinuum generation in water containing homeopathic medicine is significantly different from that obtained in water containing plain ethanol. The measurement for different dilutions showed up to 7 times standard deviation variation in the yield of supercontinuum generation. Even though linear absorption in the UV-visible region did not show any significant difference for different homeopathic medicines, the supercontinuum yield showed the effective nonlinear refractive index changes with different samples. Throughout the experiments, dilution was always followed by the process of succussion, (even though not stated explicitly), performed by the pharmaceutical companies from whom the medicines were obtained.

The study examined the possibility of the presence of any impurities in deionized water that might affect the supercontinuum generation. The deionized water used in all measurements was tested using Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP-AES), an emission spectrophotometric technique. The deionized water was found to contain only four trace elements B, Ca, Cu, and Si. Randomly picked samples of deionized water (3 ml) along with Homeopathic medicine also had four trace elements B, Ca, Cu, Si the same as 3ml of deionized water indicating that impurities in water did not affect the measurements. The study monitored the area under the spectra from 450-750 nm region for any changes due to doping. The spectra are average of ~ 300 laser shots and normalized with respect to the maximum intensity of the peak. The samples were prepared by one of the co-authors and supplied for blind studies to another co-author with code names, and the same was made in random order (Joshi *et al*, 2020).

## Quantum Spin of Electrons

Professor George Vithoulkas, a world-renowned Greek Homeopath and author of numerous books on Homeopathy, published a journal article in 2020 on the *Spin of Electrons and the Proof for the Action of Homeopathic Remedies* in the Journal of Medicine & Life. In it, he proposed a hypothesis that homeopathic medicines can be explained via electron spin principles and its effect on the vital force. Vithoulkas stated that any pathology, either functional or structural, can be detected in the change of the overall electromagnetic energy fields of the human body according to quantum physics. More precisely, he stated that every disturbance of the human organism affects the spin on electrons of different elements within the human body, and the 'electron reset' can take place with an agent similar to the electromagnetic force that created the problem, i.e., the Similimum.

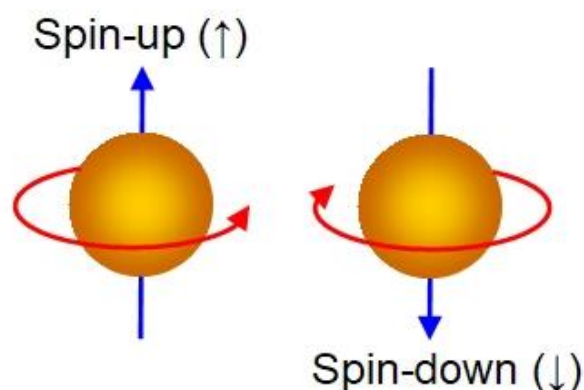
This statement of resonance compatibility of the Similimum to the symptomatology has certainly been proved by cure of the correct homeopathic treatments the world over and can be seen in many published cases. Vithoulkas' hypothesis is based on two approaches, the idea of the spin of electrons and the vital force, and their scientific relevance.

He hypothesised that in every sudden stress, such as mental, emotional, or physical stress or stimuli the organism is subjected to, there is a change in the overall structure of the energy field of the organism. Vithoulkas proposed that between the different electromagnetic changes due to pathology that are possibly occurring at the subatomic level, like ionized atoms, change in the number of electrons, change in the number of neutrons, quantum tunnelling, quantum entanglement, and electron excitations, the most probable and the most direct is a change in the spin of the electrons within one or more atoms of different elements.

In the cases of a disease process, Vithoulkas surmised, where a symptomatology exists, there are most probably changes in the spin of electron momentum from clockwise to anti-clockwise (right-handed/left-handed) or the opposite, which indicates that the organism starts to be unbalanced or dis-eased. If this negative change of momentum persists, the organism remains in an unbalanced state.

A correct Similimum should be able to bring back the electron spin to its original momentum, when the organism was in a healthy state. Each electron displays a certain quantum spin, or angular momentum that holds a certain information vibration that is interrupted or disturbed or unbalanced when interfered with via mental, emotional and physical stimuli. Electron spin is an essential property influencing the ordering of electrons and quarks in atoms, giving it great physical significance in biochemistry. Spin is an essential consideration in all interactions among subatomic particles and is part of explaining the theory of entanglement in quantum physics. Entanglement refers to the process of two electrons that are entangled over large distances and that respond immediately when one electron inverts its spin, the other responds with a counter-spin. Entanglement is one of the fundamental resources for quantum information processing (Burkard, 2000).

**Figure 30: Electron Spin Configuration**



[https://cronodon.com/Atomic/Quantum\\_Measurement.html](https://cronodon.com/Atomic/Quantum_Measurement.html)

The idea of electron spin inversion as a first cause of dis-ease is not new. Dr Johan Boswinkel, Managing Director, Health Angel GmbH, Switzerland; Technical Director, International Institute for Bio-energetic Medicine, UK, proposed a similar notion in a 2003 paper on electron spin inversion as a danger to health. Boswinkel stated that healthy people have a high vibratory energy field; however, every disturbance, whether it is emotional, mental, or physical, lowers those vibrations, due to the disturbance stimuli being of a lower vibration itself. The bio-photons emitted by all cells and the electrons of the atoms become chaotic instead of coherent, thereby losing its capability to communicate properly (Boswinkel, 2003).



Vithoukias confirms, in his article, the notion that Hahnemann's vital force is identical to the now widely accepted QEF each organism exhibits. When considering that the body consists of aggregated layers of only a few common elements such as Carbon (C), Hydrogen (H), Nitrogen (N), and Oxygen (O), plus a number of less common elements like Sodium (Na), Magnesium (Mg), Phosphorus (P), Sulphur (S), Chlorine (Cl), Potassium (K) and Calcium (Ca), with a few trace elements like Cobalt (Co) Copper (Cu), Iron (Fe), Manganese (Mn) and Zinc (Zn), it is easier to understand the overall electron aggregation of QFE information and influence on each other, and on each human cell.

He proposed that the correct Similimum, consisting of an energy frequency that is identical to the original vibration of the medicine will allow the electron spin to reverse to their healthy spin state. Vithoukias states that: *"In Homeopathic treatment, the remedy is acting on a subatomic level upon the so-called fields of force of the organism. It has to be understood that the Homeopathic remedy can influence the vital force only by a force that is of a similar nature. We are creating such a force in the laboratory by the process of potentization of the remedy. The obvious logical sequence then is to think that the potentized remedy, through its specific force field, has affected the vital collective force on account of its similarity"*.

Vithoukias concluded that, if this hypothesis proves to be correct, the whole concept of conventional medicine concerning diseases and their cure, will have to be changed drastically (Vithoukias, 2020). A notion this author concurs with.

## Ultraviolet (UV) Light Transmission Research

In 2021, Wolf *et al*, researchers at the University of Bern, Switzerland, reported on a series of experiments in the International Journal of High Dilution Research that showed ultraviolet (UV) light transmission of Homeopathic preparations to slightly but significantly differ from controls. This research, the articles stated, will now lead to increased research into Homeopathic medicines to be investigated to ascertain whether visible and near infrared spectroscopy are useful for exploring properties of homeopathic preparations. The researchers used homeopathic preparations of Copper Sulphate (CuSO<sub>4</sub>), Hypericum and Sulphur (S<sub>8</sub>), which were produced in 30 sequential steps of 1:100 dilutions (C-preparations). As controls, succussed potentization mediums were used. Transmission of the samples from 190 -1100nm was measured 4 times on 5 days with a double beam Shimadzu UV PC 1601 spectrophotometer. To correct for the daily variations of the spectrophotometer, researchers reported transmissions of the samples at each nm was divided by the average transmissions of the controls.

The study showed that median transmissions of the samples were calculated for the ranges of 190-340nm (near and middle UV), 340-640nm (visible light without red), and 640-1100nm (red and near infrared). Differences in the median transmissions between potency levels from 6C to 30C were determined using statistical Kruskal-Wallis and Jonckheere-Terpstra tests. Results showed that differences in transmissions of the various potency levels were more pronounced in the UV range than in the visible or red/near infrared range. The Kruskal-Wallis test revealed significant differences for Homeopathic preparations of CuSO<sub>4</sub>, Hypericum and S<sub>8</sub> in the UV range ( $p=0.032$ ,  $0.008$ ,  $0.009$ , respectively) and of S<sub>8</sub> in the visible range ( $p=0.026$ ). Jonckheere's test showed a tendency towards ascending medians with ascending potency levels for CuSO<sub>4</sub> in the UV range ( $p=0.080$ ). Significant trends were revealed for Hypericum in the visible range ( $p=0.042$ , descending medians) and S<sub>8</sub> in the UV range ( $p=0.015$ , ascending medians). The report concluded that UV spectroscopy seemed to be more suitable for investigating homeopathic preparations than visible or near infrared spectroscopy, since differences in transmission were more pronounced in the UV range (Wolf *et al*, 2021). The results show again that homeopathic remedies have different energy signatures when compared to controls.

## Field Emission Scanning Electron Microscope Research

Kar *et al* published an article in 2021 in the Journal of High Dilution Research: *Derivation of an empirical relation between the size of the nanoparticle and the potency of homeopathic medicines*. Experiments were undertaken to determine the size of nanoparticles (NPs) of homeopathic medicines Cuprum Metallicum, Zincum Oxydatum, Aurum Metallicum, Ferrum Metallicum and Aconitum Napellus in potencies of 6C, 30C and 200C.

The objective of the study, the researchers proclaimed, was to form a general mathematical expression that relates size of NPs present in homeopathic medicines to its potency. Experimental evidence suggested that the potency and size of the NPs may be related to the biological effects, though such correlations need rigorous verification.

The researchers stated that for using a field emission scanning electron microscope, FESEM, sampled at different potencies (6cH, 30cH and 200cH) was cast on a clean glass cover slip and was directly placed on carbon-coated grid, sputter-coated with gold and then observed. Dynamic light scattering, DLS, measurements of homeopathic samples were performed using a Nano-ZS 90-Malvern instrument employing a 4 mW He–Ne laser equipped with a thermostatic sample chamber.

The study verified the formation of NPs at higher dilutions by FESEM, DLS, and transmission electron microscope (HRTEM) studies. Results of the study revealed that the size of the constituent particles of a homeopathic medicine bears a definite relation with the potency of the medicine.

Researchers concluded that the study found a predictive relationship and statistical dependence; however, this is not sufficient to indicate a causal relationship. The knowledge of the potency of the medicine will give an estimate of the size of the constituent nanoparticle. Each homeopathic medicine revealed a characteristic curve for size versus potency. (Kar, *et al*, 2021).

**Table 3: Experimental Values of Average Particle Sizes**

Medicine	Potency (C)	Mean size $\pm$ SD (nm)	Fitted equation and R <sup>2</sup> value
Cuprum Metallicum	6	15.9 $\pm$ 2.4	$y = 61.01x^{-0.91}$
	30	1.6 $\pm$ 0.1	$R^2 = 0.922$
	200	0.62 $\pm$ 0.01	
Zincum Oxydatum	6	83 $\pm$ 52	$y = 449.2x^{-1.01}$
	30	11 $\pm$ 1.3	$R^2 = 0.985$
	200	2.3 $\pm$ 0.6	
Aurum Metallicum	6	345 $\pm$ 50	$y = 764.5x^{-0.51}$
	30	104 $\pm$ 30	$R^2 = 0.95$
	200	55 $\pm$ 12	
Ferrum Metallicum	6	167 $\pm$ 43	$y = 341.4x^{-0.39}$
	30	92 $\pm$ 37	$R^2 = 0.999$
	200	42 $\pm$ 2	
Aconitum Napellus	6	135 $\pm$ 15	$y = 333.2x^{-0.51}$
	30	58 $\pm$ 7	$R^2 = 0.999$
	200	23 $\pm$ 3	

This research, whilst identifying NPs at different potencies, did not identify the nature of the NPs. The results do not show if the NPs are in fact clathrates, or relate to the original mother tinctures, which were mainly sourced from metals. What the research shows, however, is a direct correlation of NPs to potency, which is expected. The research would have benefited by using ICP-AES spectroscopy to identify the presence of any of the mother tinctures in any of the potencies.

## Part Seven - Discussion

At present, conventional science has not accepted a particular analytical theory of how homeopathic ultra-high dilutions might work on an organism, even though patients across the globe report ameliorative and curative effects when prescribed homeopathic medicines. Numerous lines of inquiry have been followed over the years without providing a clear and consistent model of the physio-biological and bio-chemical pathways homeopathics may take to affect cellular behaviour in organic life forms. The result of this dilemma is that Homeopathy, as a >225-year-old complementary therapy model, has been misunderstood by medical scientists and shelved as a 'placebo' only therapy. In recent years however, quantum physics, quantum mechanics, quantum chemistry and quantum biology have emerged as platforms for a new and invigorated research platform to finally understand the *modus operandi* of homeopathic remedies.

One such theoretical hypothesis is the presence of complex water structures, or clathrates, including NPs, created and propagated through the dilution/succussion process (Kar et al, 2021, Sukul *et al*, 2022, Rosenzweig, 2017). The problem with such a hypothesis is that current theories predict that clathrate structures formed by the interaction of H<sub>2</sub>O molecules and mother tincture molecules may not be stable for more than a few picoseconds (10<sup>-9</sup> second) and hence these structures could not account for the long-term effects patients experience when taking homeopathic dilutions (Rosenzweig, 2017).

Clathrates are also only formed in liquid in the presence of molecules, which, at ultra-high dilutions are no longer present. Evidence for clathrates is not supported by current research into homeopathic medicines using Raman spectroscopy and other latest analytical techniques. This explanation of the effect of homeopathic remedies on water molecules still prefers the physics model of a separate, material world, where sub-atomic particles, atoms and molecules are not consisting of probability quantum energy fields of waves but are solid individual particles that only interact with each other through non-bonded electron or vector attraction and repulsion, rather than through energy wave function on electron-to-electron cloud frequency transfer.

A further approach showed the usage of the so-called 'Weak Quantum Theory' (WQT) and considered the quantum entanglement between the remedy, the patient and the

practitioner. However, WQT approaches make few physical predictions, which could be tested experimentally, and hence are hard to prove or disprove (Wilkinson, 2000).

This leaves a few scientifically researchable theories that can explain how homeopathic dilutions might work. The presented research in this dissertation indicates that water carries the electromagnetic information of the original mother tinctures in homeopathic potencies. Ethanol in potencies preserves or promotes the specific water structure, as clinical observation shows that remedies potentized in H<sub>2</sub>O solution only will not retain their potency over long periods of time.

As this dissertation shows, different potencies of homeopathic dilutions can be differentiated from each other and from their diluent medium of aqueous ethanol by NMR, FTIR, UV, IR and Raman spectroscopy. The basis of the H<sub>2</sub>O structure in a potency relates to free water molecules and hydrogen bond strength. Free OH groups in a potency are positively correlated with the ranks of the potency. Hydrogen bond strength is negatively correlated with the potency ranks. It is also a well-documented quantum physics understanding that chemical, biochemical and living systems consist of and are sensitive to electromagnetic fields. The administration of properly 'informed' quantum coherence domains (CDs) through the transfer of electromagnetic frequency signature to the OH bonds, could affect cellular processes in very specific ways. A homeopathic remedy, carrying specific information about the electromagnetic frequency field of the original substance or mother tincture, would be able to affect biochemical processes in a patient and act as a therapeutic agent through cellular receptor mediation processes in cells, DNA and mitochondrial DNA.

The physical properties of the CDs would in turn explain many of the reported effects of homeopathic dilutions. It would explain the anomalous light spectra, UV-Vis & Raman spectroscopy based upon the interaction of light with the chemical bonds within a homeopathic dilution as presented above, the anomalous heat of mixing of homeopathic dilutions via the potentization process, the specific thermoluminescence of homeopathic dilutions and the way in which Benveniste and his followers reported transmitting the effect of a chemical reagent through an electromagnetic signal. CDs could also explain the 'cross talk' effect reported by Montagnier *et al*, whereby one strong sample influence the electromagnetic spectra of another sample nearby.

The RCTs of recent individualised Homeopathy research articles and laboratory studies presented in this dissertation were chosen for their concrete hypothetical and subsequently proven outcomes model validating homeopathic treatment that clearly indicates what practicing Homeopaths have known for >225 years. Whilst homeopathic medicines are highly diluted, the electromagnetic frequency essence of the mother tincture is detectable with new research approaches, namely quantum physics and quantum chemistry. In most homeopathic RCT attempts, however, there are still major challenges which must be overcome. The main challenge is a conceptual challenge, i.e., the difficulties in scientific research arising due to conceptual differences between Homeopathy and conventional medicine, creating undue bias and foregone conclusions in the perception of the researcher. Whilst more and more RCTs are being developed in this field, mainstream or contemporary medical science is not willing to overcome the ideological gap between the dogmatic materialistic and separatist view of the body as a machine with individual parts to be healed in isolation, and the homeopathic view of a holistic energetic system.

A further challenge to overcome in homeopathic research is the understanding of disease and its treatment. Homeopaths perceive the body, and in fact all organic life, as connected. Cells communicate with each other, and disease is emerging when energy frequencies are disrupted by means of environmental, emotional or physical stimuli on the vital force, i.e., the quantum electromagnetic field of every living (and non-living) system. In RCTs on homeopathic medicines, there also seems to be a methodological challenge of often weak study designs by using incorrect methodologies, lack of knowledge of statistics, and more importantly poor adherence to homeopathic principles and tenets, thus leading to incorrect selection of the Similimum, which in turn deconstructs any attempt for a scientific outcome.

Whilst the quantum approaches of analytical studies, showing that homeopathic medicines do in fact activate electromagnetic frequency (information) transfer to OH bonds are very promising for the science of Homeopathy, it leaves open a window for subsequent research into the electromagnetic frequency interaction on IMP receptors of cells, on epigenetic methylation processes of DNA both nuclear and mitochondrial, or ultimately on electron-electron cloud transfers via electron spin modulation.

The research into Homeopathy is heading in the right direction, however, more education, open mindedness and the willingness to leave behind bias and misinformation is needed to fully understand the *modus operandi* by which homeopathic medicine affects the frequency of cells.



## Part Eight- Conclusion

The identified research in this paper has the potential to provide Homeopaths with hope that, in time, homoeopathically induced modification of cellular processes can be scientifically proven to be attributed to the transference of electromagnetic energy or vibrational frequencies of quantum wave functions from the potency dynamization of remedies to the cellular environment or receptors to bring about homeostasis and energetic balance. And that, this author believes, is the correct way homeopathic medicine will be recognized as the future of vibrational medicine. Many scientists believe that Homeopathy is not researchable; however, as this dissertation portends, it is very much researchable. The only consideration scientists must attend to is to devise scientific research techniques suitable to, and in line with, homeopathic principles. Otherwise, science will not be doing Homeopathy justice through application of false assumptions and biases, thus relegating Homeopathy to the placebo effect only. The fact that homeopathic medicines indeed produce specific cellular and biochemical reactions is stated clearly by Hahnemann in **Aphorism 30**: *The human body appears to admit of being much more powerfully affected in its health by [homeopathic] medicines (partly because we have the regulation of the dose in our own power) than by natural morbid stimuli- for natural diseases are cured and overcome by suitable [homeopathic] medicines.* This aphorism has been clinically proven the world over.

As this dissertation shows, Homeopathy is an electromagnetic frequency transfer model containing electromagnetic information of the initial substances or mother tinctures which are balancing the distorted energy frequencies in the cells at the quantum level. There is no doubt that a plausible and testable hypothesis for the action of Homeopathy and, by implication, an understanding of the bio-chemical and quantum physical nature of homeopathic potencies profoundly enhances Homeopathy as a legitimate and effective medical approach. Research at the molecular level has the advantage over other approaches in that it can ask the kinds of searching and detailed questions necessary to arrive at fully testable hypotheses as to the *modus operandi* of Homeopathy, provided homeopathic principles are observed. Homeopaths living in today's contemporary science environment can welcome the new research of quantum physics into Homeopathy as a celebration of the validity of this empirical profession.

## Appendix A – Selected Case Studies from the Author’s Practice

**Please note:** Patient names have been changed to protect patient confidentiality.

### Case One – Acute Case, Sanskaran Stages Approach

To illustrate an acute case at stage one or two that ultimately developed into a stage three case from my own practice, I am presenting a case of a married woman named Tiffany, married with one teenager, who consulted me about her left eye that had started to smart three days prior and showed significant inflammatory swelling, redness and, as the patient mentioned, a great deal of pain. She thought it was a sty, however, Tiffany was suffering from acute inflammation of the iris and her sclera was intensely red. The pupil was contracted and did not respond to light, and there was some exudation covering the lower part of the pupil. She showed marked photophobia with lachrymation, and the tears felt hot when they spilled out of the eye. She complained of pain in the supraorbital ridge for a few days, when she decided to call me to make the appointment. Upon the few quite general, yet very acute symptoms, I prescribed Belladonna 30C, one dose only, taken in my practice. I provided her with a couple of pills of the remedy to take home and advised her to take the remedy again before going to bed that night. I did not repertorize the case at that stage but provided acute First Aid. If I had the remedy, I probably would have chosen *Pyrus Americana* for eye infections as First Aid, however, Belladonna fitted the inflammation and heat.

Tiffany returned for a follow up the next afternoon and reported she had suffered terribly from the pain in her eye all night. She was unable to sleep and had to get up at 1am and walk the floor. She said she felt as if there was something on the upper lid which was cutting into the eye. She felt she would die if the pain did not stop. She was fearful, showed great anxiety and suffered great anguish. Tiffany was restless in my practice, moving up and down from her chair and could not sit still. The application of a hot towel gave temporary relief to the pain. Her breath was almost asthmatic, with wheezing and smelled foul, and when examining her tongue, it was coated in white mucous. She was warm to the touch, thirsty for cold drinks, and her mouth and throat were full of saliva. So, to follow the stages approach, the following rubrics stood out: Location: Iritis with exudation in lower part of right pupil. Sensation: Pain as if something was scraping her lid. Modalities: Aggravation at night after 12am,

amelioration warmth. Concomitants: Restless at night. Tongue thickly coated. Saliva increased. Breath offensive. I chose the following rubrics: Eyes-iritis; Eyes-immobility, night; Eyes-lids swollen-oedematous in iritis; Eyes-formicating, painful with lachrymation; Eyes-lids, swollen, painful; Eye-lachrymation with adhesions; Time-night aggravates; Mouth-saliva–thick; Mouth-odour, offensive.

## Repertorization Case Study One

Remedy Filter		ars	sulph	merc	hep	lach	arn	rhus-t	calc	sil	cham	nit-ac	caust	chin	clerm	spig	bell	mez	acon	iod	lyc	merc-c	plb	nucl	
Total Score		13	12	12	10	10	10	9	9	9	9	9	8	8	8	7	7	7	7	7	7	7	7	6	
Rubrics		5	6	4	4	4	3	5	4	4	3	3	4	4	4	5	4	4	3	3	3	3	2	3	
0☆☆☆	Eyes IRITIS ▶ REMEDIES IN GENERAL	25	1	1	1	1	-	-	2	-	-	-	-	-	2	1	1	-	2	1	-	2	-	-	
0☆☆☆	Eyes EYES ▶ IMMOBILITY, WORSE AT NIGHT, IN SYPHILITIC IRITIS		-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0☆☆☆	Eyes LIDS ▶ SWOLLEN ▶ OEDEMATOUS ▶ IN IRITIS	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0☆☆☆	Eye PAIN ▶ LIDS	10	-	2	-	-	-	-	-	-	-	2	1	-	-	-	-	1	-	-	2	-	-	-	
0☆☆☆	Eyes LIDS ▶ FORMICATING, PAINFUL ON INNER SURFACE, WITH LACHRY		-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
0☆☆☆	Eyes LIDS ▶ INFLAMMATION ▶ PAIN, WITH	1	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0☆☆☆	Eyes LIDS ▶ SWOLLEN ▶ PAINFUL	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0☆☆☆	Face PAIN (ACHING,PROSOPALGIA,ETC.) ▶ WARMTH,AMEL	21	3	1	-	3	1	-	2	2	3	2	-	1	-	-	1	-	2	-	-	-	-	-	
0☆☆☆	Time NIGHT, AGGRAVATION	116	4	3	4	4	3	4	3	3	4	4	4	3	4	2	3	3	3	4	4	3	-	4	2
0☆☆☆	Mouth ODOUR (BREATH) ▶ OFFENSIVE	113	3	3	3	2	3	3	1	2	1	3	3	2	2	2	1	2	1	1	2	2	3	3	2
0☆☆☆	Eye INFLAMMATION ▶ IRIS ▶ ADHESIONS,WITH	9	-	2	-	-	-	-	2	1	-	2	-	-	2	1	-	-	-	-	-	-	2	-	-
0☆☆☆	Mouth SALIVA ▶ THICK (SEE VISCID)	19	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	

I used Kent’s Lesser Writings to analyse the main three remedies and chose Arsenicum Album as the prescription. Even though Sulphur, Mercurius and Rhus Tox was indicated strongly, and shows inflammatory action, Arsenicum seemed better suited due to the restlessness of the patient, and the waking after 12am. Arsenicum also shows amelioration from warmth. Potency given was 30C, and Tiffany took 4 drops under clean tongue every two hours for 24 hours. The patient returned two days later and reported to be much better. Whilst the lid was still a little swollen, and the sclera was still slightly red, there was marked improvement.

Tiffany slept through the night without being restless or having to walk around. Her lachrymation improved and the pain was much better. She could tolerate light better, and the adhesions had reduced. Four weeks later, Tiffany returned with inflammatory arthritis in both knees for which I prescribed 1 dose of Syphilinum 200C as I felt Tiffany may have a sycotic miasmatic terrain. I have not seen Tiffany since but in a phone conversation she revealed she felt back to her normal self.

## Case Two - Cognitive Dissonance

To illustrate the notion of cognitive dissonance by a patient with the following case of mine with scepticism towards the therapy. The patient was a 25-year-old male named Robert, that came to me on recommendation, and I believe a little push from his mother, who wanted him to stop smoking. He made an appointment for Hypnotherapy; however, on explaining what was involved in the three sessions, he decided that Hypnotherapy was possibly not for him as it sounded scary to the very inexperienced young person. I explained that I offer more modalities than Hypnotherapy and offered him homeopathic treatment to start the process of rewiring his neural pathways and sub-conscious programming that were stopping him to reduce his 60+ daily cigarettes, and eventually stop smoking altogether. He was sceptical to say the least, as his cognitive dissonance would not allow him to understand the process by which homeopathic remedies could possibly work. He argued with me for a time that it sounded like placebo effect, to which I calmly explained that the body, as an energy form, certainly has an innate healing system involving cellular and psychological aspects that can heal spontaneously through belief, and that most healing, even when treated with a remedy or medicine, will initiate this innate healing system of the body. In fact, any allopathic medication often helps via placebo.

I prescribed Carbo Vegetalis 30C for three doses of four drops once a week for three weeks. I asked the young man to record all symptoms, feelings and emotions over the next three weeks, and offered him a follow up appointment. I also explained to him how the mind works, and that to overcome addiction, one has to feel ready and willing to accept the re-programming of the sub-conscious. I explained that, if and when he is ready, it will happen organically, and that the remedy has the ability to possibly modify his thinking. Robert was not impressed as he was not ready to take responsibility, and on leaving, he mentioned that he would probably not come back. I explained that was fine, but he should take the remedy anyway as he had nothing to lose, even if it was only a placebo.

A week after the first dose, the Robert called me excitedly to let me know he is totally in awe of the remedy, as it stopped his cravings to the point that he only smoked three cigarettes a day now. He was eager to take the second dose that night. He did attend

the second consult, by which time he had taken all three doses and had not smoked a cigarette for a whole week. He was also ready for a Hypnotherapy session, which took place at that consult. I managed to take him back to the day of his first cigarette and changed the narrative in his sub-conscious mind of refusing rather than accepting the cigarette that had started his addiction. I did not see the Robert again; however, I met his mother a few months later who told me how happy her son is, that he has procured a new job, has moved out of home, and has not smoked since the third dose of the remedy. I put this case down as one of my success stories, overcoming cognitive dissonance in a patient, and allowing his belief and bias to be beneficially modified.

### **Case Three – Mental & Emotional Disturbance**

Verita, a 44-year-old divorced single mother of two girls came to me in an emotional state after the current breakdown of her second relationship. She felt guilty, weak and depressed. Verita was very teary, suffering great anguish, saying it was her fault that she could not attract and keep a decent man. In taking her case, she mentioned she suffered from genital herpes and genital warts in the past, undiagnosed hypertension, left ventricular hypertrophy, vertigo on rising in the morning, rumination of thoughts, desired sweets but also likes salty foods, had weight problems all her life, and suffered from irritable bowel syndrome. Verita was overweight, although saying she exercised regularly, and suffered from long-term constipation, and bloating and strong PMS the week of her menses.

She romanticised having a partner that was caring, loving and there for her, but all she attracted were, in her own words: 'bastards'. She seemed very sentimental, almost dreamlike and passionate. Yet, she felt a deep hate for her first husband who was still in her life because of her two girls yet was also still grieving about the divorce. Her current partnership was on-again-off again, and whilst she felt her love was not returned the same way she felt for her partner, she wanted him to stay and not move out. She felt rejected and grieved deeply.

The following repertorization indicated Nat Mur as the totality of the symptomatology, which I prescribed at 30C potency to take 4 drops under clean tongue once a day for three days.

## Repertorization Case Study Three

	Remedy Filter	12	10	11	11	10	9	9	9	9	8	8	10	8	7	18	17	16	16	16	15	15	15	14	14	14	14	13	13	
		Rubrics																												
Inner Head	BLOOD VESSELS ▶ FULLNESS OF VEINS, WITH PRESSURE																													
Inner Head	NUMBNESS			2																										
Head Interior, Headache, Congestion Of Blood, Heaviness	NUMBNESS															1	1												1	
Inner Head	FOREHEAD ▶ NUMBNESS			2																										
Mind	SADNESS, MENTAL DEPRESSION		3	2	3	3	2	3	2	3	3	3	3	2	3	3	3	2	2	2	2	1	3	2	3	2	2	3	3	2
Mind	DEPRESSION		7																											
Clinical	DEPRESSION OF SPIRITS		13																											
Mind	SADNESS, MENTAL DEPRESSION ▶ EVENING		59																											
Genitalia Male & Female organs	FEMALE ORGANS ▶ WARTS ON																													
Female sexual organs	HERPES ON GENITALS																													
Vertigo	RISING ▶ ON		81																											
Vertigo	RISING ▶ FROM BED, ON		54																											
Sensorium	VERTIGO ▶ RISING, ON		15																											
Sensorium	VERTIGO ▶ RISING, ON ▶ HEART TROUBLE, IN																													
Sensorium	VERTIGO ▶ RISING, ON ▶ BED, ON ATTEMPTING TO RISE IN																													
Stool	LOOSE		26																											
Stool and Rectum	STOOL ▶ LOOSE		29																											
Fever	STOOL ▶ LOOSE, IN INTERMITTENT																													
Stool and Rectum	CONSTIPATION		123																											
Stomach and Abdomen	CRAVINGS AND DESIRES ▶ SWEETS AND DAINTIES																													
Mind	ANXIETY		203																											
Stomach	ANXIETY		65																											
Generalities	ANXIETY, GENERAL, PHYSICAL		65																											
Temperaments	TEARS EASILY MOVED TO																													

Verita's follow up consult three weeks later showed much improvement after slight aggravation of most symptoms for three days after taking the remedy. The patient felt much more in control, the rumination of thoughts had improved, and she meditated more. Unusual symptoms after taking the remedy included finally letting go of her first husband, feeling strong enough to instigate a clean break. Having vivid dreams was also reported, feeling less needy, and finally changing her married name to her maiden name finally. A further symptom Verita did not disclose on her first appointment was the diminishing of a non-healing squamous cell carcinoma on her hairline that was finally healing. As Verita was still displaying low self-esteem and seemed to see herself as a victim, I prescribed one dose of Nat Mur 1M.

Third follow up consult four weeks later saw Verita a different person, full of confidence, no more speaking of being a victim of circumstance, but having had the strength to end the current on-off relationship with her second partner and strike out alone. She felt she could survive without a man in her life and decided to sell her house and move to another town for a fresh start.

Nat Mur is a very important constituent of the body and when prescribed homeopathically, it has a strong anti-psoric action especially for psycho-somatic affections due to grief, anxiety, low self-esteem and victim behaviour. The genius of Nat Mur is 'ailments from grief and disappointed love even years later, which turn into strong resentment', which fitted Verita completely.

## Case Four – Totality of Symptoms

A sixty-year-old woman named Emilee came to me with strong pain and swelling in her right knee. She mentioned that she had injured her calf muscle (gastrocnemius medial body) when playing sport. She heard it pop, as she described the moment of injury. There was little pain to start with, however pain increased severely a couple of hours later. She was unable to put weight on her knee and bandaged it with a compression bandage and a support sleeve. The knee and lower leg were severely swollen and unable to bend. I administered one dose of Arnica 30C for the calf muscle injury and inflammation as an acute remedy, and prescribed Rhus Tox 30C for the ligament damage she incurred to the knee. Emilee took three doses of Rhus Tox over three consecutive days, administered cold compresses and elevated her leg when she was able. She presented for her second consult two weeks later.

Emilee was still in dull pain; however, the swelling of the knee and calf was reduced, and the range of motion was markedly improved. She reported that the pain was worse after the first dose of Rhus Tox but was getting better day after day. When she rubbed the knee, it provided relief. She also reported that she suffered from arthritis in one of her knuckles and she was worried her knee would also now be arthritic. The knee indeed was inflamed and hot to the touch, yet her calf felt cold. Emilee also reported that she could not sleep at night with heavy blankets or a doona on as she gets hot and always sticks out her leg, which she found difficult to do, and that she was worried she would put on more weight due to her confinement and inability to play sport. Emilee had trouble all her life with her weight, and that her hypothyroidism made it difficult to lose weight. The only way she could manage her weight gain was to play some sport, even though she would rather not have to. A further symptom Emilee had since childhood was a headache that came and went, mainly behind her eyes.

In repertorizing Emilee's case, Rhus Tox still came up as a strong remedy; however, in taking her totality I decided to prescribe Calc Carb as a follow-on remedy, as it confirmed her genius more appropriately of not wanting to move but felt she had to, showing a phlegmatic temperament. Emilee came to see me four weeks later and reported her knee and calf muscle was almost, if not quite fully healed, and she felt much better all over.

## Repertorization of Case Study Four

		Remedy Filter														
		calc	thuse1	lach	rhos	retr	stem	kalubi	ars	bry	puls	salcap	graph	leg	lys	natrum
	Total Score	10	9	8	8	7	7	7	7	7	6	6	6	5	5	5
	Rubrics	6	4	4	4	5	4	4	3	3	4	3	3	4	4	4
Lower Limbs	KNEES ▶ DULL PAIN															
Lower extremities	RHEUMATIC PAINS( COMPARE SEC 24) ▶ KNEES	3						1						1		
Lower extremities	PAIN ▶ WHEN SQUATTING, KNEE IN	1														
Extremities	PAIN ▶ KNEE ▶ AFTERNOON	11														2
Extremities	PAIN ▶ KNEE ▶ RHEUMATIC	67	3	3	2	2	2	2	2	2	3	1	2	1	2	1
Extremities	PAIN ▶ KNEE ▶ RUBBING,AMEL	4			2											
Extremities	PAIN ▶ KNEE ▶ WAKING,ON	1														
Extremities	PAIN ▶ ACHING ▶ KNEE	58	1	3	1		1	1		1	1	1		1	1	1
Lower Limbs	LEGS ▶ BURROWING PAINS, IN TIBIAE	1					3									
Chill	CONCOMITANTS ▶ LOWER EXTREMITIES ▶ LOWER LEG, PAIN IN	1							2		1				1	
Lower Limbs	KNEES ▶ DULL PAIN ▶ LYING QUIETLY WITH LEG STRETCHED															
Lower Limbs	LEGS ▶ BRUISED FEELING ▶ MOVE, UNABLE TO, ON ACCOUNT										3					
Lower Limbs	LEGS ▶ BURNING ▶ TIBIA, PAIN AS IF BURNT IN, IN DIFFEREN			2												
Lower Limbs	LEGS ▶ CRAMPY PAINS ▶ CALVES, IN	3										3				
Lower Limbs	LEGS ▶ DIGGING PAINS ▶ CALF, IN	1														
Inner Head	HEMICRANIA (MEGRIM, MIGRAINE, SEMILATERAL HEADACHE	3	2	3	3	2		3	3	3			3			
Head Interior, Headache, Congestion Of Blood, Heaviness	FOREHEAD, PAIN	25	1		1	1		1						1		1
Head Interior, Headache, Congestion Of Blood, Heaviness	TIGHTENING PAIN	1	1			1	1						2		1	

## Case Five - Grief

Grief, at the basis of pathophysiological and/or psychological symptoms is a common occurrence in my own practice. Marilyn, a woman in her fifties, came to see me on recommendation from another patient. I had been advised by my other patient, a close friend of Marilyn, that she had seen psychiatrists and counsellors as well as medical practitioners for a long time with no improvement, and I should be prepared for a client that would come to me for years, as that was her pattern. I had trepidations at first, as clients under psychiatric care often present with a symptomatology overshadowed by anti-depressive or mind-altering drugs. Marilyn presented with a very diminished vital force, was sanguine looking, appeared exhausted, showed the signs and symptoms of strong depression, showed profound hopelessness and melancholy, was restless, fidgety and mentally fatigued, displayed great anguish for the future, had very low self-esteem, was angry with herself for not getting better and not being able to cope with her two teenage sons, was hardly able to hold down her position as a phlebotomist in a local pathology laboratory, and talked of having thought of suicide in the past. She showed extremely high levels of 'them-esteem', the need for other peoples' acceptance and approval.

At the core of Marilyn's intense feelings of unworthiness and self-loathing, her unwillingness or inability to move herself out of her misery, which she admitted she



was addicted to, was the death of her husband of 20 years, ten years prior. After a lengthy and very thorough case taking, I prescribed Aurum Metallicum 30C.

I treated Marilyn four times over the period of four months, she received three doses of Aurum and showed great improvement. Once the Aurum layer of self-loathing and suicidal tendencies was removed, she could clearly perceive herself correctly for the first time in years. She became stronger and could talk about her grief in more detail. Her core or constitutional remedy was revealed in her fourth session, and I prescribed Nat Mur 1M, one dose only. Marilyn has recovered extremely well, she now holds support groups for friends grieving loss, has been able to assist her oldest son to move out of home, has weaned herself off her anti-depression medication, and is enjoying a new relationship. At her last consult, Marilyn told me that she felt she could cope on her own now and would not return to me unless she felt the need. I encouraged that notion; however, I check in with her monthly via a quick phone call.

### **Case Six - Childhood Stutter**

A distraught mother came to me with her 3-year-old son Harry. He had developed a pronounced stutter. I had treated the child previously for childhood infections such as cough, fever and reactions to mosquito bites. Harry always responded well to homeopathic remedies. I took the case and watched the child intently as he played with his toys while the mother cried that her son might have a speech impediment and would now not learn as fast as his peers. I then involved Harry in conversation to see how far his stutter was developed. It was pronounced on every third word and mostly on the first letter. He repeated the letter 20 times at least before he gave up speaking altogether. I could see his anxiety, as well as his mother's distraught behaviour, which undoubtedly transferred to the child.

I prescribed Causticum 30C to Harry, providing the first dose in my clinic, and advising the mother to give him two further doses one week apart. After the second dose, the mother called me excitedly with the news that Harry had stopped stuttering, and the speech pathologist, with whom she had an appointment that week to assess Harry's impediment, advised that the child did not have a stutter and did not need to receive therapy.

## Case Seven – Childhood Trauma

One of my patients, a lady in her late 30s named Nelly, who presented with deeply embedded gross trauma effects of being adopted as an infant. Nelly is a professional woman in her late forties. She lives alone with her two children after a messy divorce five years ago and has a history of a papillary carcinoma of her thyroid, which was successfully removed via a thyroidectomy, with follow on treatment of radiation and chemotherapy. She came to me on recommendation from a former patient as she had just been diagnosed with Multiple Sclerosis. Through counselling and extensive case taking, the patient revealed that she had been adopted by a family as their third child after two natural ones, and she never felt loved. Deep seated feelings of neglect, abandonment and unworthiness resulted in not loving herself, feeling disconnected to her body and soul, and presenting in autoimmune disorders in which her body attacked itself for years. Both the carcinoma and now the MS are autoimmune dysfunctions as a direct result of being rejected as an infant and given away. This was a difficult case, as it involves both life-long psychological and emotional trauma, and current pathological symptoms of muscles weakness, headaches, tinnitus, uncontrolled flickering of eyelids, numbness in both arms, sleeplessness due to waking up around 2 am each night, brain fatigue, tinnitus, tiredness, cold extremities, optic neuritis, uterine weakness and incontinence, and blurred vision.

I started with three doses of Arsenicum Album 30C over three days, the first prescribed dose taken during the consult. The effect of the remedy was immediate, as her twitching of eyelids aggravated fiercely, only to ameliorate after ten minutes. That symptom has not recurred since the first consult. Her headache and blurred vision also ameliorated, yet the tinnitus aggravated slightly and moved from her right side to the left. The fogginess in her brain disappeared fully, and the patient can sleep through the night. At Nelly's third consult, I prescribed one dose of Ignatia 30C as an acute remedy, as she was extremely teary and spoke extensively about her grief over her adoption and loss of her birth mother. I followed up with one dose of Nat Mur 1M a week later and performed a Hypnotherapy session at her next consult, which revealed her need to forgive her birth mother for abandoning her. Nelly since got in touch with her birth mother and seemed to have mended the relationship.

## Appendix B – Polycrest Remedies

Homoeopathy has a great treasure of medicines, at present, there are >5,000 proven and listed remedies in several Materia Medicas available to practitioners. Some remedies; however, are more commonly used. The most common homoeopathic remedies are often referred to as Polycrests. Many of them have been in use in homoeopathic preparations since the beginning of homoeopathy and have an earlier history of use in herbal preparations. The Polycrest remedies are effective for a wide variety of conditions and are often used for common symptoms of simple illnesses. From his introduction to Nux vomica in his *Materia Medica Pura*, Hahnemann defines Polycrest as follows: *“There are some remedies in which most symptoms correspond in similarity to some common disease, and which can therefore often be effectively applied homoeopathically. We could call these remedies Polycrest”* (Hahnemann, 2004). Below is a list of the most commonly used Polycrest remedies:

**Table 4: Polycrest Remedies**

Remedy	Abbreviation	Common Symptoms
Aconitum Napellus	Acon	A state of fear, anxiety; anguish of mind and body. Physical and mental restlessness. Sudden and great sinking of strength. Complaints and tension caused by exposure to dry, cold weather. Fears the future. Eyes feel dry and hot, as if sand in them. Pain at root of nose. Tingling in cheeks and numbness. Gums hot and inflamed. Tongue coated white. Vomiting, with fear, heat, profuse sweat and increased urination. Bitter taste of everything except water. Intense thirst. Bleeding haemorrhoids. Urine scanty, red, hot, painful. Cough, dry, short, hacking; worse at night and after midnight. Tingling in chest after cough. Tachycardia. Pulse full, hard; tense and bounding. Rheumatic inflammation of joints; worse at night. Anxious dreams. Sleeplessness, with restless and tossing about.
Allium Cepa	All-c	Watery and acrid nasal discharge which becomes worse in warm room. Oppressed breathing. Tickling in larynx. Eyes sensitive to light. Burning in nose, mouth, throat, bladder and skin. Sneezing, especially when entering a warm room.
Aluminum	Alum	Very severe constipation, no desire for days. Rectum sore and dry. Dryness of mucous membranes. Left-sided abdominal complaints. Brittle nails. Intolerable itching when getting warm in bed. Legs feel asleep, especially when sitting with legs crossed. Staggered on walking. Heels feel numb.
Antimonium Crudum	Ant-c	Excessive irritability. Tongue thickly coated white. Loss of appetite. Menses suppressed from cold bathing. Watery leukorrhea. Various skin diseases. Arthritic pain in fingers.

<b>Remedy</b>	<b>Abbreviation</b>	<b>Common Symptoms</b>
Antimonium Tartaricum	Ant-t	Respiratory problems, rattling of mucus but little expectoration. Thirst for cold water but little and often. Great drowsiness.
Apis Mellifica	Apis	Oedema of skin and mucous membranes. Stinging pains. Intolerance of heat. No thirst. Swelling in throat. Swelling after insect bites. Last drops of urine burn and smart. Inflammation of kidneys.
Argentum Nitricum	Arg-n.	Patient is always in hurry. Headache from mental exertion. Symptoms of in-coordination. Painful swelling of pit of stomach. Great desire for sweets. Intolerance of heat. Sexual weakness of males. Diarrhea immediately after eating or drinking.
Arnica Montana	Arn	Traumatic injuries. Pain from overuse of an organ. Fetid breath. Violent spasmodic cough. Angina pectoris. Small boils. Thrombosis. Tinnitus.
Arsenicum Album	Ars	Influenza with thin, watery and excoriating nasal discharge. Sneezing. Photophobia. Seaside complaints. Restlessness. Food poisoning. Intolerance of smell of food. Jaundice. Anaemia. Skin dry, rough, scaly. Psoriasis which is worse in winters. Periodic fever. Typhoid. Thoughts of committing suicide.
Baptisia	Bapt	Septic conditions. Fetid breath. Stool offensive, thin, dark, bloody. Menses too early, too profuse. Sleeplessness and restlessness. Nightmares and frightful dreams.
Baryta Carbonica	Bar-c	Tonsils and glands around ears painful and swollen. Easy taking of cold. Abdomen hard and tense. Palpitation when lying on left side. Fetid foot sweat.
Belladonna	Bell	Sudden and violent complaints and inflammations. Neuralgic pains which come and go suddenly. No thirst. Redness of affected organs. Skin sore and sensitive. Dysmenorrhoea, menses profuse. Eyelids red and swollen. Nose bleeds. Spasmodic hiccough.
Berberis Vulgaris	Barb	Kidney and gall bladder stones. Inflammation of kidneys. Bloody urine. Anal fistula. Itching of skin worsened by scratching. Lumbago.
Bryonia Alba	Bry	Excessive irritability. Dryness of all mucous membranes. Great thirst for large quantities of water. Constipation. Menses suppressed. Frequent bleeding of nose when menses should appear. Dry cough. Joints red and swollen. All complaints are aggravated by motion.
Calcarea Carbonicum	Calc carb	Apprehension, forgetfulness. Excessive sweat of head. Discharging ears. Easy taking of cold. Head proportionately larger but legs thinner in children. Obesity. Loss of appetite when tired. Umbilical hernia. Gall-stone colic. Menses too early, too profuse and too long. Feet feel cold and damp.
Cantharis	Canth	Abdominal complaints which are aggravated by coffee. Inflammation of urinary passages. Constant urge to urinate. Nephritis with bloody urine. Excessive sexual desire in females. Burns and scalds. Irregular pulse, pericarditis.

<b>Remedy</b>	<b>Abbreviation</b>	<b>Common Symptoms</b>
Capsicum	Caps	Desire to be alone. Swelling and pain behind ears. Sore throat of smokers and drinkers. Stomatitis. Fetid odour from mouth. Intense craving for stimulants. Thirsty after stool, with shivering.
Carbo vegetabilis	Carb-v	Lowered vital power. Deficiency of oxygen in the body. Digestion very slow. Hands and feet cold. Epistaxis. Distress even from simplest food. Flatulent colic. Pulse imperceptible. Easy fainting.
Causticum	Caust	Chronic rheumatic, arthritic and paralytic affections. Paralysis of tongue and vocal chords. Unsteadiness of muscles. Involuntary passing of urine specially at night and in the aged.
Chamomilla	Cham	Excessive irritability and impatience specially in children. Violent earache. Diarrhea of children during dentition. Tickling cough. Rheumatic pains.
China Officinalis	Chin	General weakness. Aversion to mental or physical exertion. Ringing in ears, Violent dry sneezing. Ill effects of tea. Weakness due to loss of fluids. Painless frothy stools. Slow digestion. Distention of stomach and abdomen after eating. Hiccough. Jaundice.
Colocynthis	Coloc	Intense abdominal pain causing the patient to bend over double. Dysentery. Taste very bitter. Contraction of muscles. Stiffness of joints.
Drosera Rotundifolia	Dros	Spasmodic, dry, irritating, choking cough (much like whooping-cough) with hoarseness of voice. Nosebleed. Disinclination to speak because talking creates breathing difficulties.
Eucalyptus Globulus	Eucal	Is a powerful antiseptic. Typhoid. Relapsing fever. Slow digestion. Dysentery. Nephritis. Asthma. High fever.
Ferrum Phosphoricum	Fer-ph	Headache better by cold applications. Eyes red, inflamed, with burning sensation. Nose bleeds. Face flushed, cheeks sore and hot. Ulcerated sore throat. Tonsils red and swollen. Eustachian tubes inflamed. Aversion to meat and milk. Anaemia. Stools watery, bloody, undigested. Congestions of lungs. Expectoration of pure blood in pneumonia. Palpitation; pulse rapid. Rheumatic pain in shoulder. Restlessness and sleeplessness.
Gelsemium	Gels	Various degrees of motor paralysis. Muscular weakness. Vertigo. Insomnia. Dim-sightedness. Diarrhea from emotional excitement.
Graphites	Graph	Dryness of skin. Nails deformed and brittle. Constipation. Obesity, hot drinks create problems. Offensive breath.
Hamamelis Virginica	Ham	Bleeding haemorrhoids. Haemorrhage from any part. Varicose veins. Orchitis.
Hepar Sulphurium	Hep	Great sensitiveness to all impressions. Tendency to suppuration. Cough when exposed to dry and cold wind. Chronic and recurring urticaria. Deep cracks on hands and feet. Great sensitiveness to dry, cold weather.
Ignatia Amara	Ign	Many of the emotional symptoms including ill effects of grief and worry. Changeable moods. Twitching of facial muscles. Insomnia. Violent yawning. Dry spasmodic cough. Feminine sexual frigidity. Coffee aggravates many problems.

<b>Remedy</b>	<b>Abbreviation</b>	<b>Common Symptoms</b>
Ipecacuanha	Ipecac	Nausea and vomiting due to any reason. Haemorrhages where blood is bright red. Diarrhea with grass-green stool. Profuse uterine haemorrhage. Asthma. Bleeding from lungs. Sleep with eyes half open. Suffocating and wheezing cough.
Kali Bichromicum	Kali-bi	Thick, ropy secretions. Loss of smell. Stomach ulcer. Left sided sciatica. Quick migration of pains. Cirrhosis of liver.
Kali Carbonicum	Kali-C	Sharp and cutting pains. Sensitiveness to weather changes. Dryness and falling out of hair. Sour eructation. Weakness of back. Large haemorrhoids. Pulse weak, rapid and intermittent. Cold weather complaints.
Kali Phosphoricum	Kali-p	Weakness of nervous system. Mental and physical depression. Loss of memory. Humming and buzzing in the ears. Violent dysentery.
Kreosotum	Kreos	Cancerous affections. Very painful dentition. Rapid decay of teeth. Hoarseness. Cholera of infants. Senile gangrene. Cracking of soles. Periodontitis.
Lachesis Mutus	Lach	Climacteric hot flashes. Toothache. Diphtheria. Quinsy and many other complaints related with throat and respiratory system. Neuralgia of coccyx.
Ledum Palustre	Led	Rheumatism. Gouty nodosities. Anal fissures. Carbuncles. Complaints which appear from below upwards.
Lycopodium	Lyco	Lack of self-confidence. Weakness of memory. Night blindness. Anorexia, small quantities of food create fullness. Distention of abdomen. Cirrhosis. Hernia, Painful haemorrhoids. Sciatica. Impotence. Psoriasis. Hepatitis.
Magnesia Phosphorica	Mag-p	Spasmodic pains. Cramps of muscles. Toothache. Flatulent colic. Menstrual colic. Angina pectoris. Spasmodic palpitation.
Mercuris Solubilis	Merc	Discharges are offensive, greenish yellow. Ear infections either chronic or acute. Nose has chronic coryza with offensive, greenish discharge. Mouth ulcers or canker sores. Ulcerations. Salivation aggravated at night in sleep. Offensive breath or metallic taste. Throat inflammation acute or chronic. Pharyngitis, tonsillitis. Swelling of glands.
Mercurius Sublimatus Corrosivus	Merc-Cor	Gonorrhoea, Inflammation and soreness of eyes. Red, swollen and painful throat. Bloody dysentery. Sensitiveness of epigastrium.
Natrum Muriaticum	Nat-Mur	Great weakness. High blood pressure and even low blood pressure. Blinding headache. Violent and fluent coryza specially which begins with sneezing. Numbness of tongue. Tachycardia, pulse intermits on lying down. Falling out of hair.
Niticum Acidum	Nit-ac	Putrid breath. Bleeding of gums. Bloody saliva. Haemorrhages from bowels, profuse, bright. Haemorrhoids bleed easily. Diarrhea, slimy and offensive. Stool scanty, dark, offensive. Uterine haemorrhages. Menses early, profuse, like muddy water, with pain in back, hips and thighs. Short breath on going upstairs. Black pores on face.

<b>Remedy</b>	<b>Abbreviation</b>	<b>Common Symptoms</b>
Nux Vomica	Nux-v	Great irritability. Habit of finding faults with others. Headache in sunshine and on waking in the morning. Nose stuffed up at night. Stomach problems are aggravated by eating. Frequent ineffectual urging for stool. Blind haemorrhoids. Dysmenorrhea. Asthma due to digestive disorders. Unrefreshing sleep.
Opium	Op	Lack of response to various medicines. Vertigo. Fright. Delirium. Paralysis of tongue. Obstinate constipation. Stool round like black balls. Snoring. Great drowsiness. Convulsions. Useful in coma.
Phosphoricum Acidum	Ph-ac	Mental debility. Impaired memory. Hair thin out, turn grey early. Blue rings around eyes. Lips dry, cracked. Bleeding gums; retract from teeth. Face pale. Craving juicy things. Thirst for cold milk. Diarrhea, white, watery, involuntary, painless. Frequent urination at night. Emissions at night and at stool. Menses too early and profuse, with pain in liver. Weak feeling in chest from talking. Cramps in upper arms and wrists. Pimples, acne, blood-boils. Falling out of hair.
Phosphorus	Phos	Great lowness of spirit. Dread of death when alone. Fatty degenerations. Scurvy. Vertigo of the aged. Dandruff. Falling of hair. Haemorrhages. Cirrhosis of liver. Glaucoma. Epistaxis instead of menses. Vomiting soon after taking water. Hoarseness. Various respiratory problems.
Phytolacca	Phyt	Loss of personal delicacy. Indifference to life. Dark redness of throat with swollen tonsils. Quinsy. Mumps. Cancer and abscess of breast. Urine suppressed with pain in kidney region.
Pulsatilla Niger	Puls	Patient is timid and can be easily discouraged. Moods are changeable and contradictory. Changeable and contradictory symptoms. Mouth is dry but no thirst. Taste of mouth keeps changing. Secretions from eyes, nose and mouth are all thick. Disliking for fat and warm food. Menses delayed, scanty, thick, dark, clotted, intermittent and changeable. Pains in the body keep shifting. Styes. Acne. Measles.
Rhus Toxicodendron	Rhus-t	Extreme restlessness. Thoughts of suicide. Rheumatic pains which are worse at beginning of motion. Drowsiness after eating. Pains due to over-exertion. Pain and stiffness in small of back. Sciatica. Urticaria. Complaints are worse when at rest.
Sepia	Sep	Indifference to friends and relatives. Chronic nasal catarrh. Herpes behind ears. Nausea in morning before eating. Desire for spicy food. Irregular menses with bearing-down sensation. Weakness of back. Hot flashes at menopause.
Silicea	Sil	Intolerance of alcoholic stimulants. Tendency to formation of pus. Styes, boils and abscesses. Constipation before and after menses. Extreme coldness of body with desire to remain close to fire. Offensive foot sweat. Crippled nails. Keloid growths. Loss of smell.

<b>Remedy</b>	<b>Abbreviation</b>	<b>Common Symptoms</b>
Sulphur	Sulph	Forgetfulness. Burning and redness of eyes. Burning in palms and soles. Unhealthy skin with tendency to skin diseases. Great acidity. Difficult respiration. Haemorrhoids. Aversion to bathing.
Tarentula hispanica	Tarent	Remedy for behavioural problems in children with ADHD. Restlessness, trouble sitting still. Better from rhythmic dancing and music. Very chilly remedy. Yeast infections. Extreme restlessness must keep in constant motion even though walking aggravates. Restless sleep
Thuja Occidentalis	Thuj	Fig-warts. Freckles. Fungus growths. Loss of appetite. Rapid emaciation. Constipation with violent rectal pain. Piles. Gonorrhoea. Asthma in children.
Veratrum Album	Verat	Extreme coldness, blueness and weakness. Pale face. Painful diarrhea followed by great weakness. Weakness of heart with intermittent action. Cramps in calves.
Zincum Metallicum	Zinc	Sensitivity to noise. Lethargy. Headache due to wine. Squinting (of eyes). Cholera of infants. Weakness, trembling and twitching of various muscles of limbs. Backache.



## Glossary

**AIDS** – Acquired Immunodeficiency Syndrome

**ATGC** - Adenine, Thymine, Guanine and Cytosine

**ATP** – Adenosine Triphosphate

**CAM** - Complementary and Alternative Medicine

**CD** – Quantum Coherence Domain

**CEO** – Chief Executive Officer

**CERN** - European Organization for Nuclear Research

**CLR** – Comprehensive Literature Review

**CpG** - Cytosine-phosphate-Guanine

**DLS** - Dynamic Light Scattering

**DNA** - Deoxyribonucleic acid

**DNMT** - DNA Methyltransferases

**EASAC** - European Academies' Science Advisory Council

**FESEM** - Field Emission Scanning Electron Microscope

**FTIR** - Fourier Transform Infrared Spectroscopy

**GER** - Giant Electrorheological Fluid

**H<sub>2</sub>O** – Water Molecule

**HRTEM** – High Resolution Transmission Electron Microscope

**ICP-AES** - Inductively Coupled Plasma-Atomic Emission Spectroscopy

**IMP** - Integral Membrane Proteins

**mtDNA** – Mitochondrial DNA

**mRNA** – Messenger Ribonucleic Acid

**MS** - Multiple Sclerosis

**NBWS** – Never Been Well Since

**NHMRC** - National Health and Medical Research Council (Australia)

**NHS** – National Health Service (UK)

**NIR** – Near Infrared Light

**NMR** - Nuclear Magnetic Resonance Imaging

**NP** – Nano Particle

**NSERM** - Medical Research Organization (France)

**OH** –Oxygen Hydrogen Bond

**QED** – Quantum Electro Dynamics

**QFT** – Quantum Field Theory

**Raman** – Raman Laser Spectroscopy

**RCT** – Randomised Controlled Trial

**TEM** - Transmission Electron Microscopy

**TGA** - Australian Therapeutic Goods Administration

**UHD** – Ultra-high Dilutions

**UV** – Ultraviolet Light

**WHO** - World Health Organisation

**WQT** - Weak Quantum Theory

**WissHom** - Scientific Society for Homeopathy