



# **The development of new sequence specific homeopathic DNA remedies for health promotion and disease protection.**

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## **Abstract.**

It is well established that homeopathic remedies have the capacity to interact with the genetic blueprint and increase the expression of many genes. This is an important observation since, in recent years, scientists have discovered that the human genome, or genetic blueprint, contains many genes that promote health and protect against disease as well as many genes that contribute towards the development and progression of many diseases.

To advance the practice of homeopathy, the homeopaths Drs. Jenaer and Marichal discovered that potentised nucleic acid molecules such as DNA could be used to target and support the activity of health promoting genes in a clinical setting. These new findings led to the development of an advanced form of homeopathy called Micro-Immunotherapy. Based on the proven principles of Micro-Immunotherapy, a series of new sequence specific homeopathic DNA (SSHD) remedies has now been developed. These new SSHD remedies take into account recently discovered health related scientific findings as well as new properties of DNA that have emerged in recent years.

This paper describes the evolution, applications and advantages of these new SSHD remedies.

## **Introduction.**

The onset and resolution of symptoms of ill-health are reflected by changes in the biological, physiological or psychological characteristics (health status) of an individual.

Basically, there are two ways in which an individual's health status can be altered. Firstly, symptoms of ill-health can be resolved or induced by the administration of pharmacologically acting drugs or chemicals that interfere with qualitative and/or quantitative features of specific proteins that are associated with a particular set of symptoms. On the other hand, an individual's health status can be changed by re-arranging the expression of genes that encode the proteins that promote or resolve a particular set of disease symptoms. It is now recognised that homeopathy is one of the health care modalities that can do this.

Homeopathic remedies alter an individual's health status in different ways. For example, they can resolve many symptoms of ill-health. They also promote many different symptom patterns of ill-health as recognised by results of the "proving" process and induction of "aggravations".

Generally, homeopathic remedies do not contain any pharmacologically acting substances, therefore they must alter the health characteristics of an individual by interacting with the transcriptome<sup>1</sup> and re-arranging the expression of various genes that effect those particular changes in health status. This is an important consideration because, in the last few decades, scientific studies have dramatically increased our understanding of genes that promote symptom patterns of many forms of ill-health when their expression is restricted as well as genes that promote symptoms of ill-health or disease when their expression is increased.

Almost two decades ago, the idea that homeopathic remedies could interact with the transcriptome and induce the expression of various genes began to be formerly addressed (1, 2). Since then, many studies have confirmed that homeopathic remedies do have the capacity to increase the expression of many genes, see Ref.3 and within.

Interestingly, Saha and colleagues (4) discovered that individual remedies such as *Condurango* and *Hydrastis canadensis* have the capacity to re-arrange the expression of many genes, well over a hundred. From a health care standpoint, this is a very important observation since, as indicated above, the human genome (the genetic blueprint) contains many genes that cause disease as well as genes that promote

health and protect against disease. They also found that each of these remedies rearrange the expression of a range of quite different genes. Therefore with a view to advancing homeopathy, it became important to develop a way to target specific health promoting genes in a predictable way. This became possible due to the pioneering work of the homeopath Dr. Jenaer in the late 1960s. As part of his seminal work (5), he confirmed that DNA and other nucleic acid molecules with defined nucleotide sequences, which were designated specific nucleic acids<sup>1</sup> (SNA) could be used to target and modulate the activity of various health promoting genes (see below).

### **About homeopathic DNA.**

DNA has long been used to prepare homeopathic remedies. It is included in *Materia Medica*s compiled by practitioners such as Dr O.A Julian (6), Dr. Jenaer (7) and others (8). It is also included in various Homeopathic Pharmacopoeias such as the Homeopathic Pharmacopoeia of the United States (HPUS).

Various homeopathic DNA<sup>2</sup> remedy preparations have been subjected to the proving process by a number of practitioners such as Dr. Jenaer, Dr. Julian, Robbins and others. Because a wide range of symptoms of ill-health are induced by administration of homeopathic DNA preparations that are below the pharmacologically active threshold, it follows that homeopathic DNA has the capacity to target many genes that cause disease.

On the other hand, following administration of homeopathic DNA, many health benefits have been recorded by practitioners such as Dr. Suvarna (9) and those above. These findings confirm that homeopathic DNA can also target genes that encode proteins that resolve many symptoms associated with different forms of ill-health.

Based on the effects of administration of homeopathic DNA, it made sense to develop a way of adapting the use of homeopathic DNA to target specific health promoting genes. As outlined above, this breakthrough was achieved by the brilliant work of the homeopath Drs. Jenaer, who, along with Dr. Marichal, introduced the use of SNAs into the emerging homeopathic practice of Micro-Immunotherapy.

### **Efficacy of SSHD remedies.**

As part of their pioneering work, Drs. Jenaer and Marichal conducted a series of clinical studies which confirmed the efficacy of SNA remedies. Results of their clinical investigations paved the way for development of the SSHD remedy system. The significance of Drs. Jenaer and Marichal's findings has been acknowledged by the international scientific community because the application of DNA molecules with precise sequences in a homeopathic setting has been granted a Patent, see EP0670164B1. Furthermore, the use of DNA molecules with precise sequences to prepare legitimate homeopathic remedies has been validated by registration of Labo'Life's SNA remedy 2LHERP by the Medicines and Healthcare products Regulation Agency in the U.K., see HR 17491/0001.

Based on Dr. Jenaer and Marichal's work, an extensive series of new SSHD remedies has now been developed. The application of these new remedies is based on a wide range of important scientific discoveries that have come to light in recent years.

### **Properties of DNA used for the preparation of new SSHD remedies.**

All DNA molecules that are used to prepare new SSHD remedies are in double stranded form. They are in the order of 300-400 base pairs in length. They are manufactured by world class molecular genetics laboratories using the classical DNA synthesising technology, the polymerase chain reaction. They are of precise sequence, length and concentration so that remedy preparations are standardised and completely reproducible. Unlike homeopathic DNA preparations, they are guaranteed risk free because they do not contain any DNA sequences of foreign or viral origin. The sequence of each of the new SSHD molecules is determined by reference to the sequence of the targeted gene/s reported as a consequence of the Human Genome Project and other reputable scientific reports.

The new SSHD molecules are potentised and administered in an aqueous phase to take advantage of some recently discovered new properties of DNA. For example, scientists have found that double stranded DNA molecules have unusual interactive properties in that, in solution, they can communicate with and be attracted to other DNA molecules with the same sequence (10). When mechanically stimulated, they can also emit sequence specific electromagnetic signals that can be recognised by DNA molecules with the same sequence (11). This DNA mediated signalling (11) cannot be measured when DNA solutions are diluted more than 1 in  $10^{12}$  (equivalent to 6C). That is why the new SSHD remedies are used specifically at a potency of 6C. By contrast, Labo'Life's SNA

remedies (1) which contain single stranded DNA or RNA molecules which are less than 30 nucleotides in length are used at potencies of 16 C or 18 C.

Interestingly, over many years, seminal work by Goodman and colleagues has shown that expression of various genes can be readily up-regulated by the application of electromagnetic signalling (12).

### **Advantages of new SSHD remedy system.**

Based on a large body of research, new SSHD remedies are designed to be completely safe.

New genetic health care discoveries usually take between 10-20 years before they can be used to develop a new form of treatment, usually in the form of a drug. By contrast, the new SSHD system is able to translate relevant discoveries into a safe treatment modality far more quickly.

### **Remedy selection criteria.**

How are gene targets selected for inclusion in the new SSHD remedy range?

There are a number of different ways in which genes can promote symptoms of ill-health. For example, many diseases are caused by inherited or acquired changes in the DNA sequence of a gene (usually referred to as a mutation). These mutations cause symptoms of ill-health due to formation of a protein that does not work properly. There are no new SSHD or indeed any homeopathic remedies that can resolve diseases caused by DNA mutations because they cannot alter the inherited sequence of DNA.

On the other hand many disease symptoms are produced when a gene loses the ability to produce a sufficient amount of a normal protein, that is, the gene is not expressed sufficiently. Based on the pioneering work of Drs. Jenaer and Marichal as well as the results of extensive work by Khuda-Bukhsh and others (1-3), new SSHD remedies have been developed to address symptom pictures that are generated when the expression of a particular gene is diminished. The symptom pictures generated by reduced expression of particular genes have been accurately recorded due to many years of world class scientific investigations.

### **When are new SSHD remedies prescribed?**

New SSHD remedies are prescribed partly on the basis of symptom patterns that are generated when the expression level of a particular gene is sub-optimal. As

SNA remedies, they are also prescribed on the basis of the known functions of the genes that they have been designed to target.

There are a number of reasons why expression of a gene may be sub-optimal. For example, the expression of some genes declines with age. The expression of one of the most important health promoting genes discovered thus far, KL, is one of them. Since its discovery, scientists have shown that the KL gene, which synthesises the hormone Klotho, plays a very important role in slowing down the ageing process (13). Scientists have shown in an animal model that reduced activity of KL results in acceleration of the aging of many organs, and in particular, skin deterioration and wrinkling (14). These features are completely reversed by up-regulation of KL (15)

More recently, Dr. Witkowski and co-workers showed that reduced KL activity is associated with impaired immunity and increased susceptibility to development of auto-immunity (16). These scientists demonstrated that KL plays an important role in stabilising CD4+ helper T lymphocytes, cells that promote and control the activity of the immune system. Thus, to protect against many diseases, everyone would benefit by taking the KL gene targeting new SSHD remedy on a permanent basis, particularly as they age. This remedy is called Age Well. Another KL targeting remedy, Super Heart is designed to support heart health. There are a number of new SSHD remedies in this category.

On the other hand there are a number of remedies that are of benefit to everyone when taken on a permanent basis at all times. For example, the amino acid homocysteine, when in high concentrations in the blood, increases susceptibility to development of heart disease, atherosclerosis and many other disorders. Blood levels of homocysteine are elevated when the protein MTHFR is reduced (17, 18). Therefore, a new SSHD remedy has been developed to target the MTHFR gene to control serum levels of homocysteine. There are a number of SSHD remedies in this category including some that are designed to help people avoid excessive weight gain.

By contrast, other remedies are only required on a transient basis. For example, with the onset of asthma, prescription of two quite different remedies is warranted. One new SSHD remedy is designed to target the IL-10 gene. IL-10 is an immune suppressant and has been shown to suppress immune components of allergy. In fact, the positive effects of asthma drugs such as triamcinolone and montelukast are considered to be due to their ability to increase IL-10 production (19). On the other hand, a completely different non-inflammatory form of asthma has recently

been discovered (20). Almost a half of asthma patients may suffer from this form of asthma. It is due to a reduction in the concentration of a protein called sphingolipid in the walls of the airways. When the amount of sphingolipid in airway cells is reduced, the walls of the airways contract resulting in the onset of a non-inflammatory form of asthma that is completely non-responsive to immunosuppressive therapy. Sphingolipid synthesis is augmented by the STP1 gene. Therefore co-administration of the remedies that target the IL-10 gene, as well as the STP1 gene is warranted in patients who present with asthma. There are a number of remedies in the new SSHD remedies in this category.

For many years, scientists have searched for genes that are involved in depression. Recently, scientists from Germany's Max Planck Institute of Psychiatry made the exciting discovery that the gene SLC6A15 was linked to severe depression.

They found that expression of the SLC6A15 gene, which regulates the brain's excitatory transmitter glutamate, was reduced in people who were severely depressed (21). Therefore, the Homeovitality Depress Aid product was developed to target this important gene in sufferers of depression.

### **Materia Medica and Education.**

By visiting the website, [www.homeovitality.com](http://www.homeovitality.com), free Materia Medicas are available to help practitioners understand much more about the range of new SSHD remedies and how to use them most effectively. One of the Materia Medicas describes a series of new SSHD remedies that focus on genes that have been found to play a critical role in development, progression and resolution of neoplastic disorders (cancer).

The website also includes information about a unique course that exposes practitioners to the basic scientific principles of biochemistry, genetics, immunology and more that underpin the present day delivery of homeopathy.

More information on Micro-Immunotherapy may be found on the website [www.labolife.com](http://www.labolife.com).

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#### Notes.

<sup>1</sup> Nucleic acid is a term used to describe the different types of molecules that consist of a string of at least three of the basic genetic building blocks or nucleotides G, T, A, C and U. Nucleic acids include DNA, RNA, mRNA, tRNA and other forms of RNA. SNA refers to a nucleic acid with a specific sequence of nucleotides. Therefore, SSHD describes a sub-type of SNA.

<sup>2</sup> The word “transcriptome” is used to refer to all the genes that are actually expressed in a particular cell or tissue. There are about 25,000 human genes, not all of them are expressed in any particular cell or tissue.

<sup>3</sup> Homeopathic DNA is in fact, a chemically altered form of DNA that is used to prepare a routine laboratory reagent. In accord with different Homeopathic Pharmacopoeias, homeopathic DNA remedies may be prepared from genomic DNA isolated from various sources, including fish and animals. Fish DNA is readily isolated from the sperms of fish such as salmon or herrings. By contrast, animal DNA is readily prepared from cells derived from the thymus of a calf. Why fish sperm DNA or calf thymus DNA? The reason why DNA from these sources is used to prepare homeopathic DNA remedies is because such DNA is readily available commercially. It is sold by International Biochemical Companies such as Sigma-Aldrich and Invitrogen as a reagent routinely used in molecular biological laboratories involved in technologies such as gene cloning. It is chemically extracted from these sources. Once isolated, it is mechanically degraded into a large number of small fragments of double stranded DNA. The fragments are in the order of only a few base pairs in length, all of which are of unknown sequence. The purity of laboratory grade salmon/herring/calf thymus DNA is assigned principally with respect to absence of enzyme activity against DNA and RNA.

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