



## **Clinical PNI – Scientific Mind-Body Therapy**

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**Clinical psycho-neuro-immunology (cPNI) originates from the science of PNI, which was developed in the early 1980s by the Americans Ader, Felten and Cohen. At the Natura Foundation, the knowledge centre for clinical PNI and nutritional therapy, the body of thought relating to PNI has undergone further development and elaboration, enabling this discipline to be used in clinical practice by Dutch pioneers, the late Bram van Dam and Leo Pruimboom. Since then, psycho-neuro-immunology has undergone tremendous growth and plays a key role as the science which links the existing medical specialisms together.**

Clinical PNI is a clinical specialty that is characterised by international scientists working closely together, who principally conduct research into the interactions between the nervous system and the immune system, and the mutual relationship between behaviour and health. However, cPNI is not only an academic matter. Quite the contrary: it is a practical science that offers a wide range of treatment options for obesity, chronic fatigue syndrome, irritable bowel syndrome, depression and many more modern day disorders. As the aforementioned potential uses in the public health sector are at the forefront of cPNI, *clinical* PNI is spoken of. Food in all its forms, exercise, psychosocial interventions, epigenetics, repleomics and deep learning are a few cornerstones of the therapy in clinical PNI.

### **Science in practice**

The method applied by the cPNI therapist is the result of many decades of research and the effectiveness of this method is endorsed by more than 3,000 practising therapists and physicians from various countries. The majority of cPNI scientists have many years of experience practising (nutritional and natural) medicine and are active in the health care sector. To this end, it is interesting to take a look at the origin of Western medicine. In around the year 1200, at universities scholarly doctors mainly studied the original writings of Hippocrates and Galen, whilst barber-surgeons (mobile barbers) performed surgery on the diseased. The craftsmen were lacking in medical-theoretical knowledge, whilst the practical knowledge of the actual surgery

remained an unknown to the scholarly doctors. Unimpeded further development of medical science was not possible until the Renaissance, when the aforementioned two groups started to work closer together. This example clearly demonstrates that theory and practice cannot be treated as separate entities in (natural) medicine. For that reason, clinical PNI opts for a practical scientific approach, enabling smoother integration of valuable scientific knowledge into everyday practice.

### **An essential addition**

Clinical PNI does not only bridge theory and practice, but essential correlations are also made in the scientific field. The main disciplines that are brought together are psychology, neurology, immunology, endocrinology, evolutionary biology and epigenetics. Research has revealed that human physiology and the external environment interact dynamically. A precise subdivision into medical specialisms is particularly of importance in emergency medicine, but obstructs the understanding, and, because of that, ultimately the treatment of less acute (chronic) disorders. Complex interactions that are psychological, neurological and immunological in nature often underlie these disorders; when just one of these factors is examined, it is impossible to find a satisfactory health solution for the problem as a whole. Clinical PNI accurately examines in closer detail the various interactions in order to gain an integrated picture of human health, based on which therapeutic strategies can be drawn up which ignore the treatment of symptoms and grasp the problem at its root. This full overview means clinical PNI is an essential addition to first-line medical care.

### **Clinical epigenetics**

One of the most spectacular insights in clinical PNI is that our genes have less of an effect on our behaviour and our health than has been assumed to date. The discipline that studies these effects is called 'epigenetics'. Epigenetics work 'on top of' genetics. Our genotype is coded in our DNA, but not all of our genes are expressed in our phenotype. The epimechanism dictates which genes are switched on and off. We inherit this mechanism from our parents and this is influenced by nutrition, exercise, the use of medicine and the environment. A large-scale Swedish study has revealed that even the influences of our parents on the epimechanism are hereditary. Even if the influential epigenetic factors are hereditary they are fortunately not irreversible. This fact is one of the fundamentals of cPNI therapy; the epimechanism can be influenced in such a way that (chronic) diseases can be prevented or even healed. Of prime importance to this are nutrient-rich food, sufficient exercise, natural supplementation and a healthy environment.

## **Resoleomics**

Another important cornerstone in cPNI therapy is *resoleomics*; this word is derived from the English verb "to resolve". As part of the healing process, resoleomics drive the physiological inflammatory response, thereby offering the body a 'solution' to a potentially life-threatening problem. Evolution is responsible for a response to tissue damage, where the start of the inflammation also immediately heralds the beginning of the end of the inflammation. The genes that are responsible for a healthy inflammatory response were created millions of years ago, at a time when our diet mainly consisted of fish, crustaceans and shellfish. These genes have not changed, but the environment in which they have to perform has undergone a revolution. Inflammation inhibitors, food which lacks nutrients, a lack of exercise and other modern ways of life have a disruptive effect on our gene expression. The inflammatory response itself is, in principle, good, but in our current environment, this can change to chronic inflammation, the result being an increased risk of developing a variety of present-day disorders, including cardiovascular diseases and diabetes. To enable resoleomics to function correctly, our eating habits have to be brought more in line with the diet that, from an evolutionary point of view, our genes are more able to cope with. Omega-3 fatty acids such as EPA and DHA, arachidonic acid and natural sources of salicylic acid are essential for resoleomics to function effectively.

## **The power of deep learning**

A powerful treatment strategy available to the cPNI therapist is *deep learning*. The deep learning process is a technique that therapists wish to entrench in their clients in order to put into motion a required behavioural change. This learning process is characterised by improved internalisation of what has been learned, because the client is encouraged to integrate the new information with knowledge that is already available to him. The general aim is that the client is able to place himself in the midst of his health problems with an active solution-oriented attitude and appropriate positive expectations of the future. The cPNI therapist acts as a coach in this process, someone who can answer the client's questions and explain the set of symptoms, risk factors and disrupted body processes and how these can be improved. The therapy is personal, scientifically substantiated and is founded on the client's own commitment. An important consequence is that the client feels that he/she is being taken seriously. This enables feelings of despair and powerlessness to make room for motivation and a feeling of being in control, which is a basic condition for the successful progress of the therapy. This enables the client to help to actively participate in the path towards health and ensures he/she is also more capable of taking preventive measures for the future.

### **From care of the sick to health care**

Clinical PNI is of great importance to the health of modern man. Increasingly, the science is discovering that we are unable to extract ourselves from our evolutionary background and the specific environment from which we originated. Along with the social structure in existence since time immemorial, this environment formed a balanced entity with the human genome. Insight and integrated knowledge of nutrition, immunology, endocrinology, neurology, psychology, sociology and pathology both in the present and the past therefore create opportunities within cPNI to promote health as much as possible and to reduce the burden of disease. A growing group of therapists, physicians and scientists share this knowledge and experience through seminars, training courses, universities and other collaborating institutes. Only in such a cooperative atmosphere will it be possible for the care of the sick of today to also really become health care in the future.

*For more information about clinical PNI and its application within modern nutritional and (natural) medicine practice, please visit [www.naturafoundation.co.uk](http://www.naturafoundation.co.uk). At this website you will also find more information about the practice-based courses, training events and the Master in Clinical PNI.*