

# **THE DESIGN OF WOODEN STICKS FOR THERAPEUTIC AND PROMOTIVE ACCUPRESSURE IN ATHLETES**

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## **Abstract**

The performance of athletes relies on the physical fitness, strength, and flexibility of joints and muscles. Disturbances due to overtraining, muscle sprain and fatigue, which hinder optimal performances, could be treated with accupressure manipulation, especially with the help of wooden sticks. After the 5.9 magnitude earthquake which hit Jogjakarta and Central Java, especially Bantul and Klaten regencies, manufacturing industries with wooden materials in the areas have been paralyzed, despite of the abundance of the raw materials. The production of wooden-sticks as tools for therapeutic and promotive accupressure for athletes would be an important business opportunity, which creates employment of skill labors, and obtain useful tools to improve the performance of athletes.

There is no complete set of accupressure sticks in the market. The development of home-industries to produce accupressure sticks need product design, production planning, resources mobilization for production, marketing and sales. Research on the application of wooden sticks for therapeutic and promotive accupressure has identified various forms of the sticks which could become a set of accupressure tools produced as one package. Guidelines for the use of the wooden sticks and the intended outcomes should be clearly written in a booklet, to make accupressure with the wooden sticks easy to learn.

Keywords: **Accupressure Sticks, Athletes**

## **Introduction**

The generally held few of fitness for sport includes concepts such as the ability to reach high levels of performance, and the ability to withstand the stresses imposed on the sportsman by his participation. These two concepts are closely linked, but do lead to contextual applications which may generate conflicting aims and objectives in the minds of those who are concerned with the acquisition of fitness by sportsmen. In particular, increasing levels of performance are accompanied frequently by increasing levels of stress on the performer. If fitness to perform is improved without a simultaneous enhancement of fitness to withstand competition stress, the performer is prone to become overstressed. In other words, the result is that the individual is strained or injured.

Clearly therefore, the development of sport fitness in training must include injury preventive elements, since the occurrence of injuries is counter-productive in

performance terms. The fitness status at which training is initiated may lie anywhere along the continuum of fitness, and is often temporarily depressed by injury. Rehabilitation from a sports injury is a special example of fitness training, but is still subject to the same criteria and principles as normal fitness training.

The major parameters of fitness in a modern performance context are: strength, speed, stamina, skill, spirit, and sports medicine. While identifying these parameters separately, it is quite apparent that they are integrated completely in the sport performance. Strength cannot be viewed in isolation in a sport context. It must manifest itself for example in movement. Of particular importance in the sports injury context is the part played by stamina. It should be appreciated that the capacity of a given function to cope with stress fluctuates during the competitive event. Particularly during phases of fatigue, there will be a diminishing of functional capacity which may fall below the level required to avoid strain. This phenomenon occurs during both local fatigue and general fatigue. Local and general stamina training is an essential element of training for all sports, even those which would not be classed as endurance sports.

The stresses which, by virtue of being more powerful than the ability of the sportsman to withstand them, cause injuries may be classified into normal and abnormal. These apply both to acute and chronic stresses. The stresses could be treated by acupressure manipulation, especially with the help of wooden sticks. After the 5.9 magnitude earthquake which hit Jogjakarta and Central Java, especially Bantul and Klaten regencies, manufacturing industries with wooden materials in the areas have been paralyzed, despite of the abundance of the raw materials. The production of wooden-sticks as tools for therapeutic and promotive acupressure for athletes would be an important business opportunity, which creates employment of skill labors, and obtain useful tools to improve the performance of athletes.

### **The Acupressure Meridian System as Therapeutic and Promotif**

Acupressure is efficacious for therapeutic, although this technique is less effective than needle stimulation. We have seen that firing rates of nerves may be affected by acupressure as well as by the release of pituitary hormones such as endorphins. They are effects which conventional medical techniques are easily capable of measuring. A much

more sensitive and useful approach lies in monitoring the electrical fields and currents secondarily associated with the meridian system.

Because the primary energies flow through the meridians are of subtle energetic nature, the electrical parameters of acupoints provide the closest indirect information that is possible with our conventional level of instrumentation. Utilizing these new systems of diagnosis, we will be able to understand more about the mechanism and benefits of many different types of subtle energetic therapies which may be useful in treating human illness. It will be through the exploration of the physical-etheric interface, as provided by measurements of the acupressure meridian system.

Chinese medicine sees the human being as microcosm within the universal macrocosm. Therefore, the principle that determine the flow of energy throughout the universe are seen as applicable to the human energetic system. The Chinese consider the state of the universe to be a changing, dynamic equilibrium between polar opposites in nature, which they have characterized in their essence as yin and yang. A correct balance of the yin and yang forces within the microcosm of the human body is critical to achieving and maintaining health.

Acupressure points are acupoints that allow energy to flow from environmental energy fields into the subtle fields of the etheric and physical bodies. The acupoints can be located on the skin via their characteristic of low electrical resistance, high conductivity, which is consistent with their role as portals of energy entry into the body. According to Chinese philosophy, the flow of ch'i energy through the twelve paired meridians follows certain well-defined cycles that mirror principles in nature. These cycles of generation and destruction demonstrate the patterns by which ch'i energy flows sequentially through the meridians, and thus to the organs of the body, during periods of both health and illness.

The flow of ch'i energy through the meridians follows a biorhythmic pattern. The flow of ch'i energy through a particular meridian is always highest at a particular time of day or night. Knowledge of this pattern of timing can be helpful to the clinician in knowing which time to treat a particular meridian using acupressure therapy. Also, this time related flow of life-energies may be a contributing factor to physiological phenomena which are strongly affected by time of day. The acupressure system delivers

chi'i to the organs through paired meridians on the left and right sides of the body. When an organ is diseased, or illness is imminent, the paired meridians delivering energy to that organ demonstrate an electrical imbalance between the two sides of the body.

Such disease-related imbalances in the major bodily organs can be determined by using diagnostic system such as the AMI Machine, a computerized instrument which electrically measures and compares the terminal acupoints for each of the major paired meridians. Electrographic scans of the body demonstrate that acupoints glow brightly when their associated meridian is out of balance, thus allowing an alternative method of disease detection.

Stimulation of acupoints produced changes in the nervous system (i.e. endorphin release and relief of pain) because the meridians indirectly influence nerve pathways in the body. Such acupoints associated nerve changes are probably mediated by energy field fluctuations in the vicinity of the nerves and glial cells which surround them. The acupressure meridian system is both a diagnostics interface as well as therapeutic interface. Energy changes in the meridian system can be measured through the acupoints to detect the presence of illness. Conversely, energy can be introduced into the meridian system to promote healing of disease via a variety of therapeutic modalities, including stimulation of acupoints by finger pressure, needles, electrical currents, sound waves, and laser light.

### **Our Relationship With Chakra**

The major chakras are specialized energy transformers which take in subtle energy and distribute it to the major glands, nerve centers, and organs of the body. The function of the chakras is related to various aspects of consciousness, especially the emotions, which affect the flow of energy through the centers. When the emotional body of individual has a field disturbances related to emotional problems, that emotional disturbances becomes translated into an altered flow of subtle energy through a particular chakras.

Each of the seven major chakras has a particular emotional and spiritual issue which affects it proper functioning. When an individual has significant unresolved emotional issues in any one of the areas, chakra dysfunction may occur. Such dysfunction

to deprivation of nutritive subtle energy flow to the bodily region and associated organs and glands supplied by that impaired chakra. If the chakra blockage is chronic, cellular imbalances and diseases may eventually occur. Altered subtle energetic flow through the various chakra is one mechanism by which chronic stress can negatively affect the physical body.

Perhaps the most critical chakra imbalance is one that affects the heart chakra, as this is the center involved with the issue of self-love and love toward others. The heart chakra supplies nutritive subtle energy to the physical heart and the general circulation, the lungs, and the thymus gland. Thus, chronic heart chakra dysfunction can contribute to heart disease, strokes, lung diseases, and various type of immunological impairment which may open the body up to bacterial, viral, and cancerous invasion. Because the chakras feed energy to the developing organs of the fetus, as well as the adult, past life carryovers of severe unresolved emotional blockages can sometimes result in harmonically-related congenital illness. Such harmful illnesses may occur in childhood or manifest as delayed effect in later life.

Meditation is an important method of opening, activating, and cleansing the chakras of the body, especially when practice in conjunction with active forms of visualization. The root or base chakra is the store house for a natural, yet powerful energy called the kundalini. This kundalini energy has the potential to activate and align all of the major chakras with the higher centers, bringing illumination and spiritual enlightenment with the proper sequences of chakra unfoldment. The kundalini energy is naturally released overtime as a result of daily meditation.

There is characterized a series of physical problems which relate to unresolved stresses and their effect upon the natural unfoldment of the kundalini process. They have termed this bodily disturbances the physio-kundalini syndrome. It is most frequently observed in meditators, but can occur spontaneously as well. Bentov discovered a series of serially turned oscillators within the body which become operational during meditation. Via a unique feedback system between the heart and aorta, micro oscillation of the body produced during meditation are translated into electro acoustical stimulation of certain pathways within the brain.

According to Bentov's model, with repeated meditative attempts over many years time, a circulating current in the sensorimotor cortex is eventually established which gradually releases old stresses locked into the brain tissue itself. It is likely that the symptoms experienced by meditators with the psycho-kundalini syndrome are due to the release of these stored stresses from the brain. Overtime and with repeated meditation, new neural pathways are established which prevent the re accumulation of stress effects and actually promote inner stimulation of pleasure centers within the brain. Thus the meditative and kundalini process, as envisioned by Bentov, is a natural release mechanism.

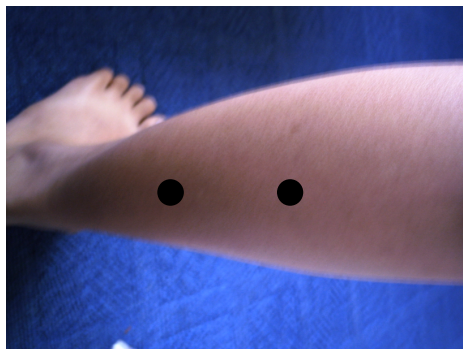
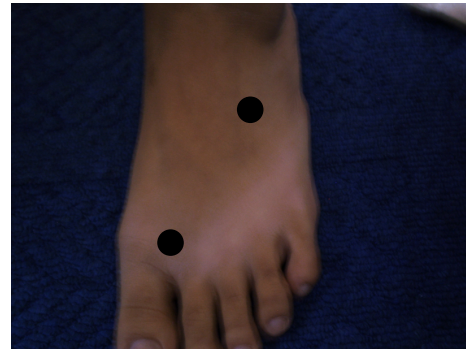
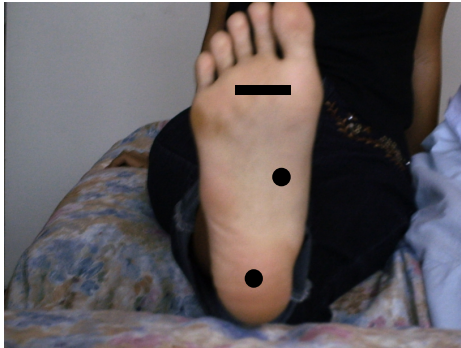
### **Reflex Zone Therapy**

Reflex zone therapy is a holistic healing method which involves pressure and massage of the reflex points found on the feet and hands. The dictionary defined the word "reflex" as an involuntary muscle contraction due to an external stimulus. In the context of reflexology, however, reflex is used in the sense of reflection, or mirror image. These reflexes are found on the soles of the feet, or the palms of the hands, which act as small mirrors reflecting the whole organism.

Reflexology teaches that a vital energy, or life force, circulates between the organs of the body, permeating every living cell and tissue. If this energy becomes blocked, the part of the body relating to the blockage is affected. Energy blocks in the human body are reflected on the hands and feet in one or more of the zones located there. By using specific pressure techniques, they can be detected through the experience of pain, or through the presence of gritty areas, often referred to as crystal deposits. This occurs in the part of the foot or hand that relates to the part of the body that is imbalanced. The pressure and massage techniques taught in reflexology are designed to dissipate energy blocks, and break down crystalline structure. Through stimulation of the circulatory and lymphatic systems, and by encouraging the release of toxins, reflexology promotes the body to heal itself.

Apart from treating disease, reflexology is an extremely effective therapy in cases of stress, tension, and tiredness. And, like acupuncture, it can also be used as a preventive measure against ill health. Reflexology, by using specific massage and pressure techniques on the reflexes of the feet or hands, is able to remove the energy blocks. The

energy current flow freely once more, and the body is returned to harmony. Yet these energy blocks are obstacles which must be overcome. If the cause is not found, patient will continue to block the energy which the reflexologist has started to release.



### **The Design of Wooden Sticks**

There is no complete set of accupressure sticks in the market. The development of home-industries to produce accupressure sticks need product design, production planning, resources mobilization for production, marketing and sales. Research on the application of wooden sticks for therapeutic and promotive accupressure has identified various forms of the sticks which could become a set of accupressure tools produced as one package. Guidelines for the use of the wooden sticks and the intended outcomes should be clearly written in a booklet, to make accupressure with the wooden sticks easy to learn. This one of the design can see below:

