

Designing a Belt to Cool the Human Body, Absorb Heat with Clay, and Treat Chronic Diseases

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Abstract

The thermal system of the human body changed after the era of the discovery of fire, but wearing a belt that contains within it materials that are relatively similar to the elements of the body would absorb heat and treat a number of diseases. Some inventors tried to place small fans between the layers of the shirt to combat the summer heat, but they are tiring when worn and the relative cold ends immediately. He removed the shirt, and a Japanese company introduced a collar that is placed on the neck equipped with a small system similar to split devices. Its possible complications can come from ammonia and electricity coming into contact, even indirectly, with the human neck. Then the cold ends as soon as it is removed. As for the cooling belt, the relative cold it causes continues for hours, even after removing it. The materials it contains are so abundant that it would not occur to one to think that it is river silt. I submitted it to standardization and control to obtain a patent. Such clay contains chemical elements that apparently match some of the active elements in the human thermal body, so the materials of the belt become symmetrical with their counterparts in the body.

Here the body is affected under the influence of these substances. We have seen that the specialist sometimes advises the patient to walk barefoot because the dirt has the ability, during contact with the skin, to improve the health of the internal organs of a person. In general, the particles, with their chemical composition, in general, if they are released randomly, after a long or short time, they regain their regular assembly. As a well-known scientific case, this and many diseases are nothing but a geometric deviation of the particles of chemical bonds. Therefore, they discovered, for example, a deviation in the ends of the chromosomes of an Alzheimer's patient. It has been observed that someone who suffers from schizophrenia recovers when he is exposed to a mild electric shock, which shows that the cells of the nervous system were suffering from deviations at times. The electrical proximity stimulated the electrical system inside the brain to regain its activity due to the ability of nanomaterials to regain its activity, as we said. Now, the human thermal system has changed after the era of the discovery of fire, and what was left of a chemical change as a result of cooking food and fire fuel for those who sit near it as a refuge for humans from predatory animals as well. He left lying on the river silt, dirt, forests, and mountains, and became luxurious. In this position, his chemical dimensions seemed to expand.

INTRODUCTION

Thermoregulation is the ability of an organism to maintain its body temperature within certain limits, even when the temperature of the surrounding environment is different. This process is one aspect of homeostasis: a dynamic state of stability between the animal's internal environment and its external

environment (in zoology these processes are called environmental physiology or physiological ecology). If the body is unable to maintain a normal temperature, it increases significantly above normal, and this condition is known as hyperthermia. This happens in humans when the body is exposed to constant temperatures equivalent to approximately 55°C (131°F), as well as prolonged exposure (a few hours) to a temperature of approximately 75°C (167°F), which causes death.

This medical thermometer shows a temperature reading of 38.7°C.

The temperature of the deep core tissues of the body remains almost completely constant within +1 or -1 degrees Fahrenheit (+0.6 or -0.6 degrees Celsius) day after day, except when a fever develops in the body. A naked person can be exposed to temperatures as low as 55 degrees Fahrenheit or as high as 130 degrees Fahrenheit in dry air, yet the temperature inside his body remains almost constant.

So the body's temperature control mechanisms represent a strangely designed control system. Conversely, skin temperature rises and falls with the surrounding temperature. This temperature is important when examining the ability of the skin to lose heat to the surrounding environment.

Controlling body temperature by balancing heat generation with heat loss. When the speed of heat generation in the body is greater than the speed of heat loss from it, it is clear that heat accumulates in it and its temperature rises. Conversely, when heat loss is greater, body temperature decreases. The balance between heat generation and heat loss, and the mechanisms by which the body controls each of these two functions are:

Generating body heat

Thermogenesis in the body is a major metabolic byproduct; Various factors determine the speed of heat generation, which is called the body's metabolic rate. The most important of these factors are:

The basic speed of metabolism of all cells in the body.

The extra speed of metabolism generated by muscular activities, which includes muscle contractions generated by goosebumps.

Additional metabolism caused by the effect of thyroxine secreted by the thyroid gland, and to a lesser extent other hormones on the cells such as: growth hormone and testosterone.

Additional metabolism caused by the effect of adrenaline, norepinephrine, and nerve stimulation on cells.

Additional metabolism caused by increased chemical reactions in the cells themselves, especially when their temperature increases.

Loss of heat from the body

Most of the heat generated in the body is generated in its deep organs, especially in the liver, brain, heart, and skeletal muscles during physical exertion. This heat is then transferred from the deep organs and tissues to the skin, where it is lost to the air in the external environment and everything surrounding the body. Therefore, the speed of heat loss is often and almost completely determined by two factors:

The speed at which heat can be delivered from where it is generated in the core of the body to the skin. The speed at which heat can be transferred from the skin to the surrounding environment.

Clay is known as one of the sedimentary rock minerals that is characterized by small crystals that are not visible to the naked eye. It is structurally called hydrated aluminum silicate, and according to the molecular formula it is symbolized by $(Al_2O_3 \cdot 2Si_2O_7 \cdot 2H_2O)$. It belongs to a structural group called kaolin, which is a natural product of the transformation of minerals or rocks whose mineral is feldspar under the influence of weather and geological factors over millions of years. Because these factors are constantly influencing,

we find that the clay mineral is widespread in nature and because of its transport and movement by wind and water, it loses some of its purity and many potential compounds that affect its composition, color, properties, and the multiplicity of its compositions give it the importance of being the basic material for the surface of the planet Earth. Through the above, we put a simple definition of ceramic clay, which is a natural earth product with particles of a size less than 2 microns. It is characterized by its plasticity and resistance to shaping. It has the property of gaining hardness and toughness after being exposed to high temperature.



Fig (1): Types of clay

Clays are classified into two groups:

First: the remaining clay:

A - Kaolin:

Primary clay formed by weathering on rocks with a high percentage of feldspar. It has large clay grains compared to other clays. Therefore, it has little plasticity and is considered relatively devoid of non-clay minerals. It is white in color, has a high melting point above 1800 degrees Celsius, and is considered heat resistant.

Chinese clay:

The second form of kaolin clay has a similar chemical composition to it, and according to the conditions of its geological formation, it is characterized by fine grains smaller than kaolin grains and good plasticity. It is pure white in color as it is a primary clay, and I have remaining sites that transform it from feldspar rocks.

Second: Secondary clays

A - Spherical clays

Sedimentary clays that were given this name because they were discovered for the first time in the form of balls in one of the English mines. Spherical clays, such as kaolin, are derived from granite-type rocks and are similar in chemical composition and common origin. They completely reverse the characteristics and properties of kaolin. They are characterized by the small size of their grains and the high content of organic matter in them. Therefore, they have high plasticity, is very viscous when saturated with water, and has a high degree of shrinkage during drying and burning, and its burning temperature is 1260 - 1300 degrees Celsius. It is used for the purpose of reducing the burning temperature of kaolin or raising the maturation temperature of other types of clays.

B - Fireclay

A sedimentary clay that is resistant to melting, indicating that it can withstand high temperatures of up to (1500) degrees Celsius without deformation or melting. These clays are composed of feldspar and its main

mineral is kaolinite, and have relatively coarse grains with little plasticity. It is used to produce firebrick clay and build furnaces and thermal tools. It is mixed With clay to raise its cooking temperature.

C - dirt clay

Earthen pottery clay is one of the most common and widespread types of clay in nature. It is found at a small depth from the surface of the earth's crust, and therefore it can be obtained in available quantities. It is characterized by high plasticity due to the softness of its grains. Therefore, specific proportions of non-plastic materials such as sand or pottery powder are added to it to reduce its plasticity. Its melting point reaches 950 - 1100 degrees Celsius without causing it to swell in shape.

Dr . bentonite

It has a chemical composition similar to the rest of the clays, but with a higher percentage of silica, with an important difference in the molecular structure from other clays, which leads to a significant change in its physical nature, because there is no bond between the layers of the clay particle, which leads to water easily permeating between them, which leads to it swelling and turning them into colloidal particles. Minutes and sometimes to molecular sizes.

When talking about the therapeutic effect of clay, we mention first of all the thermal effect. The high heat capacity and low thermal conductivity make the clay put pressure on the patient's skin and push blood from the small vessels, thus accelerating the circulation of blood and lymph. Through the skin, the natural materials and elements accumulated in the clay enter. Which acts as a safe, fast and effective treatment.

Therapeutic clays are the basis of natural reservoirs or resources. In general, the therapeutic effect of clays is clear thanks to their physical properties, organic and mineral composition, and their containment of active biological materials and elements such as iron oxides, copper, aluminum, cobalt, amino acids, carbon hydrates, hydrogen sulfide, and nitrogen, as well as hormone analogues, antibiotic analogues, and vitamin analogues. Therefore, therapeutic clays have antibacterial properties.

MATERIAL AND METHODS

Therapeutic clays can be divided into four main categories based on their chemical and physical properties. There are sulphide alluvial clays, the clays of bottom sediments of fresh water bodies, there are peat clays (peat is vegetable charcoal), as well as volcanic clays. These clays differ among themselves in smell, density, and temperature. The contents of the clay are organic materials. The sulphide silty clay contains up to (28%) of organic materials, while the clay of bottom sediments of fresh water bodies contains approximately (40%) organic materials, and the peat clay contains approximately (50%) organic materials. Volcanic, there are no organic materials in it.



Fig (2): Clay model used

These clays were worked on:

- **Peat clays:** The therapeutic peat clays are marsh deposits and are elastic and precipitate, so they improve the activity and recovery of yeasts, and have an anti-inflammatory effect.
- **Bottom sediment clays for fresh water bodies:** Therapeutic bottom sediment clays are more liquid clays that contain organic and mineral deposits. They do not contain hydrogen sulfide (marsh gas), and the therapeutic value of bottom sediment clays is represented by the moisture-preserving property and the fine mechanical structure (It has a smooth texture without lumps.
- **Volcanic clays:** Volcanic therapeutic clays differ from other types of clays with their special compositions (they are petroleum in origin), and the presence of effective therapeutic elements such as iodine and bromine, which are used in certain quantities as an important therapeutic agent or additional aid for many diseases, especially neurological ones.
- **Sulphide alluvial clays:** They are the bottom deposits of salt water bodies. They are poor in mineral content, but rich in iron sulfides and salts dissolved in water, and more than peat and volcanic clays, depending on the place of extraction of these clays.



Fig (3): Type of clay treated

Clay has a different impact on the basic human functions and systems, such as breathing, blood circulation, and the process of exchange and excretion. The unique combination of the organic-mineral compound, microelements, a solution saturated with salts, biologically active organics, and the gaseous agent in association with the thermal or electrical effect, all provide cosmetic, anti-inflammatory, and anti-inflammatory healing effects. Bacteria have an expanding and spreading effect, strengthening the exchange processes on the affected parts of the body, and under the influence of clay on the human immune system, the body's defensive forces are activated, which helps in a firm recovery.

RESULTS AND DISCUSSION

He has diseases that did not exist before the discovery of fire, as researchers confirm. Therefore, when he is exposed to cold, his cells compress more after the expansion resulting from cooking food, and he feels extreme cold. In the summer, thermal energy in the face of this expansion and its many pores penetrates the body easily, just as shrapnel penetrates it, and our feeling of heat is only like nanoscopic wounds. Perhaps we find that the animal has maintained its moderate temperature regime because it did not have such conditions. It is surprising that a newborn child does not sweat during the summer, even if he is swaddled as if he were in the era before the discovery of fire, and this continues for a period, as it seems, after giving him cooked food, in addition to keeping him away from Silt, sand, and dirt. It is worth noting

that, from a geological standpoint, we have not found words or signs carved by ancient humans that indicate cold or heat except rarely.



Fig (4): Using clay on the human body

CONCLUSIONS

The cooling belt is in fact a strong stimulant for the lost thermal system. It is similar to the mentioned electrical connection, which eliminates the expansion, making the body system cohesive. It does not react to cold and heat within the borders of our regions, except relatively. The belt efficiently restores the lost system on a temporary basis, as evidenced by the feeling of relative coldness continuing for hours, even after removing it. The belt, but if a person continues to wear the belt daily for months, he will most likely regain his old temperature regime while relatively avoiding eating food. Most importantly, he apparently recovers from disease of the colon, liver, kidneys, vertebrae, and narrowing of the arteries. It is preferable to wrap part of the belt over the site of the disease if it is small, such as the neck, to treat it. Thyroiditis, for example, and it is completely wrapped if he has liver cancer, for example, provided that the wrap continues for a whole day, even while sleeping, except for the hours of going out to work, and adherence to this treatment continues for a week at a minimum, depending on cases of improvement.

It is preferable for him to stick the belt to the waist under a light shirt while he is at home under the fan only, and to take it off when he goes out into the street because his feeling of coldness continues for hours, provided that he does not enter a store or alley that has no air because the latter interacts with the thermal system.

In the summer, twice a week, it is preferable to pour a quarter liter of water into the materials contained in the belt through the internal belt seal. It is also preferable to insert the belt into the freezer daily for a minimum of half an hour to activate the state of interlock between the water and the silt.

As an extension of the role of clay on human safety due to its symmetry with the elements of the human body in most cases, eating a little clay and smelling it from the nose is beneficial to health for almost the same reason as treating diseases with the belt, as mentioned above.

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