HEALTH CARE DEVICE AND HEALTH CARE METHOD

TECHNICAL FIELD

[0001] The present disclosure relates to a health care device and a health care method, and in particular to, a health care device and a health care method, each of which emits a low-frequency wave which passes through the plant essential oil carrier and then propagates to the human body.

RELATED ART

[0002] Known health care at present for example comprises scraping, cupping, acupuncture, massage etc., although the purpose of health care can be achieved, there are still shortcomings. For example, scraping may make skin damaged, and increases the risk of infection. Effect of cupping is similar to that of scraping, but the used cup must contact the skin, so the cleanliness and hygiene of the cup is a concern. Acupuncture uses needles to penetrate the corresponding acupoints of the human body, so there is an invasive risk. Although massage has no invasive risk, it relies on other persons to help relax the muscles.

[0003] The health care of acupuncture is improved by others, and a microwave acupuncture instrument which adopts the health care device emitting non-invasive radiation waves to human acupoints is proposed. An oscillation frequency of the radiation waves emitted by the microwave oscillator in the microwave acupuncture instrument is 1000 MHz to 2000 MHz. The oscillation frequency is very high, so that it is very easy to cause damage due to excessive radiation (energy). In practice, to achieve the desired effect of health care, the propagating directions of the radiation waves of the microwave acupuncture instrument also must align to corresponding acupoints of the human body. However, most people are not professionals related to traditional Chinese medicine and cannot

accurately identify each person's individual acupoints. Therefore, the microwave acupuncture instrument is not actually a universal and wide-used health care device.

[0004] Therefore, it is a trend in the industry to develop a health care device and a health care method that can achieve effects of convenient operation, accurate use position identification, non-invasive treatment, non-contact treatment, and no harm caused by excessive energy risk.

SUMMARY

[0005] The present disclosure is mainly based on recognizing that the main tissues and organs of the human body (referring to organisms, rather than artificial tissues or organs) have inherent oscillation frequencies, such as 8-12 Hz for the head, 4-6 Hz for the thorax, and 5 Hz for the heart, 6-9 Hz for the abdominal cavity, 1.2 Hz for the blood flow, and 1.8 Hz for the bone tissue. When a certain part of the human body is in the low-frequency wave field of 0-20 Hz, for example, the low-frequency electromagnetic wave, or s a low-frequency sound wave or infrasonic (by contrast, the sound is called the ultra-high-frequency sound or ultrasonic if the frequency is higher than 20 KHz), if its sound pressure level (the unit is dB) reaches a certain threshold, the elastic wall of the outer layer of the tissue and organ corresponding to this part will first enter a vibration state, and then the vibration will be transmitted to the interior of the tissue and organ. In particular, resonance occurs when the frequency of the infrasonic is synchronized with the inherent oscillation frequency of the tissues and organs, and the tissues and organs receive the greatest stimulation at this time. When the resonance caused by infrasonic acts on tissues and organs, it also acts on the cell structures of tissues and organs, such as the mitochondrion of the cell, which is the main place of the oxidative phosphorylation and synthesis of adenosine triphosphate (ATP) in cells. The mitochondrion in the cells can provide chemical energy for cell activities, so the mitochondrion is also called the powerhouse of the cell.

[0006] The ATP relates to membrane potential (i.e., transmembrane potential or membrane voltage) of a cell membrane, and the cell membrane is a thin film which formed by a lipid bilayer (i.e., a phospholipid bilayer). The cell membranes of most livings are mainly formed by the lipid bilayers, and interior of the lipid bilayer is filled with dielectric material, and thus the cell membrane formed by the lipid bilayer is electrically equivalent to a capacitor. In addition to the lipid layer, the structure of the cell membrane further comprises proteins, some of which act as ion channels to allow ions (such as positively charged sodium ions Na^+ and potassium ions K^+) to transport across the cell membrane. This phenomenon can be understood in physics, and that is, the capacitor of the cell membrane is a leakage capacitor, and the leakage current (ion transport) passes through the capacitor.

[0007] The resonance action that aforementioned infrasonic causes also can influence the effect of adenosine monophosphate-activated protein kinase (AMPK), about the relation of low-frequency vibration and AMPK, it can be referred to " Low-frequency vibration promotes AMPK-mediated glucose uptake in 3T3-L1 adipocytes, D. Haba et al., Volume 7, Issue 9, September 2021". Activated AMPK increases nicotinamide phosphoribosyltransferase (NAMPT), and thus nicotinamide adenine dinucleotide (NAD^+) increases. The above association can be referred to "AMP-activated protein kinase regulates nicotinamide phosphoribosyl transferase expression in skeletal muscle, J. Brandauer et al., J Physiol. 2013 Oct 15; 591(Pt 20): 5207–5220". Furthermore, since NAD^+ is one of the keys to synthesize ATP, once the amount of NAD^+ increases, the amount of ATP will also increase.

[0008] Further, when the resonances caused by the above infrasonic are applied to the mitochondrion, it affects the binding state of some enzymes, such as ATPase, to the cell membrane and the activities of the enzymes. The ATPase is an enzyme that can decompose ATP to generate energy, and can activate Na^+ and K^+, so it is also called Na^+-K^+ ATPase or Na^+-K^+ pump (Na^+-K^+ pump). The Na^+-K^+ pump can regulate concentration of sodium ions and potassium ions inside and

outside of the cell membrane, such that the membrane potential can be adjusted, for example, returning from action potential to resting membrane potential. First, the cell membrane is at the resting membrane potential, and then the cell membrane at the resting membrane potential is properly stimulated to generate the action potential by the following stages of polarization, depolarization, and repolarization and hyperpolarization, especially during the hyperpolarization stage, the membrane potential of the action potential will be lower than the resting membrane potential. At this time, Na^+-K^+ pumps must be relied on to assist the membrane potential of the action potential during the hyperpolarization stage to the resting membrane potential. It can be understood that long-term stimulation (such as stress) or long-term human inflammation, or long-term lack of ATP and/or ATPase, will cause cells to be in a hyperpolarized stage for a long time, so that the membrane potential will be lower than the resting membrane potential.

[0009] Based on the aforementioned understanding that the cell membrane is equivalent to a capacitor (or battery) in electrical properties, the membrane potential is equivalent to the voltage of the battery, and the membrane potential of the action potential during the aforementioned hyperpolarization stage will be lower than the resting membrane potential, wherein the membrane potential of the action potential in the hyperpolarization stage can be understood as the residual power (voltage) after the battery has been depleted after being used, and the resting membrane potential can be corresponding to the initial power (voltage) that is not consumed or recharged. According to statistics, there are 37.2 trillion cells on average in the human body, in other words, there are 37.2 trillion "batteries" in the human body on average. It can be understood that when the body is under long-term stress or inflammation, the cells are correspondingly in the state of "battery power consumption" in the hyperpolarization stage for a long time, so the cells cannot perform or maintain their proper functions, and human tissues and organs also present pathological phenomena or people present fatigue. However, if the low-frequency wave of a certain intensity and/or frequency acts on

the cell at this time, the energy of the wave can be converted into thermal energy, biochemical energy and bioelectric energy, so as to increase the activity of ATPase, thereby affecting the activity of ATPase In the hyperpolarization stage, and the membrane potential of the action potential is restored to the resting membrane potential, which makes the aforementioned "battery" corresponding to human cells return to the initial power (voltage) of the full power of the resting membrane potential from the "battery power consumption" state of the membrane potential during the aforementioned hyperpolarization stage. In other words, the low-frequency wave can "charge" the cells in the hyperpolarization stage, and the low-frequency wave can act on the tissues and organs, so that the damaged tissue can be repaired under the stimulation of the low-frequency wave and restore normal functions. One of the examples about the relationship between low-frequency waves and organisms, for example, the extremely low frequency (ELF) of Schumann resonance frequency of the low-frequency wave is 7.83 Hz, and exactly, the same as the frequency of the hippocampus of the mammalian brain, especially the alpha wave and theta wave of the human brain are also close to 8Hz, so the US National Aeronautics and Space Administration (NASA) installs a Schumann wave generator in the manned space capsule to maintain the physical and mental health of astronauts in space. About using the low-frequency wave to increase the ATPase activity, it can refer to "Effects of low frequency magnetic fields on Na, K-ATPase activity, M. Blank, L. Soo, V. Papstein, Bioelectrochemistry and Bioenergetics 38 (1995) 267-273", wherein the low-frequency wave (magnetic wave) of 0-70Hz increases the activity of Na^+-K^+ ATPase by 5-10%. In other words, the low-frequency wave can activate cells and "charge" cells in the hyperpolarization stage, so the low-frequency wave can be applied to "cell activation technology". It is specifically stated here that the low-frequency wave may also include an electromagnetic wave, such as an electric wave, a magnetic wave, or a light wave, or an infrasonic.

[0010] Therefore, it can be known that the aforementioned infrasonic has caused the increase of the amount and/or activity of ATP and/or ATPase. Then, since ATPase hydrolyzes ATP and generates energy, helicases can use the energy generated by the hydrolysis to perform deoxyribonucleic acid (DNA) unwinding on double helix of DNA, so as to unwind the double helix structure of the DNA. Thus, DNA polymerase can carry out DNA replication successfully, so that in addition to helping cell division, it repairs damaged genes.

[0011] In the present disclosure, it is recognized that according to the theory of traditional Chinese medical science, the belly button of human body is the Shenque acupoint and is the place where Ren meridian, Du meridian, Dai meridian, and Chong meridian pass through, so when stimulating Shenque acupoint, the whole body can be adjusted by the meridians connecting the internal organs. Furthermore, according to the theory of modern medicine, the belly button is the thinnest part of the cuticle of the epidermis in the abdomen and there is no fat tissue under the belly button, so its barrier function is the weakest. In addition, the belly button skin also has abundant venous network and hypogastric artery branch except the microcirculation blood vessel that the general skin also has. Therefore, as long as some effect or change is carried out to the blood in the belly button skin microcirculation vessel, this effect or change can be brought into the human blood circulation system. Moreover, the belly button of the human body is easy to identify its position and will not vary depending on the height, fat or thinness of the person. Therefore, using the belly button as the corresponding position which the health care device acts on the human body will allow the user to accurately identify and use it.

[0012] In the present disclosure, it is recognized that the used low-frequency wave emitter which can generate the low-frequency wave (such as low-frequency electric wave, low-frequency magnetic wave, and low-frequency sound wave) is not in contact with the belly button, and the low-frequency wave emitter which emits low-frequency wave is disposed toward the belly button to

achieve the effect similar to acupuncture, so that a non-invasive and non-contact health care method can be achieved. Preferably, the used infrasonic emitter that can generate infrasonic is not in contact with the belly button, and the infrasonic emitter that emits the infrasonic is disposed toward the belly button to achieve the effect similar to acupuncture, so that a non-invasive and non-contact health care method can be achieved. It is noted that, the infrasonic in the present disclosure is a low frequency acoustic wave. If the low-frequency wave emitter is directly used as the component of the health care device, the problem of excessive energy risk caused by the high-frequency microwave oscillator can be avoided, and at the same time, it can also avoid the adverse effects of electric waves or magnetic waves on some people with special constitutions. Therefore, the effect similar to acupuncture and moxibustion achieved by the present disclosure can also be called "qigong moxibustion".

[0013] Since it is recognized that the infrasonic can achieve the effect similar to that of acupuncture ("qigong moxibustion"), and the effect of acupuncture on the immune system is that acupuncture can increase the content of interferon gamma (γ-IFN) and neuropeptide beta-endorphin (β endorphin), so as to activate NK cells (natural killer cells), wherein the NK cells secrete cytokines, and cytokines regulates the inflammatory response. The NK cells are immune cells with large granules in the cytoplasm, developed from bone marrow lymphoid stem cells, mainly distributed in peripheral blood (including blood in microcirculation blood vessels) and spleen. There also a small presence of the NK cells in lymph nodes and other organization.

[0014] As mentioned above, the belly button is the thinnest part of the cuticle of the epidermis in the abdomen and there is no fat tissue under the belly button, so its barrier function is the weakest. In addition, the belly button skin also has abundant venous network and hypogastric artery branch except the microcirculation blood vessel that the general skin also has. Therefore, as long as some effect or change is carried out to the blood in the belly button skin microcirculation vessel, this effect or change can be brought into the human blood circulation system. Accordingly, when the infrasonic

emitter emits the infrasonic toward the belly button, it will trigger an effect similar to that of the acupuncture, which will increase the content of γ-IFN and β endorphins in the blood of the belly button skin microcirculation blood vessels and activate NK cells, B cells (B lymphocytes) and active T cells (active T lymphocytes), and because NK cells, B cells and active T cells are activated, they secrete cytokines, therefore regulating inflammation or secreting antibodies. The manner that improves the content of endorphin can also be, to make aforesaid infrasonic be acted on the container that essential oil is housed, so as to make the essential oil in container produce agitation (refer to U.S. Patent US6063894A or European Patent EP3970507A1). Thus, the essential oil odor molecules are accelerated to leave the container and are transmitted to the olfactory nerve and to the limbic system of the brain, thereby increasing the amount of endorphins secreted and activating NK cells, B cells and activating T cells. Moreover, the essential oil is that the cells near the glands of plants synthesize via photosynthesis, so the leaves of most plants all contain essential oils, or the essential oils produced in leaves can enter the glands through cell walls and be stored in other parts of plants. Therefore, the above-mentioned infrasonic acting on plants will also cause the essential oils stored in the plants to dissipate into the air (refer to US Patent US3491022A, it relates to the effect of reverse osmosis produced by infrasonic), and the dissipated essential oil is transmitted to the olfactory nerve and then to the brain The limbic system can increase the amount of endorphins secreted to activate NK cells, B cells and activate T cells. When the aforesaid infrasonic acts on the leaf and other parts of the plant that contains enough moisture, it can produce the effect of unwinding the DNA double helix structure as previously mentioned.

[0015] In addition, in the present disclosure, it is recognized that NAD^+ and/or essential oils can protect telomeres, and the association between essential oils and telomeres can be referred to "Effects of Essential Oils on Telomere Length in Human Cells, Plant J, Plant, Med Aromat Plants 2016, 5:2", and the association between NAD+ and telomeres can be referred to "NAD-Linked

Metabolism and Intervention in Short Telomere Syndromes and Murine Models of Telomere Dysfunction, Amanda J Stock and Yie Liu, Front Aging. 2021;2:785171".

[0016] In addition, when launching infrasonic emitter to emit the infrasonic toward the belly button, the activity of Na^+-K^+ ATPase for activating T cells in the belly button skin microcirculation blood vessels increases, so the activity of active T cells can be improved. In other words, when the infrasonic emitter emits the infrasonic toward the belly button, the active T cell with low activity can be "charged" to restore its activity, so that the active T cell after being "charged" can be re-tested and detected. Thus, the efficacy of the health care device of the present disclosure can be verified if the content changes of NK cells, B cells or active T cells in the blood are detected. Certainly, the ability of NK cell strain for poisoning cancer cell strain (K562) can be used to verify the results of the present disclosure, for example, effector to target cell ratio (E/T ratio) of the NK cell mixed with culture samples can be used to detect ability of poisoning, and the difference of the results can be compared to verify the feasibility of the health care device and method of the present disclosure.

[0017] As mentioned above, the aforementioned infrasonic can make the amount of NAD^+ increase to increase the amount of ATP, and the increase of the amount and/or activity of ATP and/or ATPase helps the DNA unwinding, so the double helix structure of DNA is prone to be unwound for cell division. Therefore, as long as the content changes of NAD^+, NK cells, B cells or activated T cells in the blood are detected, the efficacy of the health care device of the present invention can be verified.

[0018] Based on the above explanations, the present disclosure provides a health care device, and the health care device comprises a low-frequency wave emitter, a plant essential oil carrier and a low-frequency waveguide. The plant essential oil carrier is disposed between the low-frequency wave emitter and the low-frequency waveguide. The low-frequency wave emitter is configured to emit a low-frequency wave with a predetermined frequency. The low-frequency wave firstly passes through

the plant essential oil carrier and then propagates to the low-frequency waveguide, and next, energy of the low-frequency wave is focused in the low-frequency waveguide, and then the low-frequency wave is emitted out from the low-frequency waveguide.

[0019] In one embodiment of the present disclosure, the plant essential oil carrier comprises a plant essential oil.

[0020] In one embodiment of the present disclosure, the plant essential oil carrier is a part of a plant that contains the plant essential oil, or the plant essential oil is loaded in a container, or the plant essential oil is adsorbed on an adsorbed substance.

[0021] In one embodiment of the present disclosure, the predetermined frequency is 1.27 Hz to 1.81 Hz.

[0022] In one embodiment of the present disclosure, the low-frequency waveguide comprises a column part and/or a pyramid part, and the column part or the pyramid part is formed with an accommodating space therein, and the accommodating space accommodates the plant essential oil carrier.

[0023] In one embodiment of the present disclosure, the health care device is installed on a frame, and located at a predetermined location in front of a belly button of a user with a predetermined distance, and the predetermined distance is 5 cm to 8 cm.

[0024] In one embodiment of the present disclosure, the low-frequency waveguide is located at the predetermined location.

[0025] In one embodiment of the present disclosure, after the energy of the low-frequency wave is focused in the low-frequency waveguide and then emitted out from the low-frequency waveguide, the low-frequency wave propagates toward the belly button, and then reaches the belly button.

[0026] Based on the above explanations, the present disclosure provides a health care method, and the health care method comprises using a health care device located at located at a predetermined location in front of a belly button of a user with a predetermined distance to emit a low-frequency wave with a predetermined frequency, wherein the predetermined distance is 5 cm to 8 cm. The used health care device can one of the above mentioned health care devices.

[0027] In one embodiment of the present disclosure, the predetermined frequency is 1.45 Hz.

[0028] To sum up, the health care device and the health care method provide by the present disclosure can achieve effects of convenient operation, accurate use position identification, non-invasive treatment, non-contact treatment, and no harm caused by excessive energy risk.

BRIEF DESCRIPTIONS OF DRAWINGS

[0029] The accompanying drawings are included to provide a further understanding of the present disclosure and are incorporated in and constitute a part of this specification. The drawings illustrate exemplary embodiments of the present disclosure and, together with the description, which are used to explain the principles of the present disclosure.

[0030] FIG. 1 is a schematic diagram of executing a health care method according to an embodiment of the present disclosure.

[0031] FIG. 2 is a schematic diagram showing a structure of a health care device when executing a health care method according to an embodiment of the present disclosure.

[0032] FIG. 3 is a schematic diagram showing a structure of a health care device according to an embodiment of the present disclosure.

[0033] FIG. 4 is a schematic diagram showing a structure of a health care device with a tube according to an embodiment of the present disclosure.

[0034] FIG. 5 is a schematic diagram showing a structure of a health care device with a vertically standing rod according to an embodiment of the present disclosure.

[0035] FIG. 6 is a schematic diagram showing a structure of a health care device installed on or in a frame according to an embodiment of the present disclosure.

[0036] FIG. 7 is a schematic diagram showing a structure that a low-frequency wave emitter of a health care device is installed on a bottom surface of a pyramid part according to an embodiment of the present disclosure.

DETAILS OF EMBODIMENTS

[0037] To understand the technical features, content and advantages of the present disclosure and its efficacy, the present disclosure will be described in detail with reference to the accompanying drawings. The drawings are for illustrative and auxiliary purposes only and may not necessarily be the true scale and precise configuration of the present disclosure. Therefore, the scope of the present disclosure should not be limited to the scale and configuration of the attached drawings.

[0038] Refer to FIG. 1, the present disclosure provides a health care method. The method arranges a low-frequency wave emitter 2 at a predetermined location P in front of a belly button 11 of a user 1 with a predetermined distance D and makes the low-frequency wave emitter 2 emit a low-frequency wave W with a predetermined frequency toward the belly button 11 of the user 1. The aforementioned "front" refers to the front of a human body in a direction of a human abdomen, and correspondingly, the "back" refers to the back of the human body. The predetermined location P is located on a virtual bottom surface S2 of a virtual pyramid S, and the belly button 11 is a virtual vertex S1 of the virtual pyramid S. The predetermined distance D is designed to be not larger than 8 cm, or the predetermined distance D is designed to be not less than 5 cm, or the predetermined distance D is designed to be within a range between 5 cm and 8 cm (p.s. the range comprises two end

values of 5 cm and 8 cm). Preferably, the predetermined location P is located on the center of the virtual bottom surface S2, for example, the virtual pyramid S is a circular cone, the predetermined location P is located on the circular center of the virtual bottom surface S2 being a circle surface, and the predetermined distance D is the distance between circular center and the belly button 11, which is within the range between 5 cm and 8 cm. A plant essential oil carrier A is disposed between the predetermined position P and the virtual vertex S1. The plant essential oil carrier A comprises a plant essential oil, and the plant essential oil refers to the volatile oily substance at room temperature, which can be stored in plants or obtained by plants, so the plant essential oil carrier A can be a part containing the plant essential oil, and the part t containing plant essential oil may be a root, a stem, a leave, a flower, a fruit and a seed, for example the leave of plectranthus amboinicus. The plant essential oil carrier A can also be that the plant essential oil obtained by various plants through known distillation or extraction is loaded in a container, or adsorbed on an adsorbate such as cotton or paper. The plant essential oil can be at least one of tea tree oil, bitter refining oil, left-hand sesame oil, lemon oil, oil of wintergreen, camphor tree oil, clove oil, peppermint oil, eucalyptus oil, citronella oil, chrysanthemum oil, clary sage oil, eucalyptus oil, rose oil, jasmine oil, geranium oil, rose geranium oil, ylang-ylang oil, frankincense oil, patchouli oil, rosemary oil, helichrysum oil, thyme oil, pine oil, cedar oil, juniper oil, sandalwood oil, basil oil, lime oil, tangerine oil, sweet orange oil, petitgrain oil, petitgrain oil, neroli oil, citrus oil, litsea pepper oil, hyssop oil, melaleuca oil or ginger oil. The low-frequency wave W propagating toward the belly button 11firstly passes through the plant essential oil carrier A and then reaches the belly button 11.

[0039] The low-frequency wave emitter 2 is preferably an infrasonic transducer, and the low-frequency wave W can be the infrasonic. The structure of the infrasonic transducer comprises a power supply 21 and a vibration part 22. The vibration part 22 is electrically connected to the power supply 21. The vibration part 22 is a disc-shaped piezoelectric ceramic transducer. The piezoelectric ceramic

transducer is made of piezoelectric material polarized in the thickness direction. The power supply 21 provides power to the vibration part 22 to make the vibration part 22 vibrates in the thickness direction to generate the infrasonic with the predetermined frequency. In the present disclosure, the predetermined frequency is not larger than 1.81 Hz, or the predetermined frequency is not less than 1.27 Hz, or the predetermined frequency is within a range between 1.27 Hz and 1.81 Hz (p.s. the range comprises two end values of 1.27 Hz and 1.8 Hz). Preferably, the predetermined frequency is 1.45 Hz.

[0040] In other words, the present disclosure also provides a health care device, the health care device is arranged at a predetermined location P in front of the belly button 11 of the user with a predetermined distance D. The health care device at least comprises a low-frequency wave emitter 2.

[0041] < Detection Manner and Effect of Experiment 1 >

[0042] In Embodiment 1 of the following TABLE 1, the health care method is executed to personnel A1 and personnel A2, the predetermined distance D is selected to be 5 cm, the predetermined frequency is selected to be 1.45 Hz, and the low-frequency wave is selected to be the infrasonic. The personnel A1 is a 74-years old man, the personnel A2 is a 72-years old woman. Before executing the health care method, blood samples are drawn from the personnel A1 and personnel A2 and sent to the medical laboratory for immunological examination to check the percentage (i.e., content) of the active T cells. On the 19-th day after the execution of the health care method for 2 hours, the blood sample of the personnel A1 is again taken and sent to the medical laboratory for immunological examination, and on the 42-nd day after the execution of the health care method for 2 hours, the blood sample of the personnel A2 is also taken again and sent to the medical laboratory for immunological examination. The percentages of the active T cells of the blood samples are examined in the same way, and the results are recorded in TABLE 1 which is described later. In

TABLE 1, the difference between Embodiment 1 and Comparative Example 1 is that the plant essential oil carrier A is not used in Comparative Example 1.

[0043] TABLE 1

CONTENT OF ACTIVE T CELLS	PERSONNEL A1			PERSONNEL A2		
	BEFORE EXECUTION	AFTER EXECUTION	CHANGE RATE= CONTENT OF ACTIVE T CELLS AFTER EXECUTION/ CONTENT OF ACTIVE T CELLS BEFORE EXECUTION	BEFORE EXECUTION	AFTER EXECUTION	CHANGE RATE= CONTENT OF ACTIVE T CELLS AFTER EXECUTION/ CONTENT OF ACTIVE T CELLS BEFORE EXECUTION
COMPARARTIVE EXAMPLE 1	6.2%	12.8%	206.5%	5.3%	7.9%	149%
EMBODIMENT 1	13.5%	31.7%	234.8%	8.1%	14.6%	180%

[0044] From TABLE 1, in Comparative Example 1 without using the plant essential oil carrier, the content change rate of the active T cells in personnel A1 is 206.5%, and in Embodiment 1 which the plant essential oil carrier is used, the content change rate of the active T cells in personnel A1 is 234.8%. That is, while the plant essential oil carrier is used in the health care method, the content of the active T cells in personnel A1 can further increase 28.3%. In Comparative Example 1 without using the plant essential oil carrier, the content change rate of the active T cells in personnel A2 is 149%, and in Embodiment 1 which the plant essential oil carrier is used, the content change rate of the active T cells in personnel A2 is 180%. That is, while the plant essential oil carrier is used

in the health care method, the content of the active T cells in personnel A2 can further increase 31%. Apparently, the health care method of the present disclosure is highly effective and can maintain long-term health effects.

[0045] < Detection Manner and Effect of Experiment 2 >

[0046] In Embodiments 2, 3, 4 and 5 of the following TABLE 2, the health care method is executed to the personnels A3, A4, A5 and A6, the predetermined distance D is selected to be 5 cm, the predetermined frequency is selected to be 1.45 Hz, and the low-frequency wave is selected to be the infrasonic. The personnel A3 is a 67-years old man, the personnel A4 is a 64-years old man, the personnel A5 is a 75-years old woman, and the personnel A6 is a 47-years old woman. Before executing the health care method, blood samples are drawn from personnels A3 to A6 and sent to the medical laboratory for immunological examination to check the concentrations of NAD^+, wherein the unit of the concentration of NAD^+ is nanomoles per liter (nmol/L). On the 19-th day after the execution of the health care method for 2 hours, the blood samples of personnels A3 to A6 are again taken and sent to the medical laboratory for immunological examination, the concentrations of NAD^+ of the blood samples are examined in the same way, and the results are recorded in TABLE 2 which is described later.

[0047] TABLE 2

CONCENTRATIONS OF NAD^+ (nmol/L)	Personnel A3	Personnel A4	Personnel A5	Personnel A6
BEFORE EXECUTION	43	26	23	32
AFTER EXECUTION	116	64	42	53

Change Rate= Concentration After Execution/ Concentration Before Execution	270%	246%	183%	166%

[0048] From TABLE 2, it can be known the concentration of NAD^+ of personnel A3 before the health care method is executed is 43 nmol/L, the concentration of NAD^+ of personnel A3 after the health care method is executed is 116 nmol/L, and the concentration change rate of personnel A3 is 270%, that is, the concentration of NAD^+ of personnel A3 is increased 170%. Similarly, the concentration of NAD^+ of personnel A4 before the health care method is executed is 26 nmol/L, the concentration of NAD^+ of personnel A4 after the health care method is executed is 64 nmol/L, and the concentration change rate of personnel A4 is 246%, that is, the concentration of NAD^+ of personnel A4 is increased 146%. The concentration of NAD^+ of personnel A5 before the health care method is executed is 26 nmol/L, the concentration of NAD^+ of personnel A5 after the health care method is executed is 42 nmol/L, and the concentration change rate of personnel A5 is 183%, that is, the concentration of NAD^+ of personnel A5 is increased 83%. The concentration of NAD^+ of personnel A6 before the health care method is executed is 32 nmol/L, the concentration of NAD^+ of personnel A6 after the health care method is executed is 53 nmol/L, and the concentration change rate of personnel A6 is 166%, that is, the concentration of NAD^+ of personnel A6 is increased 66%. Therefore, the health care method provided by the present disclosure can promote the increase of NAD^+ concentration, and it can increase the NAD^+ concentration as long as it is performed once for 2 hours. Obviously, the health care method of the present disclosure is highly effective and can maintain long-term health care effects.

[0049] Refer to FIG. 2 and FIG. 3, the present disclosure further provides a health care device 100 for executing the above health care method. The health care device 100 comprises the low-frequency wave emitter 2, a column part 3 and a pyramid part 4. The column part 3 is preferably the circular column, the column part 3 has a top surface 31, a bottom surface 32 and a body 33, and the two ends of the body 33 of the column part 3 are respectively connected to the top surface 31 of column part 3 and the bottom surface 32 of column part 3. The column body 33 is provided with an accommodating space 331 recessed from the bottom surface 32 to the top surface 31, and the accommodating space 331 is provided with the plant essential oil carrier A. The pyramid part 4 has a vertex 40, a bottom surface 41 and a body 42, wherein two ends of the body 42 of the pyramid part 4 are respectively connected to the vertex 40 and the bottom surface 41 of the pyramid part 4. The top surface 31 of the column part 3 is correspondingly joined with the bottom surface 41 of the pyramid part 4, for example, by welding or screwing. Preferably, the column part 3 and the pyramid part 4 are respectively metal column and metal pyramid, respectively. More preferably, the column part 3 and the pyramid part 4 are formed integrally, in other words, the top surface 31 of the column part 3, the body 33 of the column part 3, the body 42 of the pyramid part 4 and the vertex 40 of the pyramid part 4 are formed integrally, i.e., the column part 3 and the pyramid part 4 are one-piece part. It is noted that the low-frequency waveguide is formed by combining the column part 3 and the pyramid part 4.

[0050] The low-frequency wave emitter 2 is connected with the bottom surface 32 of the column part 3, preferably this low-frequency wave emitter 2 is directly connected with the bottom surface 32 of the column part 3, such as this low-frequency wave emitter 2 is welded or screwed to the bottom surface 32 of the column part 3, so when the power supply 21 is activated, the vibration part 22 will generate the low-frequency wave W of the predetermined frequency (please refer to FIG. 1 again). Next, the low-frequency wave W is transmitted to this bottom surface 32 of column part 3 and passes through the plant essential oil carrier A, and then the body 33 of the column part 3 is used

to transmit the low-frequency wave W sequentially to the bottom surface 41 of the pyramid part 4 and this vertex 40. By using the structure of the pyramid part 4 which the bottom surface 41 of the pyramid part 4 is designed to be wider than and tapered to the vertex 40, the energy of the low-frequency wave W is more concentrated as it is transmitted toward the vertex 40. Therefore, when the low-frequency wave W is delivered to this vertex 40, the energy of the low-frequency wave W is gathered to the maximum, and then emitted toward the belly button 11 from the vertex 40. The vertex 40 of the pyramid part 4 is a tip, and therefore, based on the principle of the tip discharge in electricity, the low-frequency wave W can be concentrated on the vertex 40 to be released and emitted toward the belly button 11. It is noted that, the vertex 40 is located at the predetermined location P at this time.

[0051] Refer to FIG. 4, and in another one embodiment, the low-frequency wave emitter 2 is connected to the bottom surface 32 and the accommodating space 331 of the column part 3 via a tube 5. The low-frequency wave W is transmitted to the bottom surface 32 and the accommodating space 331 of the column part 3 via the tube 5. The low-frequency wave W passes through the plant essential oil carrier A, and then passes to the vertex 40 to propagates toward and reaches the belly button 11 as previously described. With the arrangement of the tube 5, the power supply 21 and/or the vibration part 22 of the low-frequency wave emitter 2 can be kept away from the human body, to avoid interference with any electronic device which has implanted in the human body.

[0052] Refer to FIG. 5, and in another one embodiment, the vertex 40 further has a rod 401 being vertically standing and having a longitudinal direction away from the bottom surface 41 of the pyramid part 4. Preferably, the rod 401 is a metal rod such as metal silk or metal wire. The longitudinal direction of the rod 401 is coincided with a normal line N of the center C on the bottom surface 41 of the pyramid part 4, and the normal line N of the center C on the bottom surface 41 of the pyramid part 4 passes extends toward the belly button 11. Therefore, the energy of the low-frequency wave W

can be more directed to concentrate on a tip 402 of the rod 401 to be released and emitted toward the belly button 11. Specifically, the tip 402 is located at the predetermined location P at this time.

[0053] Refer to FIG. 6, in another one embodiment, the health care device 100 is installed in or on a frame 200, the user 1 is lying on the platform (not shown in the drawings), the frame 200 is erected on the platform, and the health care device 100 is located above the belly button of the user 1. In this way, the user 1 can also get a proper rest during the health care process.

[0054] Refer to FIG. 7, in another one embodiment, the health care device 100 can also comprises the low-frequency wave emitter 2 and the pyramid part 4, but the column part 3 is not included in the health care device 100. The body 42 is provided with the accommodating space 331 sunken from the bottom surface 41 toward the vertex 40, and the accommodating space 331 is provided with the plant essential oil carrier A. In particular, at this time, the pyramid part 4 is the low-frequency waveguide and does not include the column part 3. The low-frequency wave emitter 2 is arranged on the bottom surface 41 of pyramid part 4, and the low-frequency wave emitter 2 is connected to the bottom surface 41 of the pyramid part 4. Preferably, the low-frequency wave emitter 2 is directly connected to the bottom surface 41 of pyramid part, for example, the low-frequency wave emitter 2 is adhered, welded or screwed to the bottom surface 41 of the pyramid part 4. Thus, after activating the power supply 21, the vibration part 22 vibrates to generate low-frequency wave W of the predetermined frequency (see FIG. 1 again). Next, the low-frequency wave W is transmitted to the bottom surface 41 of the pyramid part 4, and then passes through plant essential oil carrier A. Next, the low-frequency wave W passes toward the vertex 40 of the pyramid part 4. By using the pyramid design that the diameter is tapered from the bottom surface 41 to the vertex 40 of the pyramid part 4, the energy of the low-frequency wave W is getting concentrated when transmitting to the vertex 40. The pyramid part 4 can be a wooden or metal pyramid, and preferably, the pyramid part 4 is a one-piece wooden pyramid.

[0055] The above-mentioned descriptions represent merely the exemplary embodiment of the present disclosure, without any intention to limit the scope of the present disclosure thereto. Various equivalent changes, alternations or modifications based on the claims of present disclosure are all consequently viewed as being embraced by the scope of the present disclosure.

CLAIMS

1. A health care device, at least comprising:

a low-frequency wave emitter (2), configured to emit a low-frequency wave (W) with a predetermined frequency;

a low-frequency waveguide; and

a plant essential oil carrier (A), disposed between the low-frequency wave emitter (2) and the low-frequency waveguide;

wherein the low-frequency wave (W) firstly passes through the plant essential oil carrier (A) and then propagates to the low-frequency waveguide, and next, energy of the low-frequency wave (W) is focused in the low-frequency waveguide, and then the low-frequency wave (W) is emitted out from the low-frequency waveguide.

2. The health care device of claim 1, wherein the plant essential oil carrier (A) comprises a plant essential oil.

3. The health care device of claim 2, wherein the plant essential oil carrier (A) is a part of a plant that contains the plant essential oil, or the plant essential oil is loaded in a container, or the plant essential oil is adsorbed on an adsorbed substance.

4. The health care device of claim 3, wherein the predetermined frequency is 1.27 Hz to 1.81 Hz.

5. The health care device of claim 4, wherein the low-frequency waveguide comprises a column part (3) and/or a pyramid part (4), and the column part (3) or the pyramid part (4) is formed with an accommodating space (331) therein, and the accommodating space (331) accommodates the plant essential oil carrier (A).

6. The health care device of claim 5, wherein the health care device (100) is installed on a frame (200), and located at a predetermined location (P) in front of a belly button (11) of a user with a predetermined distance (D), and the predetermined distance (D) is 5 cm to 8 cm.

7. The health care device of claim 5, wherein the low-frequency waveguide is located at the predetermined location (P).

8. The health care device of claim 7, wherein after the energy of the low-frequency wave (W) is focused in the low-frequency waveguide and then is emitted out from the low-frequency waveguide, the low-frequency wave (W) propagates toward the belly button (11), and then reaches the belly button (11).

9. A health care method, comprising:

using a health care device located at located at a predetermined location (P) in front of a belly button (11) of a user with a predetermined distance (D) to emit a low-frequency wave (W) with a predetermined frequency, wherein the predetermined distance (D) is 5 cm to 8 cm, and the health care device comprises:

a low-frequency wave emitter (2), configured to emit the low-frequency wave (W);

a low-frequency waveguide; and

a plant essential oil carrier (A), disposed between the low-frequency wave emitter (2) and the low-frequency waveguide;

wherein the low-frequency wave (W) firstly passes through the plant essential oil carrier (A) and then propagates to the low-frequency waveguide, and next, energy of the low-frequency wave (W) is focused in the low-frequency waveguide, and then the low-frequency wave (W) is emitted out from the low-frequency waveguide.

10. The health care method of claim 9, wherein the predetermined frequency is 1.27 Hz to 1.81 Hz.

11. The health care method of claim 10, wherein the predetermined frequency is 1.45 Hz.

12. The health care method of claim 9, wherein the plant essential oil carrier (A) comprises a plant essential oil.

13. The health care method of claim 12, wherein the plant essential oil carrier (A) is a part of a plant that contains the plant essential oil, or the plant essential oil is loaded in a container, or the plant essential oil is adsorbed on an adsorbed substance.

14. The health care method of claim 10, wherein the low-frequency waveguide comprises a column part (3) and/or a pyramid part (4), and the column part (3) or the pyramid part (4) is formed with an accommodating space (331) therein, and the accommodating space (331) accommodates the plant essential oil carrier (A).

15. The health care method of claim 9, wherein the low-frequency waveguide is located at the predetermined location (P).

16. The health care method of claim 9, wherein after the energy of the low-frequency wave (W) is focused in the low-frequency waveguide, and then the low-frequency wave is emitted out from the low-frequency waveguide, the low-frequency wave (W) propagates toward the belly button (11), and then reaches the belly button (11).