

METHOD OF IMPROVING SKIN CONDITIONFIELD OF THE INVENTION

5 The present invention relates to the field of
homeopathic treatments, and more particularly, to the use of
a physiologically acceptable substrate containing information
energy for cosmetic and medical applications.

10 BACKGROUND OF THE INVENTION

Homeopathy has been explained as copying information,
e.g., a pattern or a combination of oscillations of different
frequencies, onto a substrate from the information or pattern
15 existing in the molecular structure of natural substances,
e.g., herbs, antibodies, or pollen. The substrate with the
copied information or pattern incorporated therein can then
be used to effect a desired response. For example, in
20 homeopathic medicine, the desired response might be the
reduction of allergy symptoms in hay fever sufferers.

U. S. Patent 5,138,172 of K. E. Werner Kropp teaches a
method for applying information energy to a substrate such as
25 saline solution or oil by exposing the substrate to a
magnetic vector potential field. U. S. Patent 5,012,110 of
K. E. Werner Kropp teaches a process for the manufacture of a
30 synthetic homeopathic substrate by placing the substrate
between opposing sets of magnets.

French patent application, Publication No. 2,634,381,
published January 26, 1990 and WO 91.10450, published July
35 25, 1991 of J. J. C. Morez teach a method of producing larger
quantities of homeopathic medicine by transferring to a large

mass of material such as water the electromagnetic information of a homeopathic remedy by way of a transmitter-receiver.

5 An object of the present invention is to provide a novel method of using physiologically acceptable substrates containing information energy for use in cosmetics, e.g.. for improving skin condition.

10 Another object of the present invention is to provide a novel method of using physiologically acceptable substrates containing information energy for use in homeopathic medicine.

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SUMMARY OF THE INVENTION

The invention is related to the use of substrates such as aqueous salt solutions, massage oils or other
20 pharmaceutically acceptable carriers that have been exposed to information energy such as oscillation patterns modeled after those found in natural herbs. In general, the substrate can be in the gaseous, liquid, solid or liquid
25 crystalline phase. The aqueous salt solutions may contain sodium chloride and magnesium chloride, as well as dissolved iron and calcium ions.

The substrates that contain information energy can be
30 used to improve skin condition by topically administering the substrates to skin. By skin condition, we mean, without limitations, dry skin, xerosis, ichthyosis, dandruff, brownish spots, keratoses, melasma, lentigines, age spots,
35 liver spots, pigmented spots, wrinkles, blemishes, skin lines, oily skin, acne, warts, eczema, pruritic skin,

psoriasis, inflammatory dermatoses, disturbed *keratinization*, skin changes associated with aging, nail or skin requiring cleansers, conditioning or treatment, and hair or scalp
5 requiring shampooing or conditioning.

The present invention provides a specific method of increasing proline uptake in human dermal fibroblast cells by contacting the cells with a physiologically acceptable
10 substrate that contains information energy.

Increased proline uptake is an indication of the collagen synthesis of these cells - - a desirable cosmetic benefit which is one route of improving skin condition.
15 Fibroblast cells, which are located in the dermis, perform many functions, i.e., synthesize collagen, elastin, glycoaminoglycans (GAGS), to name a few. Proline is an amino acid which is an integral part of the collagen
20 structure. By demonstrating an increase in the total amount of proline uptake, we demonstrate an increase in the total amount of collagen synthesized. Collagen and elastin are two
25 proteins found in the dermis responsible for the firmness and elasticity of the skin. Young, healthy skin has an abundance of these two proteins. As the body ages, the process of synthesizing these proteins decreases. Therefore, the total
30 amount of collagen/elastin diminishes in older, less healthy skin. Increasing the amount of collagen/elastin in the dermis by the present invention leads to improvement in skin condition.

35 The present invention further provides a specific method of producing the physiologically acceptable substrate that

contains information energy. The method is generally described in U.S. Patents 5,012,110 and 5,138,172 of K. E. Werner Kropp and comprises imparting information energy of 5 desired frequencies to a substrate that has been placed in a specific configuration within a magnetic field, called a magnetic vector potential field. The apparatus for applying the information energy to the substrate may comprise

- 10 a) two opposite sets of magnets, each said set of magnets comprising a plurality of magnets arranged side by side, with alternating N and S poles, wherein the substrate is exposed to a 15 magnetic vector potential field when the substrate is placed between the opposing sets of magnets; and
- 20 b) a means for applying information energy to the substrate when the substrate is located in the magnetic vector potential field.

The application of information energy to the substrate 25 may be accomplished by exposing the substrate to the following Wekroma rods having the following properties:

- 1200.7 Antioxidants BHT N-acetylcystine Beta Caratene
622 Cellulite
- 30 232 Revitalization Collagen Synthesis, Balancing Rods
7509 Neutralize Free Radicals
326 Inhibit Bacterial Growth
329 Inhibit Bacterial Growth
- 35 Fibro 1 Stimulate fibroblast cells
Fibro 2 Stimulate fibroblast cells

Preferably, the substrate is exposed to the above
Wekroma Rods by the use of a Wekroma Bio-Transer device,
wherein the substrate is at least once passed through such
5 device. The substrate may be exposed to the rods
individually or in combination.

The present invention additionally provides a method of
improving skin condition comprising a) exposing a
10 physiologically acceptable substrate to a magnetic vector
potential field; and b) administering to the skin the exposed
substrate. Thus, exposure of a substrate to a magnetic
15 vector potential field, such as the sets of magnets described
above without application of information energy is sufficient
to obtain a treated substrate capable of improving skin
condition. One preferable way of treating the substrate with
20 a magnetic vector potential field is to pass the substrate at
least once through the Wekroma Bio-Transer device, without
the placement of any Wekroma Rods within the device.

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BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 depicts the Bio-Transer device available from Wekroma-Vertrieb Schweiz.

5 Fig. 2 depicts graphically the increase in proline level in Human Dermal Fibroblast cells upon increasing the concentration of the Body Booster mineral water that was treated with the Wekroma Bio-Transer device.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The manner in which a substrate is exposed to information energy is generally described in U. S. patent 5 5,138,172 of K. E. Werner Kropp; U. S. Patent 5,012,110 of K. E. Werner Kropp; French patent application, Publication No. 2,634,381 of J. J.C. Morez, and WO 91,10450 of J. J.C. Morez. The substrate is generally in a gaseous, liquid,
10 solid or liquid crystalline phase.

One arrangement for exposing aqueous solutions to information energy is by use of a Wekroma Bio-Transer device, purchased from Wekroma-Vertrieb Schweiz, Beat Lanz, 6313
15 Menzingen, Federal Republic of Germany. Rod No. 232 as supplied by Wekroma was placed in the Wekroma Bio-Transer device as shown in Fig. 1. Test tubes containing aqueous
20 solutions were passed through the Bio-Transer device by way of a channel opening. The residence time the solution is in the Bio-Transer device does not appear to be critical, typically ranging from less than one second to a few seconds.
25 The rate at which the test tubes pass through the Bio-Transer device is typically the speed at which they free fall. Both residence time and rate of pass through may be controlled by having the solution pump through the Bio-Transer device at a
30 certain controlled velocity.

EXAMPLE 1

The following demonstrates how aqueous saline solution treated with the Wekroma Bio-Transer device can stimulate
35 proline uptake by Human Dermal Fibroblast cells.

1. To 99.2 grams of sterile distilled water add 0.4 grams of Sodium Chloride and 0.4 grams of Magnesium Chloride. Stir at room temperature until the solids dissolve and a clear solution is obtained.
2. The solution obtained in Step 1 was split into 5 equal aliquots and stored in sterile test tubes.
3. Sample No. 1 was left untreated; to be used as a control to compare to the other treated samples.
4. Rod No. 232-1 (as supplied by Wekroma) was placed in the Wekroma Bio-Transer device as shown in the accompanying drawing Fig. 1.
5. One of the test tubes containing the sterile salt solution was then passed through the Bio-Transer as depicted in the accompanying drawing. This procedure was repeated two times. Then the sample was set aside.
6. Then Rod No. 232-1 was removed from the Bio-Transer and Rod No. 232-2 was placed in the Bio-Transer. Another of the test tubes containing the sterile salt solution was passed through the Bio-Transer as in Step No. 5.
7. Repeat the above procedure until the remaining test tubes were treated; (Sample No. 4) was treated with Rod No. 232-3 and Sample No. 5 was treated with Rod No. 232-4). Rods No. 232-1, 2, 3 and 4 are identical replicas of each other.
8. All samples were submitted for proline uptake testing. The results indicate that all samples showed increases over the media control. Wekroma treated salt solutions (Samples Nos. 2 and 5) showed statistically significant increases over

Sample No. 1 (salt solution, untreated by the Wekroma Bio-Transer device).

The protocol for the proline uptake testing is as follows. Two confluent 24-well plates were treated with the sample solutions. The untreated salt solution control was added neat in 1, 5, and 10% concentrations. Solutions of the same material was passed through Rod No. 232 and assayed at the same concentrations as the control. Each sample was assayed in triplicate. The samples were then labeled with 1 μ Ci/ml of 3 H Proline by adding 1 μ l to each ml well. Plates were incubated over a five day period, in which time the treatment procedure was repeated. After treatment incubation was complete, the plates were assayed for total protein uptake. Each plate was washed with 1 ml of ice cold PBS, and then 1 ml of ice cold TCA for 10 minutes. TCA washes were repeated twice for five minutes each. Each plate was then washed with 1 ml of MeOH and allowed to dry. Protein was then solubilized in .3 M NaOH and gently shaken for .5 hours. Supernatant is collected and added to scintillant, and measured on the liquid scintillation counter.

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EXAMPLE 2

The following demonstrates how a specific mineral water
5 treated with the Wekroma Bio-Transer device can stimulate
proline uptake by Human Dermal Fibroblast cells.

Body Booster mineral water having the composition listed
in Table 1 was treated in a Wekroma Bio-Transer device using
10 Wekroma Rod No. 232 as described in Example 1.

Three confluent 24-well plates were labelled with 1
 μ ci/ml of ^3H Proline prior to the addition of the mineral
water. Tests were conducted with the Body Booster mineral
15 water that was treated with the Wekroma Bio-Transer device,
using the untreated mineral water as a control.

Each sample was assayed in triplicate using .1, .5 and
20 1% concentrations. Plates were incubated over the weekend
before being assayed for total protein. At this time each
plate was washed with 1 ml of ice cold PBS, and then 1 ml of
ice cold TCA for 10 minutes. TCA washes were repeated twice
25 for five minutes each. Each plate was then washed with 1 ml
of MeOH and allowed to dry. Protein was then solubilized in
.3 M NaOH containing 1% SDS and gently shaken for .5 hours.
Supernatant is collected and added to scintillant, and
30 measured on the liquid scintillation counter.

An increase in protein count was observed for the
Wekroma treated Body Booster mineral water. A dose dependent
increase occurred in which the .1, .5, and 1% concentrations
35 increased protein by 3, 17, and 27%, respectively. See Table
2 and Fig. 2. The results for the .5 and 1% doses were

statistically significant with p-values of .02 and .03, respectively.

EXAMPLE 3

5 The following demonstrates that Body Booster mineral water by itself increases proline uptake. However, treatment of this mineral water with the Wekroma Transer device using Rod No. 232 as outlined in Example 1 resulted in higher
10 proline uptake compared to the untreated mineral water control. Treatment of this mineral water with the Wekroma Transer device using Rod No. 1200.7 did not increase proline uptake beyond the control.

15 Two confluent 24-well plates were treated with the following: various different treatments of Body Booster consisting of Wekroma Rods Nos. 232 and 1200.7. The Body
20 Booster control was added neat in 1, 5, and 10% concentrations. The same material was passed through Rods Nos. 232 and 1200.7 and assayed at the same concentrations. Each sample was assayed in triplicate. The samples were then
25 labeled with 1 μ Ci/ml of 3 H Proline by adding 1 μ l to each ml well. Plates were incubated over a five day period, in which time the treatment procedure was repeated. After treatment incubation was complete, the plates were assayed for total
30 protein uptake. Each plate was washed with 1 ml of ice cold PBS, and then 1 ml of ice cold TCA for 10 minutes. TCA washes were repeated twice for five minutes each. Each plate was then washed with 1 ml of MeOH and allowed to dry.
35 Protein was then solubilized in .3 M NaOH and gently shaken for .5 hours. Supernatant is collected and added to

scintillant, and measured on the liquid scintillation counter.

Body Booster increased uptake 52% when treated with Rods 5 232, yielding a 12% increase from the untreated group, while 1200.7 treatment paralleled the untreated group. Student's t-test indicated that all the materials were statistically significant. See Table 3.

10 EXAMPLE 4

We repeated earlier experiments which showed that Body Booster mineral water increased proline incorporation. Body Booster mineral water without any information transferred to 15 it, increased proline uptake by 44, 38, and 33% at 1, 5, and 10% concentrations. See Table 4. In this experiment, information transferred with Wekroma Rods No. 1200.7 20 displayed a statistically significant increase of 16% at a 10% dosage.

Two confluent 24-well plates were treated with Body Booster mineral water that received 10 passes with Wekroma 25 Rods No. 1200.7. The Body Booster mineral water control was added neat in 1, 5, and 10% concentrations. The same material was passed through Rods No. 232 and assayed using the equivalent concentrations. TGF β (10ng/ml) was assayed 30 as a positive control. Each sample was assayed in triplicate. The samples were then labeled with 1 μ Ci/ml of ^3H Proline by adding 1 μ l to each 1 ml well. Plates were incubated over a five day period, in which time the treatment 35 procedure was repeated. After treatment incubation was complete, the plates were assayed for total protein uptake.

Each plate was washed with 1 ml of ice cold TCA for 10 minutes. TCA washes were repeated twice for five minutes each. Each plate was then washed with 1 ml of MeOH and 5 allowed to dry. Protein was then solubilized in .3 M NaOH and gently shaken for .5 hours. Supernatant was collected and added to scintillant, and measured on the liquid scintillation counter.

10 TGF β displayed increases of 63%, and 87% ($P < .003$).
Body Booster mineral water increased uptake 44, 38, and 33%
as a control at 1, 5, and 10% concentrations. Body Booster
mineral water treated with Rods No. 1200.7 (antioxidant)
15 displayed increases of 6 and 16% at 5 and 10% concentrations
respectively, when compared to Body Booster mineral water
controls. Student's t-test conveyed statistical significance
20 for all materials, when values were compared to untreated
controls. Statistical analysis, compared to Body Booster
mineral water control, yielded values greater than .05
excluding the 10% concentration that had been treated with
25 Rod No. 1200.7

Example 5

The following experiment showed that aqueous solutions
30 of sodium chloride and magnesium chloride treated with
Wekroma Rod 232 increased collagen production by Normal Human
Dermal Fibroblasts cells ("NHDF") to a significant degree
compared to the control aqueous solution containing the same
35 concentration of salts but untreated with the Wekroma Rod
232. The ability of the treated aqueous solutions to

increase collagen production was retained upon storage of at least six months.

Five salt solutions of .4% NaCl and .4% MgCl₂ in deionized water were made. One solution (3249/1) was not treated with Wekroma Rod 232 and used as the control solution. The remaining four salt solutions (3249/2-3249/5) were treated with Wekroma Rod, 232-1, 232-2, 232-3, and 232-4 respectively. All of these Wekroma Rods are identical replicas of each other. All five salt solutions were assayed at three different doses (1, 5 and 10% in deionized water) for any increase in the production of collagen by NHDF cells.

All sample solutions showed increases, of varying degrees, over the media control (see % change column in Table 5). Wekroma treated salt solutions 3249/2 and 3249/5 showed statically significant increases, over 3249/1, in the amount of collagen released by NHDF cells in culture. 3249/1, the untreated control solution, showed increases in collagen production (over the media control).

The four salt solutions treated with the Wekroma Rod's 232 were sealed and stored under ambient conditions for six months and then reassayed for their ability to increase the production of collagen by NHDF cells. These "retained solutions" were also compared to stored solutions that were retreated with the Wekroma Rods 232 (labeled as "remake solutions").

The results of the assay of the control salt solution, retained solutions and remake solutions are shown in Table 6.

Collagen levels were not enhanced by the presence of 10% of the control salt solution (MgCl_2 and NaCl , in deionized H_2O). Media containing 10% remake solution treated with #232 - Rod 4 resulted in a 36% increase in absolute collagen level, and a 6% decrease in DNA, combining to yield an overall increase in Collagen/DNA of 43% over the control salt solution. Retain solution originally treated with #232 - Rod 4, when present at 10% concentration, yielded an increase of 14% in absolute collagen level, along with a 24% decrease in DNA, combining to yield an overall increase in Collagen/DNA of 50%. In contrast, *Mimosa pudica*, used as a positive control, increased absolute collagen level by 20%, and decreased DNA by 65%, which resulted in an overall increase in Collagen/DNA of 238%.

Of the sample solutions tested, the only ones to show substantial increases in collagen levels were the remake solution treated with #232 - Rod 4 and the retain solution treated with #232 - Rod 4. These samples yielded increases of 43 and 50% respectively (over the salt solution control). In this assay, the positive control, *Mimosa pudica* (@ 50 $\mu\text{g}/\text{ml}$), yielded an increase of 238% over the media control.

The following outlines the method used in the above two to determine collagen and DNA levels.

NHDF cells were seeded and grown to confluence in a 96 well plate prior to being treated with the Wekroma samples ($n=3$). *Mimosa pudica* (@ 50 $\mu\text{g}/\text{ml}$) was added as a positive control and media alone served as the negative control. The plate was incubated for 4 days at $37^\circ\text{C}/5\% \text{ CO}_2$ before the

supernatants were harvested, and stored at -70° in siliconized tubes until the ELISA was performed.

The collagen ELISA was performed as follows:

5 A 96 well enzyme immunoassay grade microliter plate is coated, overnight at 4°C, with an optimal amount of Human Type 1 collagen. In a separate microliter plate (low protein binding), equal volumes of primary antibody (Rabbit anti
10 Human Type 1 Collagen) is mixed with either the collagen standards or the unknowns and allowed to react overnight at 4°C (Inhibition Step). The collagen standards or the collagen present in the unknowns will bind with the primary
15 antibody, leaving some of the primary antibody unbound.

The collagen coated plate is then washed extensively with Phosphate Buffered Saline containing 0.05% Tween-20
20 (PBST), dried and blocked with PBS containing 3% Bovine Serum Albumin for 1.5 hours at 37°C. The blocking solution is then removed from the wells, the plate is dried and the contents of the wells containing the primary antibody/standard or
25 unknown solution are transferred to the blocked, collagen coated plate. The plate is incubated for 30 minutes at room temperature, to allow whatever primary anti-body is left unbound to free collagen, to bind to the collagen coating the
30 plate. After the 30 minute incubation, the solution is discarded. Discarded in the solution will be the primary antibody bound to free collagen (from the standards or unknowns). Any primary antibody that did not bind to
35 collagen during the inhibition step will be free to bind to the collagen coating the wells. If there was a lot of

collagen present in the standard or unknown solution, most of the primary antibody will be bound up and not be available to bind to the collagen coating the wells.

5 The primary antibody bound to the collagen coating the well is detected by the addition of a goat anti-rabbit IgG-Alkaline Phosphatase conjugated antibody and incubating for 1.5 hours at room temperature followed by extensive washing
10 with PBST. The alkaline phosphatase present in the wells is detected by the addition of p-Nitrophenyl Phosphate as a substrate and the optical densities are read at 405nm on a Molecular Devices microplate reader. A standard curve is
15 constructed and the collagen levels of the unknowns are determined from this curve.

20 The DNA assay was performed as follows. DNA levels are determined by performing a freeze/thaw lysis of the cells in the presence of water and adding Hoechst 33258 (a dye that binds to DNA and becomes fluorescent). The plate is then
25 read on the spectrophotometer and DNA levels are calculated from the standard curve.

Example 6

It is possible to produce a substrate treated only with
30 a magnetic vector potential field without the application of any information energy. This can be accomplished by, for example, passing a solution through the Wekroma Bio-Transer device without the placement of any rods within the device.
35 Such a treated substrate is capable of improving skin condition upon administration of the substrate to the skin.

TABLE 1

Composition Of Body Booster Mineral Water

5	Aluminum	1-10%	Molybdenum	0
	Arsenic	0	Niobium	0
	Antimony	0	Nickel	0.01-0.1%
	Barium	0	Phosphorus	0
	Beryllium	0.01-0.1%	Potassium	0
	Boron	0.01-0.1%	Sodium	0.1-1.0%
	Bismuth	0	Silicon	0.01-1.0%
10	Cadmium	0	Silver	0
	Calcium	10-100%	Strontium	0.1-1.0%
	Chromium	0	Tantalum	0
	Cobalt	0	Tellurium	0
	Copper	0.01-0.1%	Tin	0
	Iron	0.01-0.1%	Titanium	0.01-0.1%
	Lead	0	Tungsten	0
	Lithium	0	Vanadium	0
15	Magnesium	1-10%	Zinc	<0.01%
	Manganese	1-5%	Zirconium	0
	Mercury	0		

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TABLE 2

5		MATERIAL	average DPM	% change	--P-value
		control	29666.67		
	untreated	0.10%	30266	-2.020225	
	Fe H2O	0.50%	28933.33	-2.47191	
10		1%	31395	5.825843	
		control	26077.33		
	treated	0.10%	26974.33	3.439769	0.491
	Fe H2O	0.50%	30508.67	16.99305	0.021
15		1%	33053.33	26.7512	0.031

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TABLE 3

5			dpm	avg. dpm	% change	P-value	% change from BB control
10	BB-control	1%	105215 110134 113281	109543.3	34.19933	0.001	
		5%	95021 117246 110378	107548.3	31.75529	0.02	
		10%	95786 99194 99801	98260.33	20.37675	0.001	
15	BB-232	1%	111191 125587 134227	123668.3	51.50358	0.003	12.89444
		5%	122170 110580 120287	117679	44.16617	0.001	9.419641
		10%	95146 104946 100019	100037	22.55331	0.004	1.808122
20	BB-12007	1%	104023 112237 111857	109372.3	34.08511	0.002	-0.1561
		5%	109353 108673 121246	113090.7	38.64361	0.003	5.153342
		10%	106709 100710 82910	96776.33	18.64304	0.12	-1.51027

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TABLE 4

		dpm	avg. dpm	% change	P-value	dpm minu avg. control	P-value among BB
5	control	36335 30925 30414	32558				
	TGF B	51288 58159 49600	53015.67	62.83453	0.003		
10	BB-C	48752	46925	44.1274	0.003	16194	
		44941				12383	
		47082				14524	
		49367	44988.33	38.17904	0.01	16809	
		41801				9243	
		43797				11239	
15		39432	43245.67	32.82655	0.06	6874	
		50542				17984	
		39763				7205	
	BB-232	41992	45608	40.08231	0.01	9434	0.58
		46412				13854	
		48420				15862	
		45920	46858.33	43.92264	0.005	13362	0.54
		44642				12084	
		50013				17455	
20		44162	43928.67	34.92434	0.004	11604	0.86
		43276				10718	
		44348				11790	
	control	28578 25524 33584	29228.67				
25	TGF B	51548 57206 55401	54718.33	87.20776	0.001		
	BB-1200.7	44480	42945.33	46.92881	0.005	15251.33	0.67
		42907				13678.33	
		41449				12220.33	
		45415	47527.33	62.6052	0.005	16186.33	0.14
30		52041				22812.33	
		45126				15897.33	
		49850	50052.33	71.24398	0.001	20621.33	0.05
		49835				20606.33	
		50472				21243.33	

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TABLE 5

**PRODUCTION OF COLLAGEN BY NHDF CELLS
EXPOSED TO SAMPLE SOLUTIONS**

Sample	pg/ml+/-S.D.	% Change	p value
3249/1 Control salt solution 10%	2.5+/-0.02	4.2	
5%	2.7+/-0.03	12.5	
1%	2.6+/-0.01	8.3	
3249/2 10%	3.0+/-0.06	25	0.02
5%	2.8+/-0.07	17	0.1
1%	2.4+/-0.12	0	0.8
3249/3 10%	2.6+/-0.02	8.3	0.1
5%	2.7+/-0.06	12.5	0.2
1%	2.8+/-0.11	17	0.2
3249/4 10%	2.7+/-0.09	12.5	0.1
5%	2.7+/-0.09	12.5	0.8
3249/5 10%	3.5+/-0.04	46	0.002
5%	3.0+/-0.05	25	0.02
TBF β	3.0+/-0.02	25	
Media Control	2.4+/-0.01		

TABLE 6

PRODUCTION OF COLLAGEN BY NHDF CELLS
EXPOSED TO RETAIN AND REMAKE SOLUTIONS

Sample	Coll ($\mu\text{g/ml}$)	% Change	DNA ($\mu\text{g/ml}$)	% Change	Coll/DNA	% Change
Media	0.15+/-0.001		6.2+/-0.3		0.024	
M. pudica	0.18+/-0.008	+20	2.2+/-0.1	-65	0.081	238
Control salt soln.	0.14+/-0.006		5.0+/-0.11		0.028	
#232- Rod 4 remake	0.19+/-0.015	+36	4.7+/-0.08	-6	0.040	+43
#232- Rod 4 retain	0.16+/-0.023	+14	3.8+/-0.09	-24	0.042	+50
#232- Rod 1 retain	0.15+/-0.012	+7	4.6+/-0.07	-8	0.033	+18
#232- Rod 2 retain	0.14+/-0.018	0	6.5+/-0.02	+30	0.021	-25
#232- Rod 3 retain	0.15+/-0.015	+7	5.2+/-0.07	+4	0.029	+3
#232- Rod 3 remake	0.16+/-0.01	+14	4.6+/-0.12	-8	0.035	+25
BQ Rod BQ-DAT-C4	0.14+/-0.002	0	4.4+/-0.06	-12	0.032	+14

It should be apparent to one of ordinary skill that other embodiments not specifically disclosed nonetheless fall within the scope and spirit of the present invention. Hence, 5 the descriptions herein should not be taken as limiting the invention in any way, except as stated in the following claims.

All references cited above are hereby expressly 10 incorporated by reference.

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We claim:

1. A method of improving skin condition comprising a)
exposing a physiologically acceptable substrate to a
5 magnetic vector potential field; and b) administering to
the skin the exposed substrate.
2. A method of improving skin condition comprising a)
10 exposing a physiologically acceptable substrate to a
magnetic vector potential field and directly applying
information energy to the substrate while the substrate
is exposed to the magnetic vector potential field to
15 produce a substrate that contains information energy;
and b) administering to the skin the substrate that
contains information energy.
- 20 3. A method of improving skin condition by administering to
the skin a physiologically acceptable substrate, wherein
such substrate is produced by exposing a physiologically
25 acceptable substrate to a magnetic vector potential
field.
- 30 4. A method of improving skin condition by administering to
the skin a physiologically acceptable substrate that
contains information energy, wherein such substrate is
produced by exposing a physiologically acceptable
35 substrate to a magnetic vector potential field and
directly applying information energy to the substrate



while the substrate is exposed to the magnetic vector potential field.

- 5 5. The method of claims 1, 2, 3 or 4 wherein the improvement is increased collagen content in the skin.
- 10 6. The method of claims 1, 2, 3 or 4 wherein the substrate is in the gaseous, liquid, solid or liquid crystalline phase.
- 15 7. The method of claim 6 wherein the substrate is in the liquid or liquid crystalline phase.
- 20 8. The method of claim 7 wherein the substrate is in the liquid phase.
- 25 9. The method of claim 7 wherein the liquid phase comprises water.
10. The method of claim 9 wherein the liquid phase comprises sodium chloride and magnesium chloride.
- 30 11. The method of claim 9 wherein the liquid phase comprises iron ions and calcium ions.
- 35 12. The method of claims 1, 2, 3 or 4 wherein the magnetic vector potential field is produced by two opposite sets of magnets, each said set of magnets comprising a



plurality of magnets arranged side by side, with
alternating N and S poles, wherein the substrate is
exposed to a magnetic vector potential field when the
5 substrate is placed between the opposing sets of
magnets.

13. The method of claim 12 wherein the substrate is at least
10 once passed through a Wekroma Bio-Transer device.

14. The method of claims 2 or 4 where at least one Wekroma
15 Rod selected from the group consisting of 1200.7, 622,
232, 7509, 326, 329, Fibro1, and Fibro2 is used to
directly apply information energy to the substrate.

20 15. The method of claim 14 where at least one Wekroma Rod
No. 232 is used to directly apply information energy to
the substrate.

25 16. The method of claim 15 wherein the substrate is at least
once passed through a Wekroma Bio-Transer device that
produces the magnetic vector potential field and that
contains at least one Wekroma Rod No. 232.

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