1. What Are Anions?
Anions are negatively charged ions, which, in turn, are natural particles in the air, such as atoms (the basic unit of matter, with different forms) or molecules (a group of atoms that have either a positive or negative charge).

Air is not an insulator, but neither is it a good conductor, letting only a very tiny amount of electricity flow through it. Electricity is carried in the air by ions, which are generated by either losing electrons (positive ions) or getting electrons (anions) when they receive energy (in the form of sunlight, for example).

Many studies are being conducted on ionized atoms and atomic complexes, especially on the biological implications of anions (fundamentals, applications, and prospects of subtle energy technology, CHI energy, and minus ions, the latest ionic science). These studies reveal that anions are an effective fatigue and tension reliever if there are 1,000 or more of them per 1 cc of air. (In clean forest areas, hot springs, waterfalls, and seashores, there are an estimated 800-2,000 anions in 1 cc of air.) Intensify the activity of alpha-waves to suppress the activity of serotonin and free histamine, hormones that cause respiratory diseases such as asthma. They are even called "vitamins in the air" as they also promote metabolism, vitalize the body, and purify blood.

Since they are light, anions are free to move around in the air. They are a source of bio-energy that vitalizes us and makes us healthy.

2. Benefits of Anions to the Human Body
* They purify the blood: Anions neutralize acid blood and turns it into weak alkaline, preventing cancer, allergies, and other diseases.

* They relax the mind and body: Anions stimulate the parasympathetic nerves, thus relaxing the mind and body. They likewise activate endorphins, thereby improving the immune system.

* They control the autonomic nerve system: Anions keep the balance of the autonomic nerve system, thus preventing insomnia, cold disorder, shoulder stiffness, lumbago, and chronic fatigue.

* They reinforce the body's immune system: Anions strengthen the liver and intestines, reinforcing our immunity to diseases.

* They strengthen the pulmonary functions: Anions promote the ejection of carbon dioxide from the body, thus strengthening the body's pulmonary functions. They also augment oxygen exchange, thereby preventing cold or pneumonia.
* They soothe pain: Anions restore the body's ionic balance, thereby curing chronic rheumatoid arthritis.

* They activate the cells: Anions play an important role in cell activation. A cell has more positive ions in its exterior and more anions in its interior. When a cell moves from a stationary to an active state, positive ions are replaced with anions.

* They purify the air: Anions neutralize and purify air that has been polluted by particles of tobacco, dust, and tick excrement. They can thus make indoor air clean, thereby preventing asthma, atopic dermatitis, and pollen allergy.

* They prevent allergies: Anions play a major role in preventing allergic diseases caused by inhaling allergens, such as asthma, pollen allergy, allergic nasitis, and allergic conjunctivitis. They collect dust and remove air-polluting antibodies.

**Anion and Cation**

1. **Ion**
   Ions are charged particles. There are many invisible particles and molecules in the air oxygen, carbon, nitrogen, hydrogen gases, etc. These are forms of anions or cations. If positively charged, the particles are referred to as cations. If negatively charged, they are referred to as anions.

   The ratio of ions in the air changes according to the weather condition. If a cold front or low atmospheric pressure occurs, the number of cations increases because anions are absorbed by electrically charged bodies, such as the respiratory organs or skins of animals.

   Exhaust fumes, smoke from factories and cigarettes, and electromagnetic waves emitted by industrial machines are just some of the environmental factors that increase the number of cations.

2. **Benefits of anions**
   Anions are abundant in clean air environments like plateaus, forests, and waterfalls. When the weather is bright and clear, the constant voltage in the air is strongly activated, which then increases the number of anions.

   That is why resting and recuperating in plateaus, by the sea, or in rural areas helps cure patients with chronic diseases. In urban areas, the effect of the presence of cations
in the air can be easily felt. Large numbers of cations are produced from the electromagnetic waves of electric equipment, artificial ingredients in food, exhaust fumes of vehicles, cigarette smoke, various chemical substances used in building construction, and polluted water.

It is impossible for us to completely escape environmental pollution. Therefore, it is very important to supplement anions in our everyday lives by drinking anion-infused water, using anion water for bathing, etc.

<table>
<thead>
<tr>
<th>Human body</th>
<th>Anion</th>
<th>Cation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Lightly alkalifies</td>
<td>Acidifies</td>
</tr>
<tr>
<td>Vessel</td>
<td>Expands vessels</td>
<td>Contracts vessels</td>
</tr>
<tr>
<td>Fatigue</td>
<td>Relieves fatigue</td>
<td>Worsens fatigue</td>
</tr>
<tr>
<td>Resistance</td>
<td>Promotes resistance</td>
<td>Decreases resistance</td>
</tr>
<tr>
<td>Waste product</td>
<td>Promotes elimination</td>
<td>Delays elimination</td>
</tr>
<tr>
<td>Autonomic nerve</td>
<td>Induces stability</td>
<td>Induces instability</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Normalizes blood pressure</td>
<td>Increases blood pressure</td>
</tr>
<tr>
<td>Respiration</td>
<td>Eases respiration</td>
<td>Causes dyspnea</td>
</tr>
</tbody>
</table>

**Far-Infrared Rays**

1. **What are far-infrared rays?**

- Electromagnetic waves outside the visible spectrum of light in the range of 0.76-1.5\(\mu\)m are called near-infrared rays, those in the range of 1.5-5.6\(\mu\)m are called middle-infrared rays, and those in the range of 5.6-1000\(\mu\)m are called far-infrared rays. Among these, far-infrared rays in the range of 6-14\(\mu\)m are known to be most beneficial for human health.

- Infrared rays, also called heating rays, have better heating potential than do ultraviolet rays.

- Most of the emitted radiance of a heated object is due to infrared rays, and the type of heat emitted from the ground at night are infrared rays that had been absorbed during daytime.
2. Characteristics of far-infrared rays

- Strong heating effects
  Far-infrared rays have strong heating effects because their frequency is in the same range as the original number of a substance's molecular vibration. Bumping a substance into far-infrared rays causes electromagnetic resonance. As a result, the substance absorbs the infrared rays and produces strong heating effects.

- Efficient osmosis
  Since infrared rays, due to their long waves, are less prone to scattering by corpuscles compared to ultraviolet rays or visible light waves, they exhibit efficient osmotic effects. Such rays equally heat the surface and interior of the target by permeating deeply, such as into human skin in medical treatment.

- Benefits to the human body
  - Far-infrared rays promote blood circulation by stimulating the movement of the peripheral nerves and capillary vessels, and they are effective in the dissolution of the thrombus.
  - Far-infrared rays produce the magnetothermal effect by activating water molecules. The magnetothermal effect induces strong perspiration, which helps in eliminating waste products.
  - By helping in the efficient elimination of waste products and heavy metals that have accumulated in the body, far-infrared rays promote metabolism.
  - Far-infrared rays also activate cell organizations that help eliminate wastes under the skin, and induce the skin's breathing and revitalization.
**Tourmaline**

**What is tourmaline?**
Tourmaline originated in Brazil, and is the birthstone for those born in October (together with American opal). It is a power stone that produces far-infrared rays and anions as it generates electricity by heating and friction.

**The etymology of the word "tourmaline"**
The name "tourmaline" is known to originate from the word "tormali" from the Sri Lankan language, which means "mixed gem." True to its name, the stone features all sorts of colors. Actually, tourmalines feature a rich range of colors, and all kinds of chromaticity. Thus, tourmaline is regarded as a gem that displays the biggest number of colors given by God.

**Tourmaline's marvelous pyroelectric properties**
Tourmaline has pyroelectric properties that make it attract dust when sufficiently heated (about 100°C). In Netherlands, tourmaline is called "aschentrekers," and is commonly used (because of its pyroelectric properties) to remove cigarette ashes from a cigarette pipe. Although its piezoelectric properties are not as strong as those of quartz, it also has piezoelectric properties.

**Benefits for the human body**
With the stone's ability to expand capillaries in the human body, it promotes blood circulation and metabolism, purifies blood, increases the body's resistance, and induces cellular and stomach movement. It also exhibits heating effects, helps relieve fatigue, stabilizes autonomic nerves (neuralgia), and is regarded as an effective treatment for and leucorrhoea. It is also reported to be effective in treating headaches, facial treatment and loosing weight. It is also an effective antioxidant to delay aging, especially when both the effects of anions and far-infrared rays are combined in synergy through the use of 0.06-mA electric current.

**<Tourmaline Anion Bracelet >**

© Tourmaline bracelet is a ceramic-type bracelet made from powdered tourmaline. According to a Japanese physicist, it has been proven that tourmaline exhibits subtle electric current similar to the 0.06-mA biological electric current. It features an anode and cathode at the end of each crystal. (Biological electric current is the subtle current produced when enough nutrition is supplied for cellular growth.)

© Since tourmaline's 0.006-mA current is exactly similar to the current flowing throughout the nervous system of the human body, using it presents no side effects.
This current reacts with the moisture or friction in the air, and produces large numbers
of anions. The anions are then absorbed into the body, where they activate cellsa
process that has healthful benefits.

◎ Tourmaline is a unique substance with permanent electrical properties, and ceramic
products made from tourmaline have higher anion production rates than those made of
raw ores.

◎ The tourmaline bracelet absorbs the heat radiated from a human body, and emits
far-infrared
rays to be reabsorbed by the body. The far-infrared rays it constantly emits keep the
human body warm, promote blood circulation, and relieve fatigue.

◎ The synergy of anions and far-infrared rays expands capillaries, raises the body's
temperature, activates cells, and promotes metabolism.
KOREA INSTITUTE OF FAR INFRARED APPLIED ESTIMATION
KOREA FAR INFRARED ASSOCIATION

Add. : 174-12, Seokchon-Dong, Songpa-Gu, Seoul, Korea
Tel. : (02) 2203-6037, FAX : (02) 2203-6061

Certificate of Testing Result

Serial No. of Issue : KFI-714
Name of Applicant : Seo, Jeong In [HANJIN PHARM]
Address of Applicant : 404-3, Bonri-Dong, Dalseo-Gu, Daegu, Korea
Date of Receipt : 10. 22. 2004
Name of Test Sample : Functional Accessory(PearLion Well-being)
Result of Testing : Refer to the Enclosed

<table>
<thead>
<tr>
<th>Emissivity (5 ~ 20 µm)</th>
<th>Emission Power (W/m²·µm, 37°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.903</td>
<td>3.48 × 10²</td>
</tr>
</tbody>
</table>

Note: The temperature of 37°C is provided by the applicant. The above experimental results were measured in comparison with BLACK BODY by using the FT-IR Spectrometer. End.

Signed Choi T. S.

The director of Korea Institute of Far Infrared Applied Estimation
KOREA INSTITUTE OF FAR INFRARED APPLIED ESTIMATION
KOREA FAR INFRARED ASSOCIATION

Add. : 174-12, Seokchon-Dong, Songpa-Gu, Seoul, Korea
Tel. : (02) 2203-6037, FAX : (02) 2203-6061

Certificate of Testing Result

Serial No. of Issue : KIFIM-531
Name of Applicant : Seo, Jeong In [HANJIN PHARMA]
Address of Applicant : 404-3, Bonri-Dong, Dalseo-Gu, Daegu, Korea
Date of Receipt : 10. 27. 2004
Name of Test Sample : Functional Accessory (PearLion Well-being)
Result of Testing :

<table>
<thead>
<tr>
<th>Item</th>
<th>ANION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of test sample</td>
<td></td>
</tr>
<tr>
<td>Functional Accessory (PearLion Well-being)</td>
<td>752</td>
</tr>
</tbody>
</table>

Note 1) Test Method : KFIA-FI-1042
2) The above experiments were conducted using ION analyzer at the conditions of temperature 21°C, and humidity 33% and anion numbers 10% of the atmosphere, anion discharge from specimens was measured and results were shown anion number per unit volume. End.

10 29 2004
month day year

Signed Choi J. S.

The director of Korea Institute of Far Infrared Applied Estimation
KOREA INSTITUTE OF FAR INFRARED APPLIED ESTIMATION
KOREA FAR INFRARED ASSOCIATION

Add. : 174-12, Seokchon-Dong, Songpa-Gu, Seoul, Korea
Tel. : (02) 2203-6037, FAX : (02) 2203-6061

Certificate of Testing Result

Serial No. of Issue : KFIM-520
Name of Applicant : Seo, Jeong In [HANJIN PHARM]
Address of Applicant : 404-3, Bonri-Dong, Dalseo-Gu, Daegu, Korea
Date of Receipt : 10. 22. 2004
Name of Test Sample : Functional Accessory (PearLion Well-being)
Result of Testing : 

<table>
<thead>
<tr>
<th>Name of test sample</th>
<th>ANION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Accessory</td>
<td>1738</td>
</tr>
<tr>
<td>(PearLion Well-being)</td>
<td></td>
</tr>
</tbody>
</table>

Note 1) Test Method : KFIA-FI-1042
2) The above experiments were conducted using ION analyzer at the conditions of temperature 21°C, and humidity 36% and anion numbers 104/cc of the atmosphere, anion discharge from specimens was measured measured and results were shown anion number per unit volume. End.

10 25 2004
month day year

Signed Choi I.-J.

The director of Korea Institute of Far Infrared Applied Estimation