Unlike an electric blanket which uses electric coils to create heat, the Biomat uses a combination of fabrics and Amethyst stones to generate far infrared rays which is then transferred to the body as heat. The heat comes from friction generated within the body through the effects of far infrared rays. Far infrared rays warm the inside of your body and the part of your body making contact with the Biomat.

Should the temperature of any part of the Biomat exceed the set temperature, the thermal sensors distributed throughout the Biomat will cut off the electric current. When the Biomat reaches the selected temperature, the negative ion lights will come on and will stay on until the Biomat needs to raise the temperature. The Biomat comes with an external control box which allows you to adjust the desired temperature and usage time (between 2, 4, 8, or 12 hours). As an added safety feature, when the controller is set to 122°F or higher, it will automatically step down to 113°F after 4 hours.

Far infrared rays are part of the electromagnetic spectrum that has been studied for various health benefits. It provides warmth and relaxation similar to the energy that radiates from the sun. These rays not only benefit muscles on the surface of the body, but all cells in the deepest parts of the body.

**How does it work?**

1. **Far Infrared Rays** - The combination of natural Amethyst and Hyron cotton layer generates far infrared rays (6-12 Microns) that the human body can easily absorb.
2. **Negative Ions** - Natural Tourmaline and the TOCA (Tourmaline) layer generates negative ions.
3. **EMF** - Special layers of fabric in conjunction with the Biomat EMF Interceptor effectively reduces electromagnetic waves.

**What does the Biomat EMF Interceptor do?**

The Biomat EMF Interceptor acts in the same way as a lightning rod by safely conducting the EMF energy away to the ground. With this feature, you can effectively reduce exposure to EMF for yourself and your family.
The Biomat’s 17 layers consist of:

1. Surface material: Silicon urethane with cotton
2. Waterproof layer
3. Amethyst layer for transferring natural infrared rays
4. Hyron cotton layer for thermal insulation
5. TOCA layer for natural negative ions
6. Nano Copper fabric layer
7. Quantum Energy layer (peach and grape seeds)
8. Copper fabric layer for electromagnetic interception
9. Carbon fiber layer for electromagnetic interception
10. Fiberglass layer
11. Thermal preservation layer
12. Silicon and Teflon reverse currency heating layer with EMF interception
13. Nonwoven fabric layer
14. Aluminum layer for reflection of infrared rays
15. Nonwoven fabric layer for heat preservation
16. Thermal protection layer
17. Bottom material: High quality cotton with brass pattern

Benefits of the Biomat

1. Temporary relief of:
   - Minor muscle pain
   - Minor joint pain and stiffness
   - Joint pain associated with arthritis
   - Muscle spasms
   - Minor sprains
   - Minor strains
   - Minor muscular back pain
2. Temporary increase of local circulation
3. Relaxation of muscles

Why use far infrared?

The circulatory system is responsible for the delivery of oxygen-rich blood and the removal of wastes. Far infrared rays have been found to have a blood circulation enhancing effect in human skin and eventually induces an increase in temperature of the body tissues.

Increase of Body Temperature

Studies have indicated that during thermotherapy, or hyperthermia, the body is exposed to higher temperatures which causes a significant increase in skin microcirculation, skin temperature and core temperature. Inducing an artificial fever can provide benefits to your immune system as a type of immune cell, or lymphocyte, called a CD8+ cytotoxic T-cell, helps destroy infected cells.

Heat Shock Proteins

Heat shock proteins (HSPs), or stress proteins, are present in all organisms and all cells of all organisms. Published studies have shown that exposures to environmental stress, such as heat shock, induces the body to produce HSPs that function as molecular chaperones. Molecular chaperones are a type of protein that assists in the proper folding of proteins and quality control. Improper folding of proteins and damaged proteins have been reported to be the cause of a large number of diseases.

Negative Ions

Negative ions, or anions, are atoms that have a greater number of electrons (−) than protons (+), which result in a negative charge. They are abundant in natural environments such as forests, mountains, waterfalls and oceans. In a 2013 report on the effects on negative ions, studies were discussed about the positive effects of negative ions on physiological functions and human health.

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