

## **EFFECTS of FAR INFRARED SUNLIGHT on WATER?**

1) What is Far Infrared?

It is a natural sunlight frequency emitted by our Sun at a wavelength from 15,000 to 1,000,000 nanometers (15-1000 micrometers). It is not visible to the naked eye and lies right next to visible sunlight (what we know as color). Over 50% of the sunlight emitted are infrared rays (the rest being X rays, Gamma rays, Ultraviolet rays (UV), Visible light, Infrared rays, Microwaves and finally Radio frequency light. FIR is safe and very good for the health and to help plants grow better e.g. chlorophyll content increases

2) Which of these sunlight rays is best for our health and plants and water?

Infrared is the best and safest light emitted. It accounts for 50% of the energy emitted by the Sun

3) What adverse effects do global climatic warming and CO2 emissions have on our Far Infrared rays and to our health and water?

The Sun delivers energy in the form of short wavelengths. Our Earth (and other planets) absorb this light, heat up the surface and then emit the absorbed energy back to space in the form of thermal or infrared rays (which is simply longer wavelength light).

Our Earth has a natural greenhouse effect which allows our surface temperature to rise to 15.6 deg Centigrade or 60 deg Fahrenheit, making Life possible on the Earth. The greenhouse gases are less than one tenth of 1% of the Earth's atmosphere which is comprised of mainly oxygen, nitrogen, argon and hydrogen. The trace amounts of greenhouse gases absorb the outgoing infrared energy so that we don't freeze to death. The greenhouse gases also re-emit this absorbed infrared in all types of directions with each layer of the atmosphere acting like a thermal temperature blanket.

The right altitude for the best greenhouse effect is at a mean altitude of 20,000 feet (about 4 miles from the Earth surface).

But in 1896 Svante Arrhenius predicted that a rise in temperature (known as climatic sensitivity) would coincide with a doubling of the level of CO2 emissions (the so called pre industrial benchmark for global warming) .. Today due to excessive climatic temperature warming and excess CO2 and methane emissions, the CO2 level has again doubled. This adverse effect has a toll on the amount of Far Infrared rays reaching our Earth and measurable in water.

4) What are the most noticeable greenhouse gases?

First studies in 1976 showed that freons had a poor effect on our ozone and were slowly legislated out of refrigerants over the next 20 years. Other notable greenhouse gases besides the well known CO2 emissions are methane, ozone itself, nitrous oxide, ammonia and nitrogen compounds from synthetic fertilizers. These gases need to be monitored and led to the Kyoto Protocol. But led by the USA many developed nations refused to honor this protocol in order to protect their own self-interest oil and chemical industries. Many lay blame on China however we believe the fact that the largest polluter of the greenhouse effects are the exhaust of automobiles and not the coal burning plants in China.

5) Why study Oceans and Water in order to predict the effects of global warming? And its adverse effects on infrared emissions and absorption?

The Global Circulation Model uses the laws of physics to track and monitor climatic sensitivity (i.e. every 2 deg Centigrade warming corresponds to a doubling of Carbon Dioxide emissions). The study of oceans is critical to monitor temperature and rainfall patterns and by doing so, scientists track vegetation and

reflectivity patterns. Increases in CO2 or methane cause less Far infrared absorption in our sunlight-absorbing water.

Then in the year 2005 scientists predicted the global climatic warming has become so severe our climatic sensitivity increased to 2 deg Centigrade which turned upside down the Bush Administration. This is a doubling of the predictions made in 1976 and the effects in certain parts of the Earth are catastrophic.

For instance global warming leads to faster glacial melting which leads to rising sea water levels (as experienced in New Orleans, Bangladesh and other parts of the world).

6) How is Far Infrared rays measured in water?  
Equipment such as Far Infrared Spectrometers measures the content of FIR in water.

The standard benchmark is to measure the FIR in water that is contained deep in the Earth's core. This water is the purist in the world. It has extremely fast resonance (i.e. Frequency or vibration) / very high pH / very small molecular size (measured as nanometers) / feels very soft due to its lower surface tension / has an extremely high rate of absorption and most importantly the amount of far infrared rays is about 180%.

Most surface waters (as a result of clouds / rainfall and precipitation) resonate slowly and their FIR content about 104% to 110% .. Chlorinating water will also decrease water's rate of resonance.

Extremely good mineral waters or underground wells indicate FIR absorption at around 110% to 120%

7) So how does KIKO Stone increase the Far infrared emissions in normal tap or surface waters?  
KIKO Stones are induced with a proprietary frequency to match the frequency of certain minerals contained in any mineral or volcanic ash, resin or stone. The energy is a latent type of energy meaning that when the KIKO stones are immersed in water, that water will then absorb the frequency of the KIKO stones that in turn allows a signification increase in far infrared rays.

Our tests with the Japan Water Institute shows that water containing 104% to 110% far infrared will increase in nanoseconds up to 160% to 170% far infrared content.

8) What does FIR do to our water? Our health? Our plants? Our livestock?  
The energized water has many positives and benefits. Our tissue cells can absorb nutrients, vitamins, proteins and amino acids faster creating a healthier body. The wastes and toxins are removed faster from our bodies.

Roots and stems of plants absorb soil mineral and fertilizers faster and at times, less fertilizer is required because of this absorption rate. Fruits and vegetables tend to taste better (over time as there are many factors affecting a taste of our agro products). The combination of faster resonance and FIR also helps the texture and shelf life our plants, crops and fruits.

9) Can FIR help decrease bacteria or slime growth?  
FIR does not function on the basis of Chemistry. It functions on the laws of physics.

Bacteria, mold, slime and fungi are by products of chemical deterioration. But do expect some improvement associated with bacteria with energized water. Fungi in the Kiko Sugar cane studies showed significant decrease of Downey mildew fungus.