

Biorhythmic dysfunction and Infertility

“So in a place the blood stops, in another moves slowly, in another again much faster. The path of blood through the body is an irregular one and all sorts of irregularities is possible”

Hippocrates

The Bible says that God created the light and said, *"Let it serve to mark and fix the seasons, days and years."*

Sunlight is the only true source of energy. All forms of energy derive from light. The man, directly or indirectly, is virtually surrounded by the energy of the photonic particles that make up the sunlight.

Solar energy, be it direct or indirect, after entering through the eyes and passing through the retina, undergoes a process of electrical transformation (phototransduction) suitable for humans and, in the form of electrical impulses, is transported along the retinal-hypothalamic nervous pathways to reach the suprachiasmatic nucleus and to synchronize with the so-called thalamic clocks or Zeitgeber. The pineal gland, (not the pituitary gland), through the melatonin hormone, controls and regulates the synchronization and the adaptation to the individual needs, including those involved in reproduction.. Melatonin, in fact, has pro- and anti-gonadotropic effects depending on the environmental and social circumstances.

Health and fertility depends on many factors, among them the most important is the body's ability to stay in synchrony with the rhythms of nature.

Fertility and infertility are periodical. They come and go, and may be the expression of a synchronization disorder of the reproductive system with the rhythms of nature. Electromagnetic disturbances, inadequate exposure to sunlight, and/or to the cycles of seasons and to the day-night variation can contribute to the infertility of the couple. The same applies to inadequate nutrition and other erroneous lifestyles. Today most people are vulnerable to infertility because they spend most of their time at home, at work or in other poor light environments. Especially young people, instead of going to bed and stay in synchrony with the cycles of Nature, spend plenty of time bombarded by negative irradiations of artificial lights, noise and pollution of the city, television, computers, discotheques and other nocturnal environments.

Sun light with its day-night variations represents the main regulator of the organism.

In the woman is the light that stimulates the female reproductive system. Not surprisingly, the first menstruation or menarche occurs mainly in the months when the photoperiodic changes occur. Even childbirth is affected by the ratio between day and night. In most cases, labor, namely the preparatory stage of birth, begins with the first light of day, while the actual delivery takes place during the night.

The entire female reproductive system is actually stimulated by light and it seems that the period of greatest fertility coincides with the spring and early summer.

When the light is inadequate, also become inadequate the availability and transport of energy, the microcirculation, the oxygen, the hormones, the glucose, the electrolytes, and whatever is needed to maintain healthy and fertile the couple.

In similar circumstances a re-synchronizing therapy is also essential, however, medical science continues to ignore the importance of chronobiology in all areas of medicine and in particular of the reproductive one. The resynchronization of the reproductive system is part of the multifactorial therapeutic program, at the Eumedita Swiss Center of Lugano.