

QRS Information Sheet No: Q1

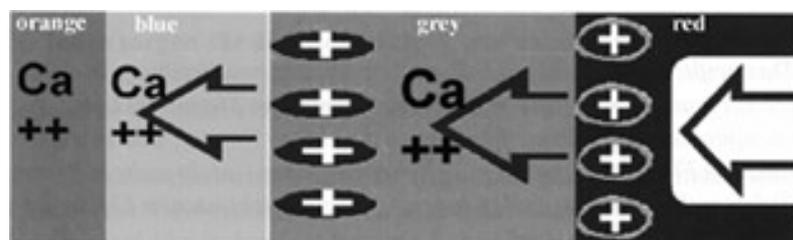
How QRS creates the calcium cascade



QRS fact sheets are issued to explain the general application of QRS technology. It is envisaged that they will be supported by more detailed advice provided by QRS Consultants

“It is possible for the first time to supply cells of the organism with both components of a dissociated chemical substance” *Patent 667475 page 19*

The Principle



The above diagram is an example of Quantronic ion shifting. Positive H ions from the blood (red) are pushed against the vascular wall (grey), where they create an acidic environment that urges calcium ions from the vascular wall into the cellular fluid (blue). From there they move into the cells (orange). (Decalcification of blood vessels and building up of Ca in the bones).

The calcium cascade

The Ca^{++} ions, which have moved into the inner cell, create effects similar to the “visit of the rich aunt”. The cells are shaping up. Depending on the previous condition the following processes, amongst others start. In the field of Quantronic these are called “calcium cascade” as they all relate to the release of calcium.

1. **Macrophages are activated.** Macrophages are an important component of the immune system. They dispose of cell refuse and eat pathogens e.g. bacteria.
2. **Enzymes are activated, stimulated or restrained.** Due to this the metabolic processes are accelerated.
3. **NO-gas (nitrogen monoxide) is produced.** It vaporises into the blood and the surrounding tissue. It dilates blood vessels and is therefore an important therapeutic element. NO also is an effective part of nitroglycerine, which is used as a first aid in the case of heart attacks. NO gas as a vasodilator is also an indispensable part of male erection.
4. **Cell division is stimulated.** For a long time it has been noticed that the magnetic field influence directs itself preferentially onto cells which are in the process of division. This is one of the reasons why the classic magnetic field therapy, prior to Quantronic, had its successes mainly in the area of regeneration. (that is eg. in orthopaedics.) It is important to understand the difference between a healthy cell and a cancer cell. Healthy cells in a nutrient bowl nestle themselves into their environment and stop growing as they touch each other. Cancer cells don't keep contact with the bowl and keep growing indefinitely as long as they receive nutrients, even if they touch each other. They don't know limitations to growth because they have no other task than growth. QRS has been proved in two clinical studies not to stimulate the growth of cancer cells.

5. **Cells become differentiated.** The mere division of cells does not mean regeneration. What matters is that the new cells undertake to do their tasks that relate to certain tissues; that a bone cell becomes a bone cell and a liver cell becomes a liver cell. According to research, this effect forms part of the calcium cascade. Whether cells are stimulated into division or concentrate more on their specific tasks depends on how much calcium there is in the cell before the in stream.
6. **Blood pressure sensors optimise blood pressure.** In the so-called medulla oblongata, a part of the brain on the extension of the spinal cord, there are vibration producers for the blood pressure that react positively to the calcium effect of the magnetic field and lower or raise the blood pressure.
7. **The adrenalin sensitivity decreases** with a similar effect to that of cortisone
8. **The response to insulin is activated**
9. **The membrane “gates” open and increase the ion exchange**
10. **The sensitivity of free nerve ends increases**
11. **The fatty-acid metabolism is normalised**

The effects of the calcium cascade are far from the only therapy effects of QRS but they explain the successes of classic magnetic field therapy described with a scientifically understandable performance model. The recognition of the calcium cascade as a fundamental effect of certain pulsating magnetic fields was the basis for the continuing improvement of the signals of the magnetic coils, until the Quantronic impulse was finally discovered.

The following summary reiterates the important other magnetic field effects, the immediate indicators for the effectiveness of pulsating magnetic fields.

- a. **Heart effect.** Heart beat slows (relaxes) and frequency decreases.
- b. **Blood pressure effect.** Blood pressure decreases.
- c. **Blood flow speed.** The blood flows faster.
- d. **Blood viscosity.** The viscosity of the blood decreases (ie. blood thins).
- e. **Respiratory volume.** Humans immediately breathe more deeply.
- f. **Increase in circulation and blood/heat radiation.** Heat radiation of the body increases significantly. It is a real circulatory reaction of the body caused by the resonance effect.

QRS Application

QRS has been designed as a long term and gentle therapy without side effects. For general preventive health the Mat applicator should be used twice per day for eight minutes per therapy.

QRS is being asked to help in the alleviation of the symptoms of very complex indications resulting from cellular dysfunction. People often present with several indications at once (eg. High blood pressure, high cholesterol, arthritis, blood sugar problems and fatigue). QRS applications will prove **beneficial in any situation where the health problem results from cellular dysfunction.** Such complex situations call for special instructions from the QRS consultant. Therapies may be more frequent, the recommended intensity may vary and the Pillow applicator may be an appropriate application method.

It is important to remember that, as every person has different DNA, so every person has a different metabolism and optimisation of QRS therapy may be required beyond the general (although very relevant) instructions contained in the User’s Manual. Please refer to Information Sheet Q2 How to select the optimum QRS setting.