QRS Information Sheet No: I1

How QRS assists in the management of diabetes



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

QRS can increase the production of insulin, make better use of available insulin, lead to reduced medication (under medical practitioner's supervision) and prevent late complications of diabetes like blindness, non-healing wounds, polyneuropathy, heart attacks and impotence.

What is Diabetes

Food is a source of energy for the body. Through the process of digestion, most of the food that we consume is eventually broken down into a simple sugar called glucose. Glucose then passes into the bloodstream where it becomes available for the body to use for growth and energy. In order for glucose to be transported to other cells in the body, a hormone produced by the pancreas, called insulin, is needed.

In diabetes, the pancreas produces little or no insulin, or the cells throughout the body are unable to utilize the insulin that is being produced. The end result is a build-up of glucose in the blood, which eventually spills over into the urine before leaving the body. Elevated blood glucose levels are responsible for the many health problems associated with diabetes.

There are two main types of diabetes:

- **Type 1 Diabetes**. Also known as insulin dependent diabetes mellitus (IDDM) or juvenile-onset diabetes. In this type of diabetes the pancreas produces little or no insulin. Treatment always involves injections of insulin along with diet modifications to control blood glucose levels. This form of diabetes accounts for about 5-10% of all cases.
- **Type 2 Diabetes.** Also known as non-insulin dependent diabetes mellitus (NIDDM) or adult onset diabetes. In this type of diabetes the pancreas produces insulin but it is not working effectively to control blood sugar. Treatment may involve diet modification and exercise alone, oral medications and/or insulin injections to control blood glucose levels. This form of diabetes accounts for 90-95% of all cases. The end result is the same as in type 1 diabetes a build up of glucose in the blood, due to the body's inability to use it as a major source of fuel and energy.

Risk factors for type 2 diabetes include obesity, heredity, age, race, sedentary life style, possibly a virus and stress.

Diabetes management requires periodic medical examination, frequent testing, medication, diet and exercise. Diabetes often leads to the development of other indications that require treatment.

QRS Therapy

QRS has been found to be effective in the management of diabetes and there is the advantage that QRS is suitable to be used with all other modalities. In particular:

- QRS therapy can stimulate persistent Langerhans-cells in the pancreas (endocrine part of the organ) and so raise the production of insulin. This insulin is then distributed to the cells and used more effectively.
- Enhanced production and better use of insulin can result in a lower requirement for medication. It is emphasised that any decision to reduce medication must be taken in consultation with a medical practitioner.
- Due to augmented microcirculation and better use of oxygen, QRS can prevent late complications of diabetes like blindness, non-healing of wounds, polyneuropathy, heart attacks and impotence.
- QRS' ability to prevent or reverse the development of complications will result in a reduced need

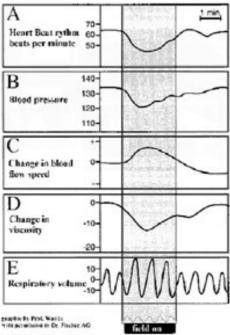
for medication. It is emphasised that any decision to reduce medication must be taken in consultation with a medical practitioner.

QRS works at the cellular level to "normalize" the function of cells. Every cell has its own frequency and the frequency package that is embodied in the QRS pulsed electromagnetic signal produces a resonance effect. This patented "key to the cells" is the double saw tooth wave. The transmembrane potential of the cell (the potential difference across the cell wall) is increased. This stimulates the

metabolic processes and increases the production of insulin. The cell membrane also becomes more porous, thereby facilitating the QRS' ion transport effect where both positive and negative ions are simultaneously transported out of the electrolytic fluids and into surrounding cells.

The combination of wave pattern, frequency package and amplitude produces significant effects on blood. The graphic shows what happens to the blood during the course of a QRS therapy.

- A. **The heart effect**: Heart beat slows (relaxes) frequency decreases
- B. The blood pressure effect: Blood pressure decreases
- C. Blood flow speed: The blood flows faster
- D. **Blood Viscosity:** The viscosity of the blood decreases (i.e. Blood thins)
- E. **Respiratory Volume:** Humans immediately breathe more deeply

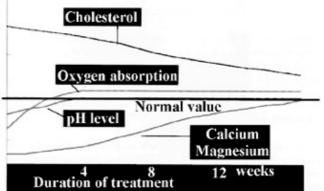


QRS therapy has been designed as a non-invasive, natural, gentle and long-term therapy. Whilst the effects can be felt quite quickly with some ailments, the aim is to produce positive results over the longer term without side effects.

The graphic below shows the effects of QRS therapy over a period of 12 weeks. Values move towards normal and the oxygen absorption increases to exceed normal values. This is very positive for diabetes sufferers. In additon, the calcium/magnesium concentration increases.

QRS Application

QRS therapy is applied two to three times per day for eight minutes each application. Use the Mat applicator because a whole of body treatment is required if every cell is to be influenced and the microcirculation improved. Settings depend on body mass, blood pressure/pulse (refer to Information Sheet Q2) and other ailments to be treated.



The Pillow Applicator may be applied twice a day in circumstances where there is a significant loss of circulation to an extremity (eg. Foot). The setting to be used is listed in the User's Manual.

Remember to drink a glass of water before and after therapy. This will help the ion transport and facilitate the elimination of toxins.

Very positive results can be expected within about two months. In some cases a shorter or longer time may be required but it will occur. It should be remembered that quite complex changes are required to create a positive outcome and diabetes sufferers often present with a range of complicating indications.