

SPECIAL REPORT Seawater

Laboratoires Quinton is a pharmaceutical laboratory whose exclusive line of business is the cold microfiltration of Seawater. As the direct heir of the French biologist and physiologist René Quinton, the laboratory is distinguished for scrupulously following the original method of its founder, which we have managed to update pursuant to the European Pharmacopoeia.

We are entirely at the disposal of healthcare professionals to answer any questions they might have about Marine Therapy and the use of the Quinton specialities.



Laboratoires Quinton



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● IN VITRO AND IN VIVO STUDY TO EVALUATE THE POTENTIAL EFFECT OF THE QUINTON SOLUTION ON THE IMMUNE SYSTEM

Dr. José Miguel Sempere. Medical specialist in Immunology and Professor of Biotechnology at Alicante University.

The studies carried out by Dr. José Miguel Sempere together with the Immunology Group of Alicante University highlight the significant immunomodulatory effect of the Quinton products, both in vitro and in vivo, the most relevant results of which are the following:

- The cells of the immune system need to be activated to be able to work properly; this activation is usually associated with cell proliferation and in some cases cell differentiation. The leucocytes cultivated in vitro with the Quinton Isotonic Solution maintain their morphology and viability throughout the culture. The Quinton Isotonic Solution itself seems to be able to activate the cells and produce an immune response, without adding any stimuli.
- Leucocytes cultivated in vitro with the Quinton Isotonic Solution are seen to increase the intracytoplasmic production of some of the most important cytokines associated with activating the cellular immune response.

Seawater keeps the immune system alert.

- ponse. The cellular immune response is especially effective in eliminating infectious agents with predominantly intracellular life cycles, such as viruses, some bacteria and parasites. It also plays a key role in eliminating many tumours and in the recognition of these.
- Unlike physiological saline solution,

Quinton Isotonic solution has an obvious protective/preserving effect on the red blood cells throughout the cell culture, which is demonstrated by the practical absence of hemoglobin released into the culture medium during the 120-144 hours.

- The Quinton Hypertonic solution, taken orally by healthy individuals can activate the immune system, according to the needs of the body at any given time.



● STUDY ON ALZHEIMER'S DISEASE AND SEAWATER

Dr. Manuel Antonio Ballester Herrera. He has a Degree in Medicine and Surgery from Alicante University. He is a specialist in Marine Therapy. He is the Head of the Sports' Institute at the Hospital USP San Jaime Torrevieja.



Doctor Manuel A. Ballester, together with the AFA Torrevieja Association (Alicante), embarked on the project in 2007 by studying and evaluating patients, who were divided up into two groups with similar characteristics, both in terms of the Global Deterioration Scale (GDS), and the associated diseases (MD, DBP, Cholesterol, etc.). Both groups were given 2 ampoules of

Seawater enhances the cellular nutrition of patients with Alzheimer's disease.

Isotonic Seawater a day for 16 months. They were monitored daily and they had bimonthly check-ups that were exactly the same as those carried out at the beginning of the study for the technical evaluation (psychological and cognitive assessments, occupational therapy, physiotherapy and assistance), in which the following results were obtained:

- In the group of patients who were less affected by the disease, their behaviour changes were better and their state of mind was more stable.
- In the groups of patients who were most affected by the disease, their agitation stabilised more after three months of treatment.
- Hardly any of the patients who took Isotonic seawater caught colds or the flu.

Even though it is not the cure for Alzheimer's disease, it should be pointed out that the Quinton method does not have any contraindications, or side effects and it does help to balance cellular nutrition.



STUDYING THE EFFECT OF TAKING QUINTON HYPERTONIC DAILY ON BLOOD PRESSURE

Dr. José Miguel Sempere. Medical specialist in Immunology and Professor of Biotechnology at Alicante University.

Laboratories Quinton, together with Alicante University organized a study aimed at determining the effect of Hypertonic Seawater that is taken daily on diastolic blood pressure (DBP) and/or systolic blood pressure (SBP).

The study was supervised by Dr. José Miguel Sempere, a medical specialist in Immunology and Professor of Biotechnology at Alicante University. The subsequent results of taking Hypertonic Seawater on a daily basis show that it does not produce any significant changes in the blood pressure values and it is very well tolerated.

METHOD

Six ampoules of Hypertonic Seawater (Quinton Hypertonic solution) were administered to a group of 21 volunteers (18 healthy controls and 3 with high

blood pressure) each day for one month, in the ratio of two ampoules every three hours. To make sure that the subjects took the correct dosage, they all had to follow the protocol established in the clinical trial, and they had to take the ampoules on site, in front of an observer. Throughout this period, the daily diastolic blood pressure (DBP) and systolic blood pressure (SBP) values taken for all the subjects involved in the clinical trial were recorded. On the 28th day, the subjects stopped taking Quinton Hypertonic but their blood pressure was taken and recorded for another week.

Their blood pressure was taken daily at 7.30 in the morning by the same person assigned to this task. The sphygmomanometer used in the clinical trial was a Corysan Boso Nova Ref. 503092.

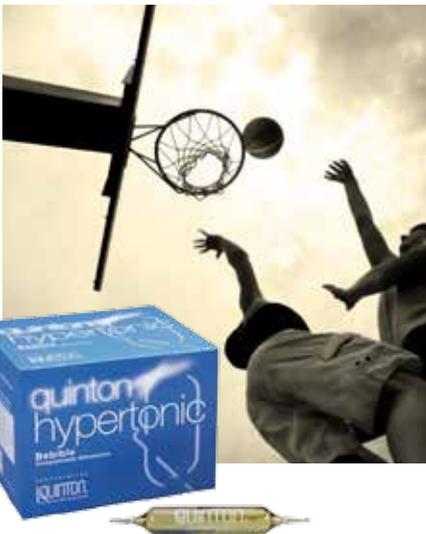


RESULTS OF THE STUDY

- No significant changes in the systolic blood pressure values were observed whilst the subjects from the clinical trial were being treated with Quinton Hypertonic.
- No significant changes in the diastolic blood pressure values were observed whilst the subjects from the clinical trial were being treated with Quinton Hypertonic.
- The product was tolerated very well throughout the clinical trial, nobody abandoned the study.
- The results of this clinical trial suggest that taking six ampoules of Quinton Hypertonic solution on a daily basis for one month does not produce any significant changes in the blood pressure values and it is very well tolerated.

PHYSIOLOGICAL CHANGES IN ATHLETES PRODUCED BY TAKING STERILIZED MICROFILTERED SEAWATER

Dr. Manuel Antonio Ballester Herrera. He has a Degree in Medicine and Surgery from Alicante University. He is a specialist in Marine Therapy. He is the Head of the Sports' Institute at the Hospital USP San Jaime Torrevieja.



oxygen consumption. The test lasted 60 minutes. Twenty minutes before the test a blood sample was taken from each of the players. Then the players took 20 ml of cold microfiltered Seawater or the same amount of placebo. The blood pa-

When the data obtained from the study is combined with the experience of the athletes the conclusion drawn is that when athletes take cold microfiltered it favours their recovery from fatigue.

rameters that were analysed in the samples taken were: pH, partial pressures of oxygen, partial pressure of carbon dioxide, sodium, potassium, calcium, bicarbonate, lactate and glucose. One minute before the test the players were weighed and then another blood sample of the same characteristics as the previous one was taken.

During the test two new blood samples were taken following exactly the same

protocol 30 and 59 minutes into the test. Moreover the players took 20 ml of the same liquid as before 40 minutes into the rectangular test.

The third test follows the same methodology as the second test with the only change being the liquid to take; if the previous week they had taken the cold microfiltered Seawater, now they had to take the placebo or vice versa.

The results highlighted the most significant variations, which are as follows: the sodium level increases by 2.8% compared to that of the placebo, the stability of the bicarbonate does not drop from 23.3 mgr/dl right through the study and the glucose levels tend to rise compared to that of the placebo, which dropped. The conclusion drawn from correlating the data of the study with the experience of the athletes is that when the players use cold microfiltered seawater it favours their recovery from fatigue thanks to the increase in sodium, which in turn helps prevent hypotonic hyponatremia; the bicarbonate helps prevent acidosis and it mobilizes stored energy making it more readily available to the body.

In the study, organised by the Chair of the Exercise Physiology Department at Universidad Católica San Antonio in Murcia, 11 semi-professional indoor football players were analysed. This involved doing a triangular maximum exertion test on a moving treadmill and a rectangular exertion test on a treadmill with a constant load that was equal to a speed of 70% of their maximum

PILOT STUDY TO EVALUATE THE CHANGES IN THE QUALITY OF LIFE IN MENOPAUSAL WOMEN AFTER ADMINISTERING QUINTON ISOTONIC SEAWATER

Dr. Isabel Fernández Domínguez. MD Gynecology. Naturopath. Kathy Von Korff.

The study, in which the Cervantes Scale was used, was carried out on 30 patients going through menopause, 18 of them completed the study. This instrument, approved by the Obstetrics and Gynecology Society (SEGO), has 31 items that can gauge the quality of life, the symptoms of menopause and other aspects that affect the well-being of

During menopause, a woman's body produces increasingly less hormones (estrogen and progesterone). The loss of these hormones produces changes in the body and this can lead to the aforesaid symptoms. Drinkable Isotonic Seawater (purified extract of seawater) is a composition that is qualitatively and proportionally identical to the

extracellular fluid and, it is therefore, one of the most natural and essential environments required to help the basic biological regulation system recover its primordial status, regulate the basic acid balance, nourish and make oxygen more available to cells and favour the proper recovery of the functions of the body and mind.

The results pinpoint significant improvements in symptoms such as joint pain and stiffness, depression or water retention.

women. All the patients took Quinton Isotonic twice a day, for three months and at the end of the study they had to answer the questions in this scale again. The results were very positive seeing as all the parameters analysed improved; especially those concerning pain or joint pain and stiffness, self-esteem, and those of depression and water retention.



Mean values and standard deviation of the global score and by dimensions of the Cervantes scale before and after the procedure, as well as the size of the effect observed.

Dimension	Mean scores at baseline (SD)	Final mean value(SD)	Student's t-test	Size effect (¥)
Global score	64.5 (30.6)	48.2 (25.6)	0.026	0.53
Menopause and Health	31.9 (11.7)	23.0 (9.7)	0.004	0.76
Psychical domain	12.9 (11.3)	9.0 (8.8)	0.046	0.35
Sexuality domain	11.7 (7.3)	9.9 (6.1)	0.084	0.24
Partner relationship	6.3 (5.3)	5.6 (4.9)	0.566	0.12
Vasomotor Symptoms	5.3 (4.2)	3.3 (2.9)	0.067	0.50
Health	11.3 (5.1)	7.9 (4.3)	0.001	0.68
Aging	15.2 (7.6)	11.9 (7.2)	0.008	0.44

(*) Student's t-test for paired data.

(¥) Cohen's effect size: 0.2 is poor, 0.5 is moderate, and ≥ 0.8 is significant.

PILOT STUDY CARRIED OUT AT THE RESPIRATORY SPA

Dr. Miquel Pros Casas. He has a Degree in Medicine and Surgery, and he is a member of the Barcelona Medical Association.

The study was carried out to evaluate the efficacy of the natural treatment for respiratory and hearing disorders using Seawater inhalation spa therapy in children aged between 0 and 6 years old. The group under analysis was composed of 28 children (17 children aged 0 to 2 years old and 11 children aged 3 to 6 years old) suffering from respiratory disorders such as: repeated respiratory and hearing disorders (bronchitis, bronchiolitis, otitis, rhinopharyngitis,

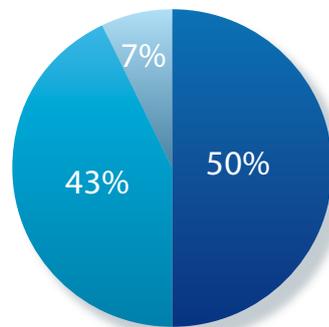
During the pilot study the boys and girls were given different types of inhalation therapy for 21 weeks at the Respiratory Spa, and always with the natural seawater as part of the therapy. After four and a half months of treatment at the Respiratory Spa, 93% of the patients got better, that is to say, the health of 9.3 out of every 10 children improved compared to their initial state of health.



The respiratory disorders of 9 out of 10 children improved after being treated with Seawater compared to their initial condition.

conjunctivitis, tonsillitis, etc.), lots of mucus, loss of hearing, coughing fits, breathing through the mouth, snoring at night, changes in the gastrointestinal functions (diarrhea) or vomiting mucus.

RESULTS OBTAINED



- A. They progress very well.
- B. Favourable progress.
- C. No improvement.

USING THE PROTOCOL THAT INCLUDES QUINTON ISOTONIC NASAL SPRAY, TO PREVENT CATCHING INFLUENZA A VIRUS

Dr. Francisco Pedro García. has a Degree in Surgery and Medicine from Murcia University, and he is the Director of the Advanced Pediatrics Service and the Head of the Pediatric Allergology Department from the USP Hospital San Jaime, Torrevieja (Alicante).

The objective of the study was to corroborate the efficacy of a protocol combining recommendations and non-iatrogenic medication to decrease

Using the Quinton Isotonic Nasal Spray products is useful and effective in the prophylaxis of influenza A as well as treating it.

anxiety caused by the fear of Influenza A, prevent it, and reduce the amount of medication consumed.

An observational study was carried out from the 01/09/09 to the 15/04/10 on 1000 patients who had outpatient appointments at the Hospital USP for any type of condition or disorder up

until the 31/12/09. They were all given recommendations in writing on the "Prevention of Influenza A Protocol", in which the Daily Nasal Hygiene Spray was prescribed.

The results showed:

- The anxiety and the fears about Influenza A had practically disappeared.

- The amount of medicine consumed dropped.
- No adverse effects were reported.
- There was a subjective improvement in the quality of life.
- There was a low incidence of Influenza A.



TESTIMONIALS OF DOCTORS AND HEALTHCARE PROFESSIONALS



A month ago I had a visit from a patient, aged 45, who complained of a sharp pain in the abdominal wall. After examining her I noticed an abscess the size of a walnut that was surrounded by a big patch of infectious cellulite. The area was very red and hot, she said it was very painful when I rubbed it slightly. I sent her to the Emergency Services immediately. After doing an ultrasound scan the surgeon decided to operate on the patient, drain the abscess and let the surgical wound heal by second intention.

I told her to come back to the surgery so that I could make sure it was healing properly. The surgical wound was 4 cm long, 3 cm wide and 2 cm deep. It was covered with a gauze dressing soaked in topical antiseptic. The surgeon had prescribed the daily cleaning and dressing of the wound for a month and the patient was told to

come back once a week to evaluate the progress.

I told her that there was another way to cure the wound. Instead of using topical antiseptic, the wound could be cured with just seawater. I explained the advantages of using this type of treatment and I told her that it would heal within two weeks. She agreed to give it a try and we started the daily treatment with Quinton Dermo Action Spray.

Every day she sprayed the wound and the surrounding area that was swollen to clean away the discharge. Then she filled the wound with seawater for a few minutes. After that she dried the area and covered it with a dressing. It improved from day one without any type of complication or infection.

Dr. Remedios Más



The Quinton solution is an excellent therapeutic resource that we can use nowadays. The prevailing trend towards specialised medicine has favoured the search for specific pharmacological therapeutic remedies to try and solve seemingly specific problems.

In my clinical experience, I have been able to demonstrate that unspecific therapy that treats the individual's own terrain, that is to say, the type of treatment that focuses more on the causes of the problem rather than the signs and the symptoms, solves the majority of the specific disorders. It seemed logical to think that, if a therapeutic remedy has a positive effect on the interstitial fluid (tissue fluid or the Pischinger system), which is

finally where all the cellular biochemical reactions take place; it will have a positive impact of the overall health of the individual.

From another viewpoint, given that the plasma is merely "a small internal ocean", the seawater treatment is going to help prevent and treat any disorder that affects this plasma.

The medicine of the future is obviously going to promote prevention more and intervention less. Drugs will be used in the right measure. Our health systems, public and private, can only be efficient and cost-effective if they promote the self-management of our patients' health. This all requires patience and the desire to incorporate the best of what is known about past and present medicine. Reviving seawater therapy is, therefore, going back to simple, effective, efficient and natural methods.

Dr. Miquel Samarra Stehle



At our Biological Medical Centre we recommend inhaling homotoxicological medication (2nd generation homeopathy) for patients who have bronchopulmonary problems and children with asthma (whether it is caused by allergies or not) and those

who are prone to bronchospasms, during an attack or in the acute stage. We use Quinton solution that is inhaled as the basic treatment for patients who are susceptible to this or together with homeopathic medication in the acute stage or during an asthma attack.

In children, as a basic treatment, in allergies, as prevention in spring-winter, we recommend spraying ½ an ampoule of Quinton Hypertonic solution using a spray and

a nozzle three days a week at home and the rest of the ampoule should be administered orally.

In patients who have asthma attacks, the drugs that are administered to regulate bronchospasms, modulate the inflammatory response, stimulate the antiviral defence system and regenerate mucus membranes, etc. are prepared together with Quinton solution. This seems to act like an adjuvant, perhaps this is due to the composition of the marine plasma that is similar to the Extracellular Matrix, which has to be regulated for any pathological process. Since we started using the Quinton Solution as a basic treatment, we have noticed that the homeopathic bronchodilators are used less and the number of bronchospasm attacks has decreased.

Dr. Inma González



My first experience with Quinton was quite a while ago, when my mother had two leg ulcers over the tibia that got worse over three months. She had been going to her local health centre to try and heal them. When she came to my house I cleaned

and dressed them using a different method. It was going quite well but they just wouldn't heal up completely. I used to clean them with saline solution and then one day I remembered that I had a few samples of Quinton, so I tried it instead of the saline solution. To my surprise the next day, the ulcers had practically closed up, the hyperaemia and the itching had disappeared, it was great. From this moment onwards I only used Quinton and in just a few days the ulcers had completely cleared up.

The second case also concerns venous ulcers in the two lower limbs that affected an elderly lady, who has mobility problems, for more than a year. A healthcare worker had been curing the ulcers every day at home, but the doctor had told her that they would never close up. I suggested using Quinton water two hours before the new dressing was put on. She did this herself without saying anything to the healthcare worker. In a few days they started to get better and when the doctor paid her a visit he just couldn't understand what had happened as they had practically closed up.

The third case concerns a girl with a lesion on her back caused by having a large plaster on it. It was scabby, swollen, with watery blisters; it was itchy, painful and stinging. She had gone to her doctor but it hadn't improved.

I put an ampoule of Quinton Isotonic directly on it with gauze. The next day the whole lesion had practically disappeared, we put another ampoule on and it healed up completely.

Dr. Carmen Ruipérez Asensio



We have helped many people by giving them Quinton Seawater. It has had positive results on their body. The cases that I have had to treat include pregnant women, who I recommend Quinton Hypertonic to when they are tired and as a mineral supply for the body. If they have

nausea or sickness in the first few months I recommend Quinton Isotonic. We have had babies and children with colic or diarrhea. I quickly give them ampoules of Quinton Isotonic and in a few days they have improved considerably. When children have lots of mucus and phlegm I give them ampoules of Quinton Isotonic and the Nasal Spray. At the moment I have a 45 year old woman at the nutritional

consultations who is losing weight and she has been diagnosed with severe anemia with very low levels of ferritin, so we are raising her iron and ferritin levels with the help of Quinton Hypertonic and food that is rich in iron. It is really good in cases of gastroenteritis or stomach problems, gas, colic, diarrhea etc... In fibromyalgia it is used as an adjuvant for the treatment to restore the blood plasma and the motor skills. In menopause we use it to counteract any mineral deficiencies that women go through at this stage of their life due to hormone changes. In short, we use it all the time because over the years it has proved to be a reliable and safe product that we can recommend, and we have a high number of patients who now know about it thanks to its properties and our recommendations.

Arantxa Baeza Ruzafa. Nutritionist



He is part of the Medical Staff of the Elche CF second division Spanish football team. The players have been under considerable physical strain in the first half. You have to help them get their energy back. Water, isotonic drinks... and

an ampoule of Quinton Hypertonic. Initially they would pull a face and look at us strangely, even more so when they actually drank it. Now they ask us for it. I would like to highlight how well it worked for the left-back player who had gastroenteritis over the weekend. I gave him two ampoules of Quinton mixed with a bit of an Isotonic drink. The technical team didn't think he would last the second half. I was even more doubtful. The team went back on the pitch. All eyes on the player, who did manage to finish the game, and he played well too. Back on the

coach going home, I thought of the players who had been reluctant to use this magnificent sports supplement at the beginning, who now ask for it as if their whole sports career depended on it. I remember how, in the pre-season, one of the most charismatic players, who had just joined the team, said to me: "Doctor, Quinton is really good, isn't it? It really helps us recover!" And he smiled, delighted with the three goals, which were partly thanks to Quinton. The next week begins and I am at the surgery and one of my patients arrives, complaining about catarrh. He has a blocked nose, and he has also got a dry and irritated throat. I tell him to use Quinton Nasal Hygiene to rinse out his nose and gargle with Quinton Isotonic and then drink it. He looks at me strangely. But three days later, he comes back looking much happier. Since then he has become another Quinton fan. He uses it when he does exercise, the other members of his family use it when they have gastroenteritis, and he recommends it to his friends who also do sport.

Dr. David Díez



In my personal experience the Quinton Seawater-based products have proved to be extremely effective for the seasonal allergic rhinitis that I have suffered from since I was very young. At least in the last two years,

I have treated it exclusively with Hypertonic Nasal Solution and with Isotonic Ocular Solution, seeing as the bouts of allergic rhinitis start off with the spores going through the tear ducts. Thanks to this exclusive treatment, I haven't had to use any other type of therapy for it.

Dr. Verdú

Other studies available

Anti-obesity and anti-diabetic effects of deep sea water on nice ob/ob. Hwang HS, Kim HA, Lee SH, Yun JW. Department of Biotechnology, Daegu University, Kyungsan, Kyungbuk, South Korea.

Intake of dissolved organic matter from deep seawater inhibits atherosclerosis progression. Geethalakshmi Radhakrishnan and col. Department of Surgery II, Faculty of Medicine, Kochi University. Sumiko Techno Research, Co. Ltd., Ehime. Ocean Research Institute, The University of Tokyo, Japan.

Estudio para establecer las posibles actividades inmunomoduladoras del "agua isotónica Quinton", mediante ensayos ex vivo e in vitro con esplenocitos murinos, Francisco Romero Montero, María Jiménez Valera and Alfonso Ruiz-Bravo López from the Microbiology Department, Faculty of Pharmacy, University of Granada and Laboratorios Quinton, 2006.

Determination of vitamin B1 in seawater and microalgal fermentation media by high-performance liquid chromatography with fluorescence detection, Hong-zhi He, Hua-Bin Li & Feng Chen, Chinese Academy of Sciences, South China Sea Institute of Oceanology, Guangzhou, P.R. China, Analytical and Bio-analytical Chemistry, 2005- September.

Drinking deep-sea water restores mineral imbalance in atopic eczema/dermatitis syndrome. Y Hataguchi, H Tai H Nakajima & H. Kimata. Department of Allergy, Satou Hospital, Japan. European Journal of Clinical Nutrition. 2005- June-29.

Heat induced activation of reducing properties of sea water. Cherinov Av & col., Institute of Theoretical and Experimental Biophysics, Russian Academy of Sciences, Pushchino, Russia. Abstract in English taken from website "Medscape" from the journal article "Biofizika". 2003-Nov-Dec.

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