

The theoretical protocol presented in "High pH Cancer Therapy With Cesium," by A. Keith Brewer, Ph.D., is his last protocol. He wrote this protocol after years of animal research with cesium and rubidium compounds and after receiving reports on the clinical use of cesium chloride by Hans A. Nieper, MD and H. E. Sartori, MD and others. Dr. Brewer died in 1986. In recent years, additions and omissions have been made to Dr. Brewer's protocol by several parties. These protocols need to be evaluated by considering the research or clinical experience which supports them, if any.

When Dr. Brewer had his high pH theory of cancer tested out in an animal model in the late 1970's, the cesium sources used were cesium chloride and cesium carbonate. In the animal research model, the application of cesium carbonate gave superior results, possibly because it is more alkaline.

In Dr. Brewer's original protocol, he wrote that under a physician's supervision, a patient who is taking 3 to 6 grams of cesium chloride might require as much as 2 to 4 grams of potassium chloride to maintain correct blood levels of potassium. Either excessively high or low potassium levels are dangerous and for this reason most physicians monitoring patients on cesium programs are utilizing weekly blood testing to monitor potassium levels. (See "Special Monitoring" on page 3.)

**PLEASE NOTE:** The amounts of cesium chloride and potassium chloride given by Dr. Brewer in the above mentioned protocol are applicable only for the potency and absorption characteristics of the two compounds specified. There are two important considerations: Different compounds furnish different amounts of potassium. Some compounds are more efficiently absorbed by the body than others.

Dr. Brewer stated in the booklet, "High pH Cancer Therapy With Cesium": "Small doses of Cesium Chloride such as 0.5 grams per day should not be given. These small doses will be sufficient to raise the pH of the cancer cells only into the high mitosis range, and hence may speed up the rate of cancer growth. It is essential that sufficient CsCl must be given to raise the pH into the 7.8 and above range."

#### **CESIUM NOW AVAILABLE IN A LIQUID IONIC FORM:**

Recently, new liquid ionic forms of cesium and potassium have become available. The businesses marketing these products must understand the absorption and utilization characteristics of their cesium and potassium products and inform customers about amounts they should take of each mineral product to maintain the body's potassium at an optimum level.

People who choose to use this liquid form of cesium may also find it beneficial to use the potassium in the liquid form, to replace the potassium that is displaced by cesium consumption.

We have received one report of an individual who was taking the liquid (ionic) cesium who tried using a potassium tablet to offset the potassium displacement caused by the cesium. He was only able to stabilize his potassium levels by using the liquid (ionic) potassium with the liquid (ionic) cesium. Some physicians have reported that to overcome the potassium displacement caused by the liquid (ionic) cesium, it is probably best not to mix the liquid (ionized) products with the powdered or tablet forms of potassium due to the variations in absorption and utilization.

Information about cesium written by A. Keith Brewer, Ph.D., contained in the booklet *High pH Cancer Therapy With Cesium*, is available on this website.

The protocol that Dr. Brewer suggested in his writings included several other vitamins and minerals, which he believed increased the effectiveness of the cesium. Included are significant amounts of vitamin C, vitamin A, zinc, selenium and potassium.

## SOME POSSIBLE CESIUM SIDE EFFECTS AND CONTRAINDICATIONS:

1. Stomach upset and nausea are quite common side effects from taking cesium. Eating a full meal, not just a snack, and taking the cesium at the end of the meal, may help to alleviate these problems. Emptying the cesium capsule into a glass of water and taking it this way at the end of the meal may also help alleviate these symptoms. Dr. Nieper mentioned that taking the cesium with the sugar sorbitol and mixing them in a water solution might help in some cases. Eating half a banana before a meal has also been reported to help some people tolerate the cesium chloride better. Ginger capsules or ginger root would possibly combat nausea.

One of the reasons that cesium chloride may cause stomach upset is actually from the increased amount of chloride, not necessarily the cesium. The chloride tends to increase the acidity in the stomach. People who have had a history of ulcers may not be able to handle the increased acidity from the chloride.

2. After taking cesium for several weeks some people experience some numbness in their lips or on the tip of their nose. This can occur even at the dosage of three grams a day. People who are taking larger amounts under a doctor's supervision may experience a greater degree of numbness. Doctors need to monitor this very carefully. Even after discontinuing the cesium it may take several weeks for this numb sensation to disappear.

3. People with heart conditions should not take cesium as it displaces potassium as well as other significant minerals such as magnesium and could lead to heart palpitations or a heart attack.

4. It is essential that the mineral displacement by cesium be adjusted for by increased consumption of minerals, particularly potassium and magnesium. POTASSIUM rich foods such as bananas and potatoes can be consumed as well as potassium supplements taken. Some doctors prescribe a high potency TIME-RELEASE POTASSIUM supplement for their patients on the cesium protocol. The mineral magnesium is needed in significant amounts. It is involved in over 300 enzymatic reactions in the body. Doctors often suggest that people take up to 800 mg of a magnesium supplement while on the cesium protocol. A brief review of some possible signs of specific mineral deficiencies is included.

5. People with kidney disease would not be able to handle the Robert Barefoot protocol that uses high amounts of vitamin D3 and calcium.

## ROBERT BAREFOOT'S CESIUM PROTOCOL:

Along with the cesium and other vitamins and minerals that Dr. Brewer suggested, Robert Barefoot suggests that two other special nutrients be added to the protocol.

### 1. Vitamin D:

He has added high amounts of vitamin D3 to be taken for 30 to 50 days. The vitamin D3 is in 5000 IU capsules and he suggests 6 capsules a day, or 30,000 IU's per day for a month or so. Vitamin D3 has a special function in helping to cause cell differentiation, or the maturation of cells. Cancer cells tend to be immature cells that multiply and divide faster than normal. Vitamin D3 helps them to mature. High amounts of vitamin D3 are contraindicated in people with kidney disease because it causes too much calcium to be absorbed into the bloodstream. Even people

without kidney disease need to have liver and kidney function tests taken to make sure that hypercalcemia does not occur and cause kidney damage.

## 2. Coral Calcium:

This is a highly absorbable, ionized form of calcium that comes from the coral reefs around Japan. The assimilation rate of this calcium is said to be 98%, whereas other forms of calcium may only be assimilated up to 60% or even less. Calcium is also very alkalizing and this probably helps the body to reach an alkaline pH with the cesium more quickly.

Another ultra-absorbable calcium is AdvaCal™, a calcium complex developed by the Japanese that contains calcium hydroxide, calcium oxide and some seaplant amino acids. Besides providing a highly absorbable form of calcium, this product has been shown to build natural bone density, not just prevent loss as with regular calcium supplements.

### SPECIAL MONITORING:

#### 1. Electrolyte Monitoring:

Since high oral intake of cesium tends to drive the electrolytes out of the cells by displacing them, it is prudent to obtain ongoing mineral analysis. Increased oral intake of minerals may maintain the body in a positive mineral status, but only objective testing can reveal that for sure. Nausea and/or diarrhea can also cause electrolyte loss. Electrolyte products available from your pharmacy or the Gatorade beverage may be somewhat helpful.

#### 2. Intracellular Mineral Testing:

Blood tests of potassium and magnesium levels do not accurately reflect the intracellular levels of these important minerals. A unique test called the *ExaTest* is a non-invasive test that measures the levels of several minerals (potassium, magnesium, calcium, phosphorus, chloride and sodium) inside the cells, thus providing an accurate assessment of actual tissue stores of these minerals. The test results are obtained from a quick scraping of cells from under one's tongue, which are affixed to a slide that is sent to *IntraCellular Diagnostics, Inc.* for analysis. (www.exatest.com phone: **1-800-874-4804**)

#### 3. Blood Calcium Monitoring for Hypercalcemia:

The high amounts of vitamin D3 taken in Robert Barefoot's protocol can result in too much calcium being absorbed into the bloodstream. If this occurs, vitamin D3 supplementation needs to be discontinued immediately.

#### 4. Liver and Kidney Functions:

It is prudent to monitor these functions during the protocol to assess the reaction of the body to the high dose D3, calcium and cesium intake.

#### 5. Uric Acid Monitoring:

Dr. Brewer suggested that the levels of uric acid would become higher as the tumor was being broken down. Physicians may want to measure uric acid levels at the onset of the treatment and then test uric acid levels frequently if the patient is taking 6 or more grams of cesium. Tumor size and dosage of cesium are believed to have an influence on how soon and how much uric acid levels will increase. A state of wasting may also affect uric acid levels.

### SPECIAL NOTES:

#### 1. Cesium Half-life:

The half-life of natural (non-radioactive) cesium in the human body, based on radioisotope studies, is anywhere from 65 to 84 days, so even after cesium is discontinued, it is still assumed to be acting in the body for a considerable period of time.

#### 2. Mineral Supplementation:

The oral intake of extra minerals needs to be continued even after the cesium is discontinued since it is still actively displacing minerals in the body for a considerable period of time.

### 3. Cesium Chloride versus Cesium Carbonate:

Some of the initial animal research was carried out with both the chloride and carbonate forms of cesium. One of the experiments with mice indicated that cesium carbonate was superior in action to cesium chloride. In fact, in further experiments carried out at the University of Wisconsin, Platteville, only the cesium carbonate form was used. The carbonate form is more alkaline and that may be one of the reasons that it was more effective.

4. Vitamin A Source: The Vitamin A source should not be from fish oil.

### 5. Networking:

Doctors and patients are encouraged to network and report on their results in using a cesium protocol.

### 6. Be Vigilant:

Dr. Nieper said that once our bodies have allowed cancer to manifest itself we should never think we are free of it. We must always be vigilant and do whatever we can to support or strengthen our body's defense capabilities.

### POSSIBLE MINERAL DEFICIENCY SYMPTOMS:

The following list is not by any means complete. It just identifies some of the more common and most known symptoms of deficiency of these minerals.

#### 1. Potassium:

muscle fatigue  
irregular heartbeat  
apathy  
muscle weakness and/or muscle cramps

#### 2. Magnesium:

cardiac dysrhythmia  
high blood pressure  
muscle spasms  
eye twitches

### SPECIAL PRODUCT SOURCES:

Many supplements, including cesium chloride, vitamin D3, vitamin C, vitamin A, selenium, zinc, potassium and coral calcium are available from Ministry Minerals at 1-888-818-5580 (toll free in Canada, Mexico and USA), or (406)777-0413 (406)777-0414; Fax (406)777-0419

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