



## IC AND ALOE VERA

After ten years of needing to pee every 30 minutes, 24 hours a day, you forget what it feels like to sleep through the night. When you rate your pain level as a *six* or an *eight* or, in tears, as a *ten*, it is difficult to remember a life free of pain. When you beg your doctor to help you and think you can't stand it one more moment, you begin to lose hope that anything will give you relief.

Don't give up. There is hope. Concentrated aloe vera (with the anthraquinones removed) is a healthy alternative that clinical trials have shown helps 87.5% of IC/PBS sufferers. We all know that aloe vera rubbed on a sunburn reduces redness (inflammation), eases pain, and speeds healing. It works the same way inside the body as it does on the skin. Since IC/PBS has inflammatory, pain, and immune components, it makes sense that concentrated aloe vera could help the symptoms of IC/PBS.

Aloe vera is a succulent (not a cactus) with more than 200 individual elements, most of which are nutritional. The active ingredient in aloe is a glycoaminoglycan (GAG), a long-chain polysaccharide. The lining of the bladder is a GAG, so it is possible that the aloe vera is forming a band-aid over the bladder lining.

There are several factors that affect the ability of an aloe vera product to help IC/PBS sufferers.

1. The *barbardensis* Miller species of aloe vera contains the highest levels of active ingredients.
2. The plants must be grown organically or you will get concentrated pesticides and chemicals in the finished product.
3. The leaves must be processed within six hours of being harvested or the enzymes in the gel will begin to break down the polysaccharides.



4. The whole leaf must be used and not just the inner gel. The majority of the GAG is found near the rind, so much of it is lost if a manufacturer filets the leaf and uses just the inner gel. The harsh chemicals in the aloe plant that cause diarrhea (anthraquinones) are concentrated near the rind as well, so they must be filtered out, along with the inert insoluble fiber.

5. The refined liquid must be freeze dried immediately. IC/PBS sufferers should never take liquid aloe vera products, since they are usually preserved with citric acid or pasteurized, which caramelizes the active ingredient.

4. Read product labels carefully. There should be no fillers or preservatives in the powder. The less a product costs, the more likely it is not to contain pure aloe vera powder. You should look for 600 mg of concentrated aloe vera powder in each capsule, 200 mg of which should be the active ingredient (GAG).



In clinical trials, participants took six super-concentrated, freeze-dried aloe vera capsules per day, three in the morning and three in the evening. All of the study patients with positive results responded within the first 30 days, but retrospective studies of hundreds of IC sufferers showed a small population who needed more than six capsules per day and as long as three months to see a significant change in symptoms. Don't expect instant results.

Concentrated aloe vera is not a cure, but research has shown that the majority of IC/PBS sufferers will see some improvement in their symptoms. Nearly half of participants got their lives back. Unless you are allergic to aloe vera, there are no negative side effects, so it's worth a trial. In fact, concentrated aloe vera is a dense source of nutrients itself and has been proven to improve the absorption of nutrients from other foods, so it provides your body with the building blocks it needs to heal itself.

