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## **HYPERTONIC SALINE SOLUTION**

A number of otolaryngologists in the United States are reporting beneficial effects using hypertonic nasal saline. The use is not widespread but is becoming more so as otolaryngologists and patients re-learn this age-old technique. Over-the-counter options are available also, but you can prepare this solution at home.

**A** When you irrigate, the hypertonic saline (salt water) acts as a solvent and washes the mucous crusts and other debris from your nose.

**B** The higher salt concentration pulls fluid out of the swollen membranes and shrinks them. This decongests and improves the airflow into your nose. The sinus passages begin to open and drain.

**C** Studies have also shown that high concentration salt water improves cell function (ciliary beat pattern.)

## **THE RECIPE**

- Choose a one-quart glass jar that is thoroughly cleansed.
- Fill with distilled or bottled water; it should not contain chlorine or other chemicals in high concentrations.
- Add 2 to 3 heaping teaspoons of pickling/canning salt (coarse/kosher salt)--NOT table salt as it contains a large number of additives.
- Add 1 teaspoon Arm & Hammer Baking Soda (pure carbonate).

Mix ingredients together and store at room temperature. Discard after one week. If you find this solution too strong you may decrease the amount of salt to 1-1 ½ teaspoons. With children, it is often best to start with a milder solution and advance slowly.

## **THE INSTRUCTIONS**

You should plan to irrigate your nose with hypertonic saline 2-3 times per day. You may use a bulb/ear syringe, a large medical syringe (30 cc), or Water Pik with irrigation tip. Always pour the amount you plan to use into a clean bowl. **DO NOT** put your used syringe back into the quart because it contaminates your stock solution. Many people prefer to warm the solution slightly in a microwave oven - but be sure that the solution is **NOT HOT**. Stand over the sink (some people do this in the shower) and squirt the solution into each side of your nose, aiming the stream toward the back of your head, **NOT** the top of your head, this allows you to spit the salt water out of your mouth. It will not harm you if you swallow a little.

This technique is useful in adults **AND** children. For younger children, you may want to place the solution into a pump spray container such as an "Ocean Spray" or "nasal steroid" container and squirt several times into each side of the nose. **DO NOT FORCE** your child to lie down; it is much easier to do in a sitting or standing position.

Most people experience a little burning sensation the first few times they use hypertonic saline solution, but this usually goes away in a few days.

If you have been told to use a nasal steroid such as Flonase, Nasonex, or Nasacort, you should always use hypertonic saline solution first, then use your nasal steroid product. The nasal steroid is much more effective when sprayed onto clean nasal membranes and the steroid medicine will reach deeper into the nose. If you have any questions, comments or problems regarding nasal irrigation, please don't hesitate to contact us.