



## Homemade Washing Soda Crystals from Sodium Carbonate

### Before you begin:

- This process is similar to the one used for making rock candy. Do not rush the process!
- You will produce better crystals if you make small batches. We recommend one cup of water. (*1 or 2 large crystals, crushed, will draw much more fluid than a larger quantity of small crystals. Starting with more than the recommended amount of water will yield crystals that are too small to draw fluid effectively.*) Is this another example of "Less Is Best"?
- *For a steady supply of crystals to give to clients, begin making a new batch every day or two.* On any one day, your fridge will have several containers at various stages of development. Once harvested, the crystals can be stored indefinitely at room temperature in closed jars or plastic zip-lock bags.
- The raw material you need to obtain is **anhydrous sodium carbonate** (not bicarbonate). In the U.S. this is available only as a powder, not as crystals. It can usually be obtained inexpensively from water treatment and swimming pool servicing companies.

### Procedure:

1. Place **1 cup of warm water** into a non-reactive heat-resistant container. (*use 1-liter glass beakers, which are available online at reasonable cost. You can also use a very large heat-resistant glass or mug or a porcelain container. Stainless steel is okay, but do not use aluminum.*)
2. Keep the water warm by heating it on low or medium heat. **Do not let it come to a boil.**
3. Gradually add **sodium carbonate powder** into the warm water, stirring *continuously* until no more powder will dissolve. (*the average amount that will dissolve at approximately 1 cup, but the exact amount will vary with altitude, weather, and other factors that may change each time.*)
4. Allow the beaker (or other container) to cool slightly. Place the open container in the refrigerator. You may cover it *loosely* with saran wrap if you wish, but the purpose is to allow the crystals to dry.
5. Crystals will form within 8 – 10 hours or overnight. Pour off the water that collects at the bottom of the container.
6. Let the crystals dehydrate *uncovered* (or loosely covered) for another day. The crystals will turn white and hard; they will be more angular than the Australian washing soda crystals you may have seen.
7. Periodically test the crystals by chipping them out of the container with a metal butter knife or similar tool. If the crystals are too mushy, wait another day. (*This is the trickiest part of the process. If you pry the large crystals out when they are too wet, they will be mushy. If you let them harden for a week, you may not be able to pry them out! If some of the crystals are too wet, it is all right to put them in another clean container and leave them uncovered in the fridge until they are dry.*)
8. Store the "harvested" crystals at room temperature in airtight plastic bags in order to keep them from absorbing moisture from the air. Jewelers' zip-lock bags hold enough for one application to the knee.

### Using the Crystals:

- Use the crystals for the appropriate conditions, as recommended in the Bowtech™ manual.
- Advise your clients of the slight chance of blistering as fluid is drawn out through the skin. Should blistering occur, they can prevent recurrence by applying petroleum jelly to the skin beforehand.
- Reuse the hardened soda packs by putting them into the bath or washing machine. Or use in soaks.