

Water: Interview with Greg Barsten, Part II

G. Douglas Andersen, DC, DACBSP, CCN

Editor's note: Part I of Dr. Andersen's interview with Greg Barsten, DC, CCSP, CCN, was published in the June 17, 1996 issue of "DC."

Dr. G. Douglas Andersen: Tell us about different types of water filters.

Dr. Greg Barsten: Well, there's granulated carbon and there is carbon block. The carbon block was the originator. They were inexpensive to produce and sold well. Eventually granulated carbon evolved from the carbon block. The difference is that the surface area is much greater in a granulated carbon filter, thus making it much more efficient. Carbon is effective in reducing chlorine, pesticides, and odors, and it also improves taste.

Dr. Andersen: Do filters fill up?

Dr. Barsten: Yes. Any reputable manufacturer will provide a life expectancy of the filter along with directions on when to change filters. It is up to the consumer to change filters as directed. If filters are left unchanged, you may notice a reduction in water pressure or taste changes in your water.

Dr. Andersen: What else does carbon filter out?

Dr. Barsten: Carbon is used mainly for odor and for taste.

Dr. Andersen: Please explain reverse osmosis.

Dr. Barsten: Basically it runs water through a thin film membrane. The thin film membrane separates large and small molecules and it has to do that under pressure. So, what you're doing is eliminating a lot of the contaminants that are larger size molecules. It removes chlorine, but it is somewhat nonselective in that it also rejects calcium, magnesium, and a lot of the helpful elements, along with some of the larger molecules.

Dr. Andersen: Correct me if I'm wrong, but you give me the impression that water that undergoes reverse osmosis is almost distilled.

Dr. Barsten: Exactly. It was originally used in the industry for photography for processing film and printing and so forth, because it was basically devoid of minerals. It was developed about 25 years ago, so it is relatively a newcomer on the block.

Dr. Andersen: We have ample evidence that cultures who consume "hard water" rich in minerals have lower rates of many diseases.

Dr. Barsten: Right.

Dr. Andersen: Since reverse osmosis removes beneficial minerals, should it be used as a water filtration system?

Dr. Barsten: Yes, although it should not be used alone but in concert with carbon filtration. By

combining reverse osmosis with carbon, you will remove pesticides, chlorine, and heavy metals and improve taste and odor. Any type of filtration is better than no filtration, but there is extensive evidence that multiple filtration types are what doctors should recommend to their patients.

The benefits of using water filtration for the removal of toxins far outweigh any loss of beneficial minerals which, as you know, can be easily compensated for by consuming a diet rich in fruits, vegetables, and whole grains.

Dr. Andersen: Are there any other types of filtration besides carbon and reverse osmosis?

Dr. Barsten: Yes, there's distilled. In addition to being wasteful, like reverse osmosis, it is devoid of all minerals.

Dr. Andersen: How is reverse osmosis is wasteful?

Dr. Barsten: Usually for every one gallon of water filtrate that you get out that you can use, there are three to five gallons that are wasted. So, it is a very inefficient way of providing water, at least from an ecological and environmental standpoint. Distillation does much the same thing, it's wasteful along similar lines, and it is also very expensive. Furthermore, distillers miss many organic solvents and pesticides if not combined with carbon filtration.

Dr. Andersen: What type of system can people use that will not waste water but will remove all harmful chemicals and leave minerals in? What should we recommend for our patients and ourselves? Move to the Himalayas?

Dr. Barsten: Well, I think first of all any kind of a filtered product is going to be better than nothing if it is coming from municipal sources. When you start getting up into areas where there is no population and fewer environmental contaminants, then you are just taking your chances with organic contaminants.

Dr. Andersen: Are there any other types of filtration systems our reader should be aware of?

Dr. Barsten: Yes, there are some water treatment systems that do offer many advantages. There is one right now that uses a three-stage filtration process with two different types of carbon along with KDF. KDF is a zinc copper media which combines with chlorine to form zinc chloride, a nutrient. Lead is attracted to the media as well and potassium is liberated in its place. It is an excellent water treatment system.

Dr. Andersen: It is clear from this interview that you feel tap water is unhealthy. If you are in a restaurant and have a choice of consuming tap water or soda, what would you drink?

Dr. Barsten: Well, assuming we remove variables, like a person is not phenylketonuric and does not have problems with sugar or caffeine, I would recommend the soda, simply because most companies that make soda run their water through some kind of coarse or crude filtration process.

Dr. Andersen: That is an amazing statement.

Dr. Barsten: From a pesticide, contaminant, and carcinogenic standpoint, the soda is safer than the tap.

Dr. Andersen: What about cooking in tap water, such as boiling vegetables?

Dr. Barsten: When you cook things like potatoes, rice, or pasta they all absorb many times their weight in water. Since tap water contains a high amount of contaminants, so will the foods that are

cooked in it. I recommend that my patients do not cook with tap water.

Dr. Andersen: Can you prioritize for the readers and their patients the most important steps they can take?

Dr. Barsten: Certainly.

1. Drink six to eight glasses of water each day from a good, filtered source/filtration system. These include reverse osmosis units or three-stage carbon/KDF units. If you don't have this type of filtration, bottled water that has some sort of filtration is still better than water from the tap.
2. Filter your shower with a two-stage filtration unit.
3. Cook in filtered, purified, or bottled water.
4. If you don't have a filter, purchase water from known reliable sources and ask them the steps they take in cleansing and purifying their water.

*G. Douglas Andersen, DC, DACBSP, CCN
Brea, California*

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