

removal abilities of water-treatment equipment, home water filtration long has been centered on the kitchen sink.

But manufacturers have begun moving filtration products to other locations in the home, particularly the bathroom. The latest trend takes its cue from a young consumer's voice—the one asking in the middle of the night, “Daddy? Can I have a drink of water?”

Citing internal studies that the bathroom sink serves as a regular place to fill a drinking-water glass, Aquasana, Doulton and Everpure have begun promoting under-sink filters for the bathroom. And Brita recently introduced the first faucet-mount filtration system exclusively for bathroom sinks. Attaching to existing faucets, this \$27 disposable device removes chlorine, lead, sediment and cysts, and will remain effective for a year if used to filter 2 cups of water per day. (A diverter valve sends out unfiltered water for nondrinking purposes.)

Everpure in 2005 brought to market the first under-sink filtration system for the bathroom. The SPA-400 Bathroom Drinking Water System provides filtered water from the sink's cold-water faucet. The Bathroom Drinking Water Station adds a separate touch-free faucet installed in the countertop next to the sink.

The number of shower-head filter systems has increased, essentially because the health-conscious began singing their praises.

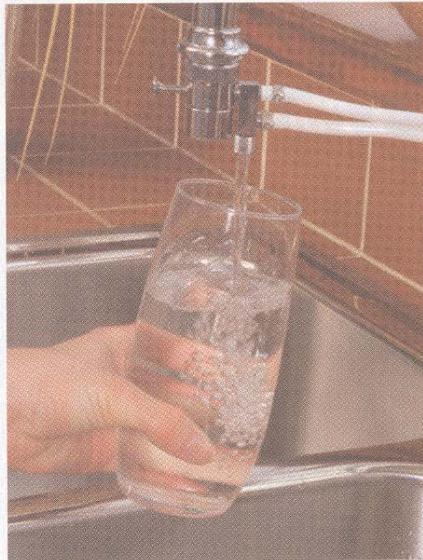
“It's a totally holistic thing, built around the belief that the water one bathes in should be as pure as the water one drinks,” explains Charles Strand, chief executive and chief water-quality specialist at Sun Water Systems, whose Aquasana brand introduced the shower-head filter in 1989.

So you won't be caught with “egg water” on your face, shower-head systems use two types of filters. Granular activated carbon filters primarily screen out chlorine by adsorption, and KDF copper/zinc filters trigger an electrochemical process that converts waterborne chlorine into a harmless compound that washes down the drain. KDF also retards the growth of mildew in warm, damp bathrooms.

Two-stage filters in newer shower systems extract a broader number of



BRITA PRODUCTS



SUN WATER SYSTEMS

**Most faucet-mount and countertop units clean water for pennies per gallon.**

contaminants while restoring pH balance, but at a price. Two-stage filters cost twice as much to replace as one-stage filters—about \$39 instead of \$19.

Shower filters are installed between the inlet pipe and the shower head. Many systems consist of the filter compartment with an attached shower head (regular or massaging) in a price range of \$38 to \$80. Shower filters generally require replacement once a year. Rainshow'r and Sprite have introduced disposable filter heads, which are thrown away after a year. Costing \$15 to \$21, about the same as replacement filters for permanent shower systems, disposables offer only basic chlorine and odor filtration through a small plastic shower head.

**Tapping Technology.** Most home water-purification systems use ideas that have been around awhile, but new technology is seeping slowly into the pipeline.

Several high-end countertop models have mini water-softener systems that inhibit lime-scale buildup in the product itself and in drain pipes, a technology previously offered only on commercial systems. Filter changing also has become easier. Everpure under-sink systems require only a quarter-turn to remove and secure their cartridge, the company says. And more models have added indicators that take the guesswork out of maintenance.

There are newer technologies on the horizon. For example, Sylvan Source is readying a home water distiller that cleans water more effectively with less wastewater than comparable units. The product should be available later this year in retail outlets specializing in upscale major appliances such as Sub-Zero and Viking.

Sylvan's M-600 Ultra-Clean Water System augments distillation with degassing and demisting. This process eliminates gases, organic substances and fine contaminants that might survive the normal distillation process, so “extremely clear water” at a rate of 6 gallons per day is produced, the company says. The device can be linked by plumbing to serve kitchen and bathroom sinks and a refrigerator's ice maker.

The device's self-cleaning system regularly flushes left-behind contaminants down a drain. This flushing creates only a half-gallon of wastewater for each gallon of clear water produced, compared with as much as 10 gallons of waste per 1 gallon clean in reverse-osmosis systems, says Laura Demmons, Sylvan Systems president. Demmons says the technology is scalable to smaller systems such as those placed under the sink, but there are no plans for Sylvan to manufacture smaller-scale products.

Meanwhile, Aquasana next year will introduce aromatherapy shower-head filtration systems aimed at enhancing mental rather than physical health. This system will have a compartment into which one will insert tablets that will mix with hot water to produce scents such as eucalyptus, lavender and vanilla.

**Clean It Up.** Of course, all of this is so much bilge if the filter system doesn't do what it's supposed to—clean the water. The latest filtration systems com-