## Water without the Waste



While whole home filtration systems are also available, reverse osmosis systems appeal to many people for their convenient size and cost.

While the message is clear that drinking water is beneficial for overall health, how to make the drink portable without spending a small fortune on bottled water has aggravated more than a few health conscious consumers. In 2006 alone, Americans consumed 167 bottles of water each, but only recycled 23 percent. That left 38 billion water bottles in landfills.

In order to reduce the overall cost of buying bottled water and to reduce the waste, many water drinkers have turned to an alternative option — reverse osmosis, a filtration system that can be installed in one's home.

These compact units are made up of pre-filters, a reverse osmosis module, a post-filter and a pressurized holding tank. They are small enough to be installed under the sink or even on the countertop. The pre-filters trap impurities, sediment and other contaminants, some of which result from pollution and others from treatment of the water. The water then passes through the reverse osmosis module, which contains the reverse osmosis membrane, treating the water a second time to remove even more impurities. The water receives a final treatment as it goes through a post-filter and any remaining waste goes down another line into the drain. A good reverse osmosis system can remove 99.9 percent of the impurities found in water.

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[PHOTO dir="assets/news/nimbuswaterpurifier.jpg" align="right" caption="Under-counter systems are easily installed." width="250"]

The first benefit most users of a reverse osmosis system recognize is cleaner, more sparkling water without any chemical taste or odors. In fact, a reverse osmosis system can treat for such impurities and contaminants as aluminum, asbestos, chlorides, chlorine, fluoride, lead, mercury, silver, nitrates and sulfide. The Environmental Protection Agency has established standards for the presence of many of these contaminants in water, indicating safe levels for each contaminant.

Cost for a reverse osmosis system ranges from \$150 to more than \$400. Maintenance includes changing the filters every six months to a year. The reverse osmosis membrane will ordinarily last between three to five years.

Fill up a reusable bottle, and water is suddenly portable and pure again without additional cost. From enjoying better tasting ice cubes, tea, coffee, soups, and all your favorite beverages and foods, there are many benefits to installing a reverse osmosis system in your home, including a few more dollars in your pocket and doing the environment a big favor as well.

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