



eco waterhouse technologies

Clean water solutions since 1991

Consumers Ask – Does Reverse Osmosis Remove Pharmaceuticals From Water?

Does reverse osmosis remove pharmaceuticals from water? Since traces all types of drugs ranging from birth control pills, antibiotics and mental health medications have been found in the drinking water of several millions of Americans, people are trying to rely on reverse osmosis. The process is proven to be highly useful in removing drugs and other known contaminants.

Intensive Laboratory tests which lasted 5 months finally revealed to the public the existence of traces amounts of pharmaceutical drugs such as mood stabilizers, sex hormones, antibiotics, anti-seizures, anti-convulsions and several other over-the-counter drugs. Although the concentrations are generally low and at present render no effects to the general public, scientists are beginning to show concern on the long term effects.

Individuals over a period of 3 to 5 decades are constantly exposing their systems to drugs that they should not be taking in any amount which may prove to have late consequences. Taking in very large amounts of water will also mean taking higher concentrations of different combined drugs with potential negative interactions. The Water Quality Association confirmed that filtering systems in homes provide a significantly safer approach to ensure that water is drug-free and healthy. Less than 2% of all consumable water is ingested by humans so point-of-use or POU systems are shown to be very ecologically friendly and cost-effective.

About Reverse Osmosis

Although there are several cleansing processes that effectively remove contaminants like bacteria, dirt, viruses and the like, reverse osmosis has been shown to be the most effective in ridding pharmaceuticals in water supply. People who used to rely on distillation, bottling and other methods are now asking, “Does reverse osmosis remove pharmaceuticals from water?” The answer is yes. It can separate solvent from solute or place water back into its purest form free of drugs, chemicals and even natural minerals.

Pressure and Membrane

Water containing pharmaceuticals is pushed forcibly through a semi-permeable membrane so the movement is from a high solute concentration area toward a low solute concentration area. Very fine particles, chemicals, substances and pharmaceuticals in water supply will be left behind the other side of the membrane with only water being allowed to pass through.

This is a very effective approach. Other effects include the loss of useful and beneficial minerals that aid in immunity and health like calcium, potassium and magnesium. Water can also lose its pH thereby changing from being alkaline into acidic. Some individuals such as babies, children and the elderly will benefit more by taking in natural trace minerals from water. An excellent water filtration system will keep the good minerals while ridding of perchlorate, fluoride, VOCs, chloramine, chlorine, lead, arsenic, bromated and several other known drugs regardless of amount and concentration.

Compared to Carbon

Reverse osmosis filtration is more effective than countertop carbon filters in removing unwanted contaminants and pharmaceuticals in water suppl. RO systems also offer several stages with separate filter cartridges that focus on a variety of problems in the water unlike single stage filters. The filters may already include sediment and carbon types plus the reverse osmosis membrane. Reverse osmosis delivers the safest and cleanest drinking water to people with 90% to 95% contaminant rejection. RO membrane filters will be able to remove hundreds more of contaminants than regular models.