

## DIGITAL HOT COLD WARM RO WATER PURIFIER

**MADE IN TAIWAN**

### Feature:

- ❖ Built-In Reverse Osmosis System
- ❖ Water Resistance
- ❖ Arch designed drainage net keep water from splashing while filling
- ❖ LED Hot water temperature display
- ❖ Two-phase water spigot
- ❖ Cold and Hot water temperature adjustment
- ❖ Highly efficient, noiseless and low power-consuming compressor
- ❖ Re-boiling feature convenient for doing coffee, tea or instant soup

### Specification:

- ❖ Function: Cold, room and hot water filtration system
- ❖ 5 Stage RO system inside with booster pump
- ❖ Dimension: D53 X W43 X H135 cm
- ❖ Hot water capacity: 5L, Cold water 3L and warm water 10L
- ❖ Case adopt SUS 304 stainless steel material
- ❖ Front plate and top cover adopt ABS material
- ❖ RO pipe adopt SUS 304 stainless steel material and silicon material
- ❖ Leakage Circuit Breaker
- ❖ Re-boil function, hot water reaches 100°C directly
- ❖ High efficiency heat exchange, avoid drinking raw water
- ❖ Re-boil function, hot water reaches 100°C directly
- ❖ Safety for water shortage, overheat, leakage, and power shortage
- ❖ RO system can be installed inside, save your space
- ❖ Hot cylinders adopt SUS 316L material nominated by high level medical machine
- ❖ The thermal materials answer to UL Fireproof Regulation Standard



*Model No: LSRO-171*

### Filtration Process:

#### First Stage: Sediment Filter:

The Sediment filter cartridge is manufactured from pure 100% polypropylene fibers. The fibers have been carefully spun together to form a true gradient density from outer to inner surfaces. It is effective in removing dust, mud, rust and sand particles.

#### Second Stage: Granular Activated Carbon Filter:

This granular activated carbon filter is composed of high-performance activated carbon that effectively reduces unwanted tastes, odor, organic contaminants, chlorine, pesticides and chemicals that contributed to taste and odor. It is designed to allow maximum contact between the water and carbon, ensuring maximum adsorption.

#### Third Stage: Activated Block Carbon Filter:

This block carbon filter is composed of high-performance Coconut Shell carbon using a patented process and made entirely from FDA-compliant materials that highly effective at reducing 17 hazardous metals: such as lead, radon, mercury, insecticides, odor and chlorine: taste & odor, from potable drinking water. The unique structure of the carbon block enables it to reduce Giardia, Cryptosporidium, amoeba, and Toxoplasma cysts and fine sediment particles down to 0.5 microns. It is ideal choice for a wide range of residential, food service, commercial and industrial applications.

**Fourth Stage: Reverse Osmosis (RO) Filter:**

Reverse Osmosis utilizes the unique properties of a semi-permeable membrane to allow fluid to pass while restricting the flow of dissolved ionic material. With pressure applied to impure water on the side of such membrane materials, pure water will pass through, leaving most of the impurities behind. The rejection of the dissolved ionic material is a function of both molecular weight and ionic charge. For example, we can expect a nominal 90% rejection of sodium chloride, which

means that the product water passing through the membrane will have a concentration of salt approximately one-tenth that of the feed water. The rejection of calcium carbonate (hardness) will be near 95%, while most metallic salts will be rejected at a rate of approximately 98% to 99%.

The rejection of non-ionic or organic material is primarily by mechanical filtration. Most substances with a molecular weight of over 100 will be completely rejected by an intact reverse osmosis membrane. Low molecular weight organics, such as formaldehyde or phenol, can pass freely through an R.O. membrane, as can most dissolved gasses. Oil, suspended solids and particulate matter are mechanically filtered, as are viruses, bacteria, pyrogen, and larger organic molecules.

To carry the rejected material away from the membrane surface, the feed side of the R.O. membrane is continually flushed with an excess flow, usually two to five times the product flow. This avoids clogging of the membrane surface and reduces the tendency toward scale formation

Contaminants	Average Percent Reduction
Arsenic	99.99
Barium	98.90
Cadmium	99.60
Chromium (Hexavalent)	99.99
Chromium (Trivalent)	97.00
Copper	99.0
Cysts	100
Turbidity	98.50
Fluoride	97.9
Lead	99.99
Perchlorate	96.5
Total Hardness	100
Selenium	92
TDS	97

**Fifth Stage: Taste and odor Filter:**

This granular activated carbon filter is composed of high-performance activated carbon that effectively reduces unwanted tastes, odor, organic contaminants, chlorine, pesticides and chemicals that contributed to taste and odor. It is designed to allow maximum contact between the water and carbon, ensuring maximum adsorption. We are using NSF approved post carbon to guarantee the taste of water.

**Sixth Stage: Mineral Filter:**

This series of mineral cartridges are designed to raise the pH of influent waters. These cartridges contain sparingly soluble sacrificial medias that are only acted upon by acidic waters.



They will have little effect on neutral or alkaline water. Mineral Cartridge that is an all inclusive mineral and pH balance system for drinking water that purifies, revitalizes, disinfects and fortifies the water. The mineralized water after the mineralized filter has perfectly balanced proportions of minerals necessary for healthy development of the human body. This filter improves the qualities of clean water by adding necessary for proper human development and health minerals, such as Calcium, Magnesium, Sodium, Potassium and others readily found in many natural mineral waters.

## **Benefits of Mineral Water**

Some studies have shown that the healthiest kind of bottled water is mineral water and drinking this water each day can help you enhance your overall health and well-being. Mineral water is able to do so much good because it contains essential minerals such as iron, calcium and magnesium. Even better, mineral water, unlike tap water, will be free of added chemicals as well as preservative-free and completely natural. Here we will discuss some of the benefits of mineral water.

## **Benefits of Mineral Water**

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### **1. Lose Weight**

Any type of water including mineral water contains no calories and is fat free. When trying to lose weight, many people forget to consider the calories found in the most popular drinks such as soda and juice and these calories can make it difficult to achieve weight loss or even maintain a goal weight. The Mayo Clinic actually reports that cutting out calories from your beverages can lead to greater weight loss than simply cutting calories from your meals. When you opt for mineral water you will be able to stay at your target calorie intake while staying hydrated and feeling healthy.

### **2. Improve Bone Health**

After menopause women suffer from a gradual bone loss but this can be controlled by simply having mineral water on a regular basis. A study in one of the popular scientific journals suggested that the calcium found in mineral water may be crucial to maintaining a normal bone density and therefore preventing the development of bone related illnesses such as osteoporosis.



### **3. Lower Blood Pressure**

The magnesium found in mineral water can also play an important role in maintaining a normal blood pressure level. One study found that patients with hypertension who consumed one liter of bottled mineral water showed a decrease in blood pressure over time. The researchers propose that these patients had poor magnesium levels so consuming mineral water rich in magnesium was able to lower their blood pressure.

#### **4. Lower LDL Cholesterol**

LDL cholesterol is the bad cholesterol and is one of the largest factors for developing heart problems. People who drink mineral water regularly will notice a large reduction in their risk of developing heart disease due to its ability to lower levels of LDL cholesterol. In addition, some of the minerals found in mineral water such as potassium and magnesium support heart function.

#### **5. Aid Digestion**

Mineral water is also a great source of sulfates which help promote digestion. That is because sulfates stimulate the pancreas so it releases enzymes such as amylases, proteases and lipases that help digest food properly. Low sulfate levels can cause poor digestive health or even bloating, constipation or diarrhea.

#### **6. Maintain Muscle Performance**

Mineral water that is rich in magnesium may also help play a key role in the function of muscles. That is because magnesium is an essential mineral for our bodies as it allows muscles to relax and contract properly. That is why muscle aches and cramps are one of the signs of magnesium deficiency.

#### **7. Maintain Electrolyte Balance**

Electrolytes are salts (bicarbonate, chloride, potassium and sodium) which prevent dehydration by helping the cells of the body absorb water. Because mineral water can be a great source of electrolytes, those who experience an electrolyte imbalance are frequently asked to consume mineral water in order to replenish their electrolyte loss.

#### **8. Reduce Kidney Stone Risk**

Doctors recommend increasing your intake of fluids in order to help prevent kidney stones and the best choice is mineral water. Usually kidney problems take place because of calcium oxalate kidney stones but when you consume mineral water that has adequate amounts of calcium and magnesium it can help decrease the concentration of calcium oxalate. Studies have also shown that drinking mineral water can significantly reduce a person's risk of suffering uric acid kidney stones.

#### **9. Better Your Skin**

Mineral water can help better your skin because of its high quantities of silica which can strengthen the spongy cells that are found between elastin and collagen fibers as well as slow down wrinkle formation. Simply drinking mineral water will help your skin but you can also use it in your beauty regime. One great way is to cleanse your face, then wipe your face using a cotton ball soaked in mineral water and finish with your moisturizer. You can also put mineral water on your toner pad before adding the toner. If you use homemade beauty products or wet your makeup before using it, always opt for mineral water instead of tap water. You can even gently spray your face with mineral water throughout the day or use it for hair spray.

## 10. Other Benefits

- Mineral water can help breakdown waste materials in the body as well as cleanse it of toxins.
- Many of the mineral waters available have therapeutic effects that can ease or cure multiple chronic diseases and conditions.
- Mineral water can also help relieve the pains and aches associated with rheumatism and arthritis by reducing inflammation and swelling of the muscles and joints.

## Precautions and Tips for Drinking Mineral Water

### 1. Mind the Sodium Content

Some of the brands of bottled mineral water will contain high quantities of sodium so in these cases, if you only use mineral water for your daily fluid intake you may be consuming excess amounts of salt. Drinking too much mineral water can also be detrimental to the health of people who suffer from high blood pressure. Because of this, you should either limit your intake of mineral water or opt for ones with low levels of sodium.

### 2. Limit Mineral Water during Pregnancy

When you are pregnant, you must drink water to ensure the body stays hydrated. When pregnant you should restrict your consumption of mineral water to only occasional use that is because bottled mineral water can contain high levels of salt which could raise your blood pressure or cause other health complications when pregnant.

### 3. Consider Sparkling Mineral Water

Sparkling mineral water is mineral water that has been carbonated but it can also be found in some springs naturally. Sparkling mineral water can be as good for the body as normal mineral water. Usually to make the sparkling variety, man-made processes will add carbon dioxide to the natural mineral water. This type of mineral water has the added benefit of helping destroy germs which are a source of various bacterial and viral infections.

Source of Information: <http://www.newhealthguide.org/Benefits-Of-Mineral-Water.html>