FilterSorb SP3

Texture of Water: Part III

By Deepak Chopra
A Natural Mineral Water

As you already know, hard water has a high mineral content. The minerals are mostly metal ions such as calcium and magnesium in the form of carbonates.

CaCO$_3$ and MgCO$_3$

Carbon dioxide changes the Texture of Water

As everybody knows that there is a huge difference in the solubility of carbon dioxide in

Soft Water vs. Hard Water
As I know that Carbon Dioxide solubility is just \textbf{ZERO} in water with high salinity. And after Water Softeners as salinity increases and the carbonation comes to an end and this is a function of difference in solubility. It is because that the carbonation is bound (ionic ions) to metals in the water—such as the carbonates described and are therefore \textbf{HARD TO REMOVE!}

\textit{Learn more on Next slides about the real Healthy Water}

-Deepak Chopra
SP3 Water for Drinking

A Natural Mineral Water

- Minerality
- Still
- Effervescent

Balanced Levels of carbonation

- CaCO₃
- H₂O
- Carbonated CO₂

Minerality of Water is determined by the minerals in contain. Calcium and Magnesium Carbonate (MgCO₃ and CaCO₃) are the best choice. They give texture but does not overpower minerals like potassium, sodium, sulfate, silica, bicarbonates and trace minerals that the human body needs. Lead and Copper are removed by SP3 media in all contents and concentrations.
Gases, colloids or sediments are not included in the minerals measurement. After mouth-feel, Minerals are the second most important factor in matching with healthy food. The higher mineral water falls in the category of **Classic Water**.

**Classic Waters** are the workhorses of the food and water pairing. Their mouth-feels matches many dishes perfectly, which makes them a safe bet. **Classic Water** are also perfect for coffee and mixed drinks. If you have less minerals then **SP3** water is a good choice for mixed drinks while one with a higher minerals would be perfect choice with steaks and meats.
Calcium and Magnesium levels combine the mineral water's "HARDNESS". All bottled water should be naturally hard, thanks to Calcium and Magnesium.

**Sodium water from Water Softeners**

When water is softened with ion-exchange water softener, it adds sodium to the water. About 8 mg/L of sodium is added for every grain of hardness. Environment Protection Agency (EPA) has new Sodium level regulation in drinking water which is 20 mg/L.

<table>
<thead>
<tr>
<th>CaCO₃ Hardness (SI)</th>
<th>CaCO₃ Hardness (US)</th>
<th>Category</th>
<th>Added Sodium</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 – 60 mg/L</td>
<td>1 – 3.4 gpg</td>
<td>Slightly Hard Water</td>
<td>8 – 27.2 mg/L</td>
</tr>
<tr>
<td>60 – 120 mg/L</td>
<td>3.4 – 6.7 gpg</td>
<td>Moderately Hard water</td>
<td>27.2 – 54 mg/L</td>
</tr>
<tr>
<td>120 – 180 mg/L</td>
<td>6.7 – 10 gpg</td>
<td>Hard water</td>
<td>54 – 80 mg/L</td>
</tr>
<tr>
<td>180 mg/L and above</td>
<td>10 gpg and above</td>
<td>Very Hard water</td>
<td>80 mg/L and above</td>
</tr>
</tbody>
</table>

Most of the waters have CaCO₃ equivalent over 300 mg/L (16 gpg)! That adds over 128 mg/L of Sodium after softening which is over 6.4 times higher than the recommendation.
Structured Water = $\text{H}_2\text{O}$ 100% natural

100% natural waters are always available on taps. Hard tap waters contain two kinds of hardness:

| Temporary Hardness | •Ca(HCO$_3$)$_2$
|•Mg(HCO$_3$)$_2$ |
|--------------------|-------------------|
| And                |                   |
| Permanent Hardness | •Sulfate (SO$_4$)
|•Chloride (Cl)      |
|•Silica (SiO$_2$)   |                   |

Hardness – Ca(HCO$_3$)$_2$ water makes scaling in pipes, hot water appliances, dishwashers, washing machines, showers, taps and makes cleaning more difficult and more dependent on soaps and synthetic detergents. Scaling in boilers, heat exchangers and coffee machines comes from hard water. But hard water when passes through SP3 media opens the bracket of Ca(HCO$_3$)$_2$ and changes in no time changes its TEXTURE to:

- **Non Soluble** $\rightarrow$ CaCO$_3$ Calcium & Magnesium minerals
- **Pure Water** $\rightarrow$ 100% natural H$_2$O
- **Naturally** $\rightarrow$ Carbonated with CO$_2$
pH of the water is most important factor in all “Drinking waters”. The pH (for potential Hydrogen) measures the substance’s level of acidity or alkalinity. On the pH scale 1.0 to 6.8 is acidic and is not recommended for drinking or making whatsoever drinks. pH between 6.9 and 7.2 is nearly neutral and 7.2 to 14 is alkaline (or basic). All natural waters or low alkaline waters (pH 7.2 to 7.5) are best for human consumption. They tastes neither sour nor bitter but best for human tongue. Since pH is a Logarithmic scale, the difference of 1 degree indicates a tenfold increase or decrease in acidity or alkalinity. Water from weak acid cations with a pH of 5 for example is 10 times more acidic than that of a pH of 6 and so on.
Structured Water

**Definition:** When water is unadulterated means only structured as follows

\[ \text{Ca(HCO}_3\text{)}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O} + \text{CO}_2 \]

Nothing added or subtracted and 100% natural.

This in turn means this \( \text{H}_2\text{O} \) (water molecule) has its outer electron shell intact, i.e. in equilibrium and without a charge. This is a structural water, a water without the change in pH, without adding high sodium content, a water that you will feel and see can penetrate the body’s cells with ease and therefore cleanse your cells and re-hydrate your body’s cells much more easily. It is this cleansing of your cells that give you a better, healthier and happier life.
Lower the **TDS** (Minerals) the greater the cell hydrating properties of the water.

All healthy cells are surrounded by ("structural water").

And all natural waters are naturally carbonated those are treated with **FILTERSORB SP3**. All mineral waters with its unique mineral composition those are reputed to have beneficial properties for health.
Effect of minerals on your health

Compared to most of the wines, differences in taste between waters are quite subtle. But they are nevertheless discernible: Local geological strata impart water with different minerals, giving each and every single source of drinking water a unique set of minerals.

Herewith we describe the most healthiest minerals found in **SP3 water** the benefits these minerals can provide.
Magnesium (Mg++)

Almost all human cells have some level of magnesium in them and all adults need four hundred milligrams (400 mg) of Mg++ everyday. Magnesium is very important for the regulation of muscle contractions and the transmission of nerve impulses and its activation energy for producing enzymes. Human beings’ complete bone structure relies on Mg++ and the expansion blood vessels, which reduces the risk of heart attack. All sickness are related to magnesium deficiency. Nervousness, lack of concentration, dizziness and headaches or migraines are related to high SODIUM in water and lack of magnesium. All waters have below 50 mg/liter of Mg++ therefore AMG (Adds Magnesium is important) to install (500 - 600 mg/liter) of Mg++ in healthy drinking water. It is a revolution in all Drinking water history.

Upcoming next: AMG Filters
Calcium (Ca++) only SP3 can do

It is a fact that every adult needs about **800 mg** of Ca++ per day – babies don’t require more than **300 mg/day** but all youngsters between fifteen and nineteen year olds need significantly more.

**Soft Water has no Magnesium (Mg++) and**

**Soft Water has no Calcium (Ca++) and**

**7.8 mg/L of Sodium is suitable for all heart patients.**

The metabolism and regular contraction of heart is affected by sodium.

The many benefits include its stabilizing bone structure, teeth and cell membranes, ensuring nerve and muscle impulses are properly transmitted and helping to prevent blood clotting. Calcium also has a balancing effect for numerous skin allergies. Bone decalcify (osteoporosis) and fractures become more likely if a body is not getting enough calcium. Best water for drinking should have **200 mg/liter** to **400 mg/liter** calcium.
Effervescent: Effervescent waters are an epicurean surprise to many. **FILTERSORB SP3** water is very sophisticated water, with the smallest possible bubbles of \((\text{CO}_2)\), straddle a line between **STILL** and **LIGHT SPARKLING** water.

**Carbonation: 2 mg/liter – 5 mg/liter**

Use **SP3** water to surprise to contrast a dish with a water pairing.

**Recommended serving temperature: 12°C / 54°F**

You will notice all those people who claim they don’t like sparkling water at all will love **Light Sparkling** water made by **SP3**.
What is Water Texture?

Natural carbonated water is water that contains CARBON DIOXIDE GAS (CO₂). The natural gas in temporary hardness Ca(HCO₃)₂ when comes into contact with solid particles of SP3 media creates:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CaCO₃</td>
<td>→</td>
<td>Minerals</td>
</tr>
<tr>
<td>H₂O</td>
<td>→</td>
<td>Classic Water</td>
</tr>
<tr>
<td>CO₂</td>
<td>→</td>
<td>Carbon Dioxide</td>
</tr>
</tbody>
</table>

This CO₂ gas creates bubbles in the water (H₂O), leading to an effervescent TEXTURE that everybody find quite enjoyable in drinking water. This water is known as “Light Sparkling Effervescent Water” or SP3 water. In its simplest form, it is essentially identical to healthy still water. Natural carbonated water has thousands of examples and they have been consumed for centuries by people who believed that this is the only water, which has provided many Health Benefits.

Thanks to FILTERSORB SP3!