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**“ INNOVATIVE AGRICULTURAL TECHNIQUES TO BOOST
ENTREPRENEURIAL SKILLS OF FUTURE FARMERS”**

FARMERS FOR FUTURE

ERASMUS+ PARTNERSHIPS
PROJECT 2020-1-IT01-KA202-008505

IEK KAVALAS, GREECE

Analysis of the water

Resource: deyasmp.gr & diaitologos.com

Analysis of the water

- Water is a natural resource that is very important because it is one of the key factors for life and growth. In recent years, this good has been in short supply, although an observer who would look at the Earth from space would describe it as a «blue planet» due to the abundant water that covers it. The vast majority of water found in nature is seawater.

Analysis of the water

- Specifically:
- 97.39% of water reserves are seawater
- 2.01% are ice
- 0.58% groundwater
- 0.02% are lakes and rivers
- 0.02% is present in the atmosphere in the form of water vapor
- Fresh water is 2.6% of the total amount

Analysis of the water

- If we could distribute water reserves evenly across the surface of our planet, we would create a water mantle about 3 kilometers deep. The water, however, is not evenly distributed in all parts of the planet and if the observer approached the Earth he would see floods in other areas and water shortages in others.



Analysis of the water

- Water is the natural element that results from the chemical union of hydrogen and oxygen molecules. In Chemistry water is symbolized as H₂O



- It is the main component of the organisms of our planet. 60% of the weight of a tree corresponds to water, while in most animals and plants 65% is water. Each of us needs some amount of water every day to live. But very large quantities are needed to have our food or to satisfy our other needs. Fresh or fresh or inland waters are very important for human activities. Lack of water in many parts of our planet is responsible for the death of many of our fellow human beings, because the lack of water is due to the inability to produce food. In reality, life without water can not exist.

CHARACTERISTICS – PROPERTIES – DENSITY

- Water is everywhere. In every region of the planet, where there is life, there is water. Even in the driest dunes of the deserts there is some amount of water attached to the surfaces of the grains of sand. We find it in three forms. That is, we find it in solid form (ice), in liquid form (water) and in gaseous form (water vapor). As for its properties, water boils at 100 degrees Celsius and coagulates at 0 if it is chemically pure.

DENSITY

- The density of water varies with temperature and the highest density is at a temperature of 3.94 degrees Celsius. This is very important – that is, the same volume of water has the highest weight at 3.94 degrees – because it causes the ice to float on the water and thus be able to melt.



PROPERTIES

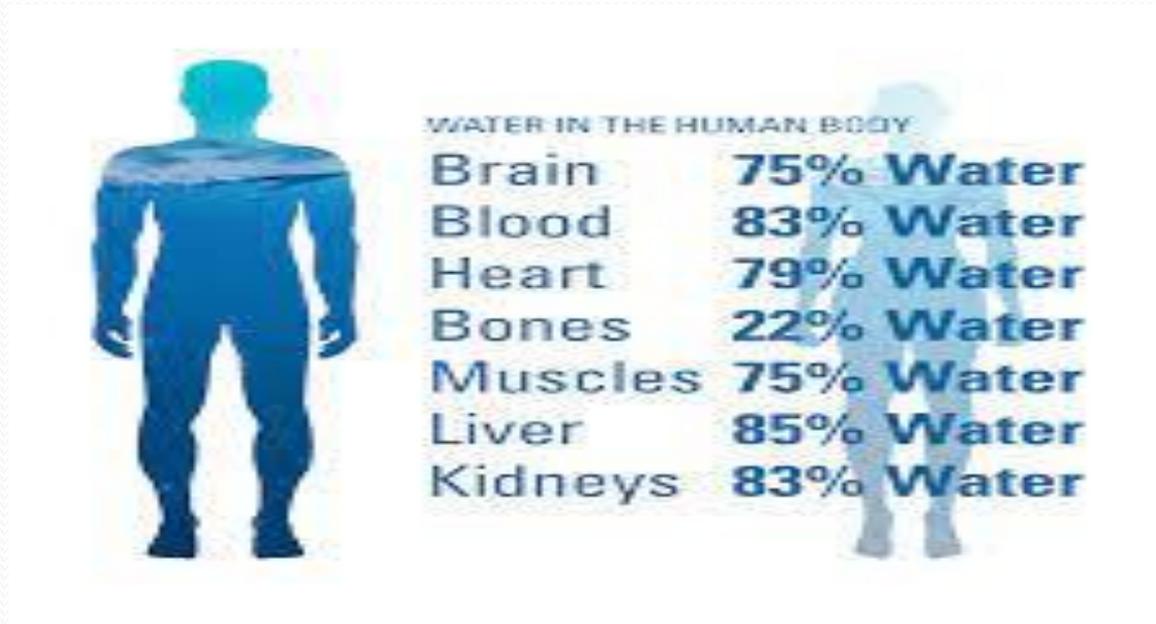
- Also the chemical properties of water and especially the solvents, are very important for the ecosystem. Water has the ability to dissolve a wide variety of substances. Many chemical elements and compounds dissolve in water and some of them are transported by its terrestrial and underground motion to various parts of the earth's surface. In a similar way the nutrients dissolved in the water pass through the roots and diffuse throughout the plant tissue.

Why drink Water?

- It has been described as the «cradle of life» because it is essential to all the biochemical processes that take place in our body.
- You see, adequate hydration helps the human body:
- **To control body temperature**
- **To transport nutrients to the body's tissues**
- **To eliminate the by-products of metabolism**
- **To better digest food**
- **To maintain joint health**

Its distribution in our body

- Water is distributed throughout our body and is divided between what is inside the millions of cells (intracellular fluid) and what is outside the cells and acts as a conduit between them and the organs (extracellular fluid).



Its distribution in our body

- Water is about 60% of your body weight, with a range of 45-75% since the percentage varies based on gender and age. In the table below you can see in detail the percentage of water in each part of the body:
- Water in the organs of the body./ Percentage in water (%)
- Skin 64
- Skeleton (Bones) 31
- Muscles 79
- Brain 73
- Liver 71
- Heart 73
- Kidneys 79
- Pancreas 73
- Lungs 83

Its distribution in our body

- Also, the amount of water differs considerably between adipose and muscle tissue in percentages of about 10 and 75% respectively, which explains why a person with more weight and fat will have a lower percentage of water in his body compared to a person who has increased muscle mass.

Is there a limit to Water Consumption?

- Excessive water consumption can also be dangerous to health, as when we drink more water than the kidneys can excrete, there is increased circulation in the blood resulting in a dilution of electrolytes. Sodium levels fall and can lead to a condition called water intoxication.

Is there a limit to Water Consumption?

- Symptoms include:
- Nausea or vomiting
- Headache
- Confusion and disorientation
- Muscle spasms, cramps or weakness
- Irritability
- Epileptic seizures
- Coma

Is there a limit to Water Consumption?

Hyponatremia from water consumption is unusual, people who are at greater risk of developing this condition are very active people such as marathon runners (in races over 26 km), triathletes, hikers, rowers, etc.

If your doctor diagnoses hyperhydration, then there are ways you can follow to treat it, always with his own guidance. These include: reducing fluids, taking diuretics, treating a condition that may have caused hyperhydration in the first place, or stopping aggravating medication.

THE END

THANK YOU FOR YOUR PATIENCE AND
WE HOPE YOU LIKED OUR PRESENTATION

