



# Water



**Water = Life = Profit**



*Nutrient transport*



*Digestion and absorption*



*Thermoregulation*

**Water is not only a vital ingredient, but also essential in several physiological functions**

*Elimination of metabolic waste*



*Several more*





# Factors of Water intake



Ambient temperature



Age

Velocity and humidity of the air



Sex

Feed intake



Health status

Diet formulation

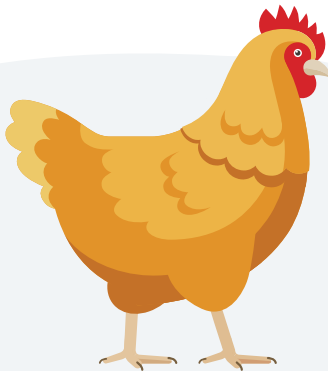


Genetic

Type of drinker



Others





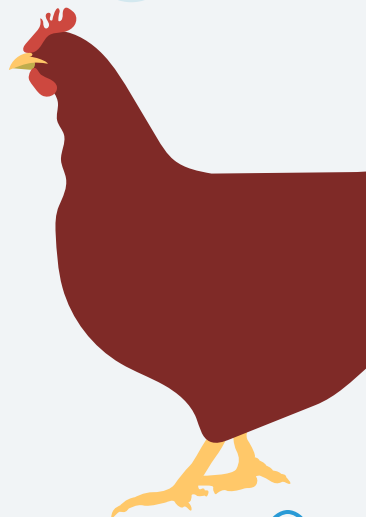
# Checklist for water intake

- ✓ **As the body weight increases,** the water need increase.

**BE SURE WATER IS ALWAYS AVAILABLE!**

- ✓ **House temperature:** hens will increase the water intake as the temperature of the water increases.

- ✓ **Water temperature:** the water temperature should be lower than 27°C. If higher the hen will drop the feed intake.





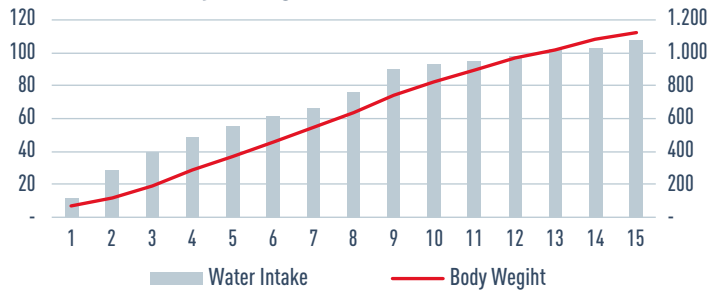
# Trials



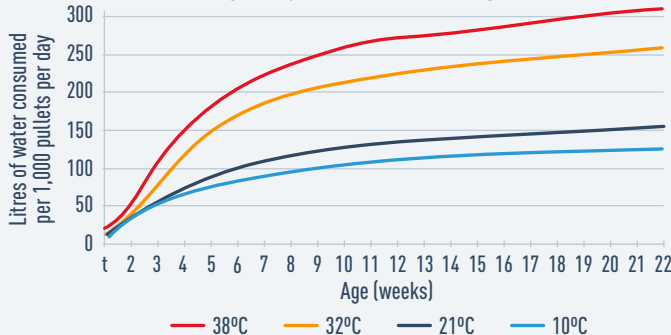
## Trial 1.

Water intake increases as the body weight increases.

## Body Weight - Water Intake



## Average daytime house temperature



## Trial 2.

When the house gets hot, water intake increases.



# The Water Quality



## Microbiological quality

- Water can act as a disease carrier if it is contaminated at the source. Moreover, poor microbiological quality of water can affect gut health and lead to pathologic issues that affect production.

The microbiological quality at the water source should be monitored and samples should be taken at least once per year. This is even more important if the water comes from surface sources.

*\*Learn more at page 55 of H&N Management Guide.*

## Chemical quality

- The content of minerals and other elements can greatly impact egg production and hen health. Even if corrective measures can be taken, it is very difficult and expensive to alter the chemical characteristics of water.



# Bibliography



- H&N International management guides.
- Trial 1: Field data from Turkey.
- Trial 2 : Water consumption of growing pullets as function of house temperature. Dagher (2008)