



Water temperature



What happens if my birds don't drink enough water?



- ✓ Feed consumption **drops**
- ✓ Egg production **decreases**
- ✓ Eggshell quality **deteriorates**
- ✓ Kidney **damage**
- ✓ **Mortality**

I'm thirsty!





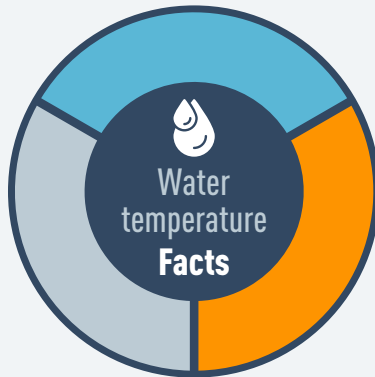
Don't FORGET!!!



Water > 25°C

Hens will decrease their water consumption

Water < 20°C
They will decrease
water consumption



Water > 32°C
They will refuse
water intake

CRITICAL MOMENTS



FIRST 7 DAYS:

Water at the pipes heats up fast



HOT WEATHER:

Keep the water cool
before enters the farm



Water intake effects



Water temperature affects the body weight growth!!!

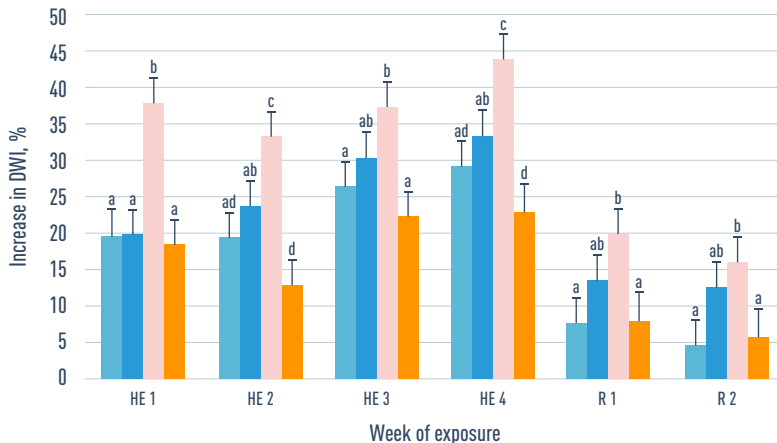


Figure 1.

Effect of drinking water temperature (T_w) on change in daily water intake (DWI), with reference to DWI during acclimation at thermoneutrality (T_a and $T_w = 21^\circ\text{C}$), during 4 weeks of heat exposure (HE) and 2 weeks of recovery (R) at thermoneutrality. Means for each week labeled with different letters were significantly different ($P < 0,1$).

$T_w = 15^\circ\text{C}$

$T_w = 19^\circ\text{C}$

$T_w = 23^\circ\text{C}$

$T_w = 27^\circ\text{C}$



Feed intake



Water temperature affects the feed intake!!!

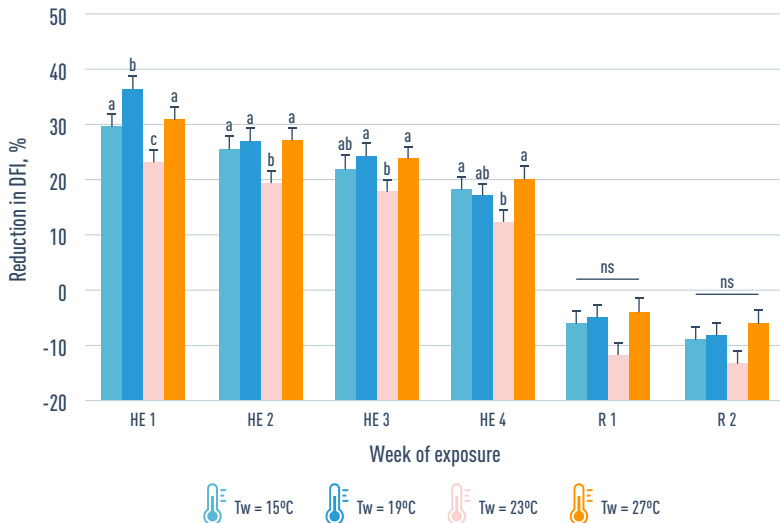


Figure 2.

Effect of drinking water temperature (T_w) on change in daily water intake (DWI), with reference to DWI during acclimation at thermoneutrality (T_a and $T_w = 21^\circ\text{C}$), during 4 weeks of heat exposure (HE) and 2 weeks of recovery (R) at thermoneutrality. Means for each week with different letters were significantly different ($P < 0.1$).



Checklist

- Daily water **intake**
- Daily feed **intake**
- Feed / Water **ratio**
- Water **temperature**



Bibliography



H&N International management guides.

Hongwei Xin, Dong Uk Ahn, R S Gates and MC Puma (2000) Drinking water temperature effects on laying hens subjected to warm cyclic environments. Poultry Science 81(5):608-17