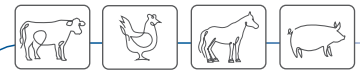


# MAXCHELAT/Mg

## MAGNESIUM GLYCINATE

MAXCHELAT/Mg is a Mg chelate of glycine hydrate produced by a novel production process being a unique glycinate macroelement in the market. MAXCHELAT/Mg is calming down animals in stressful phases, reducing their aggressive behavior. In addition, MAXCHELAT/Mg reduces the risk of milk fever of transition dairy cows.

MAXCHELAT/Mg is produced with a novel production process, in which the Mg is complexed with the glycine to form a chelate. This leads to a stable compound protecting the Mg from complexing with anions such as phosphates or proteins in animals' gastrointestinal tract. MAXCHELAT/Mg is characterized by a high mineral content (20.5%) and a very good bioavailability.



### CHARACTERISTICS

- High degree of complexation
- High Mg content (20.5% Mg)
- Unique glycinate macroelement

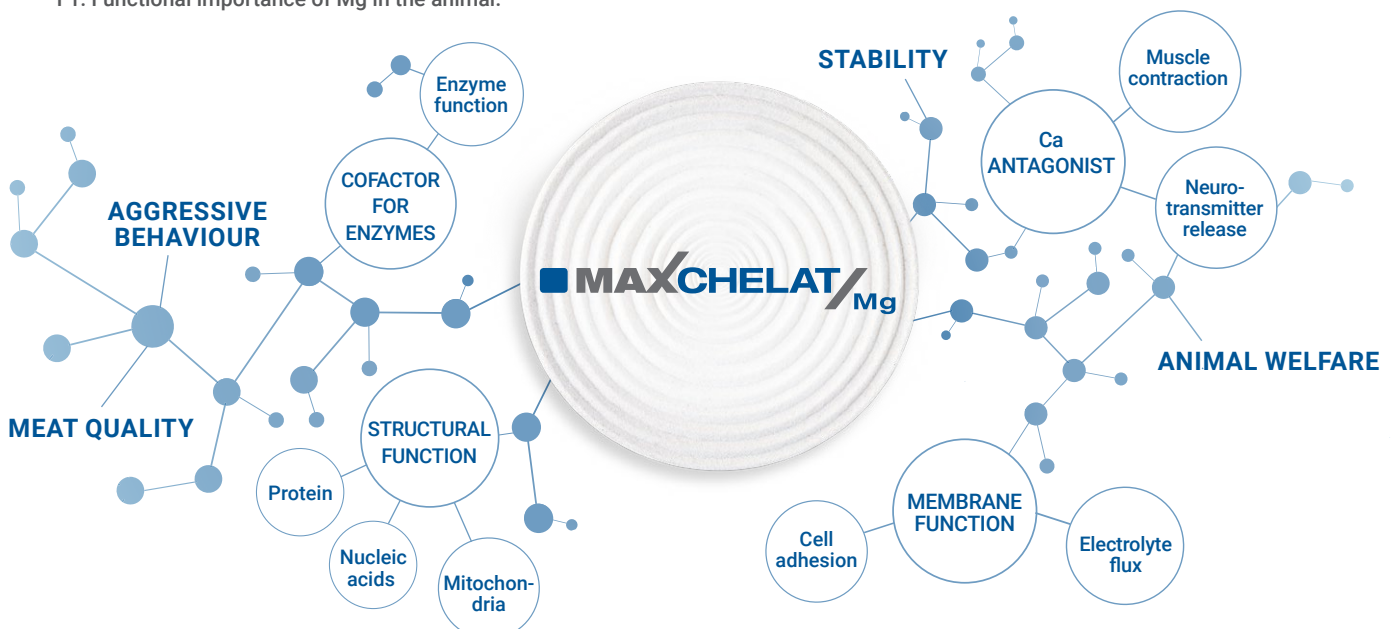
### APPLICATION BENEFITS

- Highly bioavailable
- Uniform, free-flowing particle

### ORGANICALLY BOUND Mg WITH HIGH BIOAVAILABILITY

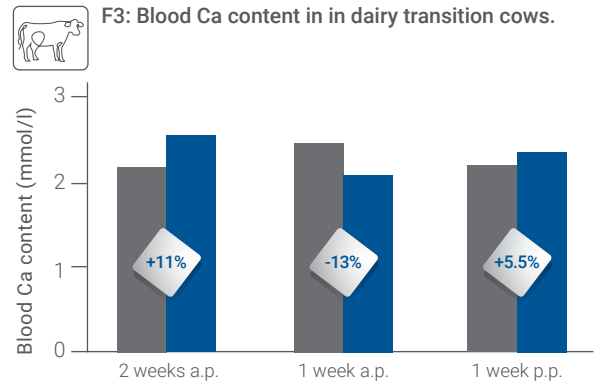
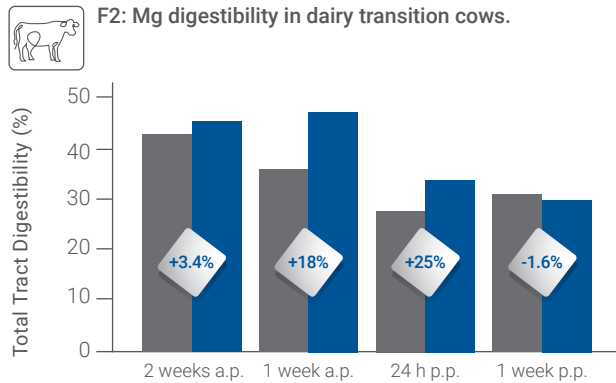
Animals can be exposed to different stressors during their life time, e.g. social, environmental, metabolic. Stressors affects the physiology of animals, thus performance. Magnesium can be fed to reduce aggressive behaviour and related stress responses. Feeding Mg during stressful phases can affect animal behaviour reducing lesions, thus increasing carcass quality and supporting animal welfare.

F1: Functional importance of Mg in the animal.



## A TARGETED Mg SUPPLY FOR DRY-COWS

**Animals:** Cows (Holstein-Friesian, milk yield  $\varnothing$  11,315 kg,  $\varnothing$  1.8 lactations), 3 wk a.p. to 2 wk p.p.  
**Treatments:** 3.5 g Mg/kg DM:  
 (1) Control:  $MgSO_4$ , MgO;  
 (2) MAXCHELAT/Mg  
**Methods:** Fecal samples (n=19-20), blood samples (n=19-20)



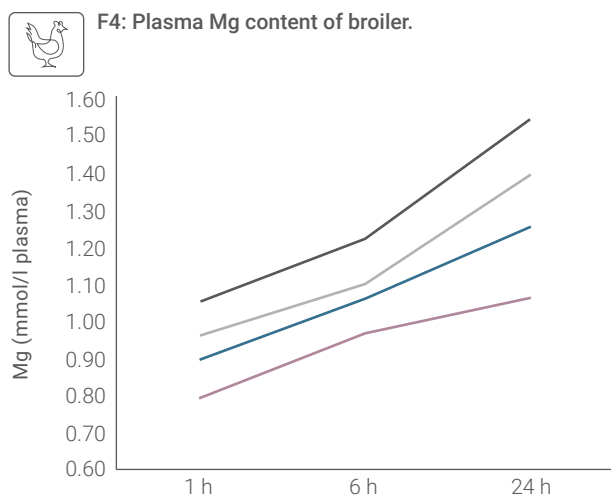
Source: ISF, 2015.

■ Control ■ MAXCHELAT/Mg

The total tract digestibility of MAXCHELAT/Mg was numerically greater than Control, except for the time point 1 wk p.p.. The Ca content in the blood was numerically greater for MAXCHELAT/Mg than Control 2 wk a.p. and 1 wk p.p.. For MAXCHELAT/Mg 1 wk a.p., the blood Ca content was numerically lower than Control. **Short-term supply (3 wk a.p. until parturition) of high digestible MAXCHELAT/Mg for transition dairy cows increases blood Ca by affecting parathormone and and vitamin D<sub>3</sub> and reduces the risk of milk fever.**

## IMPROVED BIOAVAILABILITY IN BROILER

**Animals:** Broiler (ROSS 308); age: 36 d  
**Treatments:** 8 g Mg/kg diet (Control, MgO, MAXCHELAT/Mg, Mg-Acetate, Mg-Asp)  
 5 d ad libitum; d 5: fasting period; d 6: test diet  
**Methods:** Mg content in blood plasma (n=5); 1, 6, 24 h after feeding test diet



In broiler chicken, the Mg content in blood plasma was numerically greater for MAXCHELAT/Mg compared to all other treatments 1, 6, and 24 h after feeding the test diets. **Short-term supply of MAXCHELAT/Mg resulted in the greatest Mg plasma content indicating the greatest bio-availability compared to the other Mg sources.**

— MgO  
 — MAXCHELAT/Mg  
 — Mg-Acetate  
 — Mg-Asp

Source: ISF, 2014.