

## The effect of the Ayucal on the eggshell quality of hens laying in the second stage

### S u m m a r y

The quality of the eggshell is the primary criterion for evaluation of the quality of eggs for both the industry and consumers. Strong and resistant eggshell is vital especially with the current fully mechanical harvesting and packing of eggs in the mass production. The aim of this study was to determine the effect of the Ayucal on the eggshell quality. Eggs used for the study came from 360 ISA Brown hens. When the experiment started half of the hens was in the 53rd week of lay and the other half in the 41st week. The experimental groups received Ayucal in drinking water, containing active substances affecting the more efficient use of calcium from the feed. Evaluation of the eggshell quality was performed before and after the 6 weeks period of Ayucal administration. Hens receiving Ayucal had a higher egg production and a lower share of breakage or damaged eggs as compared to the control groups. There was no significant effect on the eggshell quality. In the experimental group of older hens there was a small improvement in the strength of the shell ( $F_{max}$ ). In addition, in a flock of older hens there was an improvement in the characteristics of the eggshell quality regardless of the specified product.