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Influence of dietary taurine and housing density on oviduct function in laying hens

Key words: Rearing pattern, Taurine, Laying hens, Inflammation, Oviduct injury

This study mainly focused on the possibility of enhancing the health of laying hens by reducing housing density and by dietary supplementation with taurine and summarized the key roles they played in the following aspects:

- **Laying hen performance**
- **Histological examination**
- **Effect of taurine and different housing modes on NF-κB DNA binding activity**
- **Changes in iNOS**
- **Real-time quantitative RT-PCR analysis of gene expression**
- **Activities of SOD and levels of T-AOC and MDA in the oviduct**

A series of comprehensive tables and figures were generated to show this research

Summarize

- Taurine has important protective effects against oviduct damage. Reducing housing density also results in less oxidative stress, less inflammatory cell infiltration and lower levels of inflammatory mediators in the oviduct. Therefore, both dietary taurine and reduced housing density can ameliorate oviduct injury, enhance oviduct health, and promote egg production in laying hens.