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Age-related changes of yolk precursor formation in the liver of laying hens

Key words: Lipid metabolism, Yolk precursor formation, Estrogen, Antioxidants, Hen

Research Summary

This study investigated the age-related changes of yolk precursor formation in the liver of laying hens in different laying stages (D90, D150, D280 and D580).

- TG and T-CHO levels in the liver-ovary axis
- Antioxidant capacity of the liver
- Serum E₂ levels
- Expression of ERs
- Expression of genes related to yolk precursors synthesis

Innovation points

Our results first elucidated that the capacity of yolk lipid formation in hens may decrease with increasing age as a consequence of decreases in liver antioxidants levels, serum E_2 levels and transcription of the critical genes involved in yolk precursor synthesis.

Innovation points

