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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 E_2 levels**
- **Expression of *ERs***
- **Expression of genes related to yolk precursors synthesis**

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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.

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Innovation points

