

## **Tropical summer induces sperm DNA damage in boars which can be mitigated by antioxidant therapy**

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Despite pork being the most widely consumed meat in the world, summer infertility due to heat stress significantly reduces pig production and can potentially limit sustainable pork supply particularly in tropical regions. The boar's characteristic non-pendulous scrotum, inefficient capacity to sweat and the high susceptibility of boar sperm to temperature shock makes this species particularly vulnerable to heat stress. While traditionally considered a sow problem, recent studies demonstrate that DNA damage in sperm caused by heat stress can result in early embryo loss in mice.

The aim of this study was to determine whether sperm DNA damage is higher during summer in boars and evaluate antioxidant supplementation to alleviate the problem.