



CRC

for

Premium

Quality

Wool

Direct Effect of Hormones on Wool Growth

Produced for the CRC for Premium Quality Wool undergraduate program by;
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Direct Effects

- There is no overriding hormonal control of follicle function
 - Prolactin has a direct effect but not much in the Merino
 - Pharmacological doses of glucocorticoids can stop follicle function
 - Lack of T4 can stop wool growth
- No hormone can affect wool growth without affecting other body functions

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Physiological mechanisms that affect follicle cells

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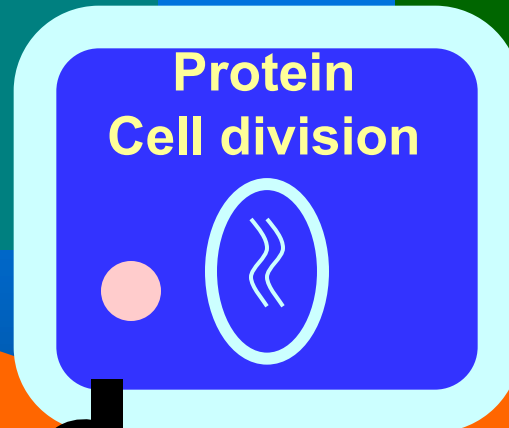
Cortisol (low levels)
Thyroid hormones
GH ?
Prolactin ?
Insulin ?
Others ?

Growth factors

-ve

Cortisol (high levels)
ACTH ?
 β -endorphin ?
Adrenaline
 α -MSH ?
Others ?

Growth factors



Glucose

Hormones

Amino acids

Vasopressin

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