

Cobalt Deficiency

Produced for the CRC for Premium Quality Wool undergraduate program by; Dr. David Masters, CSIRO Animal Production.



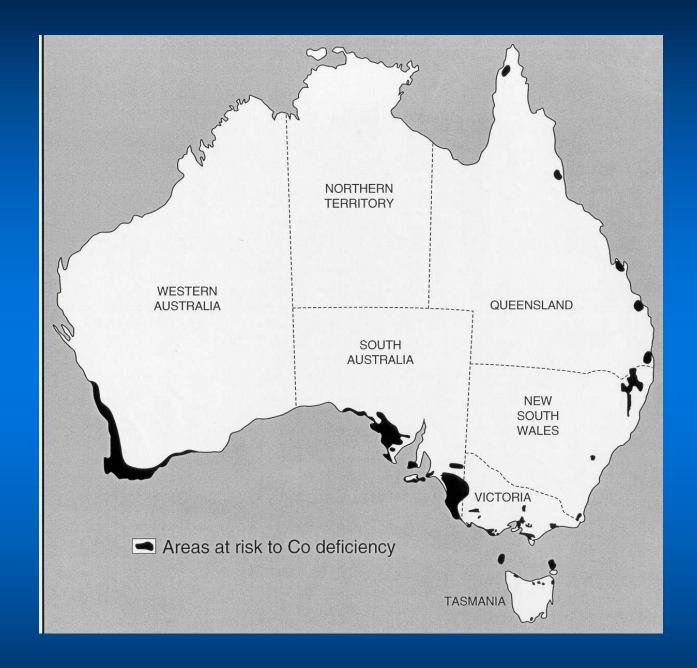
CRC

for

Premium

Quality

Wool





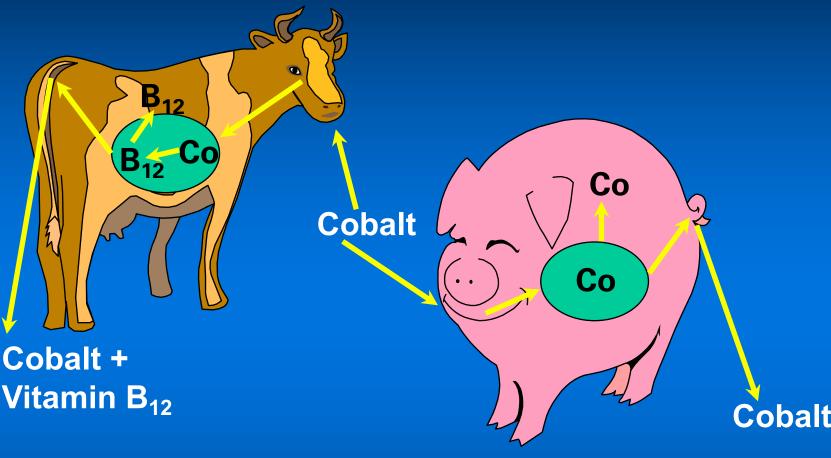
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In practice microbes in gut of monogastrics would also produce some B₁₂

David Masters

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Cobalt deficiency

Effects

Occurrence

- Loss of appetite (wasting)
- Loss of weight
- Reduced wool growth
- Anaemia

- Sandy or volcanic soils
- Lush green pasture
- Rapidly growing or reproducing sheep

Premium

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Cobalt is required for energy metabolism

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Propionate —— Propionyl CoA

Methylmalonyl CoA

Methylmalonyl CoA Mutase

Succinyl CoA ——TCA Cycle



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Cobalt is required in methionine and folate metabolism

Methionine **Tetrahydrafolate** S-Adenosyl homocysteine Methionine synthase Homocysteine 5- Methytetrahydrafolate Cystathione Cysteine

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