

FORAGE LINK



“Linking forage feeding to trace elements”

Macro Minerals	Required For	Deficiency Causes
CALCIUM	Bones, hooves, teeth, nervous system and muscle	Milk fever, skeletal problems, poor yield/condition and restlessness
PHOSPHORUS	Bones, teeth and for energy production	Milk fever, joints, poor performance and fertility
MAGNESIUM	Bones, nervous system and enzyme function	Staggers, poor yields/condition and nervousness
SODIUM	Saliva production , digestion and absorption	Reduced appetite, acidic rumen and poor feed conversion
Trace Elements		
COPPER	Fertility, energy utilisation and immunity	Infertility, anaemia, poor growth and coat condition, swayback in lambs
COBALT	Required by the rumen microbes to produce Vitamin B12	Lack of Vitamin B12 leads to low energy and poor performance, Pine.
IODINE	Thyroid gland development which controls energy metabolism	Ringworm, retained placentas, still born young and reduced growth rates
MANGANESE	Fertility, bone development and growth rates	Poor conception rates, bone malformation of youngstock
ZINC	Growth of hoof and wool/hair, immunity, udder tissue	Bad feet, high SCC, poor coat condition and poor performance
SELENIUM	Along with Vitamin E as an antioxidant, improves Iodine function and fertility	Retained placentas, white muscle disease, poor fertility and lack of immunity
Vitamins		
VITAMIN A	Sight, skin, tissue lubrication, follicle development and bone density	Poor sight, bone malformations, poor lubrication and infertility
VITAMIN D3	Magnesium and calcium function, bones and skeleton	Staggers, milk fever, weak bones, poor yields and growth.
VITAMIN E	A strong antioxidant, works with selenium	Muscle wasting, poor immunity retained placentas and infertility
VITAMIN B12	Fundamental enzyme in the production of energy	Poor energy utilisation, poor performance, twin lamb disease
VITAMIN B1	Growth, muscle activity, carbohydrate metabolism, nervous system and brain function	CCN, Staggers, blindness, rolling of eyes, twitching and hypersensitivity