

# **KW Complete Dairy**



A high specification supplement for lactating dairy cows fed a total or partial mixed ration containing feed ingredients rich in phosphorus, e.g. brewery and distillery grains, maize meal and gluten feed, palm kernel meal, wheatfeed, plus, rape, soya and sunflower protein meals.

## **Specification**

Vitamins	iu/kg	Major Minerals	%	Trace Elements	mg/kg
Vitamin A	550,000	Calcium	23.5	Copper	800
Vitamin D	200,000	Magnesium	8	lodine	350
Vitamin E	3,200	Phosphorus	0.5	Manganese	2,000
Vitamin B <sub>12</sub> (mcg/kg)	2,250	Salt	22.5	Selenium	35
		Sodium	9	Zinc	6,500

## Needs, Features and Benefits

NEED	FEATURE	BENEFIT	
Optimise cost benefit	<ul> <li>Formulated to the latest recommendations</li> <li>High bio-availability</li> </ul>	<ul><li>No waste</li><li>Ensures production is not constrained</li></ul>	
High productivity	All trace elements that act as 'catalysts' for processing feed	Good feed efficiency	
Optimise immune system	Key micronutrients for immunity such as, Vitamins A & E, plus copper, manganese, selenium and zinc	Insures immune system     is not constrained by     nutrition, e.g. risk of     mastitis and retained     cleansings	
Maintenance of strong bones	Calcium and phosphorous to complement forages, recognising the bioavailability of background sources.	<ul> <li>Reduction in losses due to leg problems</li> <li>Reduction in the incidence of milk fever</li> </ul>	
Good stability and dispersion	A high quality carrier that avoids separation	<ul> <li>Minimises variation in micro-nutrient supply</li> <li>Consistent performance</li> </ul>	

The predicted responses (benefits) assume that the specified nutrient, physical or structural dietary components are limiting livestock performance in the current ration.





# **Recommended Daily Feed Rates**

- Feed at 20 to 25g/day per kg of un-mineralised concentrate moist feeds should be converted to 100% dry matter. Where no other mineralised feeds are offered a minimum of 100g/day should be fed. Feed rates should not exceed 300g/day
- Add to the TMR ration at the latter stages of mixing, top dress or make 2 / 3 days requirement available in containers away from the water source.

### Micronutrients in Health and Production

It is vital that micronutrients are fed in accordance with the latest recommendations. The table below summarises the key functions of micronutrients and the deficiency symptoms if inadequate levels are fed.

Micronutrient	Key Function	Deficiency Symptoms
Vitamin A	Skin, vision, bone growth, reproduction and immune system	Reduced absorption of nutrients, loss of appetite, reduced growth, rough hair, nasal discharge, blindness, water retention, decreased sexual activity, irregular oestrus, foetal death and weak young.
Vitamin D	Regulation of calcium and phosphorus	Soft irregular shaped ribs and long bones, stiffness, swelling of joints, decreased appetite.
Vitamin E	Antioxidant, hormone production, blood clotting, immune function.	Muscle damage, retained cleansings, predisposition to mastitis
Vitamin B12	Has a crucial role in energy production, growth, immune and nervous system function and red blood cell production	Reduced appetite, weight loss, lower milk production, muscle wasting, anaemia
Copper	Blood formation, many enzymes systems, bone, hair and wool formation, immune system	Anaemia, reduced growth and milk production, scours, de-pigmentation, impaired bone formation and disorders of the nerves.
lodine	Production of thyroid hormones that regulate energy metabolism, growth and development	Swelling of the thyroid gland (goitre), reduced, milk production, growth reproductive activity, prolonged calvings, increase in stillborn calves, retained placenta and endometritis.





Micronutrient	Key Function	Deficiency Symptoms
Manganese	Fat and carbohydrate metabolism, reproduction, growth and correct bone formation and immune function	Slow growth, skeletal abnormalities, poor reproductive status and poor immunity.
Selenium	Antioxidant and immune system	Muscle damage, reduced fertility, slow growth and anaemia.
Zinc	Skin, growth, development, reproduction, bone and blood formation and many enzyme systems	Skin, hair and wool problems, reduced growth rate, slow wound healing and reduced immune system.
Calcium	Skeleton, muscle activity, milk constituent and enzymes.	Twisted bones, milk fever, twisted abomasums and reduced appetite.
Chloride	Maintaining electrolyte balance	Reduced milk production and growth.
Magnesium	Skeleton, muscle function and nervous system	Tetany, Predisposition to milk fever, Reduced forage digestion
Phosphorous	Skeleton, energy production, cell membranes and reproduction	Twisted bones, milk fever, poor fertility and reduced appetite.
Sodium	Maintaining electrolyte balance	Reduced milk production and growth

## Availability, handling and storage

KW Complete Dairy is available all year round, UK wide and can be delivered direct to farm in 25kg bags. The minimum order quantity is 1.0 T. KW Complete Dairy should be stored out of direct sunlight in a cool, dry environment. KW Complete Dairy should be used within the shelf declared on the bag.

#### **Additional information**

#### **Quality Assurance**

KW Complete Dairy is marketed by KW Alternative Feeds, a UFAS-accredited company.

#### **Legal Disclaimer**

Suggested feeding rates are produced as a guide only and many other factors may have an overriding effect on animal response; no performance guarantee can be given. Rations should be carefully balanced for energy and protein, contain sufficient forage to maintain rumen function and be fortified with an appropriate vitamin and mineral supplement. Animals must have constant access to clean water.

