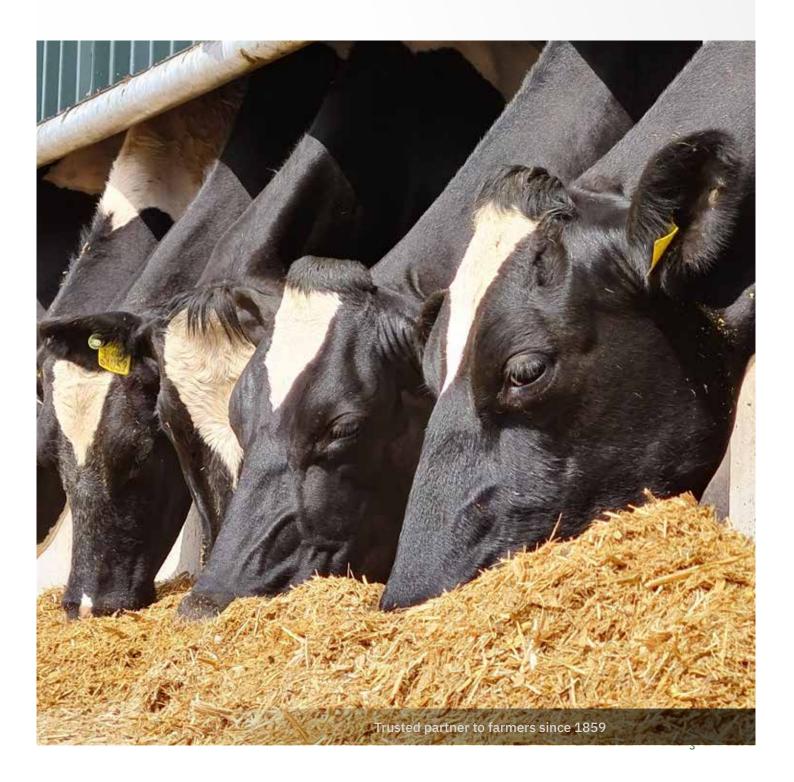
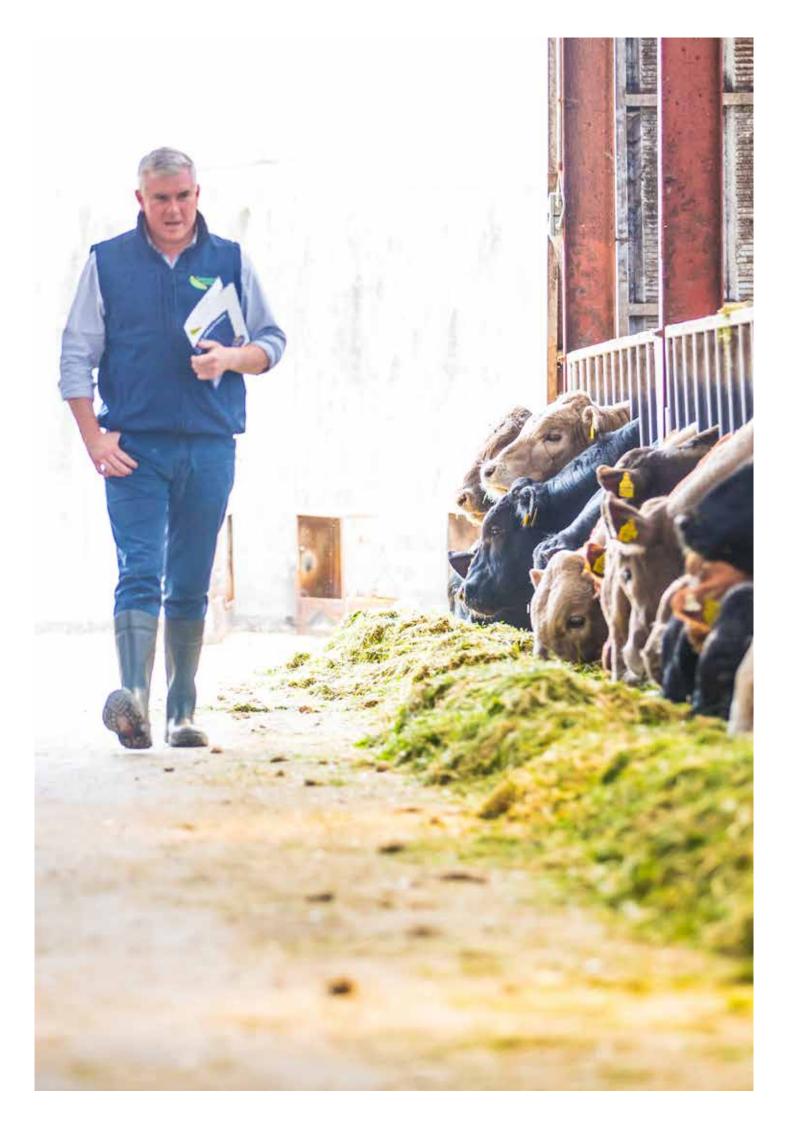


Leaders in Animal Feed and Forage Solutions together with Expert Nutrition Advice







Leaders in Animal Feed and Forage Solutions together with Expert Nutrition Advice

Specialist Nutrition is an experienced animal feeds company, supplying a comprehensive range of high-quality feeds and supplements to progressive dairy and beef farmers.

Specialist Nutrition has worked with farmers to support animal health and farm profitability since 1998. As leaders in Animal Feed Solutions, our moist and liquid animal feeds are the most efficient and sustainable feed available and provide the best value protein and source of energy for animals.

We partner with farmers who value how our Animal Feed Solutions can fit into their farm system and have a very experienced team who provide Expert Nutritional Advice. Along with a range of minerals and high-quality performance products formulated using the latest research, we work with all available on-farm forage to produce real results and help build a profitable future for farmers.

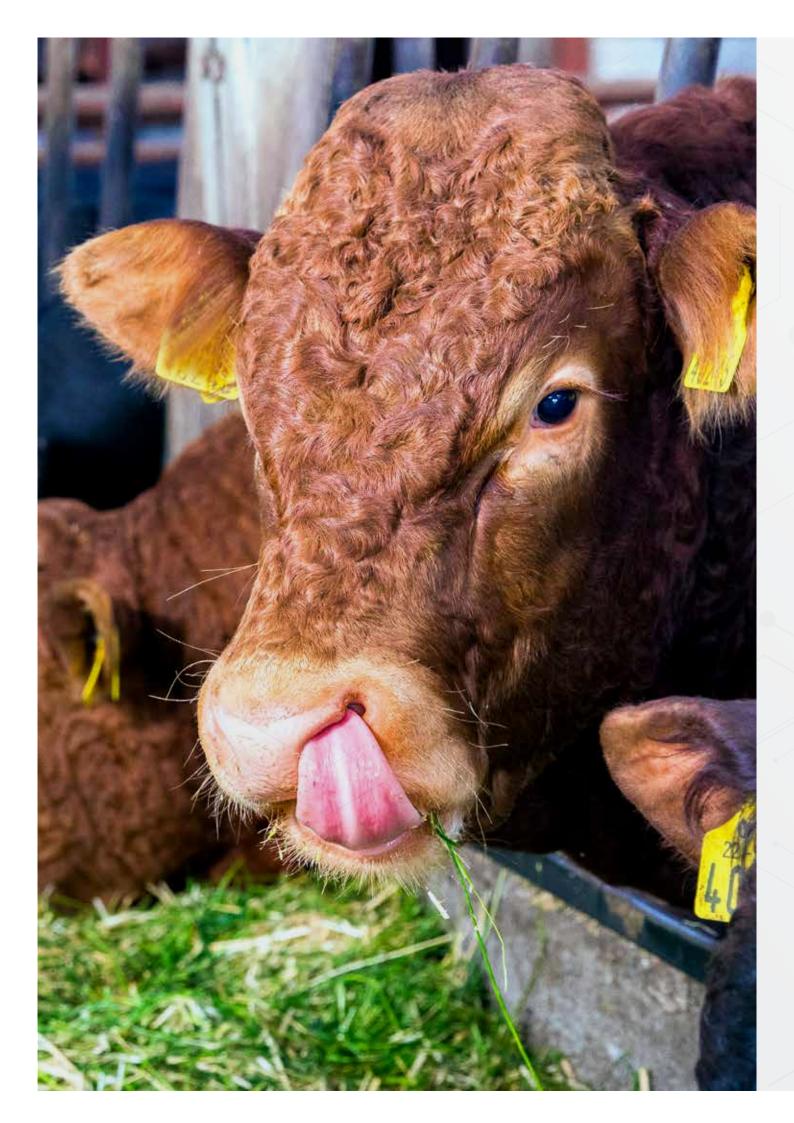
Specialist Nutrition is an Arvum Group company which was founded in 1859 as William Power & Co. Since then, we have been developing new agricultural technologies by being focused on innovation and building trusted partnerships.

If you would like to know more about how we can help you, and support your farm system, please call me on 051 833 071.

Jim Buckley Managing Director

Meet the team

Managing Director	Jim Buckley				
Commercial Director	Terence Delaney				
Ruminant Nutritionists & Forage Systems' Specialists					
Midlands and East	Michael Cleary	086 804 8219			
South East	Nigel Condell	087 093 8170			
East Munster	Rachel McCarthy	087 242 1276			
West Munster	Pat Coakley	086 851 2301			
Business Developmen Manager	t Amy Roche	087 408 1002			
Office Sales	Valerie Corcoran, Sales Specialist		051 833071		
Logistics Team	Pamela Butler / Helen Leyland / Caroline Aspel		051 833071		
Accounts	Sharon Purcell / Denise Stuart / Yvonne Cheasty 051 833071		051 833071		



Contents

Expert On-Farm Animal Nutrition		
Managing Production Lifecycle & Herd Health	06	
Dry Cow Management and Precalver Minerals	80	
Post Calving Minerals	12	
Beef Minerals	14	
Calf Milk Replacer	16	
Rumen Health	18	
Robotic Feed Solutions	23	
Performance Products for High Yielding Cows	26	
Rumen Bypass Protected Fats	28	
Mycotoxin Management	30	
Bedding Conditioner	31	
Butterfats	32	
Animal Feed Solutions	35	
Moist Feed Solutions	36	
Liquid Feed Solutions	44	
Dried Animal Feeds	46	
Storage and Handling Guide		
Pitting to Secure your Winter Feed	49	
Key Decisions in your Forage System	50	
Getting the Most from your Ley	51	
Grass Mixtures	52	
Slurry Treatment	54	
Maximising the Value of your Forage		
Silage Additives	56	
Forage Crops	57	
Sustainability	61	

Disclaimer:

Errors and Omissions Excepted. All sales are subject to terms and conditions – copy available on request. Please consult a qualified agricultural advisor. 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. In all activities Specialist Nutrition adheres to the highest standard of health and safety procedures and environmental compliance. We strongly recommend to all customers that they review their farm health and safety practices and work environment to ensure they operate in a safe and compliant manner.



Specialist Nutrition work with farmers to support animal production, rumen health and farm profitability across the beef and dairy sectors.

Specialist Nutrition uses real-time NIR measurement and more specialised laboratory analysis of feed samples while formulating the diet to help improve feed management and minimise variability, to increase production and animal health.

Analysing the forages and grains gives us the information we need to balance diets correctly.

Regular dry matter (DM) testing of feeds and rebalancing the diet to compensate for DM changes ensures that producers are feeding the ration formulated by our nutritionist.

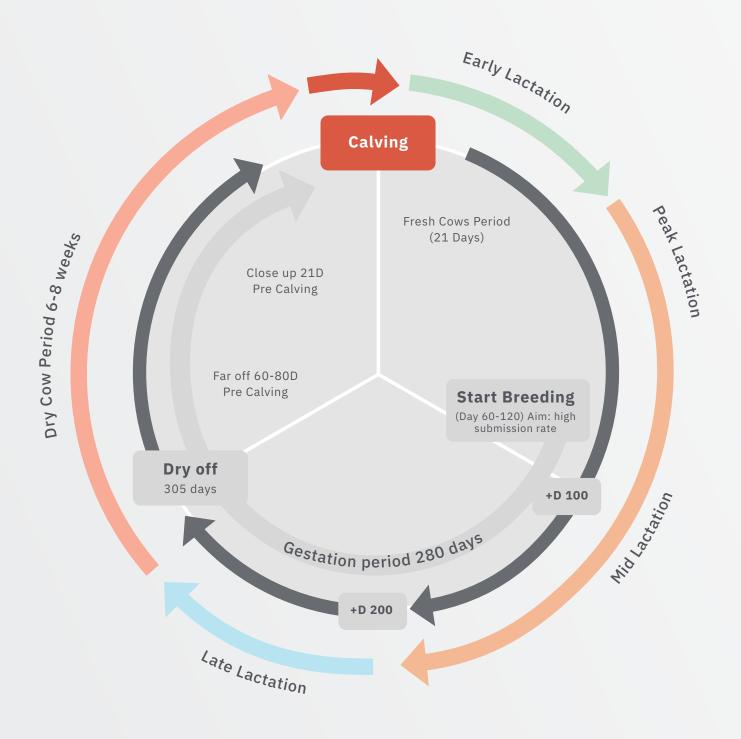
We use the most advanced technology for measuring the quality of feed inputs to help make better decisions and balance the diet to enhance animal wellness, productivity and maximise profitability for dairy and beef farmers



From rumen health to fertility, our ruminant nutritionists help producers overcome challenges to support animal performance and profitability across the following areas:

- Effective minerals, amino acids, and enzymes for animal nutrition
- Herd health for pre-calving, fertility, and boost immunity
- Gut health management with high-quality rumen buffers, enhancers, and production improvers
- Use of yeasts and fats to optimise production for your farm system
- Mycotoxin management

Managing Production Lifecycle & Herd Health



Up to 48h after calving Challenges Milk fever / Displaced abomasum / Uterus infection / Retained cleanings Technical & Dietary recommendations • Diet management • Add Choline to the diet to reduce loss of BCS and support peak milk for up to 21 days after calving • Reviva energy boost helps restore nutrient balance after calving, stimulates DM intakes and milk production

Early Lactation	
Challenges	Sudden changes in BCS / Butterfat depression / Ketosis / Acidosis / Fertility / Lameness
Technical & Nutritional Services	 Dietary recommendations Calving review Introducing grass to the diets
Solutions	Protect rumen function with yeasts and rumen buffer Add bisting to improve boof boolth and for milk production.

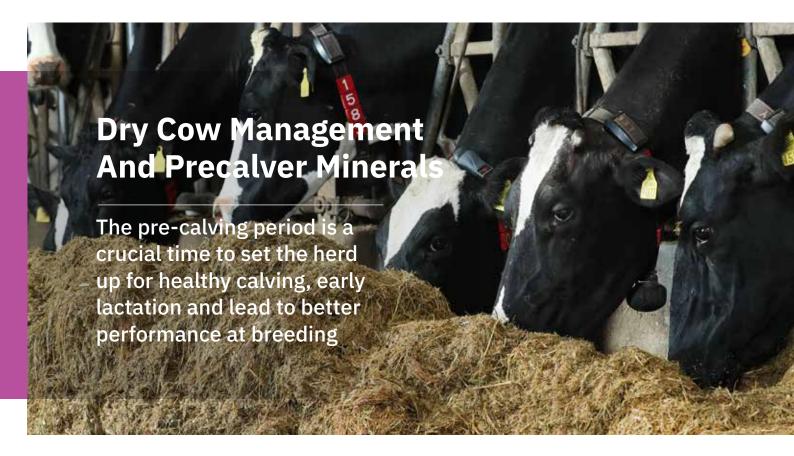
Add biotin to improve hoof health and for milk production
Ensure high DMI with access to palatable feed all day
High energy concentration feed, high fibre content and small amounts of concentrates (increasing over the time) are important for the early lactation diet
Supplementation of protected fats can be helpful in early lactation (up to day 120) to minimise

• Supplementation of protected fats can be helpful in early lactation (up to day 120) to minimise negative energy balance, improve fertility and butterfat content

Peak Lactation & Mid Lactation		
Challenges	Breeding season / Acidosis challenge / Protect butterfats / Lameness	
Technical & Nutritional Services	Dietary recommendationsPre-cut silage analysis	
Solutions	 Protect rumen function with yeasts and rumen buffer Add protected fats to diet for butterfats Add biotin to improve hoof health and for milk production 	

Regulate BCS / Regulate milk production / Control somatic cell count / Hoof health
 Dietary recommendations Late lactation is one of the most important areas of the production cycle and often neglected It is important to regulate both milk production and body condition A lack of body condition will put the cow under stress during the dry period Watch out for high somatic cell count and treat accordingly Look out for lameness and mobility issues
 Address any health concerns quickly to maintain BCS and animal health Biotin is very effective for hoof health and milk production Maintain the right energy and protein balance in the diet to ensure they are not getting too fat or too thin

Dry Cow Period	The dry period is the most important period to prepare the cow for her next lactation
Challenges	 Control BCS to avoid ketosis and managing BCS to avoid issues in early lactation Boost immune system Replenish and balance mineral levels in preparation for close up and calving Manage somatic cells and drying off
Technical & Nutritional Services	 Analyse your silage for mineral content and balance your diet accordingly to prevent metabolic diseases. Add a good dry cow mineral formulated for your dry cow diet
Solutions	 Ensure BCS at start of dry cow period between 3.0 and 3.5 Balancing energy & protein requirements for calcium mobilisation and preventing milk fever Add our Hoofcare Package to improve hoof strength and health for the next lactation



Helping your transition cows

Our precalver minerals are formulated to support challenges during transition: hormonal, metabolic, mineral, immunity and inflammation and to increase resistance to metabolic diseases during transition.

Precalver minerals are designed to reduce metabolic diseases, improve gut integrity and increase longevity from improved survival rate to next lactation.

OptiMin Precalver

OptiMin Precalver ensures an adequate supplementation of essential minerals and vitamins during the dry cow period.

- Includes all essential vitamins and trace minerals
- Vitamin D3 and Magnesium will help to prevent milk fever
- Vitamin E will improve immunity and help the cow manage the metabolic challenges during transition

Feed Rate: 125-150 g/head/day

SN Protected Precalver

Our **SN Protected Precalver** is specially formulated to help meet all the needs around calving and early lactation.

The supplementation of high-value vitamins, in particular Vitamin D3 and E, together with an ideal combination of protected and unprotected trace minerals, will significantly improve immunity status, fertility and calf growth.

- High levels of Magnesium and Vitamin D3 to help calcium mobilisation at calving and to help prevent milk fever
- High levels of Vitamin E (8000IU/kg) is supported with the inclusion of AO Mix: a blend of natural polyphenols, with proven antioxidant activity
- Contains protected Selenium, which, along with high Vitamin E, boosts cow and calf immunity and helps reduce the incidences of retained cleanings

Feed Rate: 125-150 g/head/day



The importance of precalver minerals in the transition period is to support the immune system and meet the requirements of both the cow and the unborn calf. We have the knowledge and expertise to implement our tailored approach to define what your farm system requires.

TAILORED SOLUTIONS

- Hoofcare Package with added Biotin: Feed supplement formulated to improve hoof strength and reduce the incidence of lameness and hoof disorders in cows and cattle
- **Biotin plus** (Hoofcare and energy for milk production)
- Choline plus

SN Dry Cow Special

SN Dry Cow Special is one of the very best precalvers on the market with an exceptional formulation. Combining the best formulation of vitamins with protected trace elements, Dry Cow Special supports the high yielding dairy cow in the dry period. It provides the best preparation for the start of a new lactation.

Dry Cow Special is especially suitable for producers who use potassium-rich fodder (DCAD -640 meq / 1000 gr DM), to prevent hypocalcaemia.

- High vitamin (A, D3, E & B) and mineral content with protected minerals to increase milk yield and fertility
- Contains inactivated yeast combined with B Vitamins to support liver function, rumen protection and gut health
- Limits milk fever response and metabolic diseases

Feed Rate: 100-200g/head/day

SN Dry Cow Supreme

SN Dry Cow Supreme is designed to meet the highest demands of the high yielding cow during the dry cow period.

Nutritional requirements increase significantly and play a pivotal role in the cow's energy status and health both at the time of birth and the early weeks of lactation when milk production is reaching its peak.

Dietary Cation-Anion-Difference (DCAD) becomes more important for dry cow diets to prevent milk fever and give cow and calf the best start in life and next lactation. By focusing on the DCAD in dry cow diets, producers can maintain healthy cows with minimal metabolic problems.

SN Dry Cow Supreme is especially suitable for problems related to placental retention (Vit E 12500 mg / kg), sub-clinical ketosis and hepatic steatosis (choline chloride 10000mg / kg and vitamin PP 25000 mg / kg).

- Highest vitamin content especially vitamin
 E to support the immune system
- Uses DCAD to positively alter the metabolic status of both dry and lactating cows
- Very palatable promoting good intakes
- Maintains rumen function and liver support with **choline**

Feed Rate: 100-200g/head/day

PRODUCT FOCUS

Farm-O-San Reviva

Farm-O-San Reviva Restore nutrient balance after calving

Farm-O-San Reviva is a specially formulated nutrient drink to replenish cows immediately post calving while also replacing fluids lost during parturition. As a result, cows can recover considerably quicker due to the combination of electrolytes, glucose, vitamins, and minerals that Farm-O-San Reviva provides.

For best results, ensure that Farm-O-San Reviva is available immediately after calving before free access to drinking water is given.

The high energy content and excellent palatability of Farm-O-San Reviva make it a beneficial ingredient for animals limited in their energy intake, such as high producing dairy cows. In addition, it gives vital supplementation to freshly calved cows while also replacing lost fluids.

Rich in calcium, vitamins, and energy Farm-O-San Reviva contains all the electrolytes a cow needs to quickly restore her nutrient balance after calving and increase her blood calcium levels.

Farm-O-San Reviva also stimulates dry matter intake after calving, which helps maintain good milk production and body condition.

- Replenishes lost fluids
- Provides electrolytes and nutrients
- Reduces the risk of milk fever
- Contributes to a healthier cow
- Highly palatable
- Rich in calcium, vitamins, and energy.
- Tested and proven to be very tasty - 94% of freshly calved cows drink it without hesitation.

Administration

Available in 7kg & 20kg buckets, Farm-O-San Reviva is easy to use. Mix 1kg of Farm-O-San Reviva in 20Litres of lukewarm water. Administer immediately after calving before free access to drinking water is given.





Ruminase as an additional feed for Rumen Performance

We have had excellent results, health improvements and reduction in milk fever incidence by combining **Protected Precalver with Ruminase** for the last three weeks of the dry cow period.

The addition of Ruminase yeast with high-value B Vitamins prepares the rumen for lactation and will ensure a good microbiome of minerals. See page 21

Feed Rate: 50g/head/day for an adult animal

• Reashure™ Precision Protected Choline as an additional feed to help reduce ketosis

During transition, cows mobilise body fat to meet the energy demand at lactation which if not actively managed, can lead to a decrease in Body Condition Score (BCS) at a time when the cow needs to be at peak milk. See page 26

Feed Rate: Dairy Cows 60g/head/day

Rumen Mg +E as an additional feed to prevent metabolic diseases around dry period

Rumen Mg + E is specially formulated with high levels of Magnesium, Calcium and Vitamin E along with yeast for an extra boost to prevent milk fever and other metabolic diseases. *See page 21*

Feed Rate: 50g/head/day

Hoofcare Package with added Biotin

Feed supplement formulated to improve hoof strength and reduce the incidence of lameness and hoof disorders in cows and cattle.

These can be added to mineral formulations where necessary. See page 22

Feed Rate: 15-20g/head/day



OptiMin Dairy and OptiMin Dairy P-Extra

OptiMin Dairy is an excellent all-rounder dairy mineral, formulated for cows on grass silagebased diets or cows at pasture.

To balance low phosphorus in maize, whole crop, beet, and other root diets use OptiMin Dairy P-Extra.

- Includes all the essential vitamins and trace minerals
- High Vitamin D3 inclusion
- Higher Phosphorus level available (P-Extra)

Feed Rate: 100-150g/head/day

SN High-Performance Dairy

Our SN High-Performance Dairy mineral is suitable for farmers looking to manage overall herd health and performance.

Contains a high concentration of all the essential vitamins and protected minerals for high yielding herds, which are vital to maintaining health and improving performance, as they are easily absorbed and readily metabolised.

- Trace minerals optimise performance, fertility and immunity due to higher bioavailability
- High levels of vitamins, including vitamin E
- High content of protected copper and selenium to meet the demands of a high yielding dairy herd

Feed Rate: 100-150g/head/day



Our mineral range includes all the essential ingredients in just the right formulation to ensure that you have the optimum balance for all stages of the animal lifecycle.

TAILORED SOLUTIONS

- Hoofcare Package including Biotin:
 Feed supplement formulated to improve hoof strength and reduce the incidence of lameness and hoof disorders in cows and cattle
- AB Vistacell Yeast & Rumen Buffer Farm Pack
- Vistacell yeast
- Ruminase (inactivated yeast & B Vitamins)
- Rumen Mg E with inactivated yeast

SN Dairy Elite with live yeast

SN Dairy Elite is an excellent dairy mineral which helps the health and fertility of the animal and supports milk production.

The combination of IntelliBond® protected trace minerals with high levels of essential vitamins, VistaCell live yeast, and Acid Buf™, a long-lasting premium rumen buffer provides a high potency combination mineral, high in bioavailability, all contributing to optimise animal health and productivity.

- High levels of essential vitamins with IntelliBond® protected trace minerals
- Contains Vistacell™ yeast for rumen protection & better rumen function
- Acid Buf™ for long-lasting rumen protection, stabilising rumen pH, increasing fibre digestion and productivity per kg dry matter intake
- High vitamins and protected trace minerals with selenium yeast to meet all the demands of a high yielding herd

Feed Rate: 150-200g/head/day

SN Dairy Cow Special

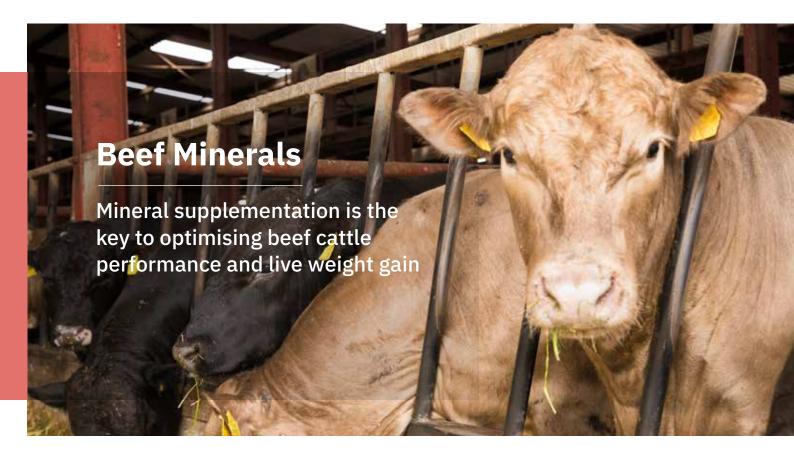
SN Dairy Cow Special is a mineral formulated with an enhanced mineral-vitamin integration to meet the needs of high-performance dairy animals.

With proven performance on the farm in Ireland, **SN Dairy Cow Special** contains vegetable extracts, enhancers and ruminal fermentation optimisers for energy metabolism, essential vitamins for growth and stimulating action on rumen microbial protein synthesis.

The highly appetising power of plant extracts stimulates the appetite of animals and increases feed intake.

- All-in-one product with high vitamins especially B Vitamins and trace minerals
- Contains Biotin and Choline for better hoof health, milk production, immune system and ketosis problems
- Live yeast to improve rumen digestion, stabilising rumen pH and overall performance

Feed Rate: 80 – 120g/head/day



Beef Minerals

As a market leader in beef nutrition in Ireland, we have a range of exceptionally highquality minerals with vitamins, trace elements, amino acids and rumen microflora combined with protected urea yeast to achieve the very best results on-farm.

OptiMin Beef

OptiMin Beef is an all-rounder for indoor or outside cattle. This mineral will meet your demands while feeding grass silage or outdoor on grass with lower concentrate feeding. It has a good range of all essential vitamins and minerals to achieve great results.

- Good vitamin, minerals and trace element content to complement your grass-based diet
- Helps to safeguard health and productivity
- A molasses mineral with a high palatability
- Contains Trouwferm a digestion enhancer which increases cellulolytic bacteria in the rumen for improved fibre digestion, higher dry matter intake all giving good effects on performance.

Feed Rate: 120-150g/head/day

SN Intensive Beef

SN Intensive Beef is our high-performance mineral for fattening beef cattle. It contains high levels of all essential vitamins, macro and micro minerals and is an ideal mineral for all beef cattle.

- Contains Vitamin B1 to ensure the rumen function and compliment high levels of cereals and low levels of forage
- High levels of Vitamin A & D3 and E to account for the reduced level of forages
- Supplemented with high trace minerals for performance

Feed Rate: 120-150g/head/day

We have formulated our beef minerals range using the latest research and with on-farm evidence for the best growth, health and performance of the animals.

TAILORED SOLUTIONS

- Hoofcare package with added Biotin: Feed supplement formulated to improve hoof strength and reduce the incidence of lameness and hoof disorders in cows and cattle
- Vistacell yeast
- AB Vistacell Yeast & Buffer Farm Pack
- Phosphor 6%
- **Ruminase** (inactivated yeast & B Vitamins)
- **Essential Zym** (inactivated yeast and essential oils)
- Limestone

SN Beef Elite (with yeast)

SN Beef Elite (with yeast) is our superior complete formulation for intensively fed cattle with high levels of performance. It provides the best results in finishing beef cattle with a unique combination of yeasts and rumen buffers supporting the rumen function, improving their immune system and rumen health.

- Contains Vistacell™ to ensure the highest digestibility of intensively fed beef cattle
- Combines two rumen buffers (Acid Buf™ & Trouwferm™) in one product to achieve the optimum rumen pH
- Niacin allows beef cattle to thrive

Feed Rate: 150g/head/day

SN Special Booster Beef

SN Special Booster Beef mineral is one of the very best minerals on the market for fattening cattle. This high finisher product will achieve the highest growth rates while ensuring a healthy rumen and optimising fibre digestibility.

- Highest level of vitamins and minerals including B-vitamins
- High levels of live yeast to ensure the best microbiome in the rumen for digestibility and rumen protection
- Very palatable and fragrant for increasing intakes

Feed Rate: 80 – 120g/head/day

Milkivit Calf Milk Replacer contains

- Yeasts & Buffer ensure rumen protection and intestinal health
- B-Vitamins, Butyrate, Acidifier to preserve feed and increase digestion by promoting the beneficial bacterial growth while inhibiting the growth of pathogenic microbe
- Fibosel (cell wall extract) stimulates the immune system by decreasing mycotoxin absorption
- Butyrate, Lactose and flavours for GI tract development and higher intakes caused by mother smell
- Can be mixed with cold water

Milkivit Range		Protein	Oil	Bag Size
• Energizer • Energizer + Pulmo	50% Skimmed Milk Powder	22.5%	25%	20kg
 Professional Professional + Pulmo	35% Skimmed Milk Powder	24%	20%	20kg
• Premium	Whey based product	23%	17%	20kg
• Premium + Pulmo		26%	17%	25kg
Active		21%	18%	20kg

Milkivit Energizer – Based on skimmed milk powder (50%)

- Milkivit Energizer is our top-end product designed for higher growth rates.
- Contains 50% skimmed milk to ensure the best development while supporting overall calf health
- With a high level of oil for energy and an optimal balanced vitamin and mineral content, Energiser Calf Milk achieves higher planes of nutrition and growth rates. It is more comparable to whole milk than other milk replacers
- Milkivit Energizer is easy to mix and designed for higher feeding rates and ad libitum feeding (mixed in a solution 135g/litre)

Milkivit Professional - Based on skimmed milk powder (35%)

- Milkivit Professional is based on skimmed milk powder, designed to offer an outstanding package for dairy heifer replacement. It will provide good fat cover and a shiny gloss on the calves back while supplementing highest levels of Amino Acids for optimum growth and development
- Milkivit Professional calf milk replacer is easy to mix in a solution of 125-150g/litre

Milkivit Premium - Whey based

- Milkivit Premium is a high-quality calf milk replacer and part of the LifeStart programme
- Suitable for every farm situation, it is very palatable and will achieve excellent growth and health results
- Milkivit Premium is easy to mix in a solution of 125-150g/litre



Milkivit Calf Milk Replacer

Milkivit Calf Milk Replacer contains highly digestible oils & proteins, vitamins and minerals to promote higher intakes, better rumen development and increased resistance against diseases and stress.

Achieve better performance, improved health and a reduced need for antibiotics with Milkivit.

The latest dairy farming science shows that the first eight weeks of a calf's life provides a huge opportunity to boost the lifetime performance of the cow.

The selection of the right milk replacer and proper calf management are essential factors for having a smooth and successful calf rearing with healthy and efficient animals.

Natural and sustainable, **Milkivit** contains specially selected dairy products and highly digestible oils & proteins to satisfy the needs of fast-growing calves, plus vitamins and minerals to promote health and a reduced need for antibiotics.

PULMO+ Immunity Boost and Better Respiratory Health for Calves

Pulmo+ can be added to your milk replacer to support a healthy respiratory and intestinal tract. Its unique combination of essential oils provide an extra boost to the immune system.





Why is the health of the Rumen important?

The rumen plays an essential role in the bovine digestive process. Two things are vital to good rumen function; a healthy microbial population and a suitable pH (ideally above pH 6.5). Without these, the rumen becomes less efficient at the digestion of feed. This leaves the animal susceptible to health complications, lowers feed efficiency and will negatively impact animal performance.

Why use Rumen enhancers?

Rumen enhancers increase the rumen's efficiency by creating an environment that allows for the complete digestion of ration feedstuffs, resulting in an increase in the absorption of nutrients.

Buffers help to reduce the rumen acidity that commonly results from feeding diets designed for high milk production. They can increase dry matter intake, rumen microbial, protein production, and fibre digestion, resulting in an increase in milk production and milkfat production.

The risk of acidosis is not only a problem for high yielding cows which are fed high in starch, sugar and concentrates. It's a common risk for all ruminant animals. Pasture-fed dairy cows are at the same risk of acidosis from high concentrations of rapidly fermentable carbohydrate.

Take care to watch for rumen problems, especially at the start of the grazing season when there is highly fermentable grass with less effective fibre in the diet.

Common signs of rumen function problems

- Reduced milk composition
- Butterfat depression
- · Reduced fibre digestion
- Inflammation
- Reduced milk yield
- Changes in manure
- Less dry matter intake

The result of these impacts are: Lower milk yield and milk solids Maintaining butterfat levels at turnout can be challenging due to the reduced fibre content of the lush grass. The inclusion of Acid Buf optimises rumen function for over 8 hours, by stabilising the rumen pH and increasing the performance of the beneficial rumen microbes.

Rumen buffers

Acid Buf

Acid Buf is a highly efficient rumen buffer made from calcareous marine algae.

Acid Buf has a unique marine mineral matrix that consumes excess acid in the rumen and regulates long term optimum pH in the rumen.

Its natural honeycomb structure breaks down slowly in the rumen providing twice the buffering capacity of sodium bicarbonate, even when fed at much lower concentrations.

Acid Buf is a slow-release rumen conditioner that reduces the time below pH 5.5 to less than 1 hour and maintains a higher daily (24hour) mean pH.

Acid Buf is the leading rumen buffer and a 100% natural animal feed ingredient.

Acid Buf's long-lasting buffering ensures a stabilised rumen pH for optimal fibre digestion

Feed Rate: 80-100g/head/day

Benefits of Acid Buf

- Increases fibre digestion, which raises milk solids production
- Increases butterfat and milk protein
- Long-term pH optimisation in the rumen by maximising the time the rumen spent between pH 5.8 - 6.2
- Optimises healthy rumen functioning, reducing subclinical rumen acidosis (SARA) and acute acidosis
- Increasing productivity per kg/dry matter intake
- Highly bioavailable source of calcium and magnesium
- Cost-effective and supported by independent peer-reviewed research





Vistacell™ YEAST

Vistacell acts as a probiotic to improve rumen and gut health by boosting the growth of beneficial rumen bacteria and improving rumen fermentation.

By removing oxygen and competing for sugars in the rumen, Vistacell yeast improves the environment for fibre digesting and lactate utilising microbes, allowing them to thrive and grow. The result is an increase in microbial protein production, and optimised rumen pH and improved fibre digestion. These are all factors which are essential in maximising the efficiency of high performing dairy cows.

Vistacell™ ensures the delivery of the highest dose rate of live yeast for ruminants on the market (60 billion CFU/head/day) compared with other live yeasts.

The higher the live yeast dose rate, the greater the response

Benefits of Vistacell™ yeast

- Increase milk yield by up to 2 litres/ cow/dav
- Increase LWG for beef herds
- Improve feed efficiency and increased dry matter intake
- Reduce the risk of acidosis
- Improve rumination and cud-chewing
- Improve dung consistency
- Less diarrhoea
- Cows/cattle look more content

Also available as Vistacell AB, providing the benefits of Vistacell and Acid Buf in one combination farm pack product

Vistacell™ Farm Pack

Vistacell™ 4% live yeast Vistacell™ 8% live yeast **AB Vista Farm Pack**

Vistacell™ AB 4% live yeast with Acid Buf Vistacell™ AB 8% live yeast with Acid Buf

Rumen Mg + E with inactivated yeast

Rumen Mg + E is specially formulated with high levels of Magnesium and Vitamin E along with yeast as a high-performance farm pack.

- Prevents Milk Fever
- Magnesium and calcium for the lactating cow and an extra boost in the last ten days for the dry cow (closed group)
- Contains high levels of Vitamin E and Selenium
- Inactivated yeast to support rumen function

Feed Rate: 100-200g/head/day



Ruminase

inactivated yeast and high B Vitamins

Ruminase is an inactivated yeast with very high purity levels and little or no fermentation residues. It is a fantastic source of amino acids, B vitamins, nucleotides with superb palatability.

Combined with a good base mineral, Ruminase contributes to the maintenance of optimal conditions of the gastrointestinal tract, in the case of possible dietary errors, and during treatments with antibiotics and sulfonamides.

- Increased intakes
- Increases the digestion of fibre and allows the utilisation of more available energy from the diet
- Reduces the production of lactic acid and provides a greater synthesis of propionic and acetic acid
- All this increases the energy level of the entire food ration, improving the rate of fat and protein in milk or the production of beef

Feed Rate:

Beef /Dairy/Calves 20-50g/head/day

Essential Zym

inactivated yeast and B Vitamins with amino acids

Essential Zym is a combination of pure yeast and essential oils derived from plant extracts which maximise flora and gut health while also promoting feed intakes.

Essential Zym is a cutting-edge product designed for maximising performance in cattle from predominantly home-produced forages and grains.

- Further utilising feed degradation
- Improving fat and protein content in milk
- Creates a greater carcass gain and body condition score

Feed Rate:

Beef / Dairy / Calves 20-60g / head / day



PRODUCT FOCUS

Biotin

The role of biotin to support metabolic functions

Biotin

Biotin is a B-group vitamin and an essential nutrient for the animal production cycle. Though it is synthesized in the rumen of all ruminants, its bioavailability depends upon the ration formulated. Biotin is especially required for the production of keratin and the epidermal tissues of hoof-horn and has other metabolic effects that influence milk production. Studies have shown a deficiency of biotin could be a limiting nutrient for high producing cows.

Key biotin metabolism functions

- Fat metabolism
- Energy metabolism
- Protein metabolism

During transition, cows mobilise body fat to meet the energy demand at lactation which, if not actively managed, can lead to a decrease in Body Condition Score (BCS) at a time when the cow needs to be at peak milk. Lower BCS can lead to a fatty liver causing ketosis, which results in a lower dry matter intake, higher risk for metabolic diseases after calving and lower milk yields.

Lameness is ranked second to mastitis as the most costly health problem on farms

Scientific studies show that biotin delivers better-producing dairy cows, and the return on investment is considerable, even in well-managed herds

Biotin for hoof health

Improving hoof strength reduces the likelihood of problems associated with lameness. Cows with sound hooves eat more, produce more, and are more willing to breed. Biotin is also essential for dry and transition cows to help minimise the disruption of horn growth that occurs around calving.

Biotin for milk production

Biotin increases the production of glucose by the cow and is essential for milk production. More glucose means higher milk yields.

Many leading dairy nutritionists, advisors and vets are now recommending biotin supplementation.

Feed Rate: 15-20g/head/day

Available to be added to all Specialist **Nutrition minerals**



Case Study

"We began using SN Triple Booster Pack in August 2020 as part of a trial with Specialist Nutrition. Specialist Nutrition believed that this combination pack providing energy and improving rumen function would increase overall animal performance. In particular, we were looking for a boost in milk composition and yield in an already high yielding herd, and an improvement in overall herd fertility.

We trialled 15 cows on against 15 not on the SN Triple Booster with equal ability and age. The animals were fed using a hopper specially developed for use with the Lely Astronaut. Initially we didn't see huge increases as my herd were already on one of the ingredients, and I had seen the first lift in yield from using this already. However, by October a significant difference was clear.

The group getting the SN Triple Booster Pack were on average **producing over 5 litres more** than their counterparts.

When I analyse overall herd performance, 9 of the top 10 cows are on the trial, and all milking over 42ltrs while holding body condition.

I have seen fertility improve with an increase in **conception to first service.** Specialist Nutrition provide all the nutritional advice I need and have a tailored plan for the herd. Cows are happy, in great condition, going in calf and filling the tank."

John O'Callaghan Cork



Glucosure Energy Boost

High energy source for top performance dairy cows

- **S** Boost milk yield
- (v) Enhance appetite
- (v) Increase feed intake



Glucosure is particularly suitable for high-performance dairy herds, and where there is poor utilisation of energy sources and limited feed intake.

Used mainly in robotic milking systems, Glucosure Energy Boost gives an energy boost at milking time, and it helps bring the cow to the robot.

Glucosure Energy Boost offers exceptional palatability, and a slow-release high energy ingredient that can stimulate animals to increase their feed intake and enhance appetite.

Particularly suitable for high performance dairy herds, and where there is poor utilisation of energy sources and limited feed intake.

Feed Rate:

500g/head/day for high yielding dairy cows



SN Triple Booster Pack

High Energy pack to improve overall animal performance and rumen function

- **S** Boost milk yield
- Tenhance BCS in early lactation
- (v) Improve fertility

1. Boosts animal performance

- Increases milk yield up to 5L and raises milk solids (as trials have shown)
- Increases fibre digestion which leads to improved butterfat level
- Beef Farming | Promotes extra weight gain in beef (LWG), increasing productivity per kg/dry matter intake

2. Provides concentrated energy source

- Combats negative energy balance (NEB) in early lactation
- Reduces the risk of acidosis by combining rumen buffers to improve rumen efficiency and optimise healthy rumen function
- At 37 ME (MJ/kg DM) the SN Triple Booster Pack provides a fantastic concentrated and healthy energy source

3. Improves Body Condition Score (BCS) and boosts herd fertility

- Helps reduce body condition loss, particularly in early lactation
- The combination of C16 and C18 protected fats will help to enhance BCS and fertility
- Readily available energy source to enhance fertility during NEB

Feed Rate:

400g/head/day



Performance products for high yielding herds:

High yielding dairy cows require some extra care to manage their production, health, and fertility. Keeping cows healthy during the critical transition period will save money on treatment cost, replacement animals and lost milk.

Our range of performance products target all of these areas and can either be purchased as straights or added as part of your mineral formulation

ReaShure™ Precision Protected Choline for rumen protection

ReaShure™ Precision Release Choline is proven to help dairy animals' transition more smoothly, reducing the risk of metabolic disorders, supporting higher milk production, reproductive efficiency and overall animal health.

- Used in the transition period to boost milk production (up to 5%) supporting milk fat synthesis
- Reduces metabolic disorders
- Supports fat metabolism
- Reduces ketosis by increasing fat utilisation from the liver
- Increases butterfat and milk protein
- Fed at 60 grams per day for 21 days pre to 21 days post-calving

Feed Rate:

Dairy Cows 60g/head/day **Calves:** 7 g/head/day

ReaShure®
Precision Release Choline

Keeping dairy animals healthy during the critical transition period will save money on treatment costs, replacement animals and lost milk.

A smoother start will have a lasting economic impact on the entire lactation.

These products are available as straights or can be formulated as part of your mineral mixture

Nitroshure™ Encapsulated Urea

Nitroshure Urea is an encapsulated urea supplement for lactating dairy cows designed to create a slow-release protein source for the rumen.

- Improving protein quality by replacing low-quality protein sources in the diet and increasing microbial protein synthesis
- Creates more space in the rumen for other ingredients such as forage and energydense ingredients while reducing feed costs
- Achieved a more balanced rumen while improving fibre and carbohydrate digestion

Feed Rate:

Replace 100g of Soya with 20g of NitroShure up to a maximum of 150g Replace 10 g of Rapemeal with 15g of NitroShure up to a max of 150g



AminoShure-XM® rumen-protected methionine

AminoShure®-M Precision Release Methionine is the next generation in rumen-protected methionine, with gradual release encapsulation technology.

Methionine must be consumed in the diet. If not enough is consumed, your cow is unable to build proteins required for tissue and organ maintenance, growth, reproduction, fetal growth or milk protein production.

It provides exceptional bioavailability, for high yielding dairy cows in lactation and dry period so you can be confident your cows are getting the methionine required for maximum milk protein production.

AminoShure®-M Precision Release Methionine is the milk protein builder.

Consistently provides 10% extra protein in milk

Feed Rate:

20g/ head/day to meet the cows' MP methionine requirement for maximum milk protein production.

Fed at 20g per head per day and delivered in 20kg bags, one bag will do 1000 cows a day.





Goldenflake

GoldenFlake is an energy-dense feed which is used to drive milk yield, support butterfat levels, and reduce loss of body condition in early lactation, which in turn, can boost herd fertility.

Fats comprise of approximately 2.25 times more energy compared to carbohydrates or protein.

Maintaining butterfat levels is one of the main challenges facing milk producers during the grazing season. It is a particular issue for spring calving herds, where cows are also hitting peak yield and need to retain sufficient condition for good fertility.

In beef cattle, protected fats can increase the energy density of the diet while minimising the risk for acidosis.



Need	Feature	Benefits	
Increase milk yield	Extremely high content of rumen-protected,	Allows the energy density of the diet to be increased for	
Increase energy intakes	highly digestible energy	high-performing stock without impairing rumen function. Additional energy can be portioned for milk production and improved fertility.	
Improve body condition			
Increase milk fat %	A source of C16 fatty acids	Provides the building blocks for milk fat synthesis, increasing value per litre.	
Ready to feed	Dry, free-flowing, flaked product	Simplifies feeding	

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



It is worth considering adding protected fats such as GoldenFlake to your buffer diet to drive milk yield, support butterfat levels, improve body condition, which in turn, can boost herd fertility

Butterfat Extra

Butterfat Extra is a rumen protected fat extremely high in energy and C16 fatty acids, to boost milk production and milk fat content. C16 fatty acids can be directly used for butterfat production when there is less energy (glucose) needed for milk fat production.

For high performing dairy cows or cattle **Butterfat Extra** allows the energy density to be increased without impairing the rumen and give a risk for acidosis.

Butterfat Extra has a positive effect on the overall energy balance of the cow where the additional energy can be portioned for milk production and fertility.

Need	Feature	Benefits
Increase milk fat %	A source of C16 fatty acids	Provides the building blocks for milk fat synthesis, increasing value per litre.
Increase milk yield	Extremely high content of rumen-protected, highly digestible energy	Allows the energy density of the diet to be increased for high-performing stock without impairing rumen function. Additional energy can be portioned for milk production and improved fertility.
Ready to feed, easy storage	Dry, free flowing, mini prills or flakes	Easily incorporated into the diet.

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

Availability, handling and storage

- Available all year around in 25 kg bags, 600kg bags or pallet multiples of 1.2 tonnes
- Store in dry, well ventilated builings and out of direct sunlight (max. temperature 35°C)
- Pallets should not be stacked more than two high and have a gap between to allow air circulation



Mycotoxin Management

An indicator of a Mycotoxin issue on a farm can be reduced herd health and performance with animals presenting as generally unwell. There may be specific health problems, feed intakes can be reduced, and silage heating may be occurring.

To protect animal health and performance, the mycotoxins that are contaminating the farm feed need to be deactivated.

Your Specialist Nutrition advisor can help identify the right toxin binder based on an understanding of your operation, the contamination of your feed, the status of your animals and your farm operation.



PRODUCT FOCUS

Confort

The leading cause of environmental mastitis is three groups of bacteria: Streptococcus, Coliforms and Enterococcus. Due to its specialised formulation, Confort reduces the development and infection created by these microorganisms, significantly limiting the occurrence of udder disease and increased somatic cell count in milk.

Characteristics

- Moisture absorption (natural zeolites)
- Bacteriostatic effect (calcium hydroxide)
- Limits the development of fungi & bacteria (sulphur-bentonite)
- Contains essential oils extracted and purified from Aloe vera and peppermint
- No toxicity

Main Properties

- It significantly reduces the ambient moisture that contributes to bacterial growth
 on the cubicle. At the same time, it reduces the release of harmful gases, improving
 the environment and the animal welfare
- Reduces the occurrence of udder diseases while also contributing to the control
 of interdigital dermatitis
- It promotes the reduction of ammonia and hydrogen sulphide in the environment
- It has a soothing and disinfectant mode of action
- It helps the positive breakdown cycle of the bedding and slurry
- The product is formulated to be completely safe for the operator and the animals

COMPONENTS:

Minerals, Essential oils extracted and purified from Aloe vera and peppermint.

RECOMMENDED DOSAGE:

Cubicles: spread the product 1-2 times/week at a rate of 100 - 200 g/h/d. **Loose straw bed:** add it with straw, sawdust, and dry manure at the rate of 50 - 100 g/h/d. **Calf Housing:** distribute equally over the calf shed flooring and side walls 15 - 30 g/h/d.





Maintaining butterfat levels during the grazing season is one of the main challenges facing milk producers. It is a particular issue for spring calving herds, where cows are also hitting peak yield and need to retain sufficient condition for good fertility.

The main component in milk fat production is the volatile fatty acid acetate, which is produced when dietary fibre is fermented in the rumen. The problem is that although young spring grass provides a great source of both energy - in the form of rapidly fermentable carbohydrates or sugars – and protein, it's structurally immature.

As a result, fibre levels are extremely low compared with older, more mature grass. This limits the amount of acetate produced in the rumen, which in turn reduces butterfat levels.

Balancing energy supply

Supplying the right amount and type of energy to the cow, irrespective of breed or type is therefore critical if butterfat production is to be supported without adversely affecting milk yields, body condition or fertility.

While grazed grass can be low in fibre with high sugar and oil contents, for modern ryegrass swards this can persist right through until late summer, not just during spring when most expect it. Unless properly balanced in the rumen, the rapidly fermentable carbohydrates, together with the higher oil content, can have a negative impact on rumen function and fibre digestion, resulting in depressed butterfat production.

The positive impact of stabilising rumen pH

Good rumen function is also critical, with fibre digestion in the rumen impaired whenever rumen pH drops below 5.8.

This not only further cuts acetate and butterfat production, but can reduce feed intakes, overall nutrient supply and milk yield, as well as increasing the incidence of health problems such as laminitis.

The high levels of rapidly fermentable carbohydrates and sugars in spring grass, combined with low levels of structural fibre, can result in extended periods of low rumen pH. If the rumen drops below pH 5.8 - the threshold for sub-acute ruminal acidosis or SARA - the impact is even greater.

Low butterfats are an indicator for SARA at any time of the year, but in the spring, when butterfats are already depressed, it can be harder to spot. Farmers should aim to keep rumen pH as stable as possible and to minimise the time spent below pH 5.8 when fibre digestion is compromised. This can be done by ensuring an adequate forageto-concentrate ratio in the overall diet, and make sure any buffer feed contains sufficient long fibre to stimulate cudding - to release acid neutralising saliva – and good rumen function.



The addition of Acid Buf and Vistacell, along with extra digestible fibre, can substantially improve butterfat percentage, and subsequent herd performance.

Ration tips to boost acetate production and butterfats

- **1. Balanced** concentrate feeding with good levels of dietary fibre from sources such as soya hulls, sugar beet pulp or high-fibre moist feeds.
- 2. Feed a concentrate that compliments the energy coming from lush grass combined with feeding a long fibre (hay or straw) to stimulate cudding and help release acid-neutralising saliva.
- 3. Add Acid Buf™ slow-release rumen conditioner and Vistacell™ live yeast to stabilise rumen pH, minimising the time spent in acidic conditions (below pH 5.8) when fibre digestion is compromised.

Hay or big bale silage is ideal, with chopped straw a good alternative if these are not available.

One of the best ways to reduce the rate and extent of any rumen pH drop is to add Acid Buf™ slow-release rumen conditioner and Vistacell™ live yeast to the diet or the buffer feed offered at grass.

If only feeding compound in the parlour, switch to a concentrate based on digestible fibre rather than starch, and feed 'little and often' to avoid overloading the rumen. Always make sure concentrates are high quality with good palatability to encourage full intake alongside grazed grass.

The benefits, in terms of improved rumen conditions, as well as milk fat production and milk yields, have been proven in numerous peer-reviewed research and commercial trials over the years.

Increasing butterfats with live yeast and conditioners

In a case study, the addition of a slow-release conditioner and an active live yeast to cows receiving a 65:35 forage-to-concentrate ratio diet increased both milk fat production (1649 g/cow/day vs 1462 g/cow/day) and fat-corrected milk yield (38.9kg/cow/day vs 37.1kg/cow/day).

The result was due to a substantial reduction in the time the rumen spent at low pH, which improved fibre fermentation and produced a significant rise in the acetate concentration in the rumen (63.1% vs. 61.9%).

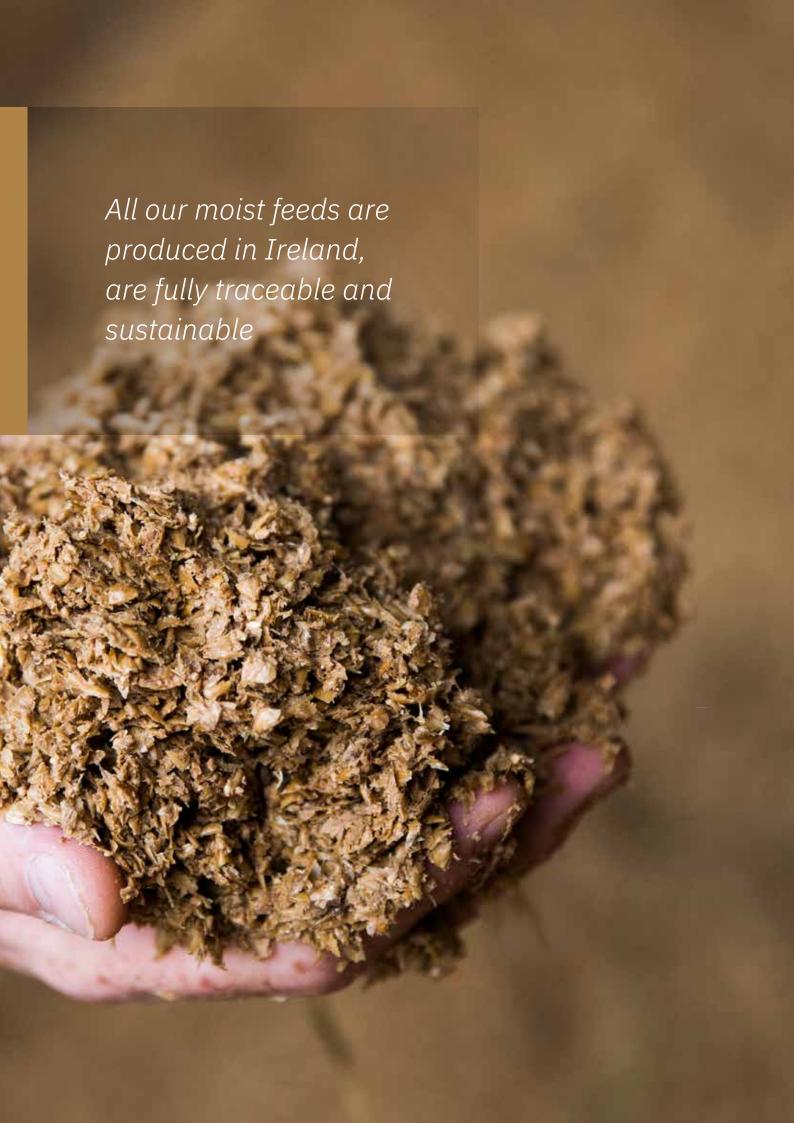
These results show how important it is to properly support rumen fermentation if butterfat production is to be maintained when grazing.

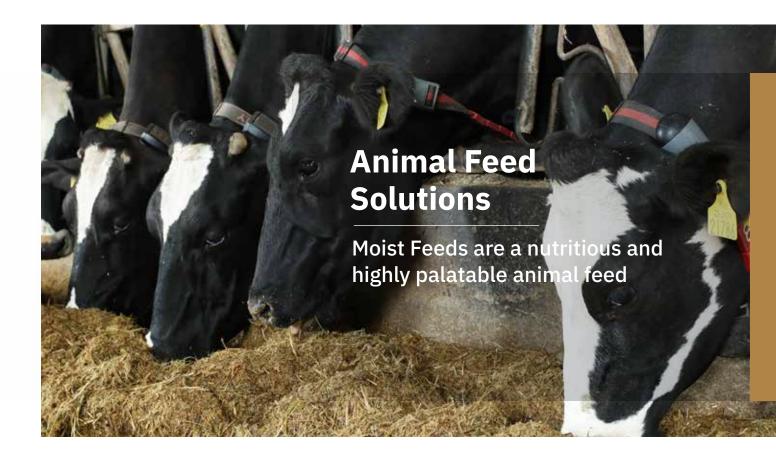
Whether used individually or together, the addition of Acid Buf and Vistacell, along with extra digestible fibre, can substantially improve butterfat percentage, and subsequent herd performance.

Would you like to chat?

If you would like a chat about how our production improvers can help you increase your butterfat levels while managing costs and herd health,

Contact Specialist Nutrition on 051 833071





Moist Feeds are a nutritious and highly palatable animal feed.

Rich in protein, they offer an excellent source of energy, fibre and minerals for dairy and beef farms.

Manage costs, animal nutrition and herd performance while adding moisture to your feeds with Moist Animal Feeds from Specialist Nutrition.

Key benefits

- · Contains good quality protein and energy
- Ideal as an inclusion for high yielding dairy feeds
- Ideally suited for milk production helping maintain rumen function
- Excellent supplement to cereals for beef cattle (finisher)
- Enhances dry matter intakes
- Reduced cost per head per day
- · Highly palatable and reduces sorting
- Easily stored and incorporated into TMR feeding systems
- Quality assured product
- Produced in Ireland and delivered fresh daily for maximum nutritional value



BREWERS GRAINS

BREWERS GRAINS is a co-product from the production of beer. The malted barley is soaked in warm water to remove the sugars as wort with the fibrous and protein residue being separated off as Brewers Grains. Brewers Grains can be fed to all livestock in a wide range of feeding situations. Whether used as part of a total mixed ration (TMR), as a sole concentrate feed or even as a forage replacer, care should be taken to ensure sufficient long fibre is fed.

- Ideal for extending forage and low protein diets
- Improving rumen function & acidosis risk with a high content of digestible fibre
- Excellent feed for all ruminants

Feed Rate:

5-20kgs/head/day

Manage costs, animal nutrition and herd performance while adding moisture to your ration

(Dry matter basis except DM) Dry Matter 18-24% Crude Protein 22% Oil 7% NDF 62% Fibre 5%

2%

11.7

Typical Analysis

Sugar

ME (MJ/KG DM)



EORNAGOLD

EORNAGOLD is produced from pressed residual (spent) grains, evaporated syrup, and a centrifuged cake residue from the whiskey distillation process. Initially, water is added to milled corn or barley and malt and processed in the brew house to extract sugars for fermentation by yeast.

- Ideal as an inclusion for high yielding dairy feeds
- Excellent supplement to cereals for beef cattle (finisher)
- High digestible fibre a lower acidosis risk
- Suitable for diets with a lower dry matter content

Feed Rate:

4-10kgs/head/day

Note: Unless specifically recommended, this feed should not be used in sheep's diets because of the risk of copper toxicity.

Typical Analysis

(Dry matter basis except DM)

Dry Matter	30-32%
Crude Protein	28%
Oil	10%
NDF	43%
Starch	6%
Sugar	1%
ME (MJ/KG DM)	13.5

Our moist feeds are produced as a co-product from the beverage industries here in Ireland. The vast majority are sourced directly from the site of production, and delivered directly onto farm. This ensures that the customer gets a fresh unadulterated product which is produced to the highest standard.

Used correctly in a balanced diet these products produce excellent results and are great value for money. Our team have many years experience in handling and feeding moist feeds.

If you have any questions give our office a call on 051 833071.





NorthernGold

NorthernGold is a co-product of the distilling industry and is an excellent feed for all animals.

Whether used as a total mixed ration (TMR) or part of a simple mix, it can make up 10% of a diet fed with straw or hay

- Ideal balancer with cereals (especially in beef cattle diets)
- Very high digestible fibre and protein content without increasing the acidosis risk
- Great for feeding store cattle or dry cows (low calcium & potassium content)

Feed Rate

5-20kgs/head/day

NorthernExtra

NorthernExtra is a co-product of the distilling industry.

NorthernExtra can be fed to most livestock in a wide range of feeding situations. Whether used as part of a total mixed ration (TMR), as a sole concentrate feed or part of a simple mix, care should be taken to ensure a good long fibre source is present and that adequate mineral and vitamin supplementation is added.

- High protein and energy content
- Suitable especially in high yielding dairy diets and beef cattle finisher diets

Feed Rate

5-20kgs/head/day

Note: Unless specifically recommended, this feed should not be used in sheep's diets because of the risk of copper toxicity.

Nicholas Molloy's story

Another farmer who has collaborated with Specialist Nutrition is Tullamore man, **Nicholas Molloy**, who was prompted by the drought conditions of the summer of 2018 to investigate the benefits of buffering.

"In early June, grass growth started to dip," he says. "We decided that buffer feeding was an option for us."

Working with Nicholas, **Specialist Nutrition Ruminant nutritionist Nigel Condell** analysed the available forages, used CreidExtra Moist Feed as a high-value protein and energy source, and formulated a diet.

"Even though the drought stayed with us for quite some while, I was very happy with my cows' performance. It worked out well for me. We maintained the milk quality, despite the severe lack of grass available on the farm. "Using CreidExtra as an alternative feed played a part when we were faced with limited grazing, and milk solids improved for me.

"I'm heavily stocked here. My grazing platform is not sufficient to sustain my milking herd.

"We use buffer feeding with CreidExtra all the time now, and it helps to balance intakes. Not only does it improve my cow performance but also helps to manage body condition scores for fertility.

"Nigel understands my farm system and what I am looking to achieve. I have ongoing support from Nigel, and I trust him to help me manage the cost of my inputs and maximise herd performance, whether in early spring or late lactation."

CreidExtra

CreidExtra is a very palatable moist feed that is high in energy and protein

- Contains high levels of yeast
- A good source of slow-release energy and protein
- Suitable especially in high yielding dairy diets and beef cattle finisher diets

Feed Rate

5-20kgs/head/day

Note: Unless specifically recommended, this feed should not be used in sheep's diets because of the risk of copper toxicity.

CreidGold

CreidGold is a co-product from the manufacture of Irish whiskey. Whether used as a total mixed ration (TMR) or part of a simple mix, it can make up 10% of a diet fed with straw or hay.

This makes it a great feed for dry cows and store cattle.

- Ideal for dairy diets helping maintain rumen function
- High digestible fibre and an excellent value energy source

Feed Rate

5-20kgs/head/day



C*TraffordGold

C*TraffordGold comes from the Cerestar processing facility in Manchester. It is produced as a result of processing wheat to make four key ingredients for human foodstuffs: starch, glucose syrups, vital wheat gluten and alcohol.

C*TraffordGold can be fed to most livestock in a wide range of feeding situations. Whether used as part of a total mixed ration (TMR), as a sole concentrate feed or even as a forage replacer, care should be taken to ensure sufficient long fibre is fed.

- Very good value for money
- Suitable for pitting during summer for subsequent winter feeding
- High dry matter content boosts existing low DM TMR diet

Feed Rate

5-20kgs/head/day



Farmers are being prompted to look for ways of controlling the variables which influence the cost of producing milk on their farm. They also need to focus on milk solids and optimising fertility in their herd.

Specialist Nutrition has seen a rise in enquiries from farmers looking to understand how they can reduce their exposure to fluctuating grass resources and milk prices with buffer feeding and Eornagold.

Strategies to bridge the gap

Buffer feeding allows farmers to complement the available grass resource to meet the cow's nutritional requirements throughout the year while keeping the cow's diet balanced, so that rumen function is at its optimum performance.

"We aim to bridge the nutritional gap with a costeffective, well-balanced feed,"

says Specialist Nutrition ruminant nutritionist, Rachel McCarthy.

"Simply adding silage and availing of more parlour compound might suffice, but it will not help optimum performance at the best value for cows. It is important to be aware of the limitations of high forage diets.

"For example, if a cow is milking 28l, her intake is c.21kg Dry Matter (DM). At grass in April, she will intake c.16kg DM leaving a shortfall of 5kg DM. Our objective is to fill this gap."

"For those farmers buffer feeding now alongside grazing, it is about adding slow-digesting fibres and starches to complement lush grass and provide extra energy to the cow in the run-up to breeding and the onset of peak milk.

"The buffer diet should include ingredients such as soya hulls, beet pulp, barley, maize meal, beet, moist feeds and home preserved forages," says Rachel.

"The ability to buffer feed can make up the shortfall in overall DM intake targets to perform consistently, achieving good milk quality and production.

"Using only compound feed to buffer feed cows is not only costly but depending on the formulation, can result in overfeeding of expensive minerals, which also adds to the danger of acidosis and creates a further imbalance to the cow's diet.





"The cost of protein such as soybean meal and the various dried distiller products have risen by 30pc in recent times.

"This is why a product like Eornagold is a great value alternative to reduce the cost of protein in the diet.

"Eornagold moist feed can be fed fresh or pitted and used as part of a buffer diet. It provides increased palatability in the animals' diet, which helps to **minimise sorting**, particularly when we are trying to feed fibrous ingredients, such as straw, to **protect butterfats**.

"It is an especially good option for pitting and can save you a lot of money when your requirement for protein increases in autumn."

Apple Pomace

Apple Pomace is produced from pressed apples in the manufacture of apple juice or cider. The remaining pulp is high in digestible fibre and therefore a valuable and nutritious feed. This co-product is an appetising moist feed, ideal for inclusion in ruminant diets as a buffer feed to promote the intake of less palatable feeds.

Apple Pomace is an excellent supplement to grass and maize silages when supply is limited or of poor quality.

- Ideal forage replacer or extender
- Highly palatable with the best source of digestible fibre and sugar
- Cheaper energy source than grass silage and ideal to compliment silage

Feeding Rates

Dairy Up to 20% dry matter intake
Beef Up to 20% dry matter intake in

adult animals.

Sheep Up to 10% dry matter intake (ewes)

Success stories



When John Shanahan, from Ballintotis, Midleton, Co Cork started using Eornagold he saw an immediate change in his milk yields as well as an increase in daily intakes, improved fertility, and a reduction in workload.

John farms 100 pedigree Holstein cows on a 60-acre grazing platform with his wife Anne and son Jack.



John & Anne Shanahan Dairy | Midleton, Co Cork

Pedigree Holstein herd 100 Cows 60 Acre Grazing Platform Spring and autumn calving

The Results

- 14% increase in milk volume over 2 year period
- 3L increase in yield per head per day
- **Improved cow fertility**

We saw an immediate increase in milk yield. Over time this has solidified into an increase of 3L per head per day

"Over time this change has solidified into an increase of three litres per head per day over the last couple of years," says John.

"Because Eornagold is a moist feed, it makes the overall substrate of the mix wetter, therefore increasing consumption. It is also highly palatable, and the cows just love it.

"Milk solids have gone from 548kg to 588kg and milk volume improved from 7605L to 8679L," John adds.

In previous years, we fed a mix of maize silage, fodder beet and grass silage along with a high protein blend to balance the diet, but there was a lot of work involved in handling and feeding the beet.

"Eornagold was recommended to me by a neighbour, and once I saw how easy it was to store and incorporate into the feed mix, I was converted. I also found that it offered a more cost-effective way of incorporating protein in the diet."

John has also noticed improvements in fertility. "Before I started using Eornagold, we had an empty rate of 20pc in the herd, but now that's down to 14pc.

"I think the extra protein and energy that it provides post-calving is vital to the cow. It plays a major part in meeting the increasing energy demands of the cow following the onset of lactation and ensures she will be back in calf quickly,"



EornaSyrup

EornaSyrup is a co-product from the manufacture of whiskey. It comprises mainly of yeast cells and residues from malted barley after alcohol is distilled off the fermented wort by the high temperature in the copper stills.

- High in digestible energy
- High level of degradable protein
- Highly palatable
- Ideal to complement low protein forage diets, such as wholecrop cereal, maize silage or straw
- Free-flowing liquid easily handled
- High copper content

Feed Rate:

1-5kg depending on the fibre level of the base diet. Beef Cattle Flexible in the way it may be offered with maximum feed rates being; Young stock 0-1kg/head/day. Stores 2-3kg/head/day Finisher 4-5kg/head/day

Dairy Cows: Can be fed in diet feeders; in concentrated mixes or trough feeders with maximum levels being 3.5-5kg/head/day

Suckler Cattle: Has successfully been used as the sole concentrate feed for in calf suckler cows on a straw diet. Additional energy may be required after calving.



CreidSyrup

CreidSyrup is a co-product from the manufacture of Irish whiskey. It comprises mainly of yeast cells and residues from malted barley after alcohol is distilled off the fermented wort by the high temperature in the copper stills

Feed Rate:

1-3 kg depending on the fibre level of the base diet



Syrup is a highly palatable source of energy which helps promote dry matter intakes

EnerGold

EnerGold is a molasses based liquid feed suitable for all ruminants. Containing high sugar and low protein, EnerGold is ideal to mix in high starch and high fibre diets.

- Cost effective source of energy
- Contains high levels of quality sugar which is an important nutrient in both dairy and beef diets
- Easy to handle in all weather conditions
- Highly palatable
- Helps to promote high dry matter intakes
- Highly digestible and contributes to rumen fermentation
- Ideal for binding dusty or mealy ingredients in your TMR

Feed Rate:

1-3 kg depending on the fibre level of the base diet

Beef Cattle

Typically 10% can be included depending on the nature of the other feeds in the mix and subsequent storage facilities for the finished ration

Dairy Cows Typically 2kg/head/day

Young Stock Typically 10% of diet from 4 weeks of age





HANDLING & STORAGE

Tanks should be built to hold and dispatch bulk liquids and care should be taken to ensure they are cleaned out from time to time to ensure no build-up of sediment.

4-inch diameter pipework is adequate to handle EnerGold. Available in lots of 10 tonnes or greater. Discounts available on full artic loads.



Dried Distillers Grains

An extremely high energy mid protein feed, rich in digestible fibre plus oil and provides a good source of bypass protein.

- Stimulates intake of less palatable feeds
- Allows energy intakes to be increased without increasing the risk of acidosis associated with high starch feed
- Promotes fibre digestion and overall feed efficiency

Typical Analysis		
Dry Matter	90%	
Crude Protein	28.8%	
Oil	10%	
Fibre	32%	
Sugar	6%	
ME (MJ/KG DM)	13.6%	

Feed Rate

Dairy Up to 4kg (typically 3kg) /head/day

fresh weight

Beef Up to 2kg/head/day fresh weight **Sheep*** Up to 1kg (typically 0.5kg) /head/day

fresh weight (*seek advice)

Beet Pulp

A highly digestible fibre-based, palatable energy feed

- Allows energy intakes to be increased without increasing the risk of acidosis associated with cereal feeding
- High digestible fibre for healthy energy release in the rumen
- Improves rumen function and health

Typical Analysis	
Dry Matter	89%
Crude Protein	9.5%
Oil	1%
Fibre	18.1%
Sugar	3.7%
ME (MJ/KG DM)	12.5

Feed Rate

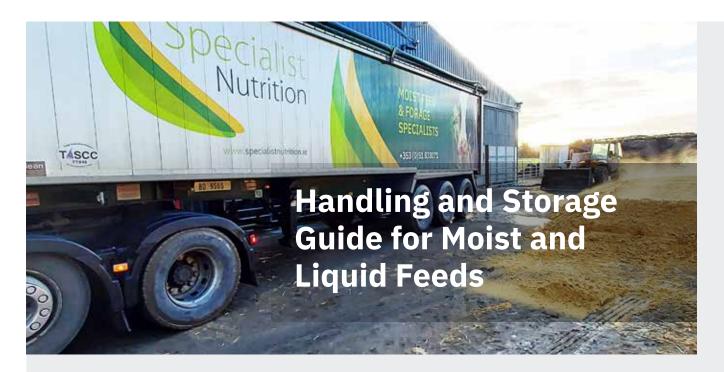
Up to 6kg (typically 3kg) /hd/day Dairy

fresh weight

Beef Up to 2kg/hd/day fresh weight

Up to 1kg (typically 0.5kg) /hd/day Sheep

fresh weight













Storing moist feeds

Correct storage and good preservation can be achieved by following the guidelines below:

1 Select the right storage site

Moist feeds are delivered in bulk and tipped in loads of approximately 30 tonnes. The selected storage site should be clean with a firm level surface, preferably concrete as it makes handling and feeding out easier.

2 Best storage practice

Moist feeds should ideally be stored in a three-walled pit as this structure is easier to manage. A long narrow three walled pit is best, as it allows the farmer to work across the feeding face quicker and therefore reduce the time the product is exposed to air.

3 Allow to cool and cover within 24 hours

Moist feeds are delivered straight from the point of production and can be hot on arrival. It is best to let the load cool down before pitting and covering within 24hrs.

Do not leave it stand longer than 24hrs as the air gets in quickly, and the soilage process starts. For multiple loads; get them into the pit as soon as possible and if necessary, cover your pit temporarily for the night and open the following day again.

4 Ensure an airtight seal

To preserve the feed, correct compaction, covering and sealing is important. To exclude all air, use the loader bucket to compact and smooth the surface of the feed in the pit.

5 Pits must be covered correctly

The exclusion of air is essential when covering a pit. Make sure the top of the pit is smooth and even. Cover with a clean high-grade plastic sheet and weight down the sides and top appropriately. Lastly, make sure the cover does not get damaged.

Whether feeding fresh or pitting, it is important to follow these simple steps to minimise any wastage and maintain the products nutritional value



It is NOT recommended to drive onto fresh, moist feed.

Once compaction is complete, seal the pit with clean, high quality polythene sheets. This should then be covered with mats, truck tyres or sandbags to ensure close contact between the top layer of the feed and the pit cover. This will provide an even airtight seal throughout the entire pit. Lighter car tyres or pallets should be avoided as they may not provide a sufficient seal.



Mixing moist feeds

To give the pit added structure and allow the pit to be piled higher while complimenting the feed's nutritional content, moist feeds can be pitted with other products such as beet pulp, soya hulls, hay and straw.

If mixing moist feeds with other products for storage, it is important to ensure the pitting mix does not exceed 65% dry matter content as it cannot be adequately compacted.



Feeding out moist feeds

Once properly pitted, moist feeds can be fed immediately and included within the cattle or dairy cow diet. When feeding from the pit, it is important to keep the face as clean as possible.

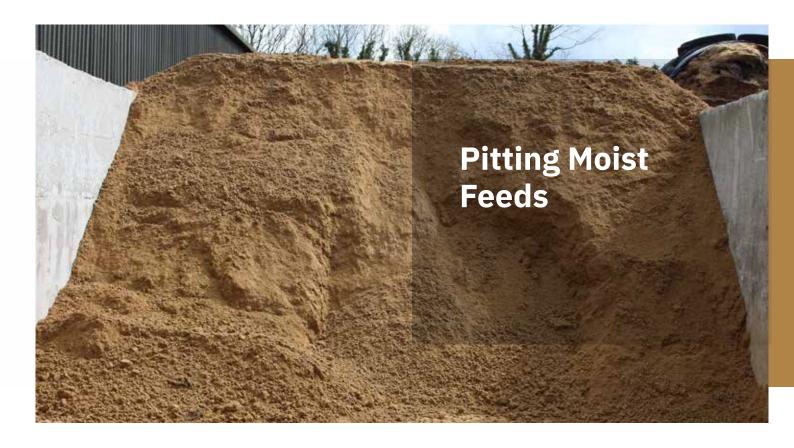
Ideally, the exposed pit face should allow the farmer to work back 18" per day in the pit. If using a loading bucket, it is important not to push in at the bottom and lift; as this disturbs the face greatly. Instead, the bucket should be used to cut down from the top, with the material then scooped away. Any loose material should then be pushed together to ensure that it is used next.



Storing Liquid Feeds

Tanks should be built to hold and dispatch bulk liquids and care should be taken to ensure they are cleaned out from time to time to ensure no build-up of sediment. 4 inch diameter pipework is adequate to handle the liquid. Available in lots of 10 tonne or greater.





Secure your winter feed by pitting moist feeds!

Moist feeds are a great addition to farm diets. Whether balancing a high cereal beef diet or buffer feeding a dairy cow, they provide an excellent energy source throughout the year.

Produced from pressed residual grains, evaporated syrup, and a centrifuged cake residue from the whiskey distillation process, moist feeds are an excellent source of protein and highly digestible fibre.

Our pitting season offers an excellent opportunity to secure your winter feed and have the comfort of guaranteed feed availability, particularly during the hectic winter season.

Moist feeds can be ensiled with other products such as beet pulp, soya hulls, hay, and straw at a ratio of 4:1. This helps give the pit added structure and allow the pit to be piled higher while complimenting the feed nutritional content.

If mixing moist feeds with other products for storage, it is important to ensure the pitting mix does not exceed 65% dry matter content as it cannot be adequately compacted.

For best results when pitting moist feeds:

- Select the right storage site a clean, level surface is essential
- If mixing with another product have this organised and on farm
- Allow the feed to cool down and cover within 24 hours – your moist feeds will be delivered straight from the point of production and can be hot on arrival. Let it cool before covering and sealing
- Ensure an airtight seal use a loader bucket to smooth and compact before covering with a clean polythene sheet and securing with truck tires, mats, or sandbags.

Key decisions in your forage system



MAXIMISING FEED EFFICIENCY OF GRASS ON YOUR FARM

- Set up grazing season in early spring. Graze down to lower residuals early spring to promote three-leaf growth and promote higher quality
- Measure residuals not yield as part of your sward management
- Target 25-30% in your reseeding plan each year
- Select grass varieties with 5* Tetraploid varieties for better grazing utilisation page 52
- Make multi species part of your resending plan page 53
- Oversow up to 1/3rd of your paddocks with clover in any year, and manage sward to 20-30% clover content page 53
- Early sow in August for Autumn reseed for improved graze out the following spring page 51



SILAGE

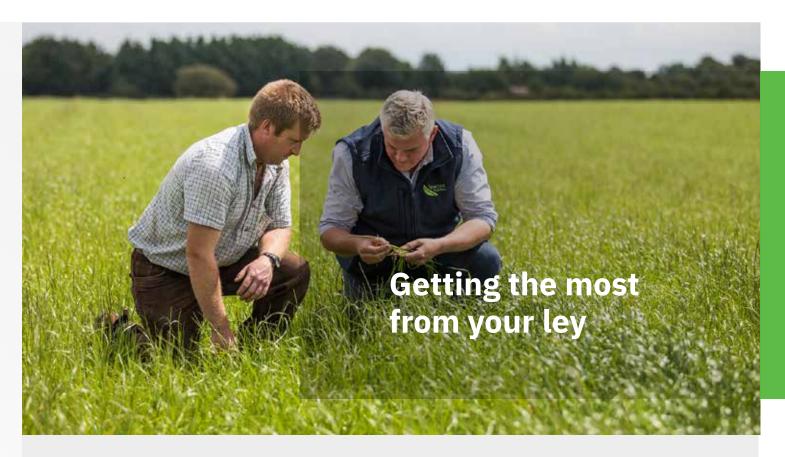
Quality silage is the nutritional cornerstone of your forage

- Increasing silage quality will improve forage quality, boost production, reduce waste and improve farm profitability. Cutting both invisible and visible clamp losses is an essential part of feeding more of what you grow
 - 3 steps to improving silage as the nutritional cornerstone of your forage:
 - 1. Precut cut test to optimise cutting dates
 - 2. Use silage additive to speed up fermentation and preserve pit and dry matter at feedout
 - 3. Test silage and balance diets accordingly



LOOK FOR OPPORTUNITIES TO BOOST HOME GROWN FORAGE

- Forage crops offer flexibility to select the right crop to balance a forage shortfall versus what is required to meet the feed budget for the winter
- Locally grown cereal crops bring good value as an additional source of high-quality forage and to replace purchased feed
- We offer a full range of forage crops from high yielding harvested crops like Fodder Beet, Maize and Wholecrop to in-situ grazed Brassicas
- To determine which option suits best, consider the window for growing the crop, rotation, site and intended use



One of the main focuses at Specialist Nutrition is maximising animal performance from grazed grass.

Ensuring a grazing platform has the highest quality grass and grazing utilisation is essential to maximise grass as a feed source in economic terms. Grazed grass is the cheapest feed available to Irish farmers, and during the grazing season, animal performance is achieved almost entirely from grazed grass.

Research shows that each extra tonne of grass dry matter utilised is worth €181 and €105/ha per year to dairy and drystock farmers, respectively.

Sowing a grass mixture that produces high yields of quality forage throughout the season is key to maximising grass utilisation on farms.

Specialist Nutrition has the best varieties for palatability and quality and uses Higher Voluntary Standard (HVS) seed in our mixes.

Why target reseeding 25% of your grazing platform each year?

- Productivity reseeding will give you higher producing swards with superior quality
- Animal Performance increase daily liveweight gain and milk production
- Nitrogen Efficiency new swards can use nitrogen more efficiently
- Economics due to our favourable climate, grazed grass is the least expensive form of feed on Irish farms



Specialist Grazer is a mixture of the best grazing varieties available, namely Xenon and Aspect, two of only three varieties to achieve a five-star grazing utilisation trait rating on the Teagasc PPI. These are combined with Nashota and Bowie to prolong the period of quality forage production over the grazing season – Nashota has excellent spring growth and quality while Bowie is the latest heading variety on the PPI.

Our team will collaborate with you, recommend the best mixture for your farm, and offer advice on establishment, grassland management, grazing utilisation, and silage conservation to deliver quality swards.

Specialist Nutrition Grass Mixures

Highly versatile mixtures with an excellent combination of high yields, quality and persistence.

All our grass mixtures offer a consistent and versatile mixture suitable for a variety of growing conditions that will deliver:

6/1	Evcollopt	arazina	utilication
	Excellent	grazing	utilisation

High yields across the grazing season

Excellent quality and palatability for excellent animal performance

Excellent persistence

Specialist Grazer has selected the best-in-class grass mixtures proven to help achieve your production goals, whether producing the highest quality milk, beef or lamb from your herds.

Specialist Grazer HVS	Grass Mixture
30% Nashota	A NxGen Tetraploid provides quality with high grazing utilisation, low grazing residuals and excellent persistence
25% Bowie	Bowie is an ultra-late variety with excellent quality. The latest heading variety on the PPI
20% Aspect	Aspect is highly palatable, as shown by its high ranking in the Teagasc grazing trials
20% Xenon	Xenon is the best performing variety on the Teagasc grazing trials
5% Coolfin/Iona White Clover Blend	A high yielding white clover with a small leaf for excellent graze out

Specialist (Cut & Graze	Grass mixture
35% Box	wie	Bowie is an ultra-late variety with excellent quality. The latest heading variety on Teagasc PPI
25% Na	shota	A NxGen Tetraploid provides quality with high grazing utilisation, low grazing residuals and excellent persistence
25% Triv	warwic	Excellent grazing and recovery
10% Du	nluce	Very good for dry matter digestibility and silage yield. Late heading tetraploid variety with good ground cover
	olfin/Iona White over Blend	A high yielding white clover with a small leaf for excellent graze out

Incorporating multi-species swards into your grazing platform

Multi-species swards are a sustainable source of high-quality forage.

As well as producing high yields of quality forage, sowing multi-species can lead to a significantly reduced Nitrogen fertiliser requirement as well as increased animal performance and health.

Multi-species swards produce large quantities of highly digestible forage rich in minerals and high in protein for grazing livestock. Apart from a couple of small fertiliser applications in spring, multi species swards are almost totally N self-sufficient.

Having a mixture of grass and multi species swards on the grazing platform will ensure a steady supply of the highest quality forage through spring, summer, and autumn, buffering against drought and reducing the cost of forage production.

Speak to Specialist Nutrition to help you select the best multi-species mixture for your situation.

"The light type of soil we have is always a struggle during the summer months with as little as a week without rain putting the farm under pressure. Finding a forage that would withstand these conditions and fit into our intensive farming system proved difficult.

After speaking to Nigel Condell, we selected the multi species 6 Species Herbal Ley mixture as the best fit for my situation.

The multi-species sward proved to be a massive hit with my herd! So much so that I am continuing to work with Nigel on a reseeding plan that will incorporate the 6 Species Herbal Lay mixture into the rest of the farm over time."

Tom, Patrick, and Philip Murphy, Co. Kilkenny.

Managing clover in the sward

The incorporation of white clover into grass swards has the potential to significantly reduce the reliance on inorganic N fertiliser and increase the financial and environmental sustainability of Irish farms.

One of the significant benefits of clover is its ability to fix N in the soil in a form that becomes available to grass in the sward. As a forage, white clover is highly digestible, with crude protein content averaging over 20%.

The use of white clover in grass mixtures can offset up to 150kg N/ha per year in inorganic N fertiliser. This is equivalent to 7 bags of 18.6.12/acre.

For maximum benefit, a sward should be managed to 20-30% white clover content.

+800kg DM/ha

Opportunity to reduce N fertiliser

Ory matter intake +1.5kg/cow per day

Milk solids +30kg MS/cow per year

White Clover is included in all Specialist Nutrition grass mixtures. A high yielding White Clover Blend Oversow is also available.

"We used the Specialist Grazer Mix when reseeding and overseeding this year.

We are extremely impressed with how this mix has grown on our heavy soil farm.

The tetraploids in the mix rated very high on the PPI for palatability, and the cows have proven that with excellent graze outs."

Diarmuid Lee, Co. Galway.

PRODUCT FOCUS

Sturrin PROThe natural way to maximise the value of your sturry

SlurriN PRO is an enzyme and bacterial complex for slurry treatment. With rapidly rising feed and fertiliser prices, there has been much discussion around the value of slurry on farm and using a slurry treatment to maximise that value. While there is an agronomical benefit to treating slurry, a good slurry treatment will do much more.



SlurriN PRO from Lallemand is a biological treatment containing a specific blend of enzymes and bacteria which work to:

-) Improve slurry quality
- Improve the animal housing environment
- (v) Improve slurry management by making it easier to handle

Improve your animal housing environment

Treating slurry stored in slatted tanks with SlurriN PRO creates positive fermentation and fibre breakdown, which directly improves the environment for the animals housed in those sheds.

- Reduces the development of undesirable bacteria, reducing bad odours
- Lower ammonia (NH³) emissions lead to higher air quality

Negative fermentation of slurry leads to undesirable bacteria and gases. The enzymes in SlurriN PRO work to break down the solid fraction of the slurry, while the specifically selected bacteria work on the fermentable sugars to create a positive fermentation and break down the fibres.

Improved slurry quality

SlurriN PRO has been proven to increase the total nitrogen available, which in turn provides savings on artificial nitrogen requirements.

- Treated slurry has been proven to have a higher N value – up to 400g/tonne fresh weight
- Increased organic N creates increased rapidly plant available N
- Increased mineral N in slurry means a cost saving on artificial N needed to meet agronomical needs

Slurry is easier to handle and more valuable to use

Treated slurry has time and financial benefits in addition to the increased N availability

- Increased homogeneity across the tank
- Decreased slurry solids
- Increased fibre breakdown
- Decreased odours

These combine to reduce the crusting time needed to agitate the tank before spreading, leading to a reduction in handling time, reduction in diesel and a more valuable product being spread on the land.



Maximising the value of your forage

Quality silage is the nutritional cornerstone of your farm. Improving forage quality will boost production from forage, reduce waste and improve farm profitability.

Pre-cut testing, harvesting, and storage are essential links in the chain to your forage system.

Forward planning will allow you to control the controllables and maximise the quality of your home-produced forages. An evaluation of the previous year's forage production should always be considered when planning the initial and the pre-silage fertiliser applications.

Pre-cut testing is an essential tool in planning your silage harvest. Specialist Nutrition can pre-cut test your grass for sugars, nitrates, and fibre levels to identify the optimum harvesting window. We utilise both field and laboratory testing where appropriate and use this information to assist farmers across the country in making the highest quality forage possible.

Silage additives can preserve the nutritional value of silage and minimise waste through spoilage.

Achieving a fast and efficient fermentation is vital if you want to produce high-quality grass silage. For farmers aiming to make high-quality silage, including an additive can significantly help improve silage fermentation and quality. The controlled microbial fermentation of forages helps preserve their nutritional value all year round.

If you can increase the ME of your silage by 1 MJ, this can produce up to 4L extra milk, depending on the feeding rate.

Taking a structured approach to grass silage making will improve forage quality, boost production from forage, and control costs.

Silage Additives

A Silage additive is always recommended to provide rapid lactic acid fermentation and to preserve as many nutrients as possible.

How to choose the correct Silage Additive

MAGNIVA Product	Recommended Crop	Ensiling Condition	Dry Matter Range	Features	Packing Size Tonnes Treated (TT)	Suitable for LVA (Low Volume Applicator)
MAGNIVA Classic	Grass	Wet Crop: Easy to ensile	Up to 26% DM	Improves fermentation and feed value	25TT & 100TT	Y
MAGNIVA Platinum Grass Wet	Grass, clover or lucerne	Wet and challenging crops: difficult to ensile	20-30%	Increased efficiency of fermentation, improved digestibility, 15 days opening option, increased aerobic stability	50TT & 100TT	Y
MAGNIVA Platinum Grass Dry	Grass, clover or lucerne	Dryer crops	31-45%	Increased efficiency of fermentation, improved digestibility, 15 days opening option, increased aerobic stability Can be used with haylage at 1.5 times the application rate	50TT & 100TT	Y
MAGNIVA Platinum Wholecrop	Wheat, barley, triticale, oats	Dry crop	30-45%	Increased efficiency of fermentation, improved digestibility, 15 days opening option, increased aerobic stability	50TT & 100TT	
MAGNIVA Platinum Crimp	Crimped wheat, barley, triticale or oats	Mature grain	25-40% *moisture content	Single application rate and non- corrosive compared to equivalent acid treatments. Increased efficiency of fermentation, 15 days opening option, increased aerobic stability	10TT & 25TT	
MAGNIVA Platinum Maize Elite	Maize	Challenged crop (drought, rain, pests)	25% - 45%	Increased efficiency of fermentation, improved digestibility, 15 days opening option, increased aerobic stability	50TT & 100TT	Y

Magniva Silage Additives

Magniva Silage additives contain a patented combination of bacteria combined with enzymes to deliver outstanding results. Achieving the best possible fermentation with Magniva crop and condition-specific additives help minimise the losses which cut feed energy before silage reaches your cows

Cutting both invisible and visible clamp losses is an essential part of feeding more of what you grow.





Supersile Granular

Supersile Granular minimises the losses which occur during fermentation while maximising feed value. Supersile Granular contains a combination of starter and finisher homofermentative bacteria designed to achieve fast fermentation in grass silage.

Applied at 400g/ton Supersile Granular contains:

L. plantarum CNCM MA18/5U - 2.50x107 cfu/g P. pentosaceus NCIMB 12455 - 2.25x108 cfu/g

This combination of bacteria work to:

- Faster pH drop
- Improved dry matter and nutrient recovery
- Improved feed efficiency

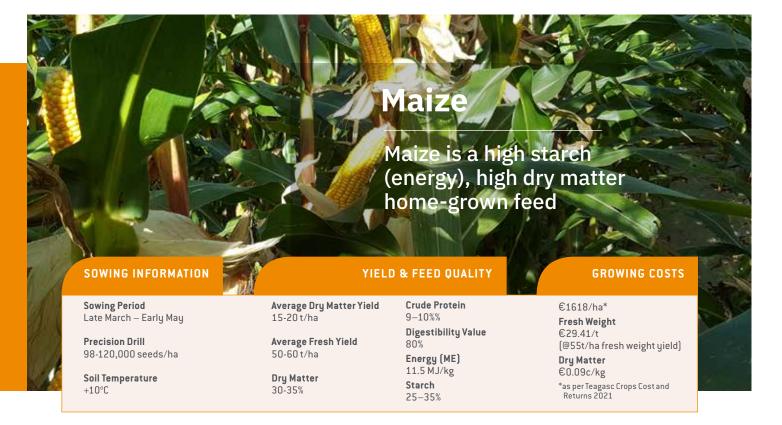


Forage Crops

We offer a full range of forage crops from high yielding harvested crops like Fodder Beet, Maize and wholecrop to in-situ grazed brassicas. To determine which option suits best, consider the window for growing the crop, rotation, site and intended use.

Choose the correct Forage Crop

Species	Sowing time	Sowing rate /ha	Utilization period	Fresh yield t/ha	Dry matter t/ha	Crude Protein %	ME MJ /ha	ME kg/DM
Fodder beet	March - April	100,000 seeds	Winter	75 - 124	15 - 18	9	162 - 202	11
Kale	April - July	5 - 7 kg	Autumn/Winter	70 - 80	8 - 10	10 - 11	80 - 110	12.5
Stubble turnip	May - Aug	5 - 7 kg	Summer - Tyfon Autumn Winter	35 - 40	3.5-4	17 - 18	38 - 44	11
Forage rape	May - Aug	6 - 8kg	Summer/Autumn Winter/late Winter	25 - 35	3.5 - 4.5	19 - 20	35 - 49	11
Swedes	April - June	350 - 800g graded 3 - 5kg direct	Autumn/early Winter Winter/late Winter	70 - 80	8 - 10	10 - 11	89 - 131	12.5
Forage rye	Sept - Oct	185kg	Early Spring	20 - 25	5 - 6	10 - 11	50 - 60	10





IRUUFE

Open sown/early maturity

Reliable production of high quality maize – great for an early harvest.

An extremely high yielding variety for an early harvest with high starch and cell wall digestibility content.

High starch content plus excellent cell wall digestibility for energy dense maize, reducing bought-in feed costs.



RESOLUTE

Open Sowing / Early Maturity

Nothing stands in the way of Resolute, it is impressive in the field and delivers in the clamp.

Exceptional early vigour with highest yield trials.

Excellent standing power for a safe and secure harvest. Resolute's high starch content and improved cell wall digestibility (60.6%) produces energy dense maize



LU 3U.21

Covered Sowing / Late Maturity

LG 30 211 delivers consistency, the biggest risk associated with maize.

For a crop so heavily influenced by weather in Ireland, LG 30 211 represents a stable variety that farmers can rely on.

Proven in animal feeding trials to give 0.5ltr more milk, per cow, per day.



KONFLUENS

Covered Sowing / Late Maturity

New and in Demand! Konfluens is a big yielding high quality hybrid.

Konfluens has a very high yield potential, combined with good starch and dry matter yield.

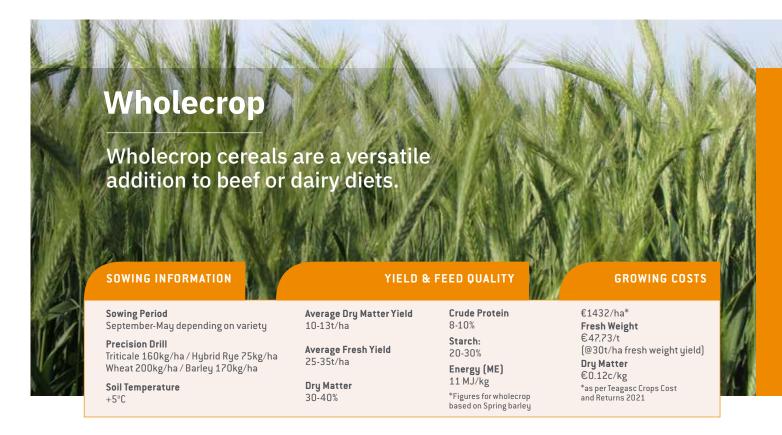
Konfluens has performed exceptionally well on farm yet again and is fast becoming a farmer favourite.

When included in diets, it will increase intakes and have a positive effect on overall yields and milk solids in the dairy herd but equally, increased intakes improve daily live weight gain, kill out percentage and fat score in a beef production system.

Why Grow Maize?

- Ideal all-year-round feed
- Can be used in spring post-calving where cows have a high demand for energy, but equally as a buffer feed where there is a feed deficit situation (drought etc.)
- An excellent break crop in a continuous tillage situation while offering an opportunity for farm to farm sale of a valuable crop

- Requires no specialised feeding equipment
- Makes use of high fertility land as well as capable of using high levels of homeproduced organic matter (slurry and FYM) to increase the organic matter content on the arable farm
- Maize is one of the best forage options for anaerobic digestion offering much higher DM yields than other commercially grown crops (grass etc.)



TRITICALE

Autumn & Spring sowing

Triticale will grow on most soil types. It can be grown as a wholecrop requiring fewer inputs than traditional cereals.

It has excellent yielding potential and medium long straw. Early to mature, has a good resistance to lodging and tolerant to diseases.

Wide opportunity for harvest depending on whether Spring or Autumn crop

HYBRID RYE

Autumn sowing

Can be sown from mid-September - tolerates BYDV & Take-all Hybrid Rye grows well in a wide range of soil types (light to heavy).

Extremely drought tolerant. Rye outperforms wheat and barley in dry sites and dry seasons.

Very secure harvest with very low risk of head losses, lodging, sprouting and Fusarium.

Generally harvested in July leaving plenty of opportunity for a grass reseed post-harvest.

BARLEY

Autumn & Spring Sowing

Grows well on most soil types. Has good over-winter ability Big, bold grain with good KP

Has good disease resistance especially mildew

High yielding with good levels of starch and effective fibre

Wide opportunity for harvest depending on Spring or Winter variety

Can be harvested with wholecrop header or conventional mower without conditioner

WHEAT

Autumn & Spring Sowing

Grows well in heavy soils

Has good disease scores helping keep to planned fungicide budgets performs extremely well on both light and heavy soils

High yielding with high levels of starch and effective fibre

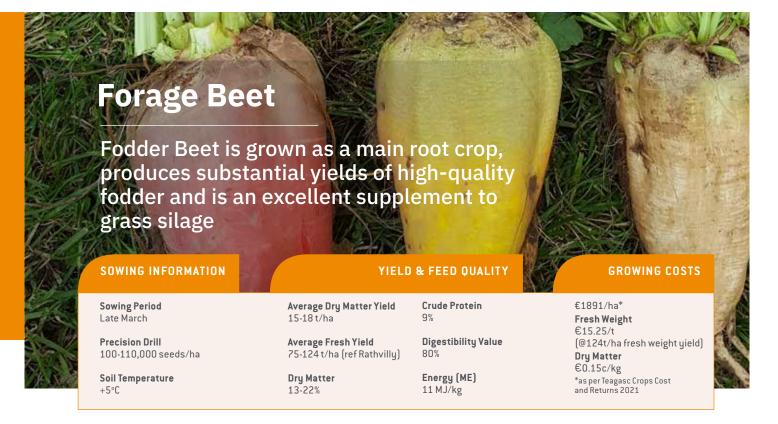
Very palatable forage

Can be harvested with wholecrop header or conventional mower without conditioner

Wholecrop cereals are a versatile addition to beef or dairy diets. Cereals can produce a starch rich forage crop that is also a good source of effective fibre, essential for good rumen function. Care must be taken to harvest at the optimum time for best results; however, the wide harvest window across the crops means this can be easily managed.

Why Grow Wholecrop?

- Flexible crop to grow and wholecrop can be produced from spring or winter crops
- Ideal year-round feed
- Low protein content means wholecrop cereal grains are an excellent and very palatable complementary feed with either grass or good quality grass silage
- Cost effective to produce
- Can be under-sown with grass seed as part of a reseeding plan
- Wholecrop cereals must be treated with a crop specific additive
 see page 56 for details on the Magniva Platinum Wholecrop Additive



BANGOR	DELICANTE	MAGNUM	ACKER
Lift & Pit	Lift & Pit	Graze / Lift & Pit	Lift & Pit
Fast becoming one of Ireland's most popular beet varieties, Bangor has developed a strong following over the last three years.	A new variety that is proving to have the best fresh weight yield for a white fodder beet.	Magnum is Ireland's most popular beet with its high yields and high dry matter (19 - 20%) content.	Very high yielding, high dry matter white sugar beet. This clean beet has proven very
Bangor delivers the best fresh yield without compromising on dry matter yield.	Fitting in well with both growers and buyers, as an early pulling beet with huge yield potential.	Magnum is a great high energy beet with a leaf score of 8, is clean and easy to pit and works well pitted with maize.	popular countrywide with both contractors & farmers, and it has also proven its ability to drive improvements in animal
Bangor is 60% above ground, easy to harvest and has a smooth, clean root.	This white fodder beet is proving very promising in terms of yield and also has a high dry matter content.	Magnum is suitable for beef and dairy stock.	performance

The roots are very palatable to stock and have superb feed quality. Specialist harvesting equipment is required to lift the roots, and storage is needed unless they are strip grazed in situ. Medium dry matter varieties tend to have a higher percentage of the root above ground and can be lifted with a top lifter and therefore have a relatively low dirt tare. These highly palatable roots can be fed whole to stock.

FORAGE CROP GUIDE

Why Grow Fodder Beet?

- Huge yields
- Improved milk yields
- Ideal break crop for cereals
- Palatable and nutritious
- High energy feed
- Can be grazed in situ for outwintering systems
- Clamp and store over winter

CROP	PACK SIZE	AVERAGE SOWING RATE KG/HA		SOWING DATE	UTILISATION PERIOD	AVERAGE ROW DEPTH CM	DAYS SOWING TO GRAZING
		Broadcast	Direct Drill				
Fodder Beet	50,000 seeds	N/A	Precisiondrill 100,000/ha	Mar - Apr	Oct - Feb	2.5 - 3	-
Maize	50,000 Seeds	N/A	120,000/ha	Apr - May	Sept - Oct	3 - 6cm	-
Forage Rape	5kg	8kg/ha	6kg/ha	May - Aug	Oct -Jan	1 – 2.5	90 - 110
Kale	5kg	8kg/ha	5kg/ha	Apri - Jun	Oct - Feb	1 – 2	150 - 220
Stubble Turnip	5kg	7kg/ha	5kg/ha	Apr - Aug	Oct - Feb	1 – 2.5	60 - 100
Swede	500g & 1kg	5kg/ha	3kg/ha	April - Jun	Oct - Feb	1 – 2	170 - 250

Sustainability

Specialist Nutrition is aware that we have a responsibility to deliver an environmentally and carbon efficient product to our customers and provide the expertise to support them in growing homegrown forages on their farms.

Since 1999, we have partnered with some of the world's leading brands to provide environmental solutions by significantly reducing their energy usage, and adding value to co-product by supplying to farms to provide a highly nutritious and carbon friendly animal feed solution.

According to the GFLI metrics for sustainable feed, which is recognised globally, moist feeds currently have the lowest carbon footprint value of any animal feed.

Our nutritionists work with farmers to formulate diets to achieve the best feed efficiency possible. We are working with these farmers to achieve higher outputs from fewer inputs and close any nutritional gap, ultimately improving the overall footprint of their farm.

Sustainability is at the core of what we do, and we continuously undertake projects to achieve environmental improvements. In 2021, Specialist Nutrition formally adopted the United Nations Sustainability Development Goals (SDGs) to enhance our sustainability strategy.

We believe we are custodians of the future, working hard so that our actions today do not negatively impact future generations. Our people share a culture focused on achieving this with integrity and ambition across our business.

We will continue to play our part as a sustainable business and help our farming customers along the pathway to achieving the targets set out to 2030.

Jim Buckley Managing Director

