



Product catalogue
for cattle

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MIKROP ČEBÍN a.s. nutritionists recommend to use the following products for different phases of lactation cycle:

DRY PERIOD

Mineral supplements: **M 0 K – M 5 K** for high- and medium-producing herds
M 50 K – M 80 K economy products and products for cows without commercial milk production

The recommended dose of 120–200 g per animal per day will provide all the essential vitamins, macrominerals and trace minerals for dry cows and late pregnancy heifers. High bioavailability of sources used and balanced combination contribute to an excellent regeneration of the mother's body and optimal development of the foetus. Supplying the mother with essential nutrients such as selenium, iodine, zinc and vitamins A, D and E is the best contribution to the viability and successful development of the calf from birth to weaning.

Packed in 25kg or 40kg bags.

CLOSE-UP DIETS

Dietary mineral supplements: **PO Plus, PO Plus Ani CA, PO Premium**

Recommended dose **PO Plus** (without anionic salts) 100–200 g per animal per day
PO Plus Ani CA (with anionic salts) 250–500 g per animal per day
PO Premium (with anionic salts) 100–200 g per animal per day

The PO range products are designed to meet nutritional needs of cows before calving, support the calving ease, prevent the occurrence of metabolic disorders in cows during early lactation and ensure an excellent viability and health of the calf. The high quality of raw materials used and balanced nutrients are the best prerequisite for meeting these requirements. The addition of organic trace elements significantly increases bioavailability. In particular, high doses of organic selenium and vitamin E contribute to improved udder health, reduced somatic cell counts and lower risk of metritis. The optimum selenium status is a basic precondition for a successful development of newborn calves (no muscular dystrophies), good viability and high immune status.

It is advisable to consult a MIKROP specialist in cattle nutrition and breeding about the MIKROP close-up system and selection and optimal dose of the supplements.

Packed in 25kg bags.

CALVING

Prevention of postpartum problems: voluntary **Fresh Drink Plus**
Drench Ca

A correct administration of **Fresh Drink Plus** is an effective means of preventing postparturient disorders in cows; it helps to encourage feed intake in the first days after the calving and supports a smooth onset of lactation. The intake of highly concentrated energy source, live yeasts, electrolytes and abundance of water support the rapid restoration of all the rumen and body functions after the calving. Mix 1 kg of **Drench Ca** powder with 20 litres of lukewarm water and provide to the cow right after the calving.

It is advisable to double the amount of lukewarm water.

Drench Ca contains a source of energy, necessary amounts of electrolytes and highly available calcium source to replenish the losses incurred by parturition. It also contains live yeasts to initiate proper functioning of the rumen. Prepare the **Drench Ca** solution by mixing 0.5 kg of powder with 20 to 30 litres of lukewarm water and administer to the cow with a drenching tube and pump after the calving. If the cow does not seem to recover



well enough, repeat the drenching on the next day. The liquid drench be supplemented with 0.5 to 1 litre of propylene glycol.

Both the products are available in 20 kg bags or 1 kg sachets.

EARLY LACTATION

Dietary mineral supplements: **M 4 K L Sc – M 8 K L Sc, M 4 H L Sc – M 8 H L Sc**

for high producing dairy herds

M 4 K – M 8 K for medium producing dairy herds

The recommended dose of 250–300 g fully covers the requirements of micro minerals, vitamins, phosphorus and magnesium in early lactation dairy cows. The high quality of raw materials that is checked in the MIKROP laboratory ensures high bioavailability of the nutrients. The **H** products contain higher levels of trace elements and vitamins D and E needed in early lactation to enhance the immune status, health and fertility of dairy cows. The **L** products also contain organic zinc and biotin to improve immunity, prevent hoof diseases and support the rumen function. The **Sc** products are supplemented with live yeast *Sacharomyces cerevisiae* yeast to support the proper functioning of rumen microorganisms, and to increase dietary intake and digestibility.

Supplements improving the rumen function and ion balance in the body: **OT 2 – all year round**
K Pufr – in the summer

OT 2 at a dose of 250 g contributes to improving the rumen function of dairy cows in the first weeks of lactation; the prevalence of cations promotes a high feed intake, good start of lactation and reduces the risk of metabolic disorders. In order to optimize the ion balance during hot weather, it is advisable to supplement the fresh cow diet with 200–400 g of **K Buffer**.

Energy, by-pass protein, enzymes: **EC blend, CUKROPEKT, CUKROPASS,**
ENZYM STAR

The **EC blend** at a dose of 75–200 g induces the rapid onset of rumen fermentation, increases dry matter intake and increases milk yield. A CUKROPEKT bolus of 0.5–1.2 kg provides a readily available energy source for the rumen microorganisms. Being composed of sugars and pectins mainly, **CUKROPEKT** does not pose a risk in terms of rumen acidosis. It is an excellent supplement to diets high in rumen degradable protein. **CUKROPASS** also contains a source of by-pass protein, in addition to sugars and pectins. **ENZYM STAR** 150 g bolus improves digestibility and availability of dietary starch, thereby promoting rumen fermentation and milk production.

RUMIN drink to fight rumen dysfunction

RUMIN drink is a proven product that fights rumen dysfunctions in dairy cows after the calving and later. Prepare the drink by mixing 333 g of RUMIN with 1-2 litres of lukewarm water and apply preferably from a bottle. If early symptoms of ketosis occur, provide 500 g of **RUMIN** with 500 ml of propylene glycol. The treatment can be repeated after 12 hours.

RUMIN is available in **packages** of 1 kg.

PEAK LACTATION

Dietary mineral supplements: M 5 K L Sc – M 8 K L Sc for high producing dairy herds

M 5 K – M 8 K for medium producing dairy herds

M 60 K – M 80 K economy products

The recommended dose of 250–300 g fully covers the requirements of trace minerals, vitamins, phosphorus and magnesium in peak lactation dairy cows. The high quality of raw materials that is routinely checked in the MIKROP laboratory ensures high bioavailability of the nutrients. The L products contain also organic zinc and biotin to improve immunity, prevent hoof diseases and support the rumen function. The Sc products are supplemented with live yeast *Saccharomyces cerevisiae* to support the proper functioning of rumen microorganisms, and to increase dietary intake and digestibility.

It is advisable to consult a MIKROP specialist in cattle nutrition and breeding about the optimum choice of supplement and dosage.

Rumen function enhancers: TA Soda, TA Retard – all year round

TA Retard Summer, K PufR – in the summer

A 350 g bolus of **TA Soda** has been proven to stabilize the rumen environment; it improves the intake of feed with high acidity (high acidity of water extract) and suppresses negative effects of undesirable substances in feed, thus improving the rumen function, health and performance of dairy cows. **TA Retard** is a top product for the prevention and remedy of acute and subacute rumen acidosis. It contains a wide range of ingredients with a high buffering capacity, from very fast to very slow acting. A dose up to 300 g of **TA Retard** can efficiently stabilize rumen pH even if high grain diets are fed. In addition, **TA Retard Summer** contains a potassium source to better overcome the heat stress. With its high potassium content and buffering capacity, **K Buffer** at a dose of 150–300 g is a proven supplement for eliminating the effects of extreme summer heat.

Energy and by-pass protein supplements, enzyme products: EC blend, CUKROPEKT, CUKROPASS, ENZYM STAR

The **EC blend** at a dose of 75–200 g induces the rapid onset of rumen fermentation, increases dry matter intake and increases milk yield. A **CUKROPEKT** bolus of 0.5–1.2 kg provides a readily available energy source for the rumen microorganisms. Being composed of sugars and pectins mainly, **CUKROPEKT** does not pose a risk in terms of rumen acidosis. It is an excellent supplement to diets high in rumen degradable protein. **CUKROPASS** also contains a source of by-pass protein, in addition to sugars and pectins. **ENZYM STAR** 150 g bolus improves digestibility and availability of dietary starch, thereby promoting rumen fermentation and milk production.

To correct rumen dysfunctions: RUMIN infusion

RUMIN drink is a proven product that fights rumen dysfunctions in dairy cows after the calving and later. Prepare the drink by mixing 333 g of RUMIN with 1–2 litres of lukewarm water and apply preferably from a bottle. If the lack of appetite persists, the treatment can be repeated after 12 hours.

Protein concentrates: URO Star M, URO Star L

URO Star M and **URO Star L** are suitable for the inclusion in diets deficient in readily degradable proteins. In addition to urea, they contain multiple soluble carbohydrates that contribute to a quick start of the rumen fermentation and better efficiency of the diet. **URO Star M** contains protected methionine and is intended for usual lactating cow diets. **URO Star L** tops up lysine in diets with a high proportion of rapeseed meal.

LATE LACTATION

**Dietary mineral supplements: M 5 K – M 8 K for high producing herds
M 60 K – M 80 K economy products**

These products at a recommended dose of 150–250 g fully meets the requirements of dairy cows in terms of trace elements, vitamins, phosphorus and magnesium in late lactation. The high quality of the sources is ensured by MICROP laboratory checks and secures an excellent utilization of the nutrients

FOR OTHER CATTLE CATEGORIES

CALVES

Calf milk replacers (CMR): TELMILK

TELMILK START – a premium milk replacer, intended for feeding calves from birth to weaning; contains 50% of high quality skimmed milk powder and has a balanced milk protein/energy ratio. It does not contain any vegetable sources.

TELMILK SPEC – basic milk replacer with a high milk/whey protein content; contains 13% of skimmed milk powder and is suitable for calves throughout the birth to weaning period or as second (“follow-on”) milk replacer (following TELMILK START, ideally from the end of the 4th week of age).

TELMILK EX – milk replacer with a balanced milk/vegetable protein ratio, suitable for calves from the end of the 4th week of life. It is suitable for mixing with hygienically safe nonsaleable milk.

Prepare **TELMILK** milk drinks containing 1 kg of powder per 7 litres of water by mixing 1 kg of powder with 4 litres of water at 45–50 °C, and topping it up with 3 litres so that the resulting drink has a temperature of 39–40 °C. Thus prepared, **TELMILK** drink is administered to calves following the colostrum nutrition, providing 2.5–3 L meals 2–3 times a day, i.e. 5–6 litres per calf per day in total. In winter, increase to 7–9 litres/calf/day, preferably by adding one meal.

Powder for rehydration solution: GLUCOSOL N

GLUCOSOL N is a dietary supplement for nursing calves with digestive disorders associated with dehydration. Dissolve powder in lukewarm water at 1 : 40, i.e. 25 g per 1 litre of water (for weaker calves, the ratio of up to 1 : 20 can be used, i.e. 50 g per 1 litre of water). The recommended daily allowance of the reconstituted solution is 10 % of the calf's body weight, divided into 3 meals. We recommend to provide 1–2 litres of **GLUCOSOL N** as the first meal after the transfer of calves. If signs of dehydration occur, skip the Telmilk meal on the first day and provide **GLUCOSOL N** instead, and the next day alternately administer Telmilk CMR and **GLUCOSOL N**. Thereafter return to Telmilk. When feeding Telmilk and **GLUCOSOL N** alternately, keep the interval of at least 1.5 hours between meals. Do not mix **GLUCOSOL N** with milk and milk replacers!

Veterinary digestion support: MIKROP HERB REVITAL

MIKROP HERB REVITAL optimizes disturbed processes in the gastrointestinal tract of calves and returns them to normal, and also has a rehydration effect. It is a liquid product, supplied in 0.5 litre bottles. Dilute 0.25 L of **MIKROP HERB REVITAL** with 1.25 L of 40 °C water to make one dose. Give twice a day, but do not skip milk or milk replacer meals.

Calf starter diets: ČOT S, ČOT S Plus – for nursing calves

Complementary starter feeds **ČOT S** and **ČOT S Plus** support a smooth transition from milk/milk replacer to solid plant based feed. A gradual increase in starter intake during a few weeks pre-weaning will enable to reduce milk stepwise and achieve a complete withdrawal of milk at a starter intake of about 2 kg/day. After the weaning, 3–3.5 kg of **ČOT S** or **ČOT S Plus** a day will cover nutrient requirements for optimum weight gain and health. In order to achieve a sufficient intake of starter feed, calves must have continued access to water even during the milk period. Compared with **ČOT S**, **ČOT S Plus** has 10% higher levels of protein, energy and contains several active substances.

Protein concentrate for the inclusion in starter feed: BK ČOT – S

By mixing 35–40 % of **BK ČOT – S** with 60–65 % of pressed or coarsely ground grain we get a whole feed for weaning calves.

Mineral supplements: **M ČOT S** mineral supplement for ČOT calf starter diets

M ČOT mineral supplement for ČOT diets for calves from 3 months of age

At a dietary inclusion rate of 4 %, **M ČOT S** provides required amounts of minerals and vitamins in starter feeds for calves. **M ČOT** is a mineral and vitamin concentrate for post-weaning calf diets. The recommended daily dose is 100–120 g per calf. The recommended inclusion rate in ČOT feed is 4 %. The high quality of the raw materials is controlled by our own laboratory and ensures an excellent utilization of nutrients and supports the proper growth, development and health of growing calves.

REARING HEIFERS

Dietary mineral supplements: **M ČOT** – for younger heifers

M 3 K – M 8 Z for older heifers

Mineral licks: **ML 3 – 3, ML 5**

A dose of 100–150 g per animal per day of **M ČOT** for younger heifers or **M 3 K – M 8 Z** for older heifers is usually sufficient to meet the requirements for minerals and vitamins to achieve the optimum growth and development. Especially on pasture where it is not possible to administer loose mineral supplements it is advisable to provide **ML 3 – 3, ML 5** mineral licks whose intake by heifers should be similar.

FATTENING CATTLE

Dietary mineral supplements: **M – HŽ, M – HŽ-E, M 5 – 1**

Protein concentrate to supplement the diet: **BK HŽ 1, BK HŽ 2, BK HŽ 3,** **BK DM – high in urea**

The mineral concentrate **M – HŽ** (with vitamins) or the economy option **M – HŽ-E** (without vitamins) at a dose of 100–200 g per animal per day meets the requirements for minerals in growing animals. In addition to essential minerals and vitamins, **M 5 – 1** contains urea as a source of nitrogen. The recommended dosage is 150–350 g per animal per day. Protein concentrates **BK HŽ 1, BK HŽ 2** and **BK HŽ 3** are intended to supplement fattening cattle diets with urea being included as one of crude protein sources. **BK DM** is a concentrated source of non-protein N-substances in the form of urea (without minerals and vitamins). Protein concentrates for fattening cattle contain urea. It is advisable to consult one of our cattle nutrition specialists to advice which protein concentrate is the most suitable for you and recommend the dosage and the most efficient dietary inclusion rate.



CATTLE



PIGS



POULTRY



HOBBY



ECO



BGP



SILAGE INOCULANTS

BEEF CATTLE – GRAZING

Dietary mineral supplements: – mineral licks: ML 3 – 3, ML 5

The composition of mineral licks meets the requirements for minerals of both cows and young grazing cattle. These products have the necessary certificates for the use in organic farming.

STANDARD SUPPLEMENTS AND MODIFICATIONS IN THE M MODULAR RANGE

Urea

Mineral concentrates of the **M** modular range can be supplemented with 25 % urea (corresponding to 71 % crude protein). Such products are then designated as “**U**” (e.g. M 8 K U). Levels of nutrients other than urea are 75% of those included in standard (“non- U”) products.

Dust-free products

The “**N**” stands for dust-free products within the **M** modular range (e.g. M 8 K N).

Our specialists in cattle nutrition and breeding are at your disposal for the best selection from the many supplements produced, the correct inclusion in the feeding rations and the determination of the optimal dosage.



For more information please contact:

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We are holders of ČSN EN ISO 9001:2016 and ČSN EN ISO 14001:2016 certificates.

MIKROP ČEBÍN a. s. is constantly working on the development of all products. Please understand that some information may vary depending on the age of the leaflet. Therefore, this material is for informational purposes only. If you are interested, please contact our specialists.

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