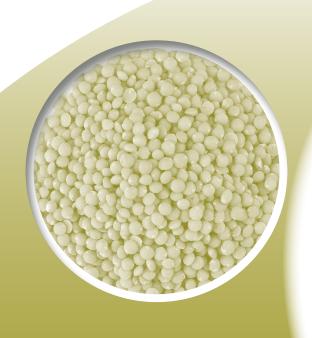


# The Great Advantages of Coated Products







# The Great Advantages of Coated Products

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# Coated METHOAir



**COATED METHO AIR** is a premix for poultry formulated to exploit the synergy between fatty acids and essential oils.

The combination of active ingredients supplies to the animals,

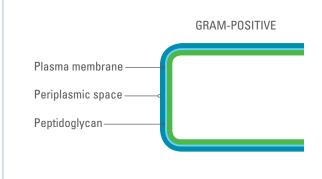
subjected to the strong stresses of the intensive breeding, the capacity to resist to the pathogenic challenges and to maintain a better health status with better productive performances.

Each ingredient has a wide number of activity that can have positive influence on the digestive system, respiratory apparatus and also immune system.

**MCFA** are a group of medium-chain fatty acids with a number of carbon atoms ranging from C6 to C12.

They are: caproic acid, caprylic acid, capric acid, LAURIC ACID.

Medium chain fatty acids are commonly used in feeding, especially because of their anti-bacterial properties against Gram-positive bacteria. (Clostridia, Staphylococcus, Streptococcus).



Gram-positive bacteria it is known that, unlike Gram-negative bacteria (Enterobacteria such as Salmonella and E. Coli), they are not susceptible to the use of short chain fatty acids. Because of the "thick" cell membrane of Gram-positive bacteria, the short chain fatty acids cannot penetrate this cell membrane and kill the cells.

Research has shown that medium chain fatty acids are able to penetrate this cell membrane. Therefore lauric acid can be effective in controlling Gram-positive bacteria like Streptococci, Staphylococci and Clostridia.

#### **NATURAL ACTIVE INGREDIENTS**



**EUCALYPTOL** and **MENTHOL** for the prevention and the treatment of respiratory disorders. Eucalyptol, being balsamic, expectorant and fluidifying, is efficiently active in maintaining free the respiratory tract.

In its activity is supported by the pairing with Menthol that, besides to be balsamic and fluidizer, is also antispasmodic on the smooth musculature of the respiratory and digestive system.

The alcoholic constituent of peppermint oil, namely the menthol, acts as a local anesthetic and disinfectant.

Inhaled menthol alleviates laryngitis and bronchitis.

Eucalyptus oils have anti-inflammatory, antibacterial, antiviral and antifungal activities.

They inhibit the cyclo-oxygenase, the main enzyme in the prostaglandin pathway, and thus exhibit an anti-inflammatory property; moreover, they have a cough inhibiting effect.



In the direction of preservation of the best animal health METHO AIR is also addressed to the protection of intestine from pathogenic agents. The essential **oils CARVACROL** and **THYMOL** synergistically operate as antiseptics and antimicrobials creating an environment suitable for the developing of the proper bacterial flora, with an immune system more

Essential oils with an antibacterial character generally contain a higher percentage of phenolic compounds, such as carvacrol and thymol, main components of plants such as oregano and thyme.

efficient in an organism not run down by inflammation processes.



All the effects are boosted and completed by the presence in METHO AIR of **CINNAMIC ALDEHYDE**. An essential oil extracted by cinnamon, that has an antioxidative effect able to reduce the cellular stress and the level of detrimental inflammation states.

Cinnamic Aldehyde has an antibacterial activity too.

After 72 hours of incubation showed inhibitory properties on the growth of all pathogenic.

The colonies of S.aureus and B.cereus in the Sulgidduk containing cinnamon powder were significantly lower than the control.

#### **INFORMATION**

#### Indications:

- Improves respiration and air passage.
- Reduces Mucus accumulation and discharge out of respiratory cavities.
- Reduces the negative effects of causing disease as well as quick recovery.
- Reduces stress and loss of valuable feed intake.
- Improves resistance to all respiratory infections.
- Reduces the negative effect and stress due to live vaccination.
- Improves survivability and reduces mortality.

#### Additives per kg:

Carvacrol, Eucalyptol, Menthol, Cinnamic Aldehyde, Thymol, Lauric Acid

#### **Excipients:**

Hydrogenated fat up to 1 kg

#### Recommended dosage:

Mix carefully and according to the good manufacturing procedures with the following dosages:

- Broilers and Turkeys in stress condition: 300-400 g/1.000 kg of feed per 5-6 days
- Prevention for Broilers: 100-150 g/1.000 kg of feed of drinking water per 4-5 days
- Prevention for Layers: 80-100 g /1.000 kg of feed twice daily

Always close the packaging after use. To stock in a dry, cool and clean environment, away from direct sunlight.

- Piglet: 300-400 g/1.000 kg of feed
- Fattening pig and sow: 150-200 g /1.000 kg of feed

#### Packaging:

• **Box:** 2 kg

## Coated SALIX Plus



The inflammatory state is the cause and the symptom of numerous clinical and subclinical problems.

**COATED SALIX PLUS** is a concentrate of extracts, with marked anti-inflammatory and antipyretic activity, which act in a synergistic way. The active ingredients, totally of vegetable origin in glycolic suspension, guarantee total safety of use.

#### **NATURAL ACTIVE INGREDIENTS**



**ECHINACEA ANGUSTIFOLIA:** the American Indians used preparations based on this plant to treat or prevent certain diseases (especially those of the respiratory tract) but also to disinfect the wounds.

They did not know that among the most interesting properties of Echinacea there was the ability to act positively on the body's immune defenses.

The properties of echinacea are given by its numerous active ingredients: alcamides, cetoalkenes, cicoric acid, polysaccharides, flavonoids and essential oil. The alcamids play an important anti-inflammatory action.

Several scientific studies have confirmed that echinacea extracts stimulate the immune system, increasing the activation of macrophages.



**BOSWELLIA SERRATA:** anti-inflammatory anti-rheumatic action comparable to NSAID by inhibition of 5-lipoxygenase, acts as Ca<sup>2+</sup> antagonist reducing intestinal motility in syndromes from colic inflammation.

The effects are due to the presence of boswellic acids

Sandern Herbon Rau: "resin extract of Boswellia S." a useful supplement to estblished drug therapy of chronic polyarthritis.

Reuslts of a double-bind pilot study - Z.Rheumatologien 1998; 57 11-16 Gerhardt Seifert Buvari Vogelsgang Repges : Therapy of active chronic Crohn disease with Boswellia extracts – Z.Gastroenterologie 2001; 39: 11-17



**SPIREA ULMARIA:** antipyretic and anti-inflammatory action due to the presence of salicylates having effect of inhibition of 15-lipoxygenase, tannins, flavonoids.

Bourgoyne: Salyicilates in Herbs. - Modern Phytotherapy.

1995; 1:3-6 Halkes Beukelman Kroes : In vitro immunomodulatory activity of Filipendula U. - Proceedings of NHAA International Conference; 1998 Sydney, Australia

Bradley: Bournemouth: British Herbal Medicine Assciation, Scientific Committee. 1992; 158-159



WHITE WILLOW BARK: has been used throughout the world as an antipyretic and analgesic.

### Coated SALIX Plus

#### **INFORMATION**

#### Indications:

anti-inflammatory, antidiarrheal, anti-pyretic action

#### **Additives per liter:**

Echinacea Angustifoglia fluid extract, Boswellia Serrata dry extract, Spirea Ulmaria dry extract, Salix (white willow bark) dry extract

#### **Excipients:**

Hydrogenated fat up to 1 kg

#### Recommended dosage:

Mix carefully and according to the good manufacturing procedures with the following dosages:

Poultry: 1 kg/1.000 kg of feed Sheep and goats: 5-10 g/head/day Cattle and camel: 20-50 g/head/day

Always close the packaging after use. To stock in a dry, cool and clean environment, away from

direct sunlight.

Piglet: 1 kg/1.000 kg of feed

Fattening pig and sow: 0,5kg /1.000 kg of feed

#### Packaging:

• Box: 20 kg

# Coated NEPHRO Phyt



Water is the most food of every efficient breeding.

The water and trace mineral metabolism are essential for healthy animals and high production performance.

**COATED NEPHRO PHYT** is a premix for poultry formulated to exploit the synergy between hydration, mineral metabolism and kidney. A rehydrated animal with a efficient mineral metabolism is a healthy animal with prompt immune response.

#### **NATURAL ACTIVE INGREDIENTS**



**TARAXACUM (Dandelion):** is rich in calcium, which is essential for the growth and strength of bones. It is also rich in antioxidants like vitamin C and luteolin, which protect bones from age-related damage.

Dandelions are highly diuretic in nature, so they help eliminate deposits of toxic substances in the kidneys and the urinary tract. The disinfectant properties of dandelions also inhibit microbial growth in the urinary system.



**ARCTIUM (Burdock root):** has been valued across continents for thousands of years for its ability to purify blood and cool internal heat. Internally and externally, it has potent anti-inflammatory and antibacterial effects on the human body.

Recent studies also show that burdock contains phenolic acids, quercetin and luteolin, which are all powerful, health-promoting antioxidants. Indication: stimulates kidney activity, keeping mineral balance, blood acidifier



**MENTHOL:** for the prevention and the treatment of re¬spiratory disorders. Besides to be bal¬samic and fluidizer, is also antispasmodic on the smooth musculature of the respiratory and digestive system.

The alcoholic constituent of peppermint oil, namely the menthol, acts as a local anesthetic and disinfectant.

Increase the water intake, menthol is useful for reducing gastric spasms, it has eupeptic action, wich improves digestion and stimulates gall bladder secretions.

## Coated NEPHRO Phyt

**NIACINAMIDE (Vitamin PP):** is part of coenzymes NAD and NADP which are essentials for metabolism of carbohydrates and lipids with also a relaxing effect on animals (if provided in high dosage).

**Zinc:** essential for the metabolism of carbohydrates, lipids and protein, it has influence on reproductive performances and immunity.

**Glycine:** it acts as neurotransmitter in the central nervous system; exerts a moisturizing action and is a precursor of creatine.

#### **INFORMATION**

#### Indications:

- Kidney disorder due to urolithiasis
- kidney form of infectious after use of sulphonamides or antibiotic treatment, in cases of mycotoxicosis
- Against stress due to temperature changes
- After medication, vaccination, peak, laying period, changing feed and during transportation.

#### Additives per kg:

Niacinamide, Zinc (zinc chelate of glycine, hydrate) 5.000 mg, Glicyne, Menthol, Arctium (Burdock) dry extract, Taraxacum (Dandelion) dry extract

#### **Excipients:**

Sodium chloride, Potassium chloride, Magnesium chloride, Hydrogenated fat up to 1 kg

#### **Recommended dosage:**

Mix carefully and according to the good manufacturing procedures with the following dosages:

Poultry: 1 kg/1.000 kg of feed Sheep and goats: 5-10 g/head/day Cattle and camel: 20-50 g/head/day

Always close the packaging after use. To stock in a dry, cool and clean environment, away from direct sunlight.

Piglet: 1 kg/1.000 kg of feed

Fattening pig and sow: 0,5kg /1.000 kg of feed

Packaging: Box: 20 kg

# Coated LIVER Deep



The liver is the most important organ to indicate the wellness state of the animals. **LIVER DEEP** is a premix with potent liver protective properties and recovery capacity of damaged liver tissue.

**LIVER DEEP** has been made with ingredients widely recognized by the scientific community for their activity. Has been formulated

#### **NATURAL ACTIVE INGREDIENTS**



**ARTICHOKE extract:** Therapeutically, artichoke extract has been used since 14 century in medical sciences for the treatment of cholestrolemia, trigelyceridemia and has hepatoprotective properties (Brand et al., 1992; Zargari, 2003). Artichoke extract has protective activity in liver.

Artichoke leaves extract (ALE) has been used, traditionally, for jaundice and liver insufficiency and it has been suggested as a harmless yet effective treatment option for hypercholesterolemia (Pittler et al., 2005).

The recent ban on antibiotics in poultry feed has served to focus much attention on alternative methods of controlling the gastrointestinal microflora, artichoke extract was suggested as alternative option for controlling gastrointestinal microflora (Kleessen et al. 2003).

Schutz et al. (2004) reported that, the total phenolic contents of approximately 12 g/kg on a dry matter basis in artichoke pomace is a promising source of phenolic compounds that might be recovered and used as natural antioxidants or functional food ingredients.

Many researchers reported that the specific activity of lipase in chicks decreased during the first six days after hatching and then increased up to 21 days of age (Krogdahl and Sell, 1989; Nitsan et al., 1991 and Uni et al., 1995). In addition, several data suggested that the bile secretion into the duodenum in young chicks (less than 3 weeks of age) might be not adequate for efficient fat utilization (Carew et al., 1972 and Katongol and March, 1980). Jin et al. (1998) discussed the development of digestive system in post-hatch poultry and concluded that the increase in ME value with age are partly due to increase in dietary fat utilization.



**Extract from CARDUS MARIANUS** (Silybum marianum): Silymarin is a complex of flavonolignane: silychristin, silydianin, silybin and isosilybin.

Silybin, in the form of soluble diemisuccinate, is also used in antipoison centre as an injectable treatment for Amanita phalloides intoxications.

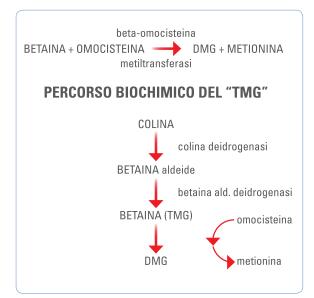
(Desplaces et al. 1975; Choppin and Desplaces 1978)

Silybin is bind with P-glicoprotein (Pgp), that can excrete drugs from cells reducing intracellular accumulation of citotoxic drugs.

(Maitrejan, 2000)

Silymarin have shown anti-inflammatory and anticarcinogenic properties in liver tissue acting on immune system modulation. (*Dehmlow et al. 1996; De la puerta et al. 1996; Luper 1998*)

## Coated LIVER Deep



BETAINE: betaine increases intracellular water retention and therefore protects intracellular enzymes against osmotic induced inactivation. As a methyl donor, betaine participates in the methionine cycle (mainly in the liver) and can be further used in trans methylation reactions for synthesis of essential substances like carnitine and crea-

The regulation of cellular hydration state, and therefore cell volume, is important for maintenance of cell function and several metabolic pathways (i.e.: protein turnover, amino acid carbohydrate, etc.). Cells try to adapt to external osmotic stress by accumulating inorganic ions (Na+, K+, Cl-) and organic osmolytes (methylated amines and certain amino acids).

Several scientific publications showed the proof of principle that betaine anhydrate can be used to overcome heat stress.

Attia et al., (2009) showed that the impact of severe heat stress could partially be overcome by adding betaine to the diet in slow growing broilers.

Dietary supplementation of betaine reduces the requirement for other methyl-group donors, such as methionine and choline.

#### **INFORMATION**

#### Indications:

Potent hepatoprotective properties and recovery capacity of damaged liver tissue

#### Additives per kg:

Artichoke extract, Extract from Cardus Marianus (Silybum marianum), Betaine

#### **Excipients:**

Hydrogenated fat up to 1 kg

#### Recommended dosage:

Mix carefully and according to the good manufacturing procedures with the following

Poultry: 1 kg/1.000 kg of feed Sheep and goats: 5-10 g/head/day Cattle and camel: 20-50 g/head/day

Always close the packaging after use. To stock in a dry, cool and clean environment, away from

direct sunlight.

Piglet: 1 kg/1.000 kg of feed

Fattening pig and sow: 0,5kg /1.000 kg of feed

#### Packaging:

**Box:** 20 kg

# Coated ND10



**COATED ND10** is a complementary feed developed for poultry, designed to improve intestinal health and boost the immune system.

The synergy between "chestnut tannins" and "egg-derived lysozyme" makes this product particularly effective in enhancing gut well-being and defending against pathogens. These natural ingredients are known for their beneficial effects on the digestive system and overall animal health, especially under stress conditions common in intensive farming.

#### **NATURAL ACTIVE INGREDIENTS**



#### **Chestnut Tannins**

Chestnut tannins are plant-derived polyphenolic compounds known for their astringent properties, which aid in reducing intestinal inflammation and binding harmful substances. They help stabilize the intestinal mucosa, reduce gut permeability, and prevent diarrhea by maintaining optimal gut flora. Additionally, tannins have antimicrobial properties, particularly against pathogenic bacteria, contributing to improved feed efficiency and animal performance.

#### Benefits:

- Promotes a balanced gut microbiota.
- Reduces inflammation and gut permeability.
- Aids in the control of diarrhea and digestive disorders.
- Enhances nutrient absorption and feed efficiency.

#### Lysozyme (Egg-derived)

Lysozyme is a natural enzyme found in egg whites, renowned for its bacteriolytic properties. It targets the cell walls of Gram-positive bacteria, effectively inhibiting their growth and supporting the natural immune defenses of poultry. As a natural antimicrobial, lysozyme contributes to a healthier intestinal environment, allowing the development of beneficial bacteria.

#### Benefits:

- Natural antimicrobial action, especially against Gram-positive bacteria.
- Supports the immune system by reducing bacterial load.
- Helps maintain gut integrity and function during stress or infections.

#### **INFORMATION**

#### Indications:

- Improved Gut Health: Designed to support and maintain the intestinal well-being of poultry, especially under stressful conditions like vaccinations, dietary changes, or pathogen exposure.
- Antimicrobial Support: Reduces the prevalence of harmful bacteria in the gut, contributing to a healthy balance of intestinal flora.
- Enhanced Performance: By improving nutrient absorption and reducing gut stress, COATED ND10 supports better overall productivity and growth rates.

#### Recommended dosage:

- Broiler and Layers: treatment 750 g /1000 kg of feed administered over 5-7 days
- Broiler and Layers: prevention 300-400 g /1000 kg of feed
- Piglets: treatment 1 kg/1000 kg of feed
- Piglets: prevention 400-600 g /1000 kg of feed

#### Packaging:

**Box:** 20 kg







