PRODUCT GUIDE

Premium Equine Feed®

# StepRight





# FIND THE RIGHT FEED FOR YOUR HORSE

Our enhanced Step Right Premium Equine Feed program continues to incorporate a wide range of nutritional ingredients, ensuring proven and comprehensive nutrition for horses throughout their entire lifespan.

Step Right feeds have been carefully formulated by equine nutritionists who consider the individual needs of each horse based on their age and level of activity. Our nutritional experts ensure you have the right feed suited to optimize the performance of your horse. Our extensive experience in equine nutrition allows us to stand confidently behind our products. When you select Step Right, you get much more than what comes in the package. On the next page is an easy-to-use chart to help you select the right feed for your horse. More details on each product can be found within this guide.



This is a guide only. Please consult with your local veterinarian to determine the feed that is best suited for your horse.

# **Broodmare & Growing Horses**

Broodmares and Foals



Optimized Development of Growing Horses



Elevated Digestible Protein



#### **Mature Horses**

Involved in Light to When Forage Quality





Maintenance Options



Maintaining Health of Senior Horses



# **Specialty Horses**

Involved in Performance and Heavy Activity



Overall Health, Hoof Condition and Ration Balancer



Sugar Sensitivities and Low NSC Options



#### THE STEP RIGHT DIFFERENCE

#### Advanced nutrition for your equine companion

Our Step Right Premium Equine Feed program continues to evolve in the way we provide nutritionally balanced diets for our equine partners, remaining at the forefront of our commitment to equine well-being and performance. All Step Right feeds include Trouw Nutrition's IntelliBond® and Optimin® trace minerals. These trace minerals have been developed to optimize bioavailability, ensuring that your horse has access to vital nutrients when they need them the most. We continue to fortify every feed with biotin, prebiotics, probiotics, selenium, a full complement of B vitamins and marine-derived calcium.

#### SmartStep BeneFit Pak

Our SmartStep BeneFit Pak fills in where the nutrients leave off, assisting the horse by modifying the fatty acid composition of the diet and providing additional antioxidants. These additives help horses cope with varied life challenges and stresses like hard work on the ranch, competition, changing environments, hygiene and aging. We have fortified every Step Right Premium Equine product with organic selenium yeast, non-hydrogenated vegetable oil, flax, turmeric, yucca schidigera, lysine and methionine.

#### Double conditioned pellet mill

Double-conditioned pellets are a superior alternative to single conditioner pellets. Achieved by adding an additional conditioning process during production, double-condition pellets increase pellet durability, digestibility, and palatability reducing any potential harmful bacteria.

#### *Vacuum-infused technology*

Vacuum-infused technology is a unique process in which, after the ingredients are mixed, the excess air pressure is removed from the mixture using a vacuum infuser, allowing the pellet to absorb the non-hydrogenous vegetable fat. The benefits of this process includes reducing cross contamination, supplying essential OMEGA 3 and 6 fatty acids, increasing energy levels, helping fat-soluble vitamin absorption and improving the quality of feed.

#### *Integrated* extrusion technology



Our extruded technology produces a kibble designed with optimal formulation and manufacturing processes. This process cooks ingredients under pressure, with high temperature steam for a short period of time. The feed is then pushed through a die to create kibble that is uniform in shape. This unique process distinguishes us from our competitors, as we customize our innovations to perfectly align with the requirements of horses today. There are many benefits to feeding extruded horse feeds, including:

- Improved digestibility and energy availability, which leads to a healthier horse with less feed required.
- Improved nutrient absorption in the small intestine.
- Increases chewing and saliva production which supports a healthy gastrointestinal environment.
- Reduced dust and fines, leading to more feed in the bag, less waste and more nutrients utilized by the horse.

#### **SMART MINERALS**



#### IntelliBond minerals

Trouw Nutrition's IntelliBond products are the first line of hydroxy trace minerals for use in animal feeds.

They feature high bioavailability and low environmental impact. IntelliBond minerals have a hydroxide group that creates a strong covalent bond with the mineral. These "smart bonds" help protect the mineral in the feed and the upper digestive tract, allowing for less reactivity and targeted availability.

IntelliBond's hydroxy trace minerals also feature our patented OptiSize<sup>™</sup> large particle technology. Trace minerals created with this technology offer benefits that traditionally formulated trace minerals cannot. OptiSize large particle technology is the best way to ensure trace minerals are evenly distributed in feed.

Organic trace minerals

#### **Optimin** organic trace minerals

Optimins are Trouw Nutrition's full range of organic trace minerals, developed by animal nutrition experts.

They are FAMI-QS certified, meaning that quality controls are performed on every batch to ensure quality, safety and performance. Due to the high quality of ingredients and excellent production process, Optimin trace minerals are easily absorbed by active transport mechanisms, which lowers the risk of mineral deficiencies, oxidative stress or competition between minerals for absorption.

Optimin Selenium Yeast works alongside Vitamin E to create a cellular antioxidant defense system. It provides a natural form of selenium to help increase immune function, increase stamina, reduce symptoms related to tying-up and increase fertility.



#### ALL NATURAL ENHANCEMENTS

#### Marine-derived calcium

Unique to Step Right, marine-derived calcium can help provide your horse with the calcium it needs to promote a healthy gastrointestinal environment. Additionally, marine-derived calcium helps to maintain proper muscle function and bone health and aids in keeping stomach and hind gut pH balanced. With its high bioavailability, marine-derived calcium ensures easy absorption and utilization for optimal equine health.

#### Long stem forage (GenAPro mini cube)

High quality grass hay is rich in nutrients including fibre, minerals, vitamins and protein and is an essential part of your horse's diet. It can aid in maintaining proper dental health and helps support their digestive system and a healthy gastrointestinal environment.

#### Selenium yeast

Selenium yeast is an organic form of the trace mineral selenium. It provides an excellent source of highly bioavailable selenium for horses when fed as part of a balanced ration. Research has shown that the uptake of selenium in the digestive tract of the animal is much more efficient when it is fed in the form of selenium yeast.

#### **Prebiotics**

Prebiotics help to provide the critical nutritional support needed to optimize digestive function in your horse. Feeds that are not enzymatically digested in the stomach and small intestine of your horse are fermented to energy by beneficial bacteria in the hind gut. Research has shown that these bacteria can benefit from the rich nutrient source provided by yeast metabolites.

#### **Probiotics**

The SmartStep BeneFit Pak includes live yeast culture probiotics. These have been shown to contribute to better energy use through increased fibre digestibility, improved detoxification and protein use, reduced inflammatory stress and improved blood oxygenation.

#### Yucca schidigera

Yucca has been shown to assist in binding excessive ammonia, minimizing oxidative stress and decreasing inflammatory response.

This will aid in increased digestive health, increased immune function, decreased inflammatory diseases and reduced chance of arthritis.

#### **Biotin**

Research has shown that supplementing a horse with 15-20 mg of biotin daily can have a beneficial effect on hoof wall growth, integrity and tensile strength. If fed at our recommended rates, every Step Right feed provides 20 mg of biotin daily – so there's no need to add an additional supplement.

#### Flax

Flax is a rich source of Omega-3 fatty acids, which have been shown to improve coat condition, immune function and fertility.

Omega-3s have also been known to maintain healthy cell membranes and decrease inflammatory response.

#### Additional vitamins

Vitamin K, vitamin B12, thiamin, riboflavin, niacin, pantothenate and folacin have been added to help meet the heightened dietary requirements of horses in training and to supplement horses that are under stress. B vitamins play an important role in metabolism and general health including energy generation during exercise, antioxidant activity, maintenance of nervous system, ligament integrity, skin and hoof integrity.

#### **Turmeric**

Turmeric is long thought to be a herbal remedy for combating oxidative stress for horses in exercise.



It's important to note that while all vitamins and minerals offer these benefits, they should be provided as part of a balanced diet. Horses require a variety of nutrients and their overall diet, including forage and other supplements and should be carefully managed to meet their specific needs.

### WEIGHT/UNIT MEASURE

#### Feeding the perfect amount of Step Right

Determining how much feed your horse needs can be a challenge. There is no uniform weight for manufactured equine feeds and the weight varies depending on whether the feed is pelleted, textured or extruded kibble. Having an accurate handle on feed intake is the first step in formulating a well thought out, safe ration for your horse.

To determine how many cups of dry feed your measuring device (feed scoop, coffee can or yogurt container) holds, take a kitchen measuring cup for dry ingredients and count the number of cups it takes to fill your scoop. Then use the table below to determine how many pounds or kilograms of feed you need to feed your horse each day.

	No. of cups in 1 kg	No. of cups in 1 lb	No. of cups/day (500 kg horse)
1 Start Right	6.17	2.81	15.43-23.15
2 Peak Performance	5.88	2.67	14.7–29.4
<b>3</b> GenAPro	6.83	3.11	34.15–51.22
4 Low Sugar Lite	5.61	2.55	5.61–50.49
<b>5</b> Top Up Mineral	4.37	1.98	1
<b>6</b> Senior	5.39	2.45	13.47–26.95
7 Top Up Supplement	5.52	2.51	up to 5.52
8 High Fat	6.37	2.89	15.9

Measurements are provided as a guide only.

Disclaimer: Individual results from the use of this product may vary as a result of differences in management environment, genetics, health, sanitation and or other factors. Therefore, Trow Nutrition Canada Inc. and its brands Hi-Pro Feeds, Step Right Premium Equine Feed, Rancher's Equine Feed, its affiliates and its distributors do not warrant or guarantee individual results and shall not be held liable for any gaps in the results.

#### **GLOSSARY OF SYMBOLS**

To help you quickly identify the key features and benefits of each Step Right Premium Equine Feed, we have developed a series of easy to identify icons. Each icon represents a key nutrient or benefit included in the feed. Look for these icons at the bottom of each product page and on our in-store packaging to help you choose the best feed for your horse.

CANADIAN

**ALFALFA** 

**GROWTH** 

**PERFORMANCE** 

TRACE

**MINERALS** 



**SLOW** 

CONSUMPTION

**RATION** 

**BALANCER** 

**PRE AND PRO** 

**BIOTICS** 

# Start Right

Broodmares and Growing Horses

#17188795

Step 1 – Start Right is a soy-free pelleted feed designed specifically for lactating broodmares, foals and weanlings.

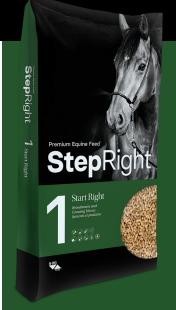
#### Benefits

- Excellent for mares in the final stage of gestation and throughout lactation when nutrient demands are highest.
- Designed for lactating broodmares, foals and weanlings.
- Double-conditioned pelleted format increases pellet durability, digestibility, palatability and reduces potential harmful bacteria.
- Excellent option for horses who have an allergy or may be sensitive to soy.

#### Feeding Instructions

This feed has been designed to be fed to brood mares, foals and yearlings to help establish sound development of the young growing horse. Horses should be fed according to their individual needs (condition, age, level of activity, etc.) in at least two separate feedings per day. This feed should be offered as a balanced ration, including access to good quality forage. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

Age/Performance	% of body weight	No. of kg	No. of cups
Nursing foal (400 kg)	0.5%	2.0	12.35
Weanlings (400 kg)	0.5%-1.5%	2.0-6.0	12.35-37.04
Brood mares (500 kg)	0.5%-0.75%	2.5-3.75	15.43-23.15
Lactating mares (500 kg)	0.75%-1.0%	3.75-5.0	23.15-30.86



#### Feed analysis

Crude protein (min)	16.0%
Crude fat (min)	5.0%
Crude fiber (max)	7.5%
Sodium	0.4%
Calcium	0.95%
Phosphorus	0.7%
Magnesium	0.21%
Riboflavin	9.6 mg/kg
Pyridoxine	13.2 mg/kg
Zinc	288 mg/kg
NSC	33.0 %
Cobalt	0.259 mg/kg
Selenium (added)	0.5 mg/kg
Vitamin A (min)	13,500 IU/kg
Vitamin D (min)	2,120 IU/kg
Vitamin E (min)	500 IU/kg
Thiamin	15.5 mg/kg
Copper	47 mg/kg
Manganese	190 mg/kg

# Peak Performance

*Sport* #17188815

Step 2 – Peak Performance is designed for performance and growing horses in training, stallions, hard keepers and horses involved in moderate to heavy activity.

#### **Benefits**

- High energy source with 10% fat and optimal starch levels for performance and energy.
- A high-energy blend containing Canadian oats and grains, designed to sustain the energy requirements of equine athletes.
- Incorporates long stem forage to provide additional fibre and digestible protein in the form of GenAPro Mini Cubes.
- Includes extruded technology which encourages chewing and saliva production and supports a healthy gastrointestinal environment.
- Excellent option for picky eaters or for horses who find textured feed more appealing.

#### Feeding Instructions

This feed has been designed to be fed to performance horses, growing horses and stallions. Horses should be fed according to their individual needs (condition, age, level of activity, etc.) in at least two separate feedings per day, approximately 0.5 – 1.0% of body weight per animal per day. This feed should be offered as a balanced ration, including access to good quality forage. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

Age/Performance	% of body weight	No. of kg	No. of cups
Yearlings (400 kg)	0.75%-1.0%	3.0-4.0	17.64-23.52
Long yearlings (400 kg)	0.5%-1.0%	2.0-4.0	11.76-23.52
Two year olds (450 kg)	0.5%-1.0%	2.25-4.5	13.23-26.46
Pregnant mares (500 kg)	0.5%-0.75%	2.5-3.75	14.7-22.05
Lactating mares (500 kg)	0.5%-1.0%	2.5-5.0	14.7-29.4
Performance horses (500 kg)	0.5%-1.0%	2.5-5.0	14.7-29.4





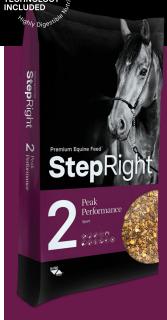












#### Feed analysis

Crude protein (min)	14.0
Crude fat (min)	10.0
Crude fiber (max)	12.0
Sodium	0.5
Calcium	1.35
Phosphorus	0.8
Magnesium	0.32
Riboflavin	10.2 mg/l
Pyridoxine	14.1 mg/l
Zinc	316 mg/l
NSC	31.3
Cobalt	0.32 mg/l
Selenium (added)	0.43 mg/l
Vitamin A (min)	14,000 IU/l
Vitamin D (min)	2,240 IU/l
Vitamin E (min)	625 IU/l
Thiamin	16.1 mg/l
Copper	52 mg/l
Manganese	208 mg/l



#17296225

Step 3 – GenAPro is a high fibre, low sugar, low starch complete feed that can be fed as a partial or total hay replacer. This alfalfabased product is well suited for travel or when forage quality and/or quantity is limited.

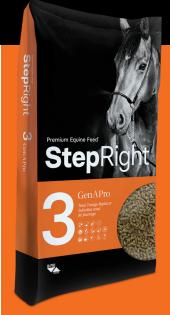
#### Benefits

- Low sugar and starch (<10% NSC).
- Ideal for competition horses that travel frequently and require a consistent quality forage.
- Higher protein levels are consistent with what would be provided in hay, which is important for growth, performance and to maintain muscle condition.
- Mini cube feed form encourages chewing and saliva production, which supports a healthy gastrointestinal environment.

#### Feeding Instructions

This feed can be fed when feeding a low roughage feeding program. Horses should be fed according to their individual needs (condition, age, level of activity, etc.) in at least 2 separate feedings per day. This feed should be offered as a balanced ration, including access to good quality forage. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

	% of body weight	No. of kg	No. of cups
500 kg horse	1.0%-1.5%	5.0-7.5	34.15-51.22



#### Feed analysis

Crude protein (min)	15.0%
Crude fat (min)	3.0%
Crude fiber (max)	21.0%
Sodium	0.4%
Calcium	1.5%
Phosphorus	0.5%
Magnesium	0.23%
Riboflavin	13.0 mg/kg
Pyridoxine	26.6 mg/kg
Zinc	282 mg/kg
NSC	8.8 %
Cobalt	0.3 mg/kg
Selenium (added)	0.3 mg/kg
Vitamin A (min)	9,000 IU/kg
Vitamin D (min)	1,500 IU/kg
Vitamin E (min)	80 IU/kg
Thiamin	13.0 mg/kg
Copper	46 mg/kg
Manganese	196 mg/kg

# Low Sugar Lite

High Fibre

#17188855

Step 4 – Low Sugar Lite is a high fibre pelleted feed, specifically formulated for horses who are prone to sugar sensitivities, metabolic resistance, insulin resistance and founder.

#### **Benefits**

- A safe option for miniature horses, donkeys and other horses prone to founder.
- Low sugar and starch (<10% NSC) to help maintain the overall health and performance of the horse.
- Double conditioned pelleted format which increases pellet durability, digestibility, palatability and reduces potential harmful bacteria.
- Designed to complement a forage-based diet, encouraging the consumption of hay or pasture as an additional fibre source.

#### Feeding Instructions

This feed has been designed to be fed to mature horses requiring a high fiber diet. Horses should be fed according to their individual needs (condition, age, level of activity, etc.) in at least two separate feedings per day. This feed should be offered as a balanced ration, including access to good quality forage. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

	% of body weight	No. of kg	No. of cups
500 kg horse	0.2%-1.8%	1.0-9.0	5.61-50.49



#### Feed analysis

Crude protein (min)	14.0%
Crude fat (min)	5.0%
Crude fiber (max)	21.0%
Sodium	0.4%
Calcium	1.2%
Phosphorus	0.7%
Magnesium	0.21%
Riboflavin	11.8 mg/kg
Pyridoxine	23.9 mg/kg
Zinc	229 mg/kg
NSC	9.0 %
Cobalt	0.25 mg/kg
Selenium (added)	0.34 mg/kg
Vitamin A (min)	13,000 IU/kg
Vitamin D (min)	2,000 IU/kg
Vitamin E (min)	345 IU/kg
Thiamin	10.6 mg/kg
Copper	38 mg/kg
Manganese	167 mg/kg



*Fortifier* #17287255

Step 5 – Top Up Mineral Fortifier is a loose mineral specifically formulated for horses in need of additional vitamins and minerals in their diet, serving as an essential component to achieve a well-balanced ration.

#### Benefits

- A safe, convenient option to ensure your horse is getting enough essential trace minerals and fat-soluble vitamins.
- Suitable for broodmares, horses on pasture and over-conditioned horses.
- Cost-effective solution to top dress any horse's non-fortified feed or feed free choice.

#### Feeding Instructions

Feed this mineral at the rate of 250 grams per day to a 500 kg horse along with sufficient forage from pasture or hay (typically totaling about 12.5 kg of dry matter). Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

	% of body weight	No. of kg	No. of cups
500 kg horse	0.25%	0.25	1



#### Feed analysis

Calcium	16.0%
Phosphorus	8.0%
Magnesium	1.8%
Sodium	3.0%
Copper	710 mg/kg
Manganese	2,300 mg/kg
Zinc	400 mg/kg
Cobalt	30 mg/kg
Selenium (added)	15 mg/kg
Vitamin A (min)	600,000 IU/kg
Vitamin D (min)	40,000 IU/kg
Vitamin E (min)	1,155 IU/kg
Thiamin	350 mg/kg
Riboflavin	175 mg/kg
Pyridoxine	90 mg/kg
Biotin	6,500 mg/kg

### Senior

Age Well

#17188875

Step 6 – Senior is designed to help your horse age well. This feed is a blend of pellets and extruded kibble created to address the unique dietary challenges faced by senior horses, hard keepers, or mature horses having difficulty maintaining condition.

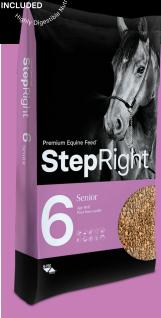
#### **Benefits**

- A blend of double conditioned pellets and extruded kibble allows for easy consumption and nutrient absorption by senior horses, even those with dental issues.
- Double conditioned pelleted format increases pellet durability, digestibility, palatability and reduces potential harmful bacteria.
- An easily digestible feed with moderate fat content, tailored to be gentle on the body of senior horses.
- Crafted using premium ingredients and elevated nutrient levels, tailored to meet the dietary needs of senior horses.

#### Feeding Instructions

This feed is designed to be fed to horses in their late teens or older, due to their unique nutritional needs. This special feed form and nutrition supplementation is designed to assist horses with the requirement changes known to occur as horses age. Feeding amounts will vary according to size, age and condition of your horse. This feed should be offered as a balanced ration, including access to good quality forage. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

	% of body weight	No. of kg	No. of cups
500 kg horse	0.5%-1.0%	2.5-5.0	13.47-26.95



#### Feed analysis

Crude protein (min)	16.0%
Crude fat (min)	5.0%
Crude fiber (max)	6.0%
Sodium	0.45%
Calcium	1.3%
Phosphorus	0.9%
Magnesium	0.285%
Riboflavin	10 mg/kզ
Pyridoxine	12.9 mg/kզ
Zinc	325 mg/kզ
NSC	33.4 %
Cobalt	0.33 mg/kg
Selenium (added)	0.43 mg/ko
Vitamin A (min)	14,000 IU/ko
Vitamin D (min)	2,200 IU/ko
Vitamin E (min)	640 IU/kį
Thiamin	18 mg/k(
Copper	53 mg/k
Manganese	219 ma/ka



# Top Up Supplement

Ration Balancer

#17188895

Step 7 – Top Up Supplement Ration Balancer is a low inclusion balancer for horses consuming non-complete feeds such as oats or COB (corn, oats, barley), or for topping up your horses' nutritional program. It's suitable for horses who are on pasture, over-conditioned or with low energy requirements.

#### Benefits

- A pelleted supplement enhancing equine performance, promoting overall hoof health and strengthening immune function.
- A low inclusion, supplement balancer pellet, with elevated proteins, vitamins and minerals designed for any horse.
- A cost-effective way to meet the nutritional needs of each horse.
- Feed as a supplement to balance out forage, pasture, or non-fortified feed and grains.
- Well-suited for stables offering a complete nutritional program.
- Includes prebiotics and probiotics to help promote a healthy gastrointestinal tract.

#### Feeding Instructions

This supplement may be fed at up to 1 kg daily to 450 kg pregnant mares, 450 kg mature horses, or growing horses. Growing horses should be fed 250 grams per 100 kg of body weight. Do not feed in excess of 1 kg per head per day. Do not feed any other supplements, vitamins or minerals without veterinary supervision. When mares foal, switch to Step 1 Start Right horse feed. Feed lactating mares according to the stage of lactation. Always change grain feeding levels slowly. Feeding amounts will vary according to size, age and condition of your horse. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

Growing horses	0.25%	Depends on Weight of Horse	
Mature horses (450 kg)	up to 1 kg/day	1.0	up to 5.52
Pregnant mares (450 kg)	up to 1 kg/day	1.0	up to 5.52
Age/Performance	% of body weight	No. of kg	No. of cups





#### Feed analysis

Crude protein (min)	17.0%
Crude fat (min)	4.0%
Crude fiber (max)	8.5%
Sodium	0.65%
Calcium	2.3%
Phosphorus	1.0%
Magnesium	0.40%
Riboflavin	59.4 mg/kg
Pyridoxine	68 mg/kg
Zinc	630 mg/kg
NSC	27.2 %
Cobalt	0.45 mg/kg
Selenium (added)	0.3 mg/kg
Vitamin A (min)	68,000 IU/kg
Vitamin D (min)	10,500 IU/kg
Vitamin E (min)	1,200 IU/kg
Thiamin	27 mg/kg
Copper	200 mg/kg
Manganese	420 mg/kg

# High Fat

Cool Energy

#17188835

Step 8 – High-Fat Cool Energy is a pelleted, vacuum infused feed designed for hard-working performance horses or horses that require fat-sourced energy for better body condition.

#### **Benefits**

- A high fat, high fibre, low NSC diet, suitable for mature, senior, performance and metabolically challenged horses.
- Ideal for helping horses maintain their body condition, especially over winter or cooler months.
- Fat sources include non-hydrogenated canola oil, flax and rice bran, which provide an optimal 3:6 fatty acid profile.
- Vacuum infused technology allows for high fat levels, promoting an overall healthy gut microbiome.
- Double conditioned, large format pellet to enhance saliva production which supports a healthy gastrointestinal environment.

#### Feeding Instructions

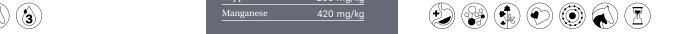
This feed has been designed to be fed to performance horses. Horses should be fed according to their individual needs (condition, age, level of activity, etc.) in at least 2 separate feedings per day. This feed should be offered as a balanced ration, including access to good quality forage. Provide access to free choice salt and fresh clean water at all times. For breed-specific feeding recommendations, consult your veterinarian.

	% of body weight	No. of kg	No. of cups
500 kg horse	0.5%	2.5	15.9



#### Feed analysis

	0.35%
	1.25%
Phosphorus	0.45%
Magnesium	0.18%
	11.3 mg/kg
Pyridoxine	19.8 mg/kg
	279 mg/kg
	6.9 %
Cobalt	0.25 mg/kg
Selenium (added)	0.3 mg/kg
	13,950 IU/k
Vitamin D (min)	2,180 IU/k
	700 IU/k
	124 mg/kg
Copper	45 mg/kg



### **SUPPLEMENTS & MINERALS FAQ**

# Where do supplements and minerals fit into my horse's diet?

Depending on the quality of available forage and the nutritional content of your horse's feed, your horse may be deficient in certain vitamins and minerals. Equine supplements and minerals are a way to provide horses with essential vitamins and minerals in a compact, convenient package. When determining which supplement or mineral to use, it is important to understand the nutrients that your horse is getting from their forage and other feeds.

# I feed high quality hay; do I still need supplements?

In many cases, high quality hay should provide your horse with sufficient energy and protein but may not provide sufficient trace minerals in the correct ratios. It can be challenging to provide your horse with sufficient quantities of the fat-soluble vitamins A, D and E. Stored forages are low in fat-soluble vitamins, so a complete diet for any horse, regardless of nutrient requirements, should always include supplemental fat-soluble vitamins.



# Does my horse need any supplements if they get lots of grain?

Feeds such as beet pulp, COB, oats, or hay cubes often do not contain any supplemental vitamins or minerals. Horses consuming these feeds as sources of additional energy and protein, or consuming minimal amounts of manufactured fortified feeds often require supplemental vitamins and minerals. Manufactured feeds such as sweet feed, extruded kibble and complete pellets do contain supplemental vitamins and minerals, but they need to be fed in sufficient quantities to provide enough supplemental vitamins and minerals. In these situations, a ration balancer or mineral can be considered to "top up" required vitamins and minerals without looking to increase substantial caloric intake.

# Chelated, organic and hydroxy bonded minerals, what is the difference?

Trace mineral nutrition can be a tricky balancing act. Complexing and chelating trace minerals is when the mineral is processed to ensure bioavailability. Trouw Nutrition's IntelliBond products are the first line of hydroxy trace minerals for use in animal feeds and support high levels of bioavailability. IntelliBond minerals have a hydroxide group that creates a strong covalent bond with the mineral. These "smart bonds" help protect the mineral in the feed and the upper digestive tract, allowing for less reactivity and targeted availability. Simply put, IntelliBond minerals are available when and where they are needed most. Research has shown that providing minerals from varied sources, including both inorganic and complexed sources, can optimize their uptake in the lower digestive tract, in turn improving your horse's ability to meet their trace mineral needs through their diet. Having Trouw Nutrition's proprietary IntelliBond minerals helps to support mineral availability without increasing the volume fed.



#### FAT IN YOUR HORSE'S DIET

Horses digest fat primarily in the small intestine, resulting in varied degrees of digestibility, depending on the fat source. Fats found in forages are absorbed less than fats sourced from oil. Fat contains 2.25 times the calories per unit of weight in comparison to carbohydrates (starch and sugar).

Fats can be a safe and effective choice for increasing energy in the diets of performance horses or horses with metabolic issues. The safety and efficacy of feeding fat as an energy source for horses has been well documented in peer-reviewed research. Fat should be fed in small meals to ensure good digestion. The substitution of fat for non-structural carbohydrates as a calorie source provides some benefits to horses prone to gastric ulcers. There is also research surrounding mature horses consuming high-fat meals, instead of meals high in non-structural carbohydrates; in these instances, researchers noted a decrease in both blood glycemic and insulinemic responses.



# Step Right Premium Equine Feed includes fat for the following objectives:

- 1. Deliver safe 'cool' calories for energy.
- 2. Offers a supply of Omega 3 and Omega 6 fatty acids to the horse. Omega 3 fatty acids in particular can be limited in equine diets.
- 3. Dietary fats (triglycerides) are a concentrated source of dietary energy that provide essential fatty acids, which can carry the fat-soluble vitamins A, D, E and K. Since these vitamins are hydrophobic, they need fats to facilitate transportation through the small intestine.

# Omega-3 and omega-6 fatty acids

Omega-3 and omega-6 fatty acids are part of a group of nutrients called essential polyunsaturated fatty acids. These fatty acids are critical for several metabolic functions in horses. Although diets that contain sufficient quantities of omega fatty acids are important, the ratio of essential fatty acids provided by feed ingredients should be considered for optimum performance.

#### Balancing omega fatty acids

Equine diets commonly utilize vegetable fat sources, the most common ones being palm fat or hydrogenated vegetable fat. These fats provide energy, but do not provide an optimum ratio of essential fatty acids. Soy and corn oil provide high quality fat for energy, but a less desirable ratio of omega fatty acids. The best fats to use in feed manufactured for horses should have a desirable ratio of omega-3 to omega-6 fatty acids.

Canola oil is a superior fat source for use in equine diets in terms of digestibility, manufacturing stability, palatability and fatty acid ratio. Step Right Premium Equine Feeds are manufactured using Canadian canola oil as the primary fat source. All fat sources used in these feeds are non-hydrogenated vegetable oils that are selected to provide a good ratio of omega-3 to omega-6 fatty acids.

#### THE IMPORTANCE OF FIBRE

#### Crude fibre and digestible fibre

Fibre is an important component of your horse's diet and can be largely sourced in the forages they are fed. Fibre is necessary for maintaining a healthy hindgut because of the necessary nutrients that regulate the bacterial population. Fibre is defined as a collection of carbohydrates such as cellulose, pectin and lignin that are resistant to enzymatic digestion in the small intestine. Horses have a large and well-developed capacity for the microbial fermentation of these complex carbohydrates, which makes fibre vital in their diet. Fibre is not considered a function of a forage's stem length; it is a measure of the specific carbohydrate fractions that exist in pellets as they do in long-stem hay. This allows the possibility to meet a horse's need for fibre by feeding a forage replacer in pelleted form or in traditional forage forms.

# The difference between crude fibre and digestible fibre

The term crude fibre is used to describe the complex carbohydrates in ingredients; however, it does not describe the digestibility of the complex carbohydrates. Digestible fibre is used to describe carbohydrates that provide safe hindgut digestible energy. It is important to identify the source of fibre in any horse feed when there is a high fibre claim. If the fibre provided in the feed cannot be utilized in the digestive tract of your horse, it does not provide any nutritional advantage.



#### Fibre and digestibility

In diets where nutrient density and digestibility are important, a high level of crude fibre in a complete feed could be counterproductive. For example, a starter feed such as Step 1 - Start Right is intended to complement the diets of pre-weaned foals with important essential nutrients and facilitate the transition of the foal from a milk diet to a solid food diet. Step 1 -Start Right has an optimum level of high-quality protein that is balanced for amino acids. It also has high quality carbohydrate sources utilizing grains for starch and sugars such as glucose, fructose and lactose. This ensures the provided nutrients are readily digestible in the foregut. Foals have an immature cecum, or hind gut and very limited capacity to utilize feeds with lower digestibility. Providing foals with access to pasture, quality hay and a good starter feed enhances the development of the hind gut and ensures good nutrient utilization for optimum growth. Starter feeds that are too high in crude fibre dilute nutrient density and do not enhance foal growth or development.

#### FEEDING PROTEIN TO HORSES

#### Crude protein

Crude protein is a measurement of the total protein content of a feed but does not indicate the protein quality. Most of the crude protein in equine diets comes from forages. Hay, along with pasture quality and maturity, will influence the protein content of a horse's diet significantly.

# Amino acids and the importance of limiting amino acids

Protein in equine diets is comprised of 'building blocks' called amino acids, which are important for the development and repair of bones, muscles and virtually all the body's soft tissues. Amino acids are the foundation of many important metabolic functions. Some amino acids are in plentiful supply in the feeds our horses eat and some are not; the ones that are not are called limiting amino acids. The horse will only perform as well as the most limiting amino acid. Lysine and methionine are examples of limiting amino acids. Limiting amino acids must be fed in the correct ratio to ensure optimum utilization. It is possible to feed a diet that meets minimum requirements for crude protein without being balanced for limiting amino acids. Increasing crude protein levels in diets for weanlings and growing horses without ensuring that the protein is of high quality and balanced for limiting amino acids may produce undesired growth and development results and can lead

to issues including OCD (osteochondritis dissecans) and physitis. Performance horses require high quality protein in their diets. The bodies of healthy equine athletes are constantly undergoing muscle building and repair. A diet that is poorly balanced for limiting amino acids is not likely to support optimum performance. Diets for senior horses are most successful when balanced for protein quality. Loss of top line and the reduction in immune function and hair coat quality often seen in senior horses can be partially related to a shortfall in the dietary intake of essential amino acids.

# Balancing protein and amino acids

The best equine diets are those that provide adequate but not excessive levels of high-quality protein and a balanced ratio of amino acids. Feeding diets with excessive levels of protein without ensuring proper amino acid balance can put undue stress on any horse, but especially horses that are growing, performance horses, or metabolically challenged horses. All Step Right Premium Equine Feeds provide crude protein and amino acid levels that have been determined by research to be appropriate for the type of horse, as specified by the tag.

#### SUGAR IN YOUR HORSES' DIET

#### Sugars in horse feed

Sugar or 'water soluble carbohydrate' (WSC) intake in equine diets has become a popular topic of discussion. Technically, WSC includes the complex sugar, fructan and the simple sugars, fructose and glucose. A WSC is characterized as a carbohydrate that can be digested rapidly to glucose in the foregut or fermented to energy in the hind gut. Nonstructural carbohydrates (NSC) are equal to the WSC and starch present in feed.

NSC are an excellent energy source for horses and can be metabolized in the horse's body with the assistance of insulin. When fed in excess of the horse's energy needs, NSC are stored as body fat. We often talk about NSC levels in feed as opposed to only WSC, since we want to consider both the sugar and starch content of a feed for horses with a metabolic illness or sugar sensitivity. You won't find any added 'table sugar' in any Step Right Premium Equine Feed, but most ingredients used in horse feeds contain NSC.

#### Benefits of starch and sugar

Horses that are in training or performing moderate to heavy activities will benefit from a feed containing starch and sugars. Feeds with a higher NSC level can efficiently 'load' the muscles of equine athletes with glycogen for easily accessible energy for performance. Pleasure and trail horses will also utilize sugar and starch energy in their regular activities.



#### Managing NSC in the diet

When working with overweight horses, it is necessary to consider the total NSC of a diet (feed and forage), as these horses can be at a higher risk of metabolic illnesses such as insulin resistance (IR), equine metabolic syndrome (EMS) and health issues including PPID (Cushing's disease).

Low-starch feeds are not appropriate for all horses; those who are easily excitable, obese, insulin resistant, or diagnosed with muscle disorders or hindgut acidosis are obvious candidates. Some horses cannot hold their weight when on a low-starch diet and may need the extra energy provided by starches, whereas others may maintain an adequate weight but lack energy when asked to perform.

For metabolically challenged horses, look for low NSC feeds, which are commonly manufactured in the form of extruded kibble or pellets. Step 8 Hi-Fat and Step 4 Low Sugar Lite are low in NSC. You may also consider adding a low-inclusion vitamin and mineral supplement, such as Step 7 Top Up Supplement Ration Balancer or Step 5 Top Up Mineral Fortifier.

#### Consider your forages

It is important to remember that your forage contains NSC, since horses generally have a diet that contains more forage than concentrated feed. If your horse requires a low NSC feed, evaluating your forage for NSC is a necessary step. Ask your hay supplier for a copy of their forage test results, or have your own hay tested.



# **QUALITY**

We know the quality of feed you give your horse is important to you - that's why we manufacture all our Step Right feeds according to the highest standards. Using quality ingredients, we incorporate a broad range of nutritional ingredients, ensuring proven and comprehensive nutrition for your horse throughout their entire lifespan. Beyond using quality ingredients, we also maintain high quality standards in our production facilities, our packaging, as well as for our employees to ensure that everything that goes into making your horses feed is the best it can be.



# We don't just manage quality; we take it to the next level.

Nutrace® is Trouw Nutrition's companywide proactive program to assure feed safety and quality. Nutrace® safeguards the safety and quality of Trouw Nutrition products and services. Just as important, it improves operations, efficiency and it reduces risks for its customers and their animal partners. The Nutrace® program, complying with legislation and customer demands, is structured in five Nutrace® pillars:

- Certified quality
- Ingredients & supplier assessment & management
- Monitoring & control
- Risk management
- Tracking & tracing

Visit our website to find out more about Trouw Nutrition's commitment to quality at **trouwnutrition.ca**.





### Find the right feed for your horse.

Our Step Right Premium Equine Feed® program continues to evolve to provide nutritionally balanced diets for our equine partners, remaining at the forefront of our commitment to their well-being and performance.

All Step Right feeds include Trouw Nutrition's IntelliBond® and Optimin® trace minerals and are carefully formulated by equine nutritionists who consider the individual needs of each horse based on their age and level of activity. When you select Step Right, you get more than what is in the package.







