

The Brooks Hoofbeat



www.brooksfeeds.com
905.985.7992

June 2013

BROOKS PERFORMANCE HORSE FEEDS
1580 HIGHWAY 7A
PORT PERRY ONTARIO
L9L 1B5

Product Profiles

INSIDE THIS ISSUE

1/ *Product Profiles.*

2/ *Lynne Poole-for the love of riding!*

3/ *Energy generation for endurance horses!*

4/ *Lindor's Finest in Sweden!*

Raewood Farm has kind words about Brooks Feeds!

5/ *Top ten reasons to choose a Brooks ration!*



Elevate Se is formulated specifically for horses that require supplementation with highly bioavailable sources of both Vitamin E and selenium. This concentrated formula provides 1500 IU of natural Vitamin E and 1 mg. of selenium per 7 gram (1/4 oz.) serving.

www.kppusa.com

Joint Armor features four elements utilized in the maintenance of healthy joints including glucosamine, chondroitin sulfate, hyaluronic acid, and manganese sulfate

www.kppusa.com



Ker A Form

Research studies have proven that feeding 20 mg of biotin daily toughens hooves and promotes the growth of healthy hoof wall. In addition to 20 mg of biotin, Ker A Form contains zinc, methionine, and iodine, rounding out the nutrients necessary for a healthy foot.

www.kppusa.com



Like us
on
Facebook



**Proudly Manufactured
In Canada**

Fibre Omega Plus is rapidly becoming the feed of choice for elite and aspiring equine athletes. Champion show jumper Erynn Ballard spoke about why she uses Fibre Omega Plus on a feature video interview with Laurie Bishop of Brooks Feeds. To listen to Erynn go to www.brooksfeeds.com



For the Love of Riding



Lynne Poole with Vasco E and awards

To describe Schomberg Ontario resident Lynne Poole as a successful equestrian, coach, judge and highly ranked dressage rider is 100% accurate but it's like finishing the book after the first chapter. Lynne is classified as a grade 4 (least impaired) Para-Dressage rider. Despite a debilitating horse related accident, a car accident, a bout with cancer and tragic personal losses, Lynne Poole is constantly amazed at how much horses have been part of the fabric of her life since her mother enrolled her in riding lessons at the age of four. "I did small pony, large pony, junior hunters, green and open hunters and jumpers, Arabians and breeding classes" Lynne recalls. But it was dressage that stuck like glue to this horse loving woman. "I love the sport. I compete as an able bodied rider but in 2010 I was classified as a Para-equestrian" Lynne explains.

Being able to compete on a level playing field with other riders and being part of the Canadian Para Equestrian Team has been and continues to be great motivation for Lynne. "I'm very proud of what I've accomplished personally and as a member of the winning Canadian Para-Equestrian Team at the 2013 Global Dressage Festival CPEDI3* in Wellington, Florida. Personally I finished in 1st place at Wellington in the grade four team test on Vasco E my Dutch Warmblood. I was also 3rd in the individual with Vasco E and 5th on my Welsh Cobb Frisbee and 3rd in the individual

and the freestyle with Vasco E. I was Leading Rider at 2012 Rancho Valencia CPEDI3* at Del Mar California with Vasco E and won the freestyle with Frisbee. Right now my focus is working towards the 2014 World Equestrian Games. I purchased a new horse, Cruiser, an 11 year old American Hanoverian, when I was in Florida in March. I ride almost every day and my coach Karin Davis comes in twice a week to help me. We think Vasco E and Cruiser will be a great duo for me."

Being a handicapped rider makes it imperative that Lynne's horses are well mannered, dependable and manageable. Lynne has come to trust Brooks' rations to supply the kind of manageable energy her horses need to achieve peak performance.

Vasco E, has been on your feed (Phase 5 textured) for almost 2 years now. The difference has been amazing with great remarks from the Team Canada coaching staff as to how wonderful he looks. It is a true testament to your feed that it produces such wonderful controllable energy which is a very important feature, especially with Para riders. I just purchased a new horse in Florida and immediately put him on Brooks feed. It is the only feed I purchase and happily recommend it to my clients."

"I know I'm a better human being for having overcome some bleak times and I try to pay back by helping as a volunteer with the Canadian Cancer Society as well as encouraging others with disabilities. I've been riding all my life. From a therapeutic point of view riding a horse is the most natural of movements. Children with MS or any kind of spinal injury benefit from riding" Lynne points out.

At Brooks Feeds we have the opportunity to share in the accomplishments and the passion of equestrians in many disciplines. But the determination and the spirit that is shown by the disabled rider more than any other discipline epitomizes and puts meaning to the words we at Brooks often quote.

Your Passion Our Commitment

Written by Dan Irwin of Brooks Feeds

Energy Generation for Endurance Horses

The main productive function of endurance horses is work. This work may vary from relatively slow exercise over long distances, common in 100-mile rides, to exercise conducted at somewhat faster speeds over the shorter (25 to 50 miles) endurance courses. Digestible energy derived from dietary nutrients is the main factor that will directly influence whether an endurance horse can go the distance. Energy is not a nutrient per se, but rather a measure of a feed's potential to fuel body functions and muscle contraction during exercise. Muscle contraction, in turn, will move the horse across the ground during the ride.

The endurance horse takes in, via the gastrointestinal tract (GI tract), a variety of energy sources (fiber, starch, fat, protein) which can be used to fuel muscle contraction. Because horses are not able to eat continuously during a ride, energy sources must be digested and their products stored within the body to be used later as fuel during exercise. These different fuels are transferred between blood, liver, adipose tissue, and muscle cells. Stored energy in the form of muscle and liver glycogen (sugar), intramuscular and adipose triglycerides (fat), and feed taken in during the ride will provide energy for muscle contraction. For muscle contraction to occur, the chemically bound stored energy form must be converted into mechanical energy. This conversion process occurs in the muscle cell, and utilizes adenosine triphosphate (ATP) as the currency for muscle contraction.

The most direct method to form ATP is by the breakdown of another compound, creatine phosphate (CP). However, since muscle contains only a small amount each of CP and ATP, the supply of ATP is quickly depleted with the onset of exercise. For an endurance horse to exercise for a prolonged period of time, ATP must be resynthesized at the same rate at which it is being used. Two fundamental reactions resynthesize ATP: (1) oxidative phosphorylation, breaking down carbohydrates, fats, and protein in the presence of oxygen, and producing energy (ATP); the involvement of oxygen qualifies this as an aerobic reaction; and 2) glycolysis, breaking down glucose or glycogen into lactic acid; this reaction does not use oxygen and is considered anaerobic.

Several factors determine both the choice of fuel and the pathway used to generate ATP. These factors include muscle fiber type, the speed and duration of exercise, type of feed (energy sources) provided, and the horse's fitness.

The horse has three basic types of muscle fiber: Type I, IIA and IIB. These fiber types have different contractile and metabolic characteristics. Type I fibers are slow-contracting fibers while Types IIA and IIB are fast-contracting. Type I and IIA fibers have a high oxidative capacity and thus can utilize fuels aerobically, while Type IIB fibers have a low aerobic capacity and depend on anaerobic glycolysis for energy generation. All three fiber types store glycogen, while only Types I and IIA have significant triglyceride storage.

It is not surprising that different breeds of horses will have different percentages of the muscle fiber types. For example, racing Quarter Horses typically have more Type IIA and IIB fibers and fewer Type I fibers than Arabian horses. This would help explain why one breed, the Arabian, is known for endurance. However, within a breed, the differences in muscle fiber type distribution are so small that muscle fiber typing as a predictor of performance is of limited value. The speed of muscle contraction determines how fast the animal is able to move. Because the amount of ATP used by a muscle depends directly on how fast it is contracting, the faster an animal moves the greater the ATP requirement. While walking, the muscles contract very slowly and expend relatively small amounts of ATP. During this type of exercise, *Type I* fibers are primarily recruited and energy generation is entirely aerobic. At this speed, the muscle burns predominantly fat. Fat stores are plentiful in horses with moderate or greater body condition, and they can be mobilized fast enough to regenerate the ATP used for muscle contraction.

As speed increases from a walk to a trot to a canter Type I fibers alone are no longer capable of contracting rapidly enough to propel the horse. At this point, **Type IIA** fibers are also recruited. These fibers are also aerobic, but they use a combination of glycogen and fat for energy generation.

Glycogen (glucose) can be metabolized twice as fast as fat for ATP generation, and as speed increases, fat becomes too slow a fuel for energy generation. As the horse increases speed to a fast gallop, **Type IIB** fibers are recruited and energy generation no longer remains purely aerobic. At these speeds, the requirement for ATP has exceeded the ability of the horse to deliver enough oxygen to the muscle to produce the energy by aerobic means. Anaerobic glycolysis takes over as a rapid metabolic pathway to generate ATP. Anaerobic glycolysis results, however, in lactic acid accumulation, and fatigue soon develops as the pH in the muscle begins to fall.

The speed at which endurance horses typically travel is within the range that can be maintained almost entirely through aerobic energy production. Only during the “controlled runaway” some riders use at the beginning of a ride, the end-of-race sprints, and during hill climbing would the energy production shift toward anaerobic means, and then only for a short time. Therefore, fatigue in an endurance horse is much more likely to result from depletion of glycogen and/or triglyceride stores than from the buildup of lactic acid.

Brooks recommends *Fibre Omega Plus, Phase V, or Un-Ti supplemented with Flax Appeal* as ideal endurance rations. Article reprinted from Brooks Equine News, courtesy of Kentucky Equine Research.

Congratulations to Jaimey Irwin of Stoney Lake Equestrian Centre!

Jaimey and Lindor's Finest make their World Cup debut!

May 5, 2013

Jaimey and Lindor's Finest make their World Cup Final debut in Gothenburg, Sweden!

The pair competed against the best in the World, and were honored to be one of two Canadians who qualified out of all of North America.

<http://www.stoneylakeequestrian.ca>



“I have attached a photo of Tanguy (Wins and scores over 70% in his first show season) I am a small breeder of quality German Oldenburg and Trakehner horses. Tanguy was purchased in utero and we are so proud of his accomplishments. He has been fed Brooks since arrival at the farm as a weanling.”

"I would like to thank the team at Brooks for creating such a high quality of equine feeds. All of my horses are raised on Brooks and I couldn't be happier with the results. Tania Laframboise (my Brooks nutrition consultant) has been there every step of the way with expert advice to put together a feed program to keep my horses looking and feeling their best."

Heidi Lightle Raewood Farm

Ten Top Reasons to buy a Brooks Feed

1. We are committed to producing the best quality feeds in Ontario and providing the best value for your feed dollars.
2. Our focus is on equine feed rather than commercial agricultural feed.
3. Knowledgeable, well trained feed advisors and nutritionists will help you choose the right feeds for your horse(s)
4. Brooks formulates feeds using the most recent research from Kentucky Equine Research and elsewhere around the world.
5. All of our feeds are manufactured in a completely drug free environment.
6. Our feeds are formulated to meet or exceed the daily requirements for minerals and vitamins using organic mineral sources, natural source Vitamin E and microbials to enhance digestion without adding useless fillers.
7. Our feeds have fueled many of the top equine athletes in every discipline.
8. We do not “least cost” our formulas. We use only high quality ingredients and do not utilize inexpensive “filler” ingredients to reduce costs.
9. Our ration balancing and growth tracking software are the industry standards. We can measure the intake of all key nutrients including NSC, fibre and Omega 3 fatty acids.

Number 10

Brooks Feeds is proud to be a Canadian owned company that employs Canadians and supports Canadian farmers.

www.brooksfeeds.com