Nutritional Digestion Aids for Good Health and Wellbeing.

ASSISTING RACING PIGEONS WITH THEIR RACING CAPABILITY

FlyRite™

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Product Information Sheet - Racing Pigeons

Purpose: The high performance Racing Pigeon needs three major situations to operate if it has any chance of winning races in this highly competitive sport. These are:

- Providing well balanced nutrition.
- Maintaining good health and wellbeing.
- Good Genetics and Training.

a. Providing well-balanced nutrition. Providing a source of energy is important for racing pigeons and this is provided from the grain mixes that are fed. Unlocking the energy from digestible carbohydrates (sugar and starch) and from fat in the oilseeds and other feed components is important. Minimising the adverse effects of indigestible and anti-nutritional carbohydrates sources (such as the non-starch polysaccharides) is also important. Insoluble fibre and whole grain is important for gizzard development which has significant nutritional and health benefits.

Whilst the protein and amino acid requirements of pigeons are reasonably well known, my own observations have shown these requirements are rarely followed in practice resulting in diets which are poorly balanced, particularly when it comes to providing key essential amino acids for tissue repair and feather replacement. On many occasions I have observed excessively high levels of crude protein and fat in some pigeon diets. Whilst a level of 12% to 14% crude protein has been proposed as being ideal for racing pigeons, the balance of key essential amino acids is more important than protein per se. Keeping the protein level at the lower end of this range is important as any excess unusable protein has to be broken down (deaminated) and excreted, and this costs energy. Energy that is not available for racing. Excessive amounts of unusable protein (nitrogen) can cause extra pressure on the kidneys and can adversely impact on racing performance. Unbalanced diets can affect body condition where insufficient balanced protein is available to build and maintain or repair muscles. Muscle condition and development is important for racing. Excessive and unbalanced protein can result in excessive fat deposition and lead to obesity.

A sound skeletal frame development is also important and therefore the pigeons will need a range of minerals such as calcium, phosphorus, electrolytes (sodium and potassium) and trace minerals to ensure proper skeletal development and body acid-base balance. Also these minerals, such as calcium, phosphorus, electrolytes and trace minerals play an important role in other key metabolic processes. Calcium is grossly deficient in all of the grains usually fed to pigeons, and phosphorus is present in a phytate-bound form (70%) which has to be released in order to be available to the pigeon.

The solution to these issues is to formulate a dietary supplement that can balance the proteins from the seeds, unlock their energy and improve the overall bioavailability of the nutrients locked in the seeds. FLYRITE™ is the pigeon racing dietary supplement developed for this purpose and contains a range of vitamins, minerals, essential amino acids and special ingredients that aid in digestion and energy metabolism within the pigeon.

Racing pigeons that are fed properly will perform at their optimum.
Product Information Sheet - Pigeons

b. Maintaining Good Health and Wellbeing. Good nutrition contributes significantly to the health of the pigeon. However, racing pigeons which are traditionally mixed with other pigeons during the racing season need to develop their own natural immunity to protect themselves from disease challenges. Disease challenges are a constant threat to the racing pigeon. Sick pigeons do not perform or race well. Good quality protein and nucleotides are important for antibody production against diseases and other ingredients within the diet are needed to assist the pigeon to cope with disease challenges.

FLYRITE™ FOR PIGEONS contains a range of naturally occurring ingredients such yeast functional fibres, natural herb extracts, oregano, nucleotides and prebiotics to assist the pigeons to cope with disease challenges.

PLEASE NOTE: We make no specific claims for this product to cure specific diseases. However, our field experience with commercial organic and free range poultry and other aviculture pigeons over many years has demonstrated the ability of the components in this product to assist poultry and pigeons to cope with disease challenges. For severe disease challenges producers are encouraged to consult their Avian Veterinarian for treatment.

c. Good Genetics and Training. Genetics and training play an important part in racing performance. These, combined with good nutrition and good health lead to optimum racing performance.

Breeding and keeping pigeons from proven performance bloodlines is important for long term competitiveness. However, unlocking that genetic potential of racing performance can only be done by appropriate training associated with good nutrition and good health.

Definitions: Adenosine triphosphate (ATP) is a complex organic chemical that provides energy to drive many processes in living cells, e.g. muscle contraction, nerve impulse propagation, chemical synthesis. Found in all forms of life, ATP is often referred to as the “molecular unit of currency” of intracellular energy transfer (see later).

ADP Short for adenosine diphosphate. An organic compound that is composed of adenosine and two phosphate groups. With the addition of another phosphate group, it is converted to ATP for the storage of energy during cell metabolism.

When pigeons are racing they are expending a large amount of energy. Mobilising this energy from sources within the body is achieved via a number of metabolic pathways. These are either aerobic processes which involves oxygen or anaerobic processes where oxygen is not involved. In the pigeon some carbohydrates (sugars and starches) are digested to glucose, absorbed, and subsequently stored in the muscles and liver as glycogen, which, in turn, is metabolised via the Citric acid cycle (Kreb’s cycle) and the electron-transport processes into ATP which is metabolised to ADP releasing energy. Aerobic processes are much more efficient and generate more energy per unit of glucose (36 moles of ATP from 1 mole of glucose) than anaerobic processes (1 mole glucose produces 2 moles of ATP). To this end, training plays a key role in lifting the “oxygen deficit limit” in the pigeon by improving fitness. In other words the fitter the pigeon the longer it takes before the pigeon is limited by any oxygen deficiency.
FLYRITE™ is a nutritional balancer product designed to assist Racing Pigeons to reach their racing capability. The product contains a range of nutrients critical to maintenance of the Racing Pigeon Flyer condition, feather growth and maintenance, good health and wellbeing. Converting food components into usable free energy for Racing is important for the optimum performance of the Racing Pigeon. Key additives such as exogenous enzymes assist the pigeon to digest the food components and neutralise the anti-nutritional carbohydrates such as non-starch polysaccharides (NSP). Basic food components such as sugars, starch and fats are then made freely available to the metabolic pathways to release free energy for the pigeon. The first step for the high performance Racing Pigeon Flyer is proper digestion and utilisation of the main food ingredients in its diet.

The second step is to balance the protein coming from the main food ingredients in order to ensure the proper development and maintenance of tissues and feathers and to reduce excesses of unusable protein which costs energy to remove and therefore provides less energy for racing. FLYRITE™ contains a range of key essential amino acids and high quality proteins, including nucleotides, to achieve this proper balance and aid with tissue repair and feather replacement during racing.

Like any athlete, to maximise the benefits from good nutrition, good health and wellbeing, training is critical to the success of the competitive racing pigeon.
The third step is to aid the pigeon to cope with disease challenges it will encounter as it is mixed with other pigeons during the racing season. **FLYRITE™** contains a number of natural ingredients, such as prebiotics, herb extracts, oregano, yeast-functional-fibres designed to increase and proliferate the number of favourable microflora within the gastro-intestinal tract (GIT) as well as act as a physical barrier to pathogens entering the pigeon via the GIT by binding these pathogens. GIT health is critical to pigeon racing performance.

**Directions for use:**
Blend 100g of **FLYRITE™** with 900g of your whole grain blend. Scale appropriately for larger quantities of complete feed. It is advised to add about 5 ml of sunflower oil or hemp oil to the grain mix first and then to add **FLYRITE™**. This will ensure any fines in the supplement will stick to the grain mix.

**PACKAGING:** Available in 900g, 4.5kg and 20 kg packs

**STORAGE:** Store away from sunlight and vermin, sealed in a cool dry place.

**NUTRITIONAL SERVICE:** Applied Nutrition supports all of its products with a comprehensive nutritional service. For Technical Inquiries and sales contact Dr. Michael Evans, Principal Nutritionist, Ph 0418 659 423. Conditions apply.

**SAFETY INSTRUCTIONS:** Avoid contact with skin and eyes. Do not inhale dust.

**FIRST AID:** If poisoning occurs contact a doctor or Poisons Information Centre Australia: 131 126.