

ZADE Liquid for Pigeons

Potent Vitamin A, D and E concentrate

ZADE Liquid has been developed to treat diseases associated with impaired immunity. The most common cause of impaired immunity in pigeons is stress coupled with secondary vitamin A deficiency. Secondary vitamin A deficiency occurs when the biological demands for vitamin A outweigh the intake of vitamin A. Grain alone is low in vitamin A and supplementation is required to maintain functional levels of circulating vitamin A in the body. The greatest demands for vitamin A occur during the breeding season and the summer moult, at the start of young bird training and throughout the colder months of the racing season.

The combination of stress and vitamin A deficiency predisposes racing and fancy pigeons to a variety of opportunistic respiratory and gastrointestinal infections as well as reproductive problems. In young birds, opportunistic infections may present as dropping changes, dirty tails, cocky combs, sneezing, panting, eye colds, going light and poor loft flying activity (see page 12-13 Orange Pigeon Book, OPB). Chlamydia, mycoplasma, streptococcus, staphylococcus, canker (wet and dry), coccidiosis, E. coli, circovirus, poxvirus, rotavirus, PMV virus, and various other gut infections are all considered opportunistic infections associated with the combined effects of secondary vitamin A deficiency and stress. For stock birds, secondary vitamin A deficiency is a common cause of cock infertility, hens failing to lay eggs, weak embryos and sickly offspring. ZADE Liquid is incorporated into the weekly health programmes to help prevent these common conditions and diseases.

ZADE Liquid for Young Birds

Outbreaks of disease in pigeons are most likely to occur during periods of extreme summer heat, at the start of training tosses and during cold weather early in the race season. During these periods, young birds fed an un-supplemented diet are prone to vitamin A deficiency and subsequent respiratory and gastrointestinal disease because they are unable to thermoregulate properly and are exposed to stress. The impact of stress is heightened when the loft is overcrowded, and/or when the birds are attacked by hawks whilst loft flying or during training tosses. These combined stress factors, together with vitamin A deficiency, impair immunity predisposing young birds to infection and illness. To prevent outbreaks of contagious disease during these risk periods, the high demands for vitamin A, as well as calcium, must be matched by increasing the amounts of vitamin A and minerals in the diet. This is achieved by adding ZADE Liquid to the drinking water for 2 consecutive days each week. For example, ZADE Liquid is given on Tuesday and Wednesday as part of the Young Bird Moulting Programme (see page 15, Orange Pigeon Book).

ZADE Liquid Prior to the Race Season

ZADE Liquid can be mixed with any vitamins or medicines, except KD Powder. It is included in the Doxycycline Cleansing Treatment Plan (page 16, OPB) for 2 days each week in preparation for the race season. In those flocks that are free of Chlamydia, ZADE is also used to boost the immunity of young birds during pre-season training and is included as part of the April Natural Programme (page 23, OPB).

ZADE Liquid During the Race Season

Vitamin A is particularly beneficial for the prevention of opportunistic stress related infections of the race season including canker, streptococcus, staphylococcus, chlamydia and mycoplasma. These infections often occur during wet, cold and/or fluctuating weather conditions. ZADE Liquid stimulates the immune system by increasing the vitamin A in the diet. The addition of ZADE protects against these opportunistic infections which are associated with the stress of training tosses or confinement in the transporter overnight. ZADE also promotes recovery from the race by accelerating muscle recovery following strenuous physical effort and mental strain of navigating and

avoiding hawks as they race home. ZADE Liquid is incorporated into existing weekly race programmes (pages 39-65, OPB) for 2 consecutive days (Sunday & Monday) and is safely mixed with antibiotics or vitamins.

ZADE Liquid During the Breeding Season

Diseases of the breeding season (e.g. infertility, dead in shell, weak babies, canker, wet nest, circovirus) are most often seen following cold spells or fluctuating weather conditions at the start of the season in birds with marginal vitamin A deficiency. Flocks that do not receive vitamin A supplementation are predisposed to heat stress and its consequences towards the end of the season when temperatures are extremely high and breeding efforts have depleted vitamin A stores to critically low levels. The consequences of vitamin A deficiency are greatest during the summer breeding months because birds with vitamin A deficiency are unable to thermoregulate properly on extremely hot days. The combination of breeding stress, heat stress and vitamin A deficiency lowers immune function resulting in poor parental care, retarded baby development and opportunistic infections that can lead to outbreaks of disease and heavy losses from contagious infections such as salmonella, pathogenic E.coli and PMV virus.

ZADE Liquid is incorporated into the weekly Breeding Programme (page 113, OPB) for 2 consecutive days each week to lift vitamin A liver reserves to levels required to maintain full fertility throughout three breeding rounds and promote parenting vigour. The overriding benefit of ZADE is the production of physically strong youngsters with a highly developed immune system that resists opportunistic infections. Therefore, ZADE is a pivotal part of the prevention plan for lofts with a history of young bird deaths associated with Circovirus, Rotavirus, PMV and Herpesvirus infections.

ZADE Liquid & Antibiotic Treatment Plans

The immune stimulating functions of ZADE Liquid increase the effectiveness of antibiotic treatment plans and when combined with Quikgel promotes a rapid recovery to health, fitness and form. Turbobooster, E Powder and Fvite are also added to the food for 5 days to restore nutritional balance and protect against relapse infections.

The number of days that ZADE Liquid and Quikgel are given as part of this treatment plan varies according to the type of disease diagnosed and the underlying cause. For example, ZADE is initially given for three consecutive days together with prescribed antibiotics (e.g. TripleX/Megamix or Resfite/Megamix) for a flock diagnosed with respiratory disease during weather extremes such as heat waves, rain downpours and/or cold spells). Following the initial treatment, ZADE Liquid and Quikgel is repeated for 2 days each week on its own or as part of designated race programmes 1, 2 and 3 (see OPB) for a further 3 weeks to prevent the return of the respiratory infection. Similarly, during the breeding season, ZADE Liquid is given for 2 days each week as part of the Gold Standard Breeding Plan which is by far the best method to improve reproductive outcomes and guard against disease.

ZADE as part of Immediate Antibiotic Treatment Plan		
	In Drinking Water	Mixed with grain
Day 1	ZADE Liquid & Quikgel + *	Turbobooster, E Powder & Fvite
Day 2	ZADE Liquid & Quikgel + *	Turbobooster, E Powder & Fvite
Day 3	ZADE Liquid & Quikgel + *	Turbobooster, E Powder & Fvite
Day 4	*	Fresh grain
Day 5	*	Fresh grain
Day 6	*	Fresh grain
Day 7	KD Powder (at completion of antibiotics)	Fresh grain

*** Prescribed medications are added to the drinking water**