

Dr Colin Walker established the Australian Pigeon Company in 1994, to develop, manufacture and distribute a range of veterinary health supplements for pigeons. Dr Walker's veterinary expertise, together with his knowledge of the requirements of pigeon racers, gathered through experience of his own race team, place him in the unique situation to develop such products. The result is a small range of quality products made for the pigeon racer and based on sound veterinary knowledge. The aim of these products is to prevent diseases by promoting health. Most fanciers realize the tremendous importance that health has to play in the performance of their birds and yet prefer not to use prescription medicines on their birds, if possible. These supplements are made from natural ingredients and it is hoped that, combined with a good loft environment and commonsense management, these products will help the birds grow, develop and form a strong natural immunity to disease. Through the application of modern veterinary knowledge and the utmost care in manufacture, the following products are now available.

## PICK STONES



### MINERAL BLOCK

A pick stone that provides a range of hard and soft grits in a mineral matrix, which the birds enjoy eating

The Australian Pigeon Company's Mineral Block is a complete and balanced mineral supplement that can be used as a grit substitute. It has been developed under veterinary supervision specifically for pigeons. It brings natural grits, trace elements and minerals necessary for health into the loft in a hygienic, palatable form, reproducing the selection available to free-ranging birds.

Pick stones fulfill two vital nutritional functions. They provide hard grits, which act as digestive stones, grinding down swallowed grain, releasing the contained nutrition, and also soft grits, which slowly dissolve, releasing minerals and trace elements necessary for health. Hard grits describe material that is either not or only partially digested and include small stones such as granite and quartz. Unlike other birds such as parrots, pigeons swallow their grain whole. Because of the tough nature of the fibrous coating of these seeds, a small supply of digestive stones is kept in the pigeon's stomach. As the muscular stomach wall contracts, the hard grit acts like a minigrinding mill, pulverizing the seed, making the nutrition they contain available to the bird. The Australian Pigeon Company's Mineral Block contains three different hard grits. Soft grits are also retained in the stomach but gradually dissolve, releasing the minerals and trace elements they contain. The pick stone made by the Australian Pigeon Company contains four soft grits, namely sterile egg shells, sterile sea shells, calcite and charcoal. Egg shells, sea shells and calcite are rich sources of the calcium that is so necessary during breeding to ensure good-quality crop milk, well-formed egg shells, decreased difficulty with egg laying, and strong bones in the nestlings.

One has to be careful, however, when using sea shells as a calcium source. If the shell is recently collected, the decomposing mollusc may still be inside. This small section of decomposing meat can contain bacteria that can make the bird sick. Some bacteria also produce toxins that can poison the birds. One of note here is called Clostridium, which produces a toxin that affects the nervous system, leading to a condition called botulism. Interestingly, in Victoria in 1992, we had 10 lofts all develop birds with botulism over a

short period, which were all able to be traced back to a single load of contaminated grit. The sea shells and also the egg shells contained in the Australian Pigeon Company's Mineral Block have been sterilized. Shells from the sea can also contain a lot of salt, which, if the birds are deprived of water, can also cause problems. The level of salt in this block has been chemically analysed and is at the correct level for the racing pigeon. Shell sections can be too large and have sharp edges that can damage the throat, predisposing the bird to canker. The shells in the Australian Pigeon Company's block have been graded to avoid this problem.

Charcoal is a natural bowel astringent, actually absorbing many toxins from the bird's system, in the process contributing to health. The charcoal in the Australian Pigeon Company's Mineral Block has been made from non-treated timber. Many of the substances used to treat timber are poisonous and can survive the charcoal-making process. It is important that the birds are not exposed to these.

Confined birds, which include most stock birds, are totally dependent on their owners to provide everything that they need nutritionally. A nutritional deficiency in the short term will cause no problem, however, even a subtle deficiency over an extended time will compromise health. This shows as a lack of vitality, decreased reproductive performance, and a poor moult. It is well known that the nutritional demand of the pigeon cannot be met by a grain diet alone. Access to a grit or pick stone is necessary for health. We have all seen the keenness with which birds allowed outside the loft examine areas such as the garden, incinerator, and gravelled surfaces. They are looking for the substances that a balanced mineral block contains. The practice of open lofting, although giving the birds the opportunity to find these things, is not without its risks. If health problems such as worms and Coccidia are present, then the droppings around the loft will contain infective eggs, which serve to reinfect the birds following effective treatments. The birds are also exposed to harmful fungi and bacteria. Many of the insects, such as slaters, around the loft can carry tapeworms. The Australian Pigeon Company's Mineral Block brings the minerals and trace elements that birds try and obtain from the loft environment into the loft in an hygienic form. The Mineral Block is palatable to the birds, which means that it is not only something that is good for them but something that they enjoy eating.

In summary, the block contains four soft grits - calcite, charcoal (from non-treated timber), sterile egg shells and sterile sea shells - together with three hard grits in two pure clays. To this have been added specific trace elements, in particular iron, sulphur and iodine, to create a balanced mineral supplement. The block's contents have been chemically analysed and adjusted to ensure that the minerals and trace elements it contains are at the correct levels and proportions for optimal health. No salt has been added. All grits have been graded to be of an appropriate size for the pigeon. All blocks are baked so that they hold their shape but can easily be broken down with the pecking action of the birds. The result is a pick stone that is not only good for the birds but is something they enjoy eating. Its use has been shown to decrease disease problems and to produce tight brown droppings, robust quick-growing youngster and good-quality feathers. It should be made available to the birds at all times.

*Each pick stone, with a minimum weight of 600 grams, comes individually wrapped in its own packet. Available singly or in cartons of twenty four.*



### **CALCIUM CAKE A calcium-rich pick stone**

Calcium Cake is a calcium-based pick stone. It is made from 100% Australian ingredients and is a blend of five calcium-based grits suspended in a mineral and clay matrix. The cakes are oven-cooked to remove all bacterial and fungal contamination. The cooking also makes them hold their shape but when pecked they easily break into nutritious bite-sized pieces. Although recommended for year-round use, Calcium Cake was developed with the breeding stock bird in mind. During breeding, pigeons have particularly high requirements for calcium, with calcium deficiency leading to soft-shelled eggs, poor-quality egg shells, difficulty with egg laying, poor-quality crop milk, and runting and deformity in babies. The cake is extremely palatable to the birds, in particular, stock birds feeding babies will devour it with gusto.

*Each 500-gram Calcium Cake comes individually wrapped in its own packet.*

[>>Back](#)

## **MINERAL/VITAMIN POWDERS**



**A PVM baby.**

### **PVM POWDER**

A highly palatable Australian-made pink vitamin and mineral powder

PVM Powder (pigeon vitamin/mineral powder) is a highly palatable Australian-made pink mineral powder packed with vitamins and minerals. This is an extremely popular product that is familiar to most Australian pigeon fanciers. To make it, it was essentially a matter of scanning the available veterinary texts to find out what were the optimal levels of the various vitamins and minerals for pigeons and then producing them in a balanced form that the pigeons would enjoy eating. PVM Powder contains all the minerals necessary for a balanced diet in pigeons, in particular calcium, iron and iodine, and also the vitamins that can be kept stable in this form, namely vitamins A, B, D, E and K. PVM Powder contains on average 20% higher levels of these vitamins than other similar brands of pink minerals and in addition also contains iodine. The pigeons seem to realize that it is good for them, with the birds eating it greedily, with some birds trying to snatch it from the air as it falls from the packet into the food tray. It is best supplied in a clean, dry bowl that cannot be tipped over or soiled by the birds, which is then placed on the loft floor in the same manner as a grit bowl. It can be made available to the birds at all times.

In the race loft, all birds will routinely eat a small amount. Fanciers will notice that birds coming from hard races and any young hen about to lay will eat substantially more, in the

process replacing lost mineral salts. However, it is in the stock loft that PVM Powder is of particular benefit. Feeding stock birds, particularly those with rapidly growing (10 - 20 days old) youngsters, will eat large amounts and their youngsters will thrive. Being so palatable, it ensures that the birds eat the calcium and other nutrients it contains so necessary at this time. Eight pairs of feeding stock birds will eat up to one 600-gram packet per week. Feeding stock birds will pump it directly into their youngsters, leaving them with pale pink rims around the base of their beaks. It aids in the production of strong chubby youngsters ready for weaning at 26 - 28 days. Birds fed PVM Powder will no longer have the same grit requirement. Non-balanced grits force the birds to scratch through looking for what they need. This leads to scatter and wastage. Because PVM Powder is balanced, the birds eat the lot, actually licking the bowl clean if it is not topped up.



*PVM Powder is available in 600-gram packets, which are heat sealed to ensure freshness, and in 2-kg and 4-kg resealable buckets.*



**BIOCAL**

Biocal is a fine white grit that is a blend of naturally occurring sources of calcium. It comes in its own reusable pick pot and is provided ad lib. Biocal is made from 100% Australian ingredients and contains ground shell grit, ground cuttle fish bone, ground sea coral and calcite. It is naturally rich in calcium and iodine. The result is a totally natural beneficial supplement, which the birds enjoy eating.

*Available in a 250-gram reusable, pigeon-embossed terracotta pot. Each terracotta pot is individually shrink-wrapped to ensure freshness.*

[>>Back](#)

## **CONDITIONING OILS**



## **POLYSEED OIL**

A high-energy, high-calorie feed additive that is a blend of eight seed oils

Polyseed Oil is a unique blend of eight seed oils (including peanut) with a natural preservative. Adding seed oils to the birds' grain mix is advantageous because the oil contains much of the nutrition available in the seed as a whole, including the fatty acids essential to growth, general vitality and the formation of healthy silky feathers. Highly palatable to the birds, Polyseed Oil is an efficient way of providing the birds with the energy and nutrition these seeds contain with no risk of fungal contamination to which all oil-based grains are prone. Added to the seed at the rate of 1/2 - 1 ml per kilogram, Polyseed Oil increases the calorie, nutrient and energy level of the seed mix and is used when increased demands are being made on the birds. It is quickly digested and provides fast energy release. It is useful when the stock birds are feeding young and in the postweaning time when the youngsters are developing. It is useful during moulting because it contains many of the unsaturated fatty acids necessary for lustrous feathers. Polyseed Oil, however, is of particular value during the exertion of the racing season when it can be added to the birds' seed to produce an especially nutritious meal after a hard race or toss or during cold weather.

*Available in a 250-ml bottle with a 10-ml measuring chamber in the neck. Simply squeeze the bottle until the chamber fills to the desired level and then add to the seed.*



## **TURBOVITE OIL**

Turbovite Oil is a yeast-based energy oil that is added to the grain. It contains essential oils, yeast and a range of vitamins. It is a completely natural product with no artificial additives. Yeasts contain high levels of protein and vitamin B. The yeasts are in an unsaturated fatty acid base, which includes wheatgerm oil (itself a rich source of the vitamin B group and vitamin E). Unsaturated fatty acids are a high-energy, high-calorie food source. To this are added calcium, copper, zinc, iron, manganese and magnesium to further increase its nutrient value. Turbovite Oil contains the vitamins thiamine, riboflavin, pyridoxine, niacin, pantothenic acid, folic acid, vitamin B12, choline and vitamin E and the

natural amino acids arginine, glycine, glutamic acid, histidine, lysine, methionine and tryptophan.

Turbovite Oil is added to the seed at the rate of 10 ml to the seed of 50 birds (approx. 2 kg) to create an especially nutritious meal. It can be used after any stress, e.g. a hard toss, hard race, following medication, during recovery from disease or during cold weather, to help lift the birds and speed the return of form.

During the race season, for birds in full training, it can be used every day. However, because it is so nutritious, the birds' buoyancy should be monitored otherwise they can become overweight. It is ideal to put condition on birds that are handling a bit light.

Turbovite Oil used during breeding helps keep the stock birds in condition and helps provide many essential amino acids necessary for growth and development in the youngster. Many flyers have commented on the quality of feather produced in youngsters supplemented with Turbovite Oil. This is as would be expected as the amino acids it contains are needed for new feather production and the fatty acids produce an extremely silky feather. Good health leads to bloom production and accentuates the silkiness of the feathers. During breeding and the postweaning time, Turbovite Oil is good to use every 2 - 3 days.

*Turbovite Oil is available in 250-ml resealable bottles with a measuring chamber in the neck.*



**GARLIC OIL**

As discussed in the chapter Natural Supplements, pigeons have been supplemented with garlic to their benefit for decades. The Australian Pigeon Company's Garlic Oil contains the juice of fresh Australian garlic in a seed-oil base. Particular care has been taken not to use any chemical or heat process in its preparation that would decrease its effectiveness. It is added to the seed at the rate of 1/2 - 1 ml per kilogram of seed before feeding.

*Available in a 250-ml bottle with a 10-ml measuring chamber in the neck. Simply squeeze the bottle until the chamber fills to the desired level and then add to the seed.*

[>>Back](#)

## **PELLETED FOODS**

### **PIGEON MAINTENANCE PELLETS and PIGEON RACING PELLETS**

Many fanciers will now be familiar with the new APC Pigeon Pellets that are available. Formulated by Dr. Colin Walker and supplied by the Australian Pigeon Company they have now been available for about 10 months. Two types are available, Racing pellets are a concentrated supplement designed to be added to a grain diet, while Maintenance pellets offer a complete diet and can be offered as the only food.

### **Why make them?**

Most of the grain blends used by pigeon racers have developed as a rather hit and miss affair rather than based on any real science or knowledge of nutrition. Pigeons do not have nutritional wisdom and simply eat the grain that for them tastes good. Most of the grain blends are high in fat and low in many essential nutrients, in particular calcium, vitamin A, vitamin E and the amino acids methionine, choline and tryptophan. This is probably a whole range of vitamin and protein supplements have come into being and can be used with success. These days, 99% of qualified avian vets during their consultations recommend to the owners of pet caged and aviary birds that these birds' diets be based on one of the available pelleted rations. The pelleted rations are like an avian Pal Meatybite and provide a much more balanced and complete base to the diet than any blend of dry grain.

### **The formulation of the APC pellets**

The APC and Dr. Walker were given access to the full nutritional information of some of the best sources in the world. This included recommended daily intakes and the nutritional contents of each grain. From this it was a matter of doing the maths to develop the nutritional contents of the both the Racing and Maintenance pellets.

### **Use of the pellets**

The two types of pellets are made so that fanciers can choose whether they want to feed a grain based diet or not. A diet of 40% peas, 12% wheat, 12% safflower, 12% milo, 12% corn and 12% Racing pellets provides approximately the same level of nutrition as 100% Maintenance pellets. Either feeding method provides a balanced diet. The Racing pellets are more expensive because they contain higher levels of vitamins, minerals and amino acids to compensate for the deficiencies of the grain diet.

### **Keeping stock birds in condition**

No other supplements are required (apart from grit) when the birds are on the APC pellets. Dr. Walker's own breeding birds have been fed virtually nothing else now for over 18 months and the youngsters produced this year are robust strong young race birds. Feeding Maintenance pellets make it easy to provide a complete diet for stock birds.

Some fanciers feed a reduced ration or for example only barley to get weight off their birds prior to pairing. It simply makes no sense to feed a deficient diet just before pairing when the birds need to be at their best. The pellets are formulated to contain 6% fat. Stock birds cannot become fat on this, no matter how much they eat. The answer to keeping stock birds trim all year round is simply to feed Maintenance pellets.

Fanciers will notice that a small amount of powder forms in each bag. This is due to the action of the pellets moving against each other in the bag and is unavoidable. It takes about 3 – 4 days for the birds to get used to the pellets and also for the first 2 – 3 weeks the birds will drink a bit more, which makes the droppings a bit sloppy. These signs pass quickly and are a small inconvenience for the long-term benefits of a complete diet. The pellets do not interfere with the use of medication and are made fresh regularly.

## **THE USE OF PELLETED RATIONS IN PIGEONS**

### **By Dr Colin Walker, the Flying Vet**

Around the world, knowledge regarding avian nutrition has undergone quantum leaps in the last two decades. We now have a very clear understanding of the optimal nutritional requirements of pigeons.

Taking a quick look at the level of various nutrients in grain and the average level of these grains used in the various feed blends, it doesn't take very long to realize that no grain blend can provide a complete and balanced diet. This is why over time a whole range of supplements has been developed and used successfully because they do complement the deficiencies of a diet based solely on dry grain. Further complicating the picture is that pigeons preferentially select certain grains within a mix. This means that even if a grain-blend did provide a balanced diet, it is likely that the balanced diet would be distorted by individual birds selecting the grains they liked. It has been shown, contrary to the opinion of many fanciers, that pigeons do not have nutritional wisdom. They do not necessarily know what is best for them but rather they are like children. They just eat the grain that tastes nice, and these for most pigeons are the grains that are higher in fat.

Throughout the avian world, one of the ways of combating these problems is through the provision of pelleted rations. Pelleted rations can be formulated to contain all the nutrients in just the right proportions and every pellet is the same. In this way, pelleted rations combat the two problems associated with a dry-grain diet, namely that grain diets alone intrinsically fail to provide an optimal diet and the preferential selection of certain grains. In a well formulated pelleted ration the nutritional intake and the provision of a complete and balanced diet is guaranteed.

Despite these advantages the use of pelleted diets has only slowly been embraced by pigeon fanciers. In all poultry species such as chickens and ducks, and in particular in the last few years in pet and companion birds such as parrots, the use of pelleted rations has steadily increased. Such rations are almost invariably recommended by avian vets around the world. The progressive veterinary-based pigeon companies around the world have in line with advances in knowledge started to manufacture and produce pellets.

I think part of the reason pigeon fanciers have been slow to use pellets is a lack of understanding of the product. Some companies produce several types of pellet, designed to be fed at different stages of the pigeon's life. This is because the nutritional requirements at different life stages vary. In a recent article, a prominent fancier was quoted as saying that when using pellets in the stock loft the raised youngsters were beautiful but when the same birds were raced on the same pellets they seemed to have no power. This is a totally anticipated outcome. To say that one pellet formulation can supply the requirements of a pigeon throughout its whole life is like saying that the dietary requirements of a pregnant woman, a footballer and a growing child are all the same. In the chicken industry, different pelleted blends are produced for laying hens, young chicks, growing chicks, etc. In pigeons, we don't need such a variety and the provision of too many different pellet blends would make the use of pellets unnecessarily complex. Most companies produce two blends for pigeons, one designed for the maintenance of adult birds and a second designed to be added as a proportion of the diet to a grain blend for actively racing pigeons.

### **Maintenance pellets**

To formulate maintenance pellets, it is simply a matter of going to the literature on the nutritional requirements of pigeons, which these days is very comprehensive and accurate. Extensive work over many years has been conducted so that not only is the ideal level in the diet of each vitamin, mineral and amino acid (amino acids combine to make proteins) known but also the ideal levels relative to each other. These nutrients can then be blended together in the form of a pellet to provide a complete and balanced diet. Many fanciers will say, "I have kept pigeons for many years. I have always fed them grain. They seem fine. Why bother?" What I feel is that many such fanciers accept certain problems that have a nutritional base as a normal part of pigeon management. Examples here

include:

1. Hens past 7 years of age no longer breeding winners – associated with decreased yolk and albumen quality, resulting in poor embryo development and the chick getting off to a poorer start.
2. Cocks and hens developing arthritic changes and gout by 8 - 9 years of age – associated with high levels of protein, too low calcium and incorrect levels of vitamin A and D3 in the diet.
3. Obesity in non-breeding hens – associated with fat contents of over 6% in the diet.
4. Infertility in middle-aged cocks – associated with an incorrect vitamin A and vitamin E ratio in the diet. These are both fat-soluble vitamins and are absorbed into the body via the same pathways. Vitamin E is needed for normal sperm function (it affects lipid metabolism in the sperm head). Giving too much vitamin A in the diet means there are no pathways available to absorb vitamin E, leading to vitamin E deficiency even if there is plenty in the diet.
5. Recurrent canker in nestlings, despite medical management – low protein levels in the diet and poor balance of nutrients predisposes to disease generally.

The list goes on and on. Recently, a fancy-pigeon owner rang me. He kept a breed of fancy pigeon that was notorious for poor fertility. Traditional wisdom was that this breed was of poor fertility and that a likely cause was Salmonella. Each year, for the previous 5 years, the fancier had paired 30 pairs together, producing only 6 – 8 youngsters per round. He was becoming totally exasperated and ended up driving 100 miles to our clinic to investigate the cause. The birds appeared normal in the hand and were fed grain, grit and water. Six birds were anaesthetized and the gonads were examined with an endoscope through a keyhole incision in their left side. There were no visible abnormalities (such as cysts, adhesions, or tumours) in any of the birds' gonads. Blood was drawn from each bird for a Chlamydia test (Chlamydia is the organism that causes eye-colds in young pigeons and can damage the gonads of older birds leading to irregular laying in hens and premature infertility in cocks). The best way to diagnose Salmonella (the organism that causes the disease Paratyphoid) is to culture the site of an infection. Endoscope-guided swabs were collected for testing, taken directly from the gonads. All test results for disease were negative. The birds were changed to a pelleted ration. The next year the first round from 30 pairs contained 57 youngsters.

Fanciers asking if the pellets contain medication to control canker is common. On pelleted rations, they found they no longer needed to treat for canker. In Australia, it is illegal to add medication to pellets (except with a prescription). This effect is simply due to the pellets providing a complete diet and the resultant increased ability of the healthier bird to resist disease.

In another instance, a fancier added turkey grower pellets to his grain blend during breeding. The high level of protein and calcium in this blend resulted in beautiful youngsters being produced. Because of this, he kept feeding the pellets as a proportion of the diet to his stock birds while they were not breeding. Several months later, some of these started to get sick. One was euthanized and autopsied. The persistently high protein, high calcium, high vitamin D3 levels in this diet for non-growing or breeding birds had damaged their kidneys and they were developing kidney failure. Correction of the diet resulted in all remaining birds recovering within 2 weeks.

Fanciers often add iron to the diet or copper sulphate to the drinker (to combat canker). These are both heavy metals that are quickly absorbed into the system but only slowly

excreted. With repeated low doses, these birds look fine but as the minerals accumulate in their bodies they have a variety of effects. The most common of these in the stock loft is reduced fertility. It can be hard for the fancier to relate the dead-in-shell youngsters, clear eggs and non-laying hens experienced during breeding to these treatments, which may have been given months earlier.

With the nutritional knowledge available and the expertise used in making maintenance pellets, to me it makes no sense not to use them. Often they are also cheaper than grain.

### **Racing pellets**

The other type of pellet made is what is termed a racing pellet. These are designed to be added to a grain blend. They are a more concentrated blend of vitamins, minerals and amino acids and designed to complement the deficiencies of the grain.

Racing pellets are made for two main reasons.

1. A maintenance pellet cannot provide the fluctuating nutritional requirements of competing race birds. Fat and energy requirements for a race bird fluctuate depending on how much work it is having, the distance of the race for which it is being prepared, and the weather. Grain blends need to be modified to cater for this fluctuating need. The fat and energy content of the diet is usually increased with cold weather and increased work load through the provision of high fat (e.g. safflower, hemp, linseed) and high carbohydrate (e.g. maize, wheat) grains and lowered during warm weather and times of less work. The experienced and astute fancier can determine the exact level through watching his birds' behaviour and monitoring weight changes through handling. If the birds appear a bit tired or light, the fat and energy content should be increased provided the protein level stays above 12% of the total diet. Total protein levels of less than 12% can lead to loss of muscle bulk.
2. Food is a principal reward for a pigeon on return from a race. As pellets are not as palatable as grain, providing only pellets on return may compromise the reward principle unless the bird is very hungry. Racing pellets allow the provision of a grain-based diet but still allow the fancier to provide a complete diet.

To produce racing pellets, the level of each vitamin, mineral and amino acid can be calculated for the average grain blend. Where deficiencies or imbalances are identified, a pellet can be produced to correct these and create a balanced and complete diet when added to the grain mix at a particular proportion. Most racing pellets are designed to be added to a grain blend at around 10%. With the use of pellets (be they racing or maintenance pellets) there is no need to provide any other supplement – in fact, their use just distorts the correct diet. The only additional food items the birds need are grit and water.

### **Disadvantages of pellets**

So what are the disadvantages:

1. Palatability – Pigeons that are not accustomed to pellets initially do not like them and will select grain every time. Usually racing pellets are accepted more readily than maintenance pellets. It takes most birds 2 – 3 days to become used to them.
2. Watery droppings – Birds fed pellets initially drink more. This makes their droppings wet. Usually within 2 – 3 weeks water intake becomes normal and the

- droppings improve. Usually however birds on the maintenance pellets, but not racing pellets, have droppings that are not quite as tight as those fed grain.
3. Wastage in the bag – Because the pellets rub against each other in the bag, some powder is produced. This leads to a small amount of wastage.

These disadvantages have got to be offset against the enormous advantage of providing a complete nutritious diet. Advantages such as healthier more fertile longer-lived stock birds, increased disease resistance, and improved race performance. I would strongly encourage fanciers to consider the use of pelleted rations.





## HEALTH GRIT

Health Grit is a premium quality grit. It is a blend of nine different hard grits, each in the right proportion to provide the correct levels of calcium, iodine, iron and other essential minerals. It is also a source of digestive stones and contains charcoal. It is made from 100% Australian ingredients with the shells it contains being harvested from the pollution-free tropical beaches of Western Australia. It is non-moisture-absorbing, free of bacterial and fungal contamination, double graded to remove all large and small pieces, dust free and contains no added salt. It is a highly palatable health promotant for the competitive bird and is designed for the actively competing race team for which everything to enhance health needs to be done to achieve top form.

*Available in heat-sealed 5- and 10-kg bags.*

[>>Back](#)

## HEALTH PROMOTANTS

### BLOOMFORD



## CALCIVITE PLUS

Liquid calcium, vitamin D3 and magnesium supplement  
For caged and aviary birds

Calcivite Plus has been developed by avian veterinarians and aviculturists to supplement the diets of pigeons that may be deficient in calcium, vitamin D3 and magnesium.

The diets provided for birds, particularly those based on dry seed, often contain low levels of calcium. Calcium deficiency can lead to thin bones, poor growth in babies and reproductive problems including soft-shelled eggs, poor quality eggs, egg binding and post

water-soluble and more easily absorbed from the bowel.

Vitamin D3 is necessary for absorption of calcium from the bowel.

The levels of calcium and magnesium in the body are related, with levels of calcium in the diet affecting the magnesium requirement. As the level of calcium in the diet rises, this increases the requirement for magnesium. It is therefore useful to also provide magnesium in a calcium supplement.

Calcivite Plus is a fully water soluble, clear liquid that is readily taken by the birds. It can also be added to wet mixes and soft foods, such as fruit or soaked or sprouted seed.

With the calcium in its proteinated form and also containing vitamin D3 and magnesium, Calcivite Plus represents an extremely useful way for the aviculturist to provide essential calcium to caged and aviary birds.

Active constituents: Calcium as calcium proteinate 33g/l; vitamin D3 25,000 iu/l; magnesium sulphate 0.5 g/l.



**ELECTROLYTE P180**  
oral electrolyte and glucose supplement for racing pigeons

**Category:** Electrolyte replacer

**Active ingredients:** Sodium ions, potassium ions, bicarbonate ions, chloride ions, glucose

**Guaranteed analysis**

Per 3-g measure:

Sodium ions 370 mg  
Potassium ions 614 mg  
Bicarbonate ions 981 mg  
Chloride ions 556 mg  
Glucose ions 468 mg

**Countries of registration:** Australia (NRA CRIS No. 54082), New Zealand

**Available sizes:** 200 g

**Directions**

Add 3 g (using enclosed measure) to 4 litres of clean water. Mix thoroughly. Remove all other sources of water from the loft. Provide a fresh solution daily.

Treat for 24 hours as required

### Notes

Electrolyte P180 is a water-soluble powder containing essential body electrolytes and glucose. When in solution, it is a palatable source of energy and electrolytes for birds. Used as directed, it will assist racing pigeons to recover from the exertion associated with racing and training

**Storage:** Store below 30°C (room temperature) in a dry place



**HERB TONIC**

Field studies have shown that some free-flying birds, such as rosellas, may consume 80 or more different types of plants per day. Captive birds are not able to forage and so are totally dependent on their carers for their nutrition. The more closely the captive diet mimics that in the wild, then one would expect that not only the health of the birds would be better but also their reproductive performance.

Recently, evidence has started appearing in both the veterinary and aviculturalist literature that supplementation with certain herbs may be of benefit. For example, chlorophyll, which is always present in wild diets, has been shown to improve crop emptying time in hand-raised cockatoos. Dandelion and milk thistle have been shown to decrease cholesterol levels and help to prevent fatty liver (a degenerative condition associated with primary liver disease and a high-fat diet) in lorikeets. Echinacea has been shown to be an immune stimulant.

Some herbs contain high levels of important nutrients, such as vitamins and minerals. Dandelion, for example, is rich in vitamin A and calcium. Wheat grass is high in beta-carotene and chlorophyll and contains a multitude of other trace nutrients as well. Rick Jordan in his well-known book on hand-raising parrots records that a noticeable difference in the overall plumage colouration is seen, in particular the reds were more brilliant, when the birds were supplemented with wheat grass powder. Spirulina is another useful natural supplement for birds. It contains beta-carotene, chlorophyll, vitamin B, calcium, amino acids known to be low in seed diets, plus many other nutrients. The minerals found in plants are in a proteinated (or organic) form, which enhances their uptake from the bowel. The vitamins are often in their precursor form. As the precursors are only converted to the active form and absorbed if the body actually needs them, there is little risk of an overdose.

In Herb Tonic, the herb extracts are carried in a lactulose base. Lactulose is a good base for herb extracts. It is a complex carbohydrate, which does not react with the ingredients in the extracts, even with prolonged storage. Lactulose is not absorbed from the bowel but when acted on by the body's digestive enzymes is turned into acetic acid. This helps to

health. The weakly acidic conditions in the stomach and bowel of birds help to protect them from disease.

Herb Tonic contains:

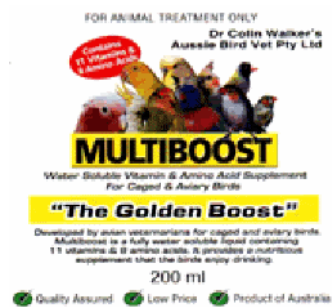
Grapefruit seed extract, 12 mg/ml

Dandelion extract, 12 mg/ml

Milk thistle extract, 12 mg/ml

Echinacea extract, 24 mg/ml

with added chlorophyll, wheat grass powder and Spirulina in a lactulose base.



## MULTIBOOST

Developed by avian veterinarians Multiboost is a fully water-soluble liquid containing 11 vitamins and 8 amino acids. It provides a nutritious supplement that the birds drink readily.

Multiboost is added to the water at a rate of 0.5 – 1 ml per litre or one drop per 100 ml of water. In dilution, it can also be added to soft foods or alternatively soaked or sprouted seed. Multiboost contains no sugar in order to decrease the risk of bacterial or fungal contamination.

Supplementation with any nutrient lacking in the diet can be expected to improve fertility, resistance to disease and health generally. Specifically formulated to address the needs of finches and parrots, Multiboost is rich in vitamins A, B and E and contains the amino acids known to be low in a dry-seed diet. In particular, the amino acids methionine and tryptophan, which Multiboost contains, aid in the formation of the lipoproteins that help to prevent fatty liver.

Multiboost is ideal for use in finches, budgerigars, canaries, cockatiels, cockatoos, rosellas, grass parrots and other birds.



## MULTIVITE PLUS - 'The Golden Boost' A water-soluble vitamin/mineral powder

Multivite Plus is a water-soluble vitamin/mineral powder that represents tremendous value

for the pigeon fancier. It is complete, containing 13 vitamins and six trace elements (including iodine). At the same time, it is concentrated and economical, with only 1/3 of a teaspoon being required for each 5 litres of drinking water. Nicknamed 'The Golden Boost' in Australia because of the way it turns the water a light golden colour, it is readily taken by the birds. Multivite Plus can be given routinely as part of a health management program for 1 or 2 days per week or as required. It can be used to assist in recovery following any stress and to promote natural health during breeding, weaning, moulting and racing. Multivite Plus is sugar-free.

I feel that it is good to incorporate a complete multivitamin into the routine health management of the loft. Given 1 or 2 days per week, it helps to ensure that the birds are not lacking anything in their diet. This is particularly important during racing when birds either miss meals while away in units or eat irregularly, arriving late from races.

Vitamins are fragile molecules: their effectiveness is decreased by heat, U.V. light and contact with organic materials such as droppings and seed. To ensure the birds get the full benefit of Multivite Plus, it should therefore be mixed fresh immediately before use and is best prepared just before feeding the birds. Once mixed, ensure that it is out of the sun and that it cannot become soiled. A fresh solution is best mixed every 12 hours. Containers made of stainless steel, glass or glazed pottery are preferred because they can be thoroughly cleaned. Glass or plastic containers should preferably be opaque. Containers should be cleaned before and after use to remove any persistent biofilm.

*Specifically formulated for pigeons, Multivite Plus is a balanced, fully water-soluble preparation that the birds enjoy drinking. It is available in 200-gram plastic jars with a screw top resealable lid; a measuring spoon is enclosed.*

## **NUTRIBLOOM**

Nutribloom is a vitamin, mineral and trace element food supplement. It is balanced, palatable and nutritious. Grain is first moistened with a seed oil such as wheatgerm oil or Polyseed Oil at the rate of 1/2 - 1 ml per kilogram before adding the Nutribloom at the rate of one measure (5g) to the seed of 100 birds (approx. 4 kg). It can also be made available ad lib in a picking pot.

Nutribloom can be used during breeding, young bird development, the moult and racing. Its regular use during breeding helps the stock birds remain healthy and produce robust young. Weaned youngsters develop well and are better able to resist disease. During the moult, Nutribloom assists in the production of strong silky feathers, while its use during racing helps the birds maintain their fitness and vitality.

## **NUTRIGRIT- YELLOW**



### **NUTRIVET - Seed Booster**

#### WATER- SOLUBLE VITAMIN, MINERAL AND AMINO ACID SUPPLEMENT

Pigeons are essentially seed eating birds and have an obligate requirement for grit. Seeds form the basis of a balanced diet and supply protein, carbohydrate and fats. We know however that it is virtually impossible to supply all the nutrients that pigeons require if fed only a dry seed diet even if the variety of grains given is quite large.

Basically dry seed diets are too high in fat and low in protein. They also fail to provide many essential nutrients. In the grains used in most seed mixes, the following vitamins are usually limiting: vitamin B12, vitamin A, riboflavin, niacin, folic acid, vitamin K and vitamin E. The most limiting amino acids in most seeds are lysine, methionine and tryptophan, while the minerals likely to be limiting are calcium, manganese, sodium, and in some cases, copper, zinc, iodine and selenium.

A grain diet can be supplemented and improved with greens (such as silver beet), yeast products (eg ID Yeast) and fatty acids (eg Polyseed Oil) to make the diet better. The challenge for avian veterinarians and pigeon racers is to provide a complete and balanced diet to our birds. Poor nutrition will suppress the birds ability to resist disease, compromise growth and feather quality, prolong recovery from exertion or illness, decrease reproductive results and of course compromise racing performance.

A further important consideration in the feeding of grain is the effect of the annual harvest. Seeds grow in spring and are harvested once a year, leading to a cycle of progressively older seeds until the next harvest. At some time during the year, at least a portion of the seeds are one year old or older. The nutrients that are most affected by aging are the vitamins, which lose activity owing to oxidation and fats, which become rancid. This aging process can lead to a reduced nutrient concentration. In this way, the level of many other micronutrients becomes reduced with time.

Nutrivet is a palatable, water- based supplement that specifically contains the vitamins, minerals and amino acids known to be lacking in a dry seed diet. All nutrients are provided at the correct levels relative to each other, and the minerals are in their proteinated form to make them soluble in water and more easily absorbed from the bowel.

Nutrivet specifically addresses the problems associated with a diet based on dry grain. Formulated by avian vets and nutritionists with the Australian Pigeon Company it enables the provision of a more complete diet. With no possible adverse effects it can be routinely used in the loft.



## PROBAC

**Category:** Probiotic

**Active ingredients:** Moxidectin, praziquantel

### Guaranteed analysis

Lactobacillus acidophilus, L. delbrueckii ssp. bulgaricus, L. plantarum, L. rhamnosus, Bifidobacterium bifidum, Enterococcus faecium, Streptococcus thermophilus, Allicin

**Countries of registration:** Australia (APVM Approval No. 56494/200/1203)

**Available sizes:** 200 g

### Directions

Add 2 g (1 measure) to 2 litres of water for 24 hours as required. May be used several times weekly. A fresh solution should be mixed daily and provided in a clean drinking vessel.

Can be added to the food at the rate of 1 gram (1/2 measure) to 1 kg of grain after moistening with a seed oil, e.g. wheatgerm oil at rate of 1 – 2 ml/kg.

Keep medicated water out of direct sunlight. Remove all other sources of water

### Notes

Probac is a concentrated, water-soluble blend of live microbes with added garlic extract (Allicin), which benefits birds by improving the intestinal microbial balance. Everyday use of Probac helps maintain a balanced digestive system, thus optimizing digestion of feed and enhancing your birds' health, naturally. These microbes are safe, non-toxic and residue-free. Garlic extract, the second natural active ingredient, supports the effects of probiotic bacteria.

The normal bacteria found in the bowel are necessary for nutrient absorption and aid in the protection of the bowel from disease. Stress disrupts these normal beneficial bacteria. Probac is a palatable water-soluble powder that will quickly restore the correct balance.

A probiotic preparation made for use in pigeons.

At least a concentrated (180 million CFU/g) probiotic preparation made specifically for birds.

Probac can be added to the drinking water at the rate of 1 teaspoon to 4 litres or added to the grain (after first moistening with a seed oil, ½ - 1 ml per kg) at the rate of 1/3 teaspoon

Probiotic preparations flood the bowel with beneficial bacteria. These bacteria produce acids such as lactic acid, that keep the contents of the stomach and intestine weakly acidic, thus favoring the growth of 'good' bacteria and inhibiting the growth of 'bad' bacteria. They also preferentially occupy receptor sites so that they are not available to disease causing bacteria and produce protective slime layers. Probiotics also have an appetite-stimulating effect, producing digestive enzymes and B vitamins. They also stimulate general immunity. Probac has the added advantage of also containing allicin, the natural immune stimulant found in garlic.

So when can the fancier use probiotics to his advantage:-

**After any stress** - It is well known that stress induces a disruption of the normal bowel bacteria and that the beneficial bacteria are the first ones to be lost with stress. Once these beneficial bacteria are removed from their normal environment by stress, many more are lost from the digestive tract and are replaced by an overgrowth of non-beneficial bacteria. This can result in diarrhoea, loss of performance, decreased appetite and in the stock loft, inhibited growth and limited weight gain in the youngsters. Probiotics restore the balance of beneficial to non-beneficial bacteria. They are best given as soon as possible after the stress or just before the time of the stress. By doing so, disease or performance problems may be avoided.

**In the stock loft** - Use probiotics regularly in the stock loft as part of routine management, particularly during the breeding season. Use two to three times weekly when the stock birds are feeding youngsters. This helps the birds resist E. coli (often associated with wet nests) and ensures that the birds get the maximum nutrition possible out of their seed at a time that often puts real demands on them. Probiotic use will help the parents produce vigorous robust young.

**In the race loft** - Probiotics can be used in the race loft to both treat and prevent E. coli and Candida infections. Stress disrupts the bowel bacteria, giving E. coli and yeast the opportunity to cause disease. In lofts where these are a problem, probiotics can be used whenever E. coli or yeasts are seen under the microscope, when the droppings become green or green and watery, or when there are weather conditions that favour E. coli, in particular when the weather is cold and damp or humid. In such lofts, it is a good idea to give probiotics routinely as part of the loft's disease management program, with the focus here being on disease prevention rather than waiting for disease to appear. When E. coli and yeast flare-ups are a problem, our challenge is to identify the stress that caused the flare up while at the same time helping the birds clear the E. coli and yeast through use of probiotics. With no on-going stress, the droppings will appear normal within 24 hours of the start of probiotic use.

**Postrace** - The stress of racing itself causes disruption to the normal bowel population. Fanciers will have noticed that the droppings of birds that have raced often take 24 - 48 hours to return fully to normal. With my own birds, I find that if they come home to probiotics, then the next morning it is much more likely that the droppings will be normally formed and brown and that the bird will continue with a feather down drop. Probiotics can be combined with electrolytes and vitamins.

**Postweaning** - At this time, we don't want to use drugs. We want to develop a strong natural immunity. Probiotics specifically stimulate this.

**Following antibiotic use** - Particularly during racing, probiotic use after antibiotics hastens the re-establishment of the normal bowel population.

**Moulting** - Maintaining a healthy bowel during moulting aids in on-going nutrient delivery to the developing feather in the feather follicle and decreases the chance of fret marks, etc.

**In the show loft** - Probiotics can help birds resist Salmonella. Although all pigeons are susceptible to Salmonella, clinical disease is seen more commonly in fancy breeds rather than racing birds. Certain breeds are particularly susceptible, e.g. Modenas, Show Homers and the high flying breeds, especially Doneks. The way an outbreak is managed depends on the severity of the problem. Regular probiotics have been shown to help birds resist the disease.

Probiotic use can never be harmful as we are simply flooding the bowel with beneficial bacteria that should always be there. Their use has many advantages and should be encouraged.

## **USE OF PROBIOTICS In Caged & Aviary Birds**

By Dr Colin Walker BSc, BVSc, MRCVS, MACVSc (Avian health)

### **The bacteria-host relationship**

Through evolution, bacteria and warm-blooded animals have closely associated themselves to form a closed system for mutual benefit. By trial and error, over millennia, populations of bacteria have evolved that are indigenous to their animal host. The animal host receives the benefits of aid in the digestive process, manufacture of essential nutrients, protection against other undesirable bacteria, assistance in control of water in the body and other metabolic advantages. The bacteria in return receive temperatures favourable for their growth, a constant supply of nutrients, and essential substances in the form of the body's secretions. Because of the exact nature of this relationship, there are bacterial populations that are the most favourable for the host animal.

### **Changes**

Each member of this mutually beneficial relationship is profoundly influenced by the other. When certain changes occur in the host, corresponding changes are reflected in bacterial populations in the bowel. Bacterial changes may occur as a result of stress, diet change, antibiotic therapy and other factors. Conversely, as the resident bacterial population changes, there are subsequent changes in the animal's activity. These include alterations in the host's ability to digest its food and its ability to protect itself from bowel disease. The animal host then has the problem of getting back to an ideal relationship with its normal resident population of bacteria. Hopefully it can accomplish such a relationship before subsequent challenges again upset the ideal state.

Where animals are not stressed, have an appropriate diet, are not crowded, are not given drugs, do not contract infection or metabolic diseases and live in a clean environment, an ideal level of intestinal bacterial population may be maintained on a rather steady basis. In fact, no differences are generally reported in numerous trials under these ideal conditions.

### **Imbalance**

The conditions described above, however, do not fit the environment under which many birds are kept. Even in the best aviaries, under the best care, birds are subjected to various stresses. This means that disruption of the normal balance of intestinal bacteria can be a common event. If an ideal state is not maintained, utilization of nutrients is not optimal and resistance to harmful organisms is reduced.

### **What is a probiotic?**

The bacteria that are normally found in the bowel of healthy non-stressed animals can be cultured and prepared as a medication. In this form they are called probiotics. The

probiotic concept involves the refeeding or reintroduction of these bacteria to an animal. Many studies in many countries have shown that, although these bacteria can control and exclude other harmful bacteria, they are in fact the most likely to be disrupted by stress. Most probiotic products consist of naturally occurring living cultures of specific strains of Lactobacilli and enteric Streptococcus (Enterococcus).

### **Restoring the balance**

Once it was established that the feeding of certain live bacteria to animals has the potential to produce beneficial effects under certain circumstances, i.e. when the normal bacterial balance has been disrupted, the actual delivery of these organisms from the laboratory to the animal became the next hurdle. Pharmaceutical companies have now overcome this. The large Japanese pharmaceutical company Yakult manufactures a human probiotic (Lactobacillus casei) as a milk-based drink in Victoria. This is distributed through the eastern States of Australia. One million bottles are consumed by Australians every week. Fourteen million are consumed in Japan every day! Interestingly, in people, studies have shown that individuals who drink 'Yakult' and are exposed to diseases such as Salmonella are much less likely to become unwell. Probiotic use in people has also been shown to decrease the chance of bowel cancer. As many of the harmful bacteria produce toxins that are carcinogenic, i.e. can induce cancer, their exclusion can decrease the risk of this disease.

In birds, there are gel preparations of probiotics for individual dosing and also water-soluble powders to treat the flock. These provide selected beneficial live bacteria with excellent stability when protected from extreme heat and moisture. Because of the intimate relationship between the host animal and its bacterial population, it is important that the correct organisms are supplied in probiotic preparation for any given species. Probiotic supplements need to be prepared with particular species in mind and the more types of normal bacteria that can be provided, the better. For use in birds, therefore, multistrain avian-origin probiotic supplements are used.

### **Recent Studies**

At the seventh European Association of Avian Veterinarians conference held in April 2003 at Loro Parque in Tenerife, an interesting paper was presented on probiotic use in cockatiel chicks. This paper described work done at Louisiana State University by a team headed by Dr. Tom Tully. Cockatiel chicks were removed from their parents at 12 days of age and hand rearing commenced. They were divided into several groups, some of which received probiotic supplementation, and some of which did not. During the hand raising, weight gain and the ability to resist disease were monitored.

Results showed that there was no difference in weight gain in healthy chicks on a good diet. The team went on to state "Although not significant in benefiting healthy babies being fed an adequate diet, in all likelihood babies being fed marginal diets by inexperienced feeders, stressed and or diseased birds should benefit from an avian specific probiotic supplement fed on a daily basis".

During hand raising the birds were deliberately infected with disease-causing bacteria (Pseudomonas sp, E. coli). Testing of the birds after infection with these bacteria showed that the probiotic-supplemented group was less likely to be pathogen positive. Subsequent blood tests showed less of an inflammatory response (lower white blood cell count) and subsequent histopathology showed less infection in the intestines.

At the AU convention in October 2003 in Chicago research work was presented by Star Labs. Star Labs are based in Missouri and manufacture a probiotic preparation called "PrimaLac". Two large trials had been conducted with this product. In one trial involving over 20,000 Bob White quail chicks it was shown that probiotic-supplemented birds, when

compared to non-probiotic-supplemented birds, had improved growth, improved feed conversion, and improved feather quality, and were more likely to survive. They also exhibited an enhanced immune (antibody) response. The second trial involved approximately 15,000 pheasants. These birds were also divided into probiotic-supplemented and non-supplemented groups. Both groups were then deliberately infected with *Salmonella typhimurium* (a disease causing bacteria) and then later Newcastle disease (caused by a paramyxovirus). In both instances approximately 25% more of the non-probiotic-supplemented birds died.

### **Mode of action**

#### **And so how do probiotics work?**

**Competitive inhibition** – The normal bacteria found in the bowel of some birds during health, e.g. *Lactobacillus* sp., produce lactic acid, hydrogen peroxide, antibiotic and other substances that help keep potential pathogens under control. In health the lactic acid produced by the normal bacteria keeps the PH of the contents of the stomach and intestine low i.e. acidic. Loss of these normal bacteria, secondary to stress, leads to an increase in PH. As a general rule, most pathogenic bacteria do not multiply well in an acidic environment and so a rise in PH creates a window of opportunity for disease causing bacteria to invade. As many aviculturalists are aware, likely potential invaders include *E. coli*, *Pseudomonas*, *Candida* (yeast or thrush), *Salmonella* and *Yersinia*. Often these organisms act as opportunists, waiting to cause disease whenever birds become stressed. In addition to weakly acidifying the bowel, probiotics do much more to help the bird, in that they produce protective slime layers that coat the bowel lining and also preferentially occupy receptor sites on the bowel wall, in the process excluding bacteria such as *E. coli*. They can offer an effective natural way of combating the problem without the need for antibiotics. By treating the birds, we are simply flooding the bowel with beneficial bacteria, which, through their normal activity may re-establish health.

**Appetite stimulation** - Probiotics appear to have a strong appetite-stimulatory effect. They are known to produce digestive enzymes and B vitamins. These effects help the birds to get the maximum nutrition from their diet.

**Immune stimulation** – Recent work indicates that probiotics stimulate general immunity.

Interestingly, it appears human probiotic preparations are being developed to target specific bacterial infections. In humans, a bacterium *Bacillus cereus* causes gastroenteritis. This infection is not fatal but is responsible for many lost days of work annually in the population. Rather than being prescribed antibiotics, in the future patients may be prescribed a specific probiotic 'yoghurt' that controls the infection. According to the companies involved, with this technology now in place, more difficult organisms like *E. coli*, which have a large number of strains and mutate more readily, will be tackled. Once available, these preparations will be beneficial and useful to aviculturalists as they will mean that such infections can be managed without resorting to antibiotics with their associated risk of side effects.

### **Use of probiotics**

Although probiotic preparations have been available for several years, there still seems to be some uncertainty about their use. As always when new products become available, it is easy for misinformation to be spread. The situation is complicated by the fact that not all birds have the same or even similar populations of bowel bacteria. Birds with caeca, such as chickens, carry large numbers of what are called gram-negative bacteria, which are capable of causing disease in other species. In birds such as parrots with no caeca, the number of gram-negative bacteria is very low, but large numbers of gram-positive bacteria are normal. In lorikeets, virtually no bacteria are found, while in many passerines such as canaries and Australian finches, no permanent population of bowel bacteria exists, with the

bacteria found in droppings being regarded as transients.

Although not a miracle cure, it does seem that probiotics can be beneficial in certain situations to help maintain the health of our birds.

So when can the aviculturist use probiotics to his advantage?

After any stress - Stress predictably disrupts the population of bacteria found in the bowel with the beneficial bacteria being the first ones to be lost. Once these beneficial bacteria are removed, an opening is created for an overgrowth of disease causing bacteria or yeasts. This can result in diarrhoea, decreased appetite and a vulnerability to disease. Probiotics restore the balance of beneficial to non-beneficial bacteria. They are best given as soon as possible after the stress or just before the time of the stress. By doing so, disease problems may be avoided.

During breeding and moulting – Often, despite the best of care, breeding or moulting birds can become “run down”. Probiotic use is likely to protect the parents and, during breeding, the babies from disease.

Following purchase and transport – Catching and confinement can be extremely stressful particularly in naturally nervous species. Interrupted feeding and drinking patterns provide further physiological stress.

Following antibiotic use – Many antibiotics not only target disease-causing bacteria, but also kill the beneficial bacteria of the bowel. When antibiotic treatment ceases, the bowel can re-populate with bacteria from the birds’ immediate environment. Probiotics can help protect the birds from disease during this time.

After fledging – Less disease can be expected after weaning if birds are probiotic-supplemented until they are feeding properly and have established themselves in the aviary.

#### **Note on Probiotic Use**

In some metropolitan areas, the addition of fluoride or chlorine to drinking water may interfere with the action of probiotics. In metropolitan areas, treatment plants are situated throughout the water-distribution network. According to Australian authorities, the concentration of fluoride and chlorine throughout most of the network is too low to exert an effect. However, the concentration in the water of aviculturalists close to a treatment plant may be high enough to kill the probiotic organisms. These substances will, however, evaporate from treated water if it is allowed to stand for 24 hours. Aviculturalists in any doubt are best to set aside water to be medicated with probiotics for 24 hours before use. Simply standing the required volume of water in several buckets awaiting use is adequate. Alternatively, rainwater or distilled water could be used. Most water-soluble probiotic preparations can be added to the feed. Indeed, with some preparations, this ensures a more immediate and effective delivery of the probiotics to the digestive tract.



Yeast being added to the grain



## **ID YEAST**

A natural yeast food additive that is rich in energy, protein and vitamin B.

Yeasts have been used as a nutritious supplement for decades by pigeon fanciers. They are a natural food that is rich in protein and vitamin B. Pigeons like their taste and they are easy to use simply being added to the grain after pre-moistening with a seed oil.

A diet higher in protein is required for successful breeding and so it is from August on that fanciers can particularly use yeast supplements to their advantage.

Regular use of protein rich supplements such as ID Yeast:-

1. Helps ensure rapid growing robust youngsters
2. Improves feather quality
3. Results in more vigorous breeding stock birds
4. Leads to quicker recovery in race birds after a hard fly

Highly palatable, ID Yeast is an energy and protein booster providing a range of amino acids and B group vitamin that help ensure that youngsters can grow at their full genetic potential and that the stock birds are less drained from the fatigue of breeding.

ID Yeast is readily digested leading to rapid crop emptying, the replacement of lost energy as quickly as possible in the feeding parents, and the speedy conversion of energy and protein into growth in the babies. The result is a more robust stock bird that is a better parent and less likely to become unwell and a chick that grows to its genetic limit.

ID Yeast is a fine yellow powder with a sweet smell and is an improvement on the older brewers yeasts supplements because it is produced in a sterile way specifically as a food supplement and therefore contains no impurities.

ID Yeast contains a range of amino acids being 45-50% protein in total and 70mg/100g of vitamin B together with other vitamins in a tasty readily digestible powder.

Directions for use:-

- \* Mix with the grain on the day of feeding
- \* Pre- moisten seed with a seed oil (Polyseed Oil is ideal) at the rate of ½ - 1ml per kg
- \* Add ID Yeast 3tsp per kg of seed, stir and feed.

## **PICK POTS**

[>>Back](#)

## **OTHER**

### **F10**

What sets F10 apart from other 'strong' disinfectants on the market is its broad spectrum effectiveness and its unmatched safety. TGA- and APVMA-approved, it is effective against viruses (including circo virus), bacteria and fungi. The product is non-corrosive, non-toxic, biodegradable, non-tainting, non-irritating, totally safe to handle and not hazardous. It is highly effective at low concentrations. No rinsing is required after use. Simply apply and leave to dry. The disinfectant will not affect birds adversely, even if fogged into lofts.

### **NESTBOWLS**

### **PERMETHRIN**

[>>Back](#)