# **Diets**



This fact sheet gives an overview of the feeding requirements of different species of birds.

### BUDGERIGARS

#### Seed

The basic food a budgerigar needs is a mixture of plain canary seed and millets. The seeds come from all over the world and this helps to make sure that there is everything in the seed to make a budgerigar strong and fit. When you look at a mixed seed, you will see a brown seed which is pointed at both ends. This is canary seed. Millets are usually round in shape and come in various colours and sizes. Pearl white millet is large and white. Panicum millet is small and yellow. Japanese millet is brown and Dakota millet is red.

There is no need to worry about the details of each seed. You can buy a Budgerigar Mixture to suit your birds. For a single pet bird you can buy packets of seed. If you have more birds it is usually cheaper to buy loose seed from a pet shop. Usually the more you buy at one time, the less it will cost you to feed your budgerigars.

When your birds are breeding it is best to increase the amount of plain canary seed in the mixture. A budgerigar needs to have seed available at all times.

#### Water

A budgerigar needs to have clean drinking water available at all times. From time to time you can add a vitamin additive or tonic to the drinking water. These can be bought from good pet shops. When adding anything to your budgerigars' water always read the instructions carefully and do not add more than the stated amount. Budgerigars are small birds and require only small amounts of additives.

#### Grit

Budgerigars need a supply of grit so that they can digest their food. When they eat seeds, they remove the husk and swallow the kernel whole. A store of grit, kept in the crop, grinds up the seeds before they pass further into the digestive system. Grit comes in the form of Mineral Grit and Oystershell Grit. Both work equally well. It is thought that grit which is too sharp can damage the inside of the budgerigar's crop and so it is best to buy a good brand which has been specially prepared for budgerigars.

## Cuttlefish Bone

Budgerigars like to peck at a piece of cuttlefish bone. They benefit from the calcium they consume as this helps to make their bones strong. Breeding hens need calcium to form the shells of the eggs they lay.

#### **Iodine Block**

Iodine blocks can be bought from pet shops ready to fix on the wires of the cage. By pecking the block your budgerigars will benefit from iodine and

minerals which will help to keep them healthy.

## Greenfood

Budgerigars love to eat greenfood but you must be very careful when feeding it. The cheapest form of greenfood is dandelion leaves and chickweed but there is a risk involved when using these. If wild greens have been sprayed, to kill weeds or insects, they can be dangerous to feed to your budgerigar. Therefore, before introducing any greenfood, it must be confirmed that it is free from dog fouling and pesticides. Any greens should be washed and dried before feeding to your birds. So it is best to feed greens which you grow yourself or buy at a greengrocers. Lettuce, spinach and cress are suitable. Greens should be fed early in the day and in small quantities. They are absorbed quickly into the digestive system and if fed in the evening can lead to a bird spending the night with an empty crop. The remains of greens should be removed from the cage the same day that they are given to avoid the eating of stale food. Greens can be fed two or three times a week.

#### **Treats**

As well as their basic diet budgerigars love to sample all sorts of food. Perhaps the best known is Millet Spray. Millet Sprays should be looked upon as a treat as budgerigars can get on very well without them, but some would eat nothing else if given the chance. A spray can be very useful to give to a budgerigar which looks a little off colour, but can make a bird fat.

Small pieces of carrot or fresh fruit, such as sweet apple or orange, are good for budgerigars. Any left over should be removed from the cage the same day. Although some budgerigars will eat almost anything, there are foods which are best avoided if your bird is not to get too fat. Such foods are bread, cake and biscuits. The exception to this is when feeding hens, which themselves are feeding chicks. Then, bread and milk is an ideal food.

**To sum up:** a budgerigar must have seed, water and grit available all of the time. Care should be taken when feeding extra food as this can make your budgerigar fat. A fat bird is not a fit bird.

## ZEBRA FINCHES & BENGALESE

One of the joys of keeping Zebra Finches and Bengalese is that their feeding requirements are fairly simple. The following information may be of assistance in helping you keep your birds fit and healthy.

#### Seed

A mixture made of about 50 per cent panicum millet, supplemented with white millet, red millet, Japanese millet, small canary seed and a small proportion of

niger seed and linseed will provide the basic essentials of a balanced diet. Rather than buy all these seeds in individual quantities it is possible to buy them ready mixed and supplied as a Foreign Finch Mixture obtainable from your local pet store or direct from one of the many suppliers who advertise weekly in Cage & Aviary Birds. An occasional millet spray will also prove beneficial. When buying seed you should ensure it is free of dust and possible vermin contamination.

#### Grit

It is essential that your birds have permanent access to a supply of grit, without it they will be unable to digest their food properly. Generally there are two forms of grit available: these are a fine oystershell grit which will suffice on its own, and also a tonic grit. For the best results supply a mixture of both.

#### Water

Your birds will require a constant supply of clean water for drinking and this can be supplied in a flomatic type container. It is also necessary to provide bathing facilities to enable your birds to bathe in order to maintain their plumage in good condition and this can be done by either supplying a shallow dish of water or by providing the type of bath that clips over the cage door opening.

# Cuttlefish

Your birds will receive the majority of the minerals they require from their seed and grit, however, to ensure that they receive the correct levels of calcium you should ensure that they always have access to a cuttlefish bone.

# Softfood

Softfood is a term used for any of the proprietary rearing and condition foods such as CeDe or EMP that should be supplied either daily when your birds are breeding or occasionally, say once a week, as a tonic outside the breeding season. They contain a mixture of dried egg and rusk crumbs, usually you need to mix these with water until moist and crumbly before they are given.

# Greenfood

Your birds will benefit if given the occasional bit of chickweed, watercress, dandelion leaves or lettuce, but unless you are certain they are free of contamination from pesticides, weed killer and such like, don't use them and always wash thoroughly before use.

#### LOVEBIRDS

A good quality parakeet / cockatiel commercial seed mix is sufficient. Millet

sprays, both white and red, can be given as extras (given the choice almost all lovebirds will choose red over white). Many breeders make dry commercial "egg food" available all year round.

Most lovebirds will take apple. Other fresh fruit and vegetables can be tried but willingness to take it varies from bird to bird and depends on what it was given by the breeder and what its parents ate.

Abyssinians in particular love dried figs (these can either be fed dry or soaked overnight and left to dry on kitchen paper) and love juniper berries. They will also eat small Chinese pine nuts and seem the most inclined to try new foods.

Calcium in the form of cuttlefish bone should be available at all times. Most breeders also make mineral blocks available.

Sprouted seeds are useful but should be avoided if for any reason you may not be able to remove it before bacteria develops.

### FOREIGN FINCHES

The different species of Foreign Finches each have their own particular requirements, but a good starting point is a Foreign Finch mix, which usually contains White Millet, Panicum, Red Millet, Japanese Millet and Canary Seed. They also like Budgerigar Tonic Seed and millet sprays, which should both be fed sparingly.

Ensure that any seed you purchase is free from dust and rubbish. Beware of buying seed that is open to possible contamination or does not look clean, it may be cheap to buy, but could prove very costly to your birds.

Egg food or soft food is used when birds are rearing young or moulting. Products such as EMP or CeDe can be fed dry or wet.

Although of little nutritional value, finches appreciate a little green food in their diet. Cress, Dandelion leaves and lettuce can be provided to give variety to their diet. Finches will also eat cucumber, grated carrot and apple.

During the summer the heads of seeding grasses, dandelion and sow thistles can be collected from areas that you know are free from contamination by sprays, pesticides and animal and wild bird droppings. The finches will devour these with relish.

Mineralised grit and Cuttlefish bone should always be available to the birds along with small amounts of granulated charcoal. Some people also provide crushed baked eggshells to give extra calcium. The grit should be fed in a shallow dish and emptied out once a week and refilled, as the birds will have taken what is of use to them.

Water should be available at all times. It should be changed at least once a day and the water containers should be cleaned regularly. Water consumption will vary, depending on the temperature, diet and the stage in the breeding cycle. When the hen is about to lay or there are chicks in the nest, water consumption will increase significantly.

Livefood, such as fruit flies and mini mealworms, are also required by some finches; especially when breeding. Guidance on the needs of the particular species should be sought.

Some people also give their birds additional vitamins and minerals and probiotics either in the drinking water or mixed in the soft food. There are many products available and the decision on which to use is a matter of personal preference.

## **CANARIES**

Canaries are seed eating birds, but there are numerous mixtures that are suitable for their diet. Plain canary seed is the bulk of almost all mixtures, with other seeds such a Niger, Linseed, Hemp and Red and Black Rape. Canaries will take whichever seeds they like when offered a mixture, and many breeders use plain canary seed only to avoid waste. If this is the case, then variation in the diet should be offered to avoid the bird becoming disinterested in the same food. Condition seed is always a good addition to a plain canary diet but offered separately and less frequent.

Grit is an essential part of a canary's diet, as this helps to digest the intake of food. It really doesn't matter whether the grit is granulated or not but it obviously has to be in an eatable size. Some breeders ignore the requirement of grit and use cuttlefish, but it is advisable not to do this for lengthy periods.

There are many soft food products on the market, and this should be used on a weekly basis throughout the year with a build up of use approaching the breeding season. The bird should be offered the soft food to feed the youngsters as they develop, and the youngsters should continue with the soft food until the moult has been completed. Whilst there is a variation in the products, there are some excellent ones on the market. A lot of breeders add to the prepared ingredients and are sometimes accused of imbalancing the company's soft foods. The addition of items such as egg, cous-cous and soaked

seed should not in anyway imbalance the food but merely give further ingredients. Some of the older fanciers will prepare their own soft food and use such ingredients as digestive biscuits, crushed bread crumbs and butchers rusks. All of this is totally acceptable to a canary's digestive system and it's a question of learning from observation what the birds like and dislike. Observation is also required as to the rate of growth of the youngsters with a specific food to identify variations. This would obviously mean trying various types of soft food before finding which one to finally use.

Water is a vital part of a canary's diet, and must be available at all times. A canary cannot live without water for long periods and it should be clean and available to each cage. Many additives are offered in water, as this is an easy method of getting them into a bird's system. It is a matter of opinion as to whether these additives are essential, and each exhibitor must decide for themselves whether or not to use them.

Wild seeds and green food should be made available to canaries, but not in excessive amounts. This can make birds loose and cause deterioration in health. It is again important to observe stock to see if there has been any affect. Chickweed is a wonderful source of nourishment for thriving youngsters, but before introducing this to birds, it must be confirmed that it is free from dog fouling and pesticides. Apple, carrot, lettuce and many other tit bits such as broccoli can be offered to birds in reasonable quantity.

### **COCKATIELS**

The main constituent for a Cockatiel's diet is a good mixture of crop seeds. Seed mixtures should contain a balance of fat oils and carbohydrates that can be found from the following seeds: sunflower, safflower, hemp, linseed, rape and niger. The last four seeds mentioned are particularly high in fat oils and should form no more than 20% of the mixture. 30% Sunflower and 50% carbohydrate should complete the mix. Carbohydrates are derived from canary seed, various millets (such as red, white, panicum and Japanese), oats or groats and buckwheat.

In addition to a good seed mixture, Cockatiels should be offered certain fruits and vegetables. Although some Cockatiels can be very selective about food, it is very important that they are offered a wide variety as soon as they fledge. They will eat carrot, apple, sweetcorn, spinach, celery, watercress, lettuce and broccoli. Avoid citrus fruits, such as orange, lemon and lime, as acid levels in these fruits can be harmful.

They should also have a supply of the following: an iodine block, fine oyster

shell grit and cuttlefish bone and clean water daily.

## **PARROTS**

Parrots generally eat seeds, nuts and fruit such as Canary seed, Millets, Cereals, Sunflower seed, Walnuts, Brazil nuts, Peanuts, Mountain Ash Berries, Elder berries, Rosehips, Cedar nuts, Banana pieces, Pumpkin seeds, Blue Raisins, safflower, linseed, rape seed.

Parakeets and the smaller Parrots will eat more of the smaller seeds and less of the nuts and larger seeds. Two foods that should not be given to Parrots are Avocado Pear and chocolate.

Lorikeets eat Nectar and are a more difficult bird to give the correct diet.

### FOREIGN SOFTBILLS

Within the bird keeping world "softbills" has become more readily available and more sought after over the past few years. These birds range from the smallest Hummingbirds to the larger Toucans. As diets improve and breeding techniques develop, aviculturists are able to breed more softbills and so more captive bred stock becomes available to the market. (Whenever possible try to purchase captive bred stock). With the ever-escalating destruction of their natural habitat such as the rain forest, many species are coming under increasing threat and possible extinction by man. Some species such as the Bali Starling (Rothschild's Mynah) have even been saved from probable extinction with the help of captive bred populations.

Most softbills that are available should be treated as imported birds. These birds will have been imported from their country of origin and quarantined for a specified period before becoming available for sale. Acclimatising the birds in their new quarters is vital for the bird's survival. So knowing how to treat the birds correctly is paramount.

Softbills fall into five basic categories and can usually be classified by their dietary requirements:

*Insectivores*: These birds will feed primarily on insects. For aviculturists they create the biggest challenge. Certain species, with persistence, will eventually take other forms of nutrition such as raw mince or hardboiled egg but the bulk of their diet should always consist of insects. They include birds such as Pittas, Rollers etc.

**Nectivores**: These birds are often more suitable for the more experienced bird

keepers and include species such as Hummingbirds, Sunbirds, Honeyeaters etc. They feed mainly on nectar.

**Frugivores**: Quite often birds with larger appetites, which mainly feed on different types of fruit. Species such as Toucans, Broadbills, Bulbuls, Fruitsuckers etc.

*Omnivores*: Birds that will eat "a bit of everything offered". Most experienced bird keepers regard all softbills as omnivores.

*Carnivores*: Obviously birds that eat meat – day old chicks or mice. Some keepers don't consider carnivorous birds as softbills, but to make things easier within this document we will include this group of birds. Birds such as Kookaburra's, Sacred Kingfishers, Crows, Jays and Frogmouths can be considered carnivores.

The first three categories mentioned above are there just as a guideline and for easier classification. Softbills will often take a combination of the three types of diet offered. For example, Sunbirds will take smaller amounts of fruit, cake and even small insects when offered, and Bulbuls will often enjoy nectar if available.

## Nectar

Over the past 30 years there have been vast improvements made to commercially available nectar diets. Specific nectars are now available for Hummingbirds and Sunbirds. When mixing any form of nectar care should be taken to follow the manufacturers guidelines. Many species of nectar feeder can easily suffer from protein poisoning; they are also susceptible to a fungus growth on the beak. This may be caused quite simply by stress or badly mixed nectar. Fortunately it is easily cured with drugs available from your local vet – such as Nystatin. By painting the drug onto the affected area the fungus growth will soon be cured.

## Fruit

Quite often softbills prefer to eat fruit that is slightly riper than that suitable for human consumption. Due to the methods used to store fruits for longer periods, all fruit to be used for your birds should be thoroughly washed – such fruits as peaches, apples etc may be coated in a fine wax for preservation. Most of the soft fruits available from markets or supermarkets can be offered, such as pears, paw-paw, kiwi, tomatoes, grapes, mango, sultanas, currents etc. Harder fruits such as apples should be chopped into small pieces to allow them to be swallowed whole. Toucans, Touracos, Bulbuls will eat much more when fruit is offered chopped. Oranges will offer a useful source of vitamin C but for some smaller softbills such as Zosterops or small Babblers it may scour their crop and cause indigestion. Fruit that is **too** over-ripe should not be offered as this may cause other problems – we don't want drunken softbills do we? Two fruits

to avoid at all times are fresh Pineapple and Avocados. The avocados are extremely rich in vitamin E as well as fats and oils. These can be harmful to some softbills.

## Soft-foods

Many forms of soft-food are available from different manufacturers, often referred to as "universal" mixtures. Quite frequently they have been designed and made for specific types of birds. For example, fine grade insectile mixes would be suitable for small softbills such as Tits and Zosterops. Whilst a low iron universal food would be used for Toucans and Touracos, because both species can suffer from "iron storage disease".

## Livefoods

Many forms of livefood are now bred in large quantities and are available commercially. Some suppliers will send it through the postal service to the customer.

#### Mealworms

Probably the widest used of all livefood. Mealworms are available in many different sizes—the mini-mealworm sold at approximately ½" up to the much bigger Morio-mealworm sold at between 2½" - 3" in length. All types of mealworm should be kept in bran and fed carrots for moisture. To ensure they are kept fresh mealworms should be kept cool, whilst the Morio cannot survive low temperatures and should therefore be kept quite warm – minimum temp 65°C. Some softbill breeders like to feed the mealworms with a fine grade insectile mixture, the theory being that the nutrition eaten by the mealworms will be passed onto the young birds in the nest.

# Crickets, Locusts and Grasshoppers

Available in their many sizes and stages of growth known as "instars". When using crickets or locusts they should be dusted with a vitamin powder before being offered to the birds. Experience has shown that care should be taken when using crickets – as escapees can often find a new home in the kitchen behind the washing machine, and then the fun begins—"Singing" every night can soon become quite wearing for the homeowner. Black and brown crickets are readily available in whatever quantity you may wish to purchase. Silent brown crickets are now also available.

### Waxmoth Larvae

Regarded as a pest to the bee-keeping fraternity, the wax-moth larvae is available from most suppliers and local pet shops, but can prove to be quite expensive when rearing softbills. Breeding large quantities of wax-moth larvae can be easily achieved by using glass containers that the moths and larvae

cannot escape from; and then supplying a medium for the larvae to grow in such as bran or wheat germ flake mixed with honey and rice-powder. Emerging from the chrysalis, which is the finale stage of the larvae once grown to full size, the moths will lay eggs in the container and if kept warm enough the eggs will soon develop into minute larvae and so the cycle continues.

#### Fruit Flies

The larvae of the fruit fly offers small softbills and nectar feeders much nutrition for their young chicks. The best time of year to grow a fruit fly culture in your bird room is the summer. By simply putting discarded fruit into a bucket the fruit fly will be attracted to the rotting fruit and lay their eggs upon it. Within a short time the eggs hatch and change into small larvae, which the birds will love to gorge upon. Some breeders prefer to allow the larvae to hatch into flies by simply placing a wire mesh over the top of the bucket, thus stopping the birds from exploring for larvae within the bucket. Once hatched the birds can often be seen "hawking" for the fruit fly above the bucket, and then going to feed their newly hatched chicks.

## Maggots

These should never be considered perfectly safe to use on a daily basis. Many breeders of softbills refuse to use them at all because of the health risks they carry. Maggots are the larvae of the blowfly and other forms of fly. Grown commercially for the fishing market, they should be thoroughly cleaned or "purged" before use. The small black spot clearly visible in the intestine of the maggot must be removed from the larvae, as when reared they are fed upon meat products and may carry botulism. If you are not sure how clean your maggots are then quite simply DO NOT USE THEM!

# Other types of Livefood:

Many insects can be used that are available by simply exploring your own garden. Ant eggs can often be found under patio slabs and if harvested in small quantities the colony of ants can keep the breeder supplied with enough eggs throughout the breeding season. Spiders are another form of insect that when offered will be snapped up frantically. Sour-bugs, lacewings, stick insects, earthworms, white-worms and many other insects can also be used.

#### Mice

Mice are available in various stages of development, they are always supplied frozen and care should be taken to ensure they are defrosted before being offered to the birds. All can be fed whole or chopped into smaller pieces. Species like the Kookaburra, like to smash the bones of the mouse against a perch or stone before swallowing it. When breeding it is best that they are offered in small pieces as the parent birds are not able to rip the mouse apart to feed the young in the nest.

**Pinkies** – are new born mice. Approximately <sup>3</sup>/<sub>4</sub>" to 1" in length they are suitable for all meat eating species, Laughing Thrushes, Bee-eaters, Jays and Barbets etc.

**Fuzzies** – are young mice with their first growth of "downy" hair. They can be offered to the birds either chopped or whole. This size is suitable to feed to species such as Barbets, Kingfishers, Jays and Magpies.

**Adults** – approximately 3-5 inches in length, are suitable for Toucans, Hornbills and Kookaburras. They can be fed whole or cut into smaller pieces.

## Day-old-chicks

Frozen day-old-chicks are a very cheap way of feeding meat to carnivorous birds. Once again care should be taken to ensure they are fully defrosted before use. Some breeders like to remove the egg-sack located in the belly of the day-old-chick by cutting it out with a sharp knife.

Other forms of meat can also be used to supplement the carnivorous softbills diet. These include mincemeat; strips of beef or ox heart, even canned dog-food can be used. When purchasing the birds ensure that you make a note of the diet they are currently eating.

## Additional Foods:

Many birds will eagerly eat sponge cake – available from you local supermarket, the cheap sponge cake either crumbled or covered with a small amount of nectar will be eagerly consumed. If cake is not available then an alternative is the sponge finger biscuit – if used with nectar they should be removed before they turn sour.

## Hard-boiled eggs

These are high in nutritional value for all birds. Either boiled in water or cooked in the microwave, they should be left to cool before being finely chopped and mixed in with soft-food. Some breeders will even dry the eggshells in a low heated oven and then crush the shells to provide a calcium supplement for their birds.

#### Cheese

This product can provide the diet of a softbill with additional vitamins, such as vitamin D3, B12 and B2. Cheddar cheese is recommended.

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