

TABLE 4: Feed requirements and practical feeding guidelines for different groups of birds.

Group	Species	Average Weight (g/bird)	Diet	Moist Feed Required (g/pair/day)	Daily Feeding Level
Smaller Seedeaters	Canaries, Finches, Budgies	20	Complete Mix for Small Seedeaters	5g	40g Complete feed/5-8 pairs
Small Parakeets	Conures, Cockatiels, Lovebirds	50	Complete Parakeet Mix	10g	40g Complete feed/4 pairs
			a. Sutherlands 10% Fat or b. Complete Parrot Mix & Sunflower Seed		
Large Parakeets	Ringnecks, Rosellas, Asian Parakeets	120	a. Sutherlands 10% Fat or b. Complete Parrot Mix & Sunflower Seed	20g	a. 40g Sutherlands 10% Fat/2 pairs or b. 40g Complete Parrot Mix/2 pairs 15g Sunflower Seed/2 pairs
			a. Sutherlands 10% Fat or b. Complete Parrot Mix & Sunflower Seed		50g
Parrots	African Greys, Amazons	400	Sutherlands High Fat Parrot Mix	130g	120g Sutherlands High Fat/1 pair
Large Parrots	Macaws, Palm Cockatoos	1200			

HELPFUL TIPS:

- **Bird should always have feed available.** By ensuring that there is around 5% feed leftover after each feed, you can be sure that your birds are getting enough food, and also allow for periods of sudden energy requirement increases. Avi-Plus Maintenance or breeder pellets are an easy way of supplying this extra feed. The pellets can be fed in a separate hopper, and if kept dry can be left for a couple of days at a time.
- **Avi recommends 2 separate feeds daily.** One feed should consist of a Complete Soft Food mix, the other should be Sunflower Seed and/or Pellets or Egg food.
- **The feeding guidelines in table 4** will help ensure that birds consume a balanced feed. If given too much feed, birds may start to eat selectively (eat mainly those things they like) and will not longer be eating a balanced diet.
- **Birds may be stimulated for their breeding season** by adding 10% Egg Food / Egg Food Breeder or Complete Breeder / Maintenance Pellets.
- **Increase feed by 100% or more** if birds are feeding young in the nest by adding Egg Food Breeder and/or Breeder Pellets to their normal feed ration.
- **Additional fruit or vegetables** can be added to the diet for variety.



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The Complete Guide to
Avi-Plus Complete Mixes



Avi-Products has come up with the following range of complete diets that simplify the bird keepers task of keeping his birds in optimal nutritional condition (See Table 1):

1. **Complete mix for Small Seedeaters** (Canaries, Finches & Budgies).
2. **Complete Parakeet Mix** (Cockatiels, Lovebirds, Conures).
3. **Complete Parrot Mix to be fed with a source of fat** (Sunflower seed or vegetable oil) **to all Parrots.**
4. **Sutherlands 10% Fat Complete Mix** (African Parrots such as Greys).
5. **Sutherlands High Fat Complete Mix** (Species with high fat requirements eg. Macaws).



TABLE 1: The ingredient content, nutritional composition and moistening instructions for the Avi-Plus Complete mixes.

Ingredients and Specs	Complete Mix for Small Seed eaters	Complete Parakeet Mix	Complete Parrot Mix	Sutherland's 10% Fat Parrot Mix	Sutherland's High Fat Parrot Mix
Roasted, rolled maize, peas & wheat	✓	✓	✓	✓	✓
Softfood supplement with vitamins, minerals & amino acids	✓	✓	✓	✓	✓
Sunflower Seed		✓		✓	✓
Manna, millet, canary seed	✓	✓			
Linseed/Rapeseed/Niger	✓				
Mixed Nuts					✓
Palm Oil				✓	✓
Protein	12.5%	14%	16%	16%	16%
Fat	6%	6%	4%	10%	20%
Volume of water for mixing	300ml /1kg dry feed	300ml /1kg dry feed	400ml /1kg dry feed	100-200ml /1kg dry feed	100-200ml /1kg dry feed

All diets contain roasted and rolled peas, maize and wheat mixed with a supplement. The nutritional supplements are included in these mixes to supply and balance the complete spectrum of the bird's nutritional needs. Thus all the required amino acids, vitamins and minerals are already present in the correct levels and no further additions are required.

- In the case of the Small Seed Eaters and Parakeet mix specially made up egg food supplement is used and small seeds are included as a part of the formulation.
- The remaining diets are supplemented with the Avi-Plus Parrot/Parakeet.
- In the Sutherland's diets the fat levels are increased by the addition of palm oil and sunflower seed and mixed nuts in the high fat diet.

These mixes are completely balanced and should be fed without any other supplements to adult birds with the exception of the Complete Parrot Mix. The Complete Parrot Mix is an "all rounder" that can be fed to a wide variety of species. It is low in fat (4% fat) so that the bird keeper can supply additional fat in accordance with the requirement of the different species. The most popular way is to feed sunflower seeds and another source of vegetable fat (also see fat requirements of birds in Table 2).

- Cold or lukewarm water should be added to moisten/soften the mix further. The recommended water addition varies between 20% (high fat diets) and 40%. No soaking time is required.
- To prevent separation the products are packed into 1 kg individual bags (i.e. 25 x 1 kg units per bag).

DIFFERENCES IN SPECIES FAT REQUIREMENTS:

Birds have different fat requirements based on genetic adaptations to normal environments. Compared to cage birds, free flying birds expend a lot more energy in their foraging behaviour and therefore consume higher fat diets. Table 2 groups the species according to their requirement for fat. Small birds generally tolerate high levels of dietary fat without getting obese, while certain larger parrot species (e.g. Amazons, Galah's) are very prone to obesity. As obesity negatively affects reproduction, these species should be prevented from over consuming high fat ingredients.

Differences in individual birds can never be fully allowed for by formulations or feeding guidelines, so it is important that keepers take note of their bird's condition whenever they are handled, and "fine tune" the fat inclusion according to body conditions.

TABLE 2: Fat requirements of cage birds (% of dry diet)

Low Fat (6 – 10% Fat)	Medium Fat (10 – 15% Fat)	High Fat (>20 % Fat)
Finches Canaries Lovebirds Cockatiels Parakeets such as: Budgies, Ringnecks, Galah's	Conures Eclectes African Parrots Amazon Parrots White Cockatoos	Queen of Bavaria Mollucan Cockatoos Palm Cockatoos Black Cockatoos Macaws

Where additional fat is required (if feeding Complete Parrot Mix) the guidelines in Table 3 can be used for the feeding of Sunflower Seed (gram Sunflower Seed per pair per day).

Keep sunflower seed to a minimum, as it's biological value of protein is low. Sunflower Seed is only useful as a source of fat, and if birds consume a large portion of their daily diet in the form of Sunflower Seed as opposed to a Complete Feed, there will be a shortage of essential nutrients.

Do not exceed the following when feeding sunflower seeds:

BIRD WITH LOW FAT REQUIREMENTS: No more than 10% sunflower seed of total daily feed.

BIRDS WITH MEDIUM FAT REQUIREMENTS: No more than 20% sunflower seed of total daily feed.

BIRDS WITH HIGH FAT REQUIREMENTS: No more than 20% sunflower seed of total daily feed, use additional oil.

TABLE 3: Sunflower Seed addition (g/pair/day)

	Low Fat requirements	Medium Fat requirements	High Fat requirements
Parakeets	2 g	4 g	–
Medium Parrots	5 g	10 g	10 g + 2.5 g Oil*
Large Parrots	12.5 g	25 g	25 g + 9 g Oil*

* Vegetable oil (eg. canola, linseed, sunflower or palm)

FEED INTAKE OF BIRDS:

Feed intake is governed by the requirement for energy. The energy requirement of a bird is commonly expressed as the basal metabolic rate (BMR) which is calculated using the following formulas:

$$\text{Passarine BMR (kJ)}^{-1} = 480 \times \text{kg (body weight)}^{0.73}$$

$$\text{Non-passarine BMR (kJ)}^{-1} = 308 \times \text{kg (body weight)}^{0.73}$$

The energy requirement for the BMR is then increased to accommodate factors such as flight, environmental temperature, breeding activity levels and stress levels.

The ingredient composition of a feed comprises the final products energy value and is calculated using the following standards:

$$1 \text{ gram of fat} = 37 \text{ kJ}$$

$$1 \text{ gram of protein} = 17 \text{ kJ}$$

$$1 \text{ gram of carbohydrates} = 16 \text{ kJ}$$

Finally the digestibility or absorption, and volume of discarded husks of various ingredients impacts on the feeding guidelines for any product. Table 4 indicates the feeding requirements and practical feeding guidelines for each of our products.