Seed Values. by George Mitchell

Years ago when seed growers were not so concerned about high production and extra good results from a crop, our birds seemed to give better fertility. In the early 50's we had good strong and robust birds, big nests and our stock birds seemed to last longer as stock birds. These days the high use of D.D.T.'s and special agricultural sprays, has, in my opinion had a detrimental effect on our birds in the breeding cage.

I would like to touch on the various seeds we feed these days as food values for our birds. In Plain Canary seed, and for that matter all seeds, the protein content is variable in regard chiefly to the soil in which it was grown. Canary seed is also valuable by reason of its fat content although in that regard it is not quite as valuable as White French Millet. The fat content, carbohydrates and the calorie value which goes hand in hand with them, are higher in the White French Millet than in Canary seed. Calories denote heat energy.

Utilisation: - Even though the protein content may vary between 15% and 20% it is the amount of protein actually utilised that must be considered as not all of the protein eaten will be used. Some cannot be absorbed by the body before being passed out. It is the amino-acids which influence the utilisation of protein.

All told there are 23 known amino-acids among which are cystine, lysine and methionine, the most important of which to birds is methionine. The prime function of protein in the animal body is to supply the amino-acids Animal protein food is generally of a higher quality than plant protein foods particularly because it contains large amounts of certain essential amino-acids. These essential amino-acids cannot be made by the birds and must therefore be supplied in some form.

In the utilisation of grain, fibre plays an important part. For example whole oats is relatively high in fibre. in hulling, the outside skin is taken off and the fibre content greatly reduced. The fibre content is much greater in small grains such as Millets than larger grains like wheat, sorghums and maize mainly because of the greater proportion of skin coating around smaller seeds. Although Millets are slightly higher in fibre than Plain Canary the Canary seed is much higher in protein. The fat content is about the same, however, the Canary seed has a small amount of Calcium and a good amount of Phosphorous which, combined with its high protein content makes it a very valuable (and necessary).

Pannicum seed is fairly high in protein (11%-14%) and much of this protein is utilised. The fat content and calorie value of Pannicum are lower than some other grains so you see that the idea of blending these various grains is to balance the ration in regard to protein, fat, oil, vitamin and calorie intake.

White Plillet is a grain which has come into prominence over recent years. It is one of the major seeds grown in Queensland and is especially used for stock feeding. It has a high protein content and high energy value. It has a low ash content which denotes very little wastage. It has no Calcium value and very little Phosphorus.

Calcium content is very low in most grains and must therefore be given a lot of thought in your feeding as it is essential in the diet of any bird or animal. Calcium is necessary for bone structure and egg shell texture. A deficiency will lead to softened bones, a tendency for the joints to swell and of course poor quality or soft shelled eggs. Calcium has to be related to Phosphorus intake. The grains cannot supply sufficient phosphorus and although these minerals can be obtained from sea grit, cuttlefish or Mt. Gambier limestone I have always supported adding Syrup of Calcium to the drinking water.

Breeders should also be feeding Grey Sunflower seed, Safflower seed and crushed Maize in their seed mixtures at this time of year. These seeds are high in protein content (18%-20%) and have great value in the oils they supply. Should breeders wish to use an oil in their breeding mixture any of the following will do - Safflower, Maize, Sunflower and Soya Bean oil with the latter also being high in vitamin content.

Do not use Cod Liver Oil in your seed mix as it has been found to be responsible for's enlarging the heart and heart tissues of budgerigars and canaries with fatal results.