

## Mash Recipe by Shauna Roberts

Background: This is what I have been feeding my flock, although only for 9 yrs (as of 2006), ever since a cockatoo was diagnosed with a kidney problem and so far it has worked great. Other's in the flock have come with malnutrition, plucking, liver problems, immune deficiencies. Blood work has been done often along with exams which sometimes have included radiographs to keep an eye on certain health conditions. So far my flocks health has remained good or improved.

Good and bad news about this recipe. The bad news is that the recipe amounts are up to you. The good news is that the recipe amounts are up to you. Not having exact amounts given may seem complicated or confusing at first but because flock size and food amount needs vary, this recipe gives you the freedom of coming up with a plan to suit your needs. This mash recipe varies from others in that the foods are fresher, because produce is added daily, rather than cooked in with grains and legumes.

**GRAINS:** Combine as many whole grains as you like but make sure you choose at least 3: millet, quinoa, amaranth, oats (whole, not rolled or cut), hullless barley (not pearled), spelt or kamut, teff, brown rice, wild rice, buckwheat. I combine at least 3 grains each time, often more and I always include either amaranth, quinoa or both and keep any rice in small amounts. Grains are then soaked and sprouted OR soaked for at least 8 hours and lightly cooked by heating until they almost boil, covering and turning off the heat. I often cook grains during the coldest winter months.

Guideline example recipe: Combine the chosen grains to equal 2 cups.

**LEGUMES:** Add a combination of adzuki, mung, sprouting peas and lentils. Soak them overnight at least 8 hours and then cook by rinsing, adding fresh water, bring to full boil. Boil for 10 minutes uncovered then cover and simmer for 20 minutes. If your sprout legumes be sure to wait for tails to be at least 1/4" long on the lentils and the other legumes tails to reach about 1/2" in length. These legumes are used because they are easier to digest than other varieties. Sprouting takes about 3 days. If you sprout, you can sprout them with the grains. I recommend using an Easy Sprouter. It is important for digestibility that legumes either be cooked for fully sprouted.

Guideline example recipe: Combine legumes to equal 1 cup.

Mix the legumes and grains a little differently each time but always have approximately 2 parts grains to 1 part of legume in order to have a complete the amino acid profile, which results in a complete protein. When combined , grains and legumes offer a complete protein that is easily digestible, more so than animal protein.

Guideline example recipe: combine grains and legumes to equal 3 cups.

You now have your recipe base to which you'll add any chosen fresh produce (veggies and fruit), daily for your bird (if need be you can also add organic frozen vegetables or fruit). The grain/legume mixture can be stored in the refrigerator for 2-3 days or if you make larger batches it can be frozen. To make it convenient you can freeze in 1-2 days serving sizes and thaw in the fridge for 24 hours before you plan to serve. Using a microwave to thaw food is not recommended.

Once the legume/grain mix is done...and cooled if it has been cooked, add at least 3-6 organic vegetables and 2-3 fruits. The legume/grain mixture should be approximately 45% of the meal. The combined greens and veggies should make up 45%, and 10% can be fruit and other additions.

Choose veggies from different categories to help you cover nutritional bases, and be sure to vary these some each time if possible, and offer seasonal foods. Choose at least one or more from EACH of the 3 categories, until you have at least 6 choices.

#### VEGETABLES:

Category 1-Orange veggies (choose at least 1 or more in this category): pumpkin, carrots, acorn or butternut squash, red pepper (keep peppers to a minimum due to their solanine content which inhibits calcium absorption).

Category 2-Dark Leafy greens (choose at least 2 or more in this category): kale, dandelion greens, mustard greens, collard greens, turnip greens (you may also want to occasionally add beet greens, spinach or chard, even though their calcium, iron, magnesium content is limited due to their oxalic acid content, if your bird has kidney problems, high oxalic foods should be avoided)

Category 3-Other veggies ( you should have at least 5-6 or more veggies, covering all 3 categories, to mix into the grain/legume mixture) : broccoli (if you lightly steam you will significantly increase the calcium content, offer steamed and raw for variation), celery, cucumber, romaine or other dark leafy lettuce, jicama, peas, zucchini, green beans, tomatoes, red or green pepper, cabbage, Chinese cabbage, bokchoy, carrot tops, cactus leaf, okra, kohlrabi, spaghetti squash, cauliflower, radish, chayote squash, zucchini, brussel sprouts, escarole, endive, corn, beet root

Edamame (green soy) can be offered about 2-3 times a week as one of the veggies.

Guideline for serving-If you are serving 1 cup of grains/legumes mixture to your birds that day, then you'll want to add approximately 1 cup or a little more of vegetables from the above 3 categories.

Fruits (choose 2-3 in season) (Generally about 10% of the total serving): papaya, mango, strawberries, blueberries, pomegranate, blackberries, raspberries, kiwi, oranges, cantaloupe or other melon, nectarine, cherries, apricot, grapefruit, banana, pears, apple, figs, pineapple, lemon, lime

When adding foods that birds aren't crazy about, chop them very fine. You may even chop food in a food processor to help introduce it to your flock. If your bird picks through food, which can easily result in an unbalanced diet, finely chopping foods is highly recommended.

Additions: You may also want to occasionally add to the mash a little broken up organic whole grain pasta, shavings of wheat grass, cooked egg (1/4-1/2 teaspoon per bird 1-2 times per week, do NOT include the eggshell), non fat organic yogurt (1/4-1/2 teaspoon per bird a few times a week), sprouted grain bread crumbs, edible flowers (make sure they aren't sprayed), a small piece of finely minced piece of garlic clove can be mixed in 3-5 times per week, or a dash of seasoning such as cinnamon, cayenne (do not give to birds with fatty liver), fresh grated ginger, turmeric, un sweetened coconut or even a little fresh washed chickweed or clover from your garden.

Seed: These can also be added in small amounts if you like. Sprouted seeds are preferred. Sunflower seed, pumpkin seed, sesame, nut pieces.

Add supplements. These can be added daily or added to the grain/legume base if you prefer.

Kelp- needs to be given in very minute amounts but is important to include. If you add it to the grain/legume base, add 1/4 teaspoon to 3 cups of base mixture. If you add it daily, then about the size that would fit on the end of a pencil or 1/10 of 1/4 teaspoon for a medium sized parrot.

Green supplements: Rotate these...Powdered alfalfa and either wheat or barley grass. Alfalfa 4 or more days a week and then wheat or barley grass on the other days. These are usually purchased in capsule form that can be opened. A light sprinkling daily to provide vitamins, minerals, trace minerals. Suggested amounts daily: Less than 1/8 capsule for birds under 100 grams, 1/8 capsule for birds up to 250 g, 1/4 capsule 250-500g, 1/3 capsule 500g-750 g, 1/2 capsule 750g-100g.

If desired a product called Veggie Magma which contains several powdered vegetables can also be lightly dusted and mixed into mash.

A small pinch of hemp protein powder, per bird, a few days a week if desired for extra protein and balance.

EFA's: Freshly ground Flax seed (use a coffee grinder just for this purpose) daily OR or cold pressed and dated, hemp seed oil 4-5 days per week.

Approximately 1 drop of oil per 250grams that your bird weighs. If grinding flaxseed then about 1/4 teasp. per 250 grams. For budgies you may want to use less.

Alternate with unrefined organic palm oil on other days. A tiny bit for smaller birds. Approximately 1/8 teaspoon for every 250 grams. Palm oil appears to provide some of the best antioxidant protection containing natural beta-carotene as well as alpha and gamma carotene's and lycopene.

Another oil to consider adding at times may be sea buckthorn. 1 drop per 250 grams.

A squirt of organic ACV (apple cider vinegar) if desired: approximately 1/4 teasp birds up to 250g, 1/2 teasp up to 500g etc.

If needed, a quality acidophilus (probiotic) can be mixed in.