Fish Nutrition: Choosing a Basic Freshwater Fish Diet

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There are over 25,000 different species of fish in the world and every individual species has their own special food preferences and requirements. While it may nearly be impossible to reproduce the exact diet that your aquarium fish would eat in the wild, we can provide a healthy diet if we follow some basic feeding guidelines. With the introduction of dried flake, granular, and pelleted foods, feeding aquarium fish has never been easier, yet every year thousands of fish become diseased or die because of improper nutrition. Nutrition problems usually result from feeding the wrong type of food (plant based, animal based, sinking, and floating), feeding improper amounts (too much or too little), and the introduction of dangerous organisms when feeding live foods.

Dried Foods

Commercially available dry foods are by far the most popular and can do a pretty good job of meeting the basic nutritional needs of many aquarium fish. Dry foods come in the ever-popular flakes, granules, pellets, and wafers. Most aquariums contain a variety of fish including fish that feed on the surface, others that feed in the middle layer and still others that only feed on the bottom. It is essential that you supply foods that are adequate for each feeding level of fish. Feeding only a floating food is not adequate for mid level and bottom feeders. Fish that feed on the surface, like the hatchetfish have up turned mouths that are suited for taking food off of the surface. Tetras are mid level feeders and have mouths that are straight-ahead and best suited for grabbing food out of the middle of the tank. Catfish have sharply down turned mouths suitable for bottom feeding. Even if a hatchetfish would leave the surface area to feed at the bottom of the tank, the location of its mouth would make it physically impossible to do so. The same is true for a catfish trying to feed on the surface. It is very important that you know what level all of the species of fish in your tank need to feed at and then provide the appropriate types of floating or sinking foods.

Herbivores, Omnivores, and Carnivores

Some fish only eat plants and others only eat animals, but the majority of aquarium fish are omnivores and eat both plants and animals. Plant eating fish that are fed animal-based foods will not be able to digest the food and will starve to death. The same is true of strictly carnivorous fish that are fed only plant-based materials. It is critical that you match the type of food that you feed to the type of fish in your aquarium. It is very likely that unless you only have one species of fish in your tank, you are going to need to feed several different foods, some floating, some sinking, some animal based and some plant based. When choosing the fish that you will build your aquarium around, make sure you take each fish's nutritional needs into consideration. Fortunately, there are a wide variety of easy-to-store affordable dry foods and it does not cost any more or take any more time to feed a pinch out of three separate containers, rather than just one.

Quality and Quantity

At first glance, all dry foods may look relatively the same, but a little label reading can reveal a lot about the product. In recent years, many dog and cat owners have learned to read the ingredients on the back of a food bag to determine the quality. The same can be done on quality fish food. If your fish require a more vegetarian diet read the ingredients to make sure the food is plant based, the same goes for the carnivorous fish. The other important thing on the label is the name. Well-respected companies are usually your best bet when choosing a fish food brand. Beware of the no name inexpensive dry foods, they are usually of questionable quality.

The quantity of food you feed your fish is also very important for their overall health and the health of the tank. Underfeeding can result in thin or stressed fish. Overfeeding can result in uneaten food that will decompose, causing an increase in ammonia, nitrogen, or unhealthy bacteria or molds in the tank. As aquarium owners become more familiar with their fish, they will be able to fine tune the feeding of their individual fish, but as a basic rule, fish should be fed two to three times a day with a quantity that they can fully consume in 3 to 5 minutes. Overfeeding is much more common and detrimental than underfeeding. Remember that some fish, especially catfish eat only at night in the dark, so if you have nocturnal fish you need to adjust your feeding schedule to accommodate them as well.

Fresh, Frozen, and Live Food

Let's face it; feeding your fish a dry food day after day is the equivalent of you eating a bowl of Total cereal three times a day for the rest of your life. While you would not starve to death, you probably would not reach your full physical potential, nor would you enjoy your food very much. While many fish that have been bred in an aquarium take commercially prepared dried food readily, they almost all enjoy and will benefit from a variety of foods including fresh, frozen, or live food. If you want to see about the closest thing to a fish smile that there is, throw a couple pieces of finely chopped earthworms in your tank some time. Fish love fresh foods and insects and many will be healthier and breed better if they are supplied. When feeding live or fresh foods remember, the one important rule is to never introduce any food or water in your tank that could contain harmful parasites, bacteria, or toxins to your fish. There are a wide variety of commercially available fresh, frozen, and live foods and the description of all the possibilities are beyond the scope of this article. Choose your food sources carefully and if you collect your own wild harvested species, remember to give them several days in clean water or earth to 'clean out' their intestinal tracts and rinse them carefully before putting them in your tank. Another caution with wild harvested food is to never harvest tadpoles, frogs, newts, or similar amphibians, as many of these are protected and may be

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threatened or endangered in their constantly shrinking environment.

Conclusion

There are many excellent books devoted entirely to the subject of feeding aquarium fish. They are well worth the price and can be both enjoyable to read as well as informative. Remember to observe the basics of fish nutrition including the correct type and quantity for your specific fish, and do not forget to add a variety of foods including some fresh or frozen food every now and then.

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