

HOW TO FEED YOUR AQUARIUM FISH



Providing Aquatic Solutions

QUALITY PRODUCTS MADE IN ITALY

Fish-feeding time in aquarium is both a necessity and a happy moment because you see your fish all together. You can watch their behavior, observe all parts of their bodies carefully and teach your children the habit of any species of fish.

When food is given, also the shyest fish come out from every hiding-place so that anyone who is watching at them monitors their state of health as well.

Each species of fish has a distinctive way of eating and of reacting when food is given.

This guide explains how to choose the right food taking into consideration fish habitat.

This booklet highlights also the importance of the ingredients that are used to produce fish food in order to ensure a healthy and efficient diet.



FISH

Aquarium fish is mostly captive bred, rarely is it captured in the wild. For this reason, the fish you buy in shops are used to eat industrial dry food, there is no need to feed them with live food.

The knowledge of our aquarium guests' origin is of primary importance to make them live healthy and for long in a bio-balanced environment.

Most of fish come from Asia, South America and Africa. If we know their place of origin, we are in a position to determine the water parameters such as pH, GH, KH, and reproduce a habitat as near to natural living conditions as possible, taking into account their requirements. Not all types of fish live together comfortably and peacefully, basically it depends on water quality (pH difference or carbonate hardness), often it depends on their level of aggressive behavior.

Asian tropical fish's place of origin includes quite all Southeast Asia; it is a wide area spreading from South China and India to Indonesia and Iran. From that area come most of species of fish that are supplied to the fish market worldwide.



Most South American tropical fish come from the Amazon. Part of them live in a wide area spreading from North of South America to Argentina that includes the tropical and subtropical regions of this continent.



African tropical fish species are fewer but they include most of Cichlids, a very beautiful type of fish with bright colours and very easy to breed in aquarium. Several fishkeepers are fond of this fish because they get many satisfactory results from breeding. African Cichlids could live well also in tap water because they do not need special water quality. Their main place of origin is located in the region of the African Great Lakes: Malawi, Tanganyika, Victoria, but the area where they live spreads from Sahara to the north of Southafrica.



HOW MANY FISH MAY I KEEP IN MY TANK?

The most widely known rule for stocking a tank is the one cm of fish per liter of water. Fewer are the aquarium inhabitants better is their life, of course. It is essential to prepare a suitable environment by trying to reproduce a habitat as near to natural living conditions as possible. Therefore tank must have a good water conditioning, a filter system suitable to its capacity and live plants (not plastic plants!) to ensure a right functioning of nitrogen cycle.

FILTER

Aquarium filters are more than important for a tank, they are a vital element: more efficient is the filtering system better all aquarium parts function. The efficiency of the filtration is mainly due to the right selection of filter media. Prodac International S.r.l. offers a wide range of media suitable for any filtering system and any kind of tank.



WATER

Tap water is absolutely unsuited for aquarium because it contains chlorine and heavy metals that must be removed when poured in aquarium. AQUASANA is a water conditioner that makes tap water perfect for receiving your fish because it neutralizes all polluting elements in tap water. Water conditioning is not enough for the comfort of your fish because the aquarium is almost "sterile", it is necessary to introduce special bacteria to start the nitrogen cycle.

NITRIDAC is a liquid high concentrate bacteria (40 million bacteria per ml) to keep existing bacteria live and active in filter and water. NITRIDAC nitrifying bacteria break down organic matter and transform highly toxic ammonia into nitrites and nitrites into nitrates.



PLANTS

Aquarium plants are not only a decorative element. They also release oxygen and provide organic matter bio synthesis keeping water parameters perfectly balanced for the life of fish. Thanks to its very long experience, PRODAC INTERNATIONAL wide range of liquid fertilizers and substrates offers a top quality support for growing and developing water plants.



FISH FOOD

The company produces specific nutrition for any kind of fish and selects the best ingredients to feed them.

Fish can be omnivore, herbivore and carnivore. In the wild, the fish feed on plants or algae (e.g. Cichlids, Locariidae, Poecilia) if they are herbivore, or on animal proteins if they are carnivores (e.g. fish predators). At present, the fish food industry can provide a wide range of products that include the following ingredients: fish meal, vegetables, mineral salts, trace elements, vitamins, to ensure a perfect balanced diet to your fish.

Vegetables are important. Some of them contain carotene that enhances the natural colour of fish, other vegetables like spinaches contain many mineral salts. Crustaceans and fish meal are also vital elements because they strengthen the organism of fish and serve a building material for the growth of body. All fish need proteins, fibers, fats, carbohydrates, trace elements and vitamins. A healthy and balanced diet manufactured with top quality products is fundamental for promoting the vitality of fish and for helping the resistance to diseases.



PRODAC INTERNATIONAL fish food contains all the above mentioned essential elements and more, such as Omega 3 and 6, Canthaxanthin, Vitamins A-D3-C-E and Aloe Vera which protects the skin and gills of both marine and fresh water fish. After many years of research and testing, Prodac International is in a strong position to offer the best fish food to satisfy the requirements of any species of fish.

Canthaxanthin is a yellow/orange biological pigment.

OMNIVORE



HERBIVORE



CARNIVORE



NUTRITIONAL ELEMENTS

CARBOHYDRATES

Carbohydrates are the most abundant organic compounds in nature. They act as “Bio-fuel” because they provide quick energy to living cells and are a constant source of energy as they store it. Carbohydrates or Glucides are stored in the molecules of most plants.

PROTEINS

Amino acids are the basic building blocks of proteins. During the digestion, enzymes break down the protein into amino acids which are then absorbed through the intestinal walls becoming nutrients that support the muscle growth. High-protein food provides vital energy to fish. Proteins are of both plants and animal origin. Vegetarian fish (e.g. Locariidae) have very thin and long intestine and they need vegetal proteins, that is one of the reason why fish must be fed according to their own needs.

TRACE ELEMENTS

They are inorganic bio-elements present in all organisms in only very small amounts. They act as cofactors of several enzymes and interact in chemical reactions of fish metabolism.

MINERAL SALTS

They are important because contribute to the growth of fish and help in the formation and strengthening of the skeletal system.

FIBRES

They have a low nutritive value. Nevertheless they are indispensable to have a good intestinal activity.

VITAMINES

All kind of food must contain Vitamins that are vital elements for growth. Vitamin A is an essential nutrient for growth and development of fish and for the maintenance of good vision. It is an important Vitamin to help boost fertility and to protect skin health. Vitamin C is very important to keep skeletal system healthy. It strengthens the fish's immune system and prevents parasitic infections on gills. Prodac International uses a stabilized form of Vitamin C in its fish food production to avoid oxidation when in contact with air. Vitamin D₃ encourages the absorption and metabolism of calcium and phosphorous. Both elements play an essential role in healthy bone development and are also important elements for longevity. Vitamin E stimulates hormonal production in the organism of fish and has antioxidant properties.

HOW TO FEED FISH

Fish must be fed daily, according to the quantity of animals in aquarium and to their size.

A good rule is to give food two or three times a day in such a quantity as it is all to be eaten within three to five minutes.

If food is not eaten quickly the next dose must be reduced because it means that the previous quantity has been excessive. Overfeeding deteriorates water quality in aquarium; uneaten food generates more pollution and raises the nitrates leading to severe damages up to fish's death.

Always give the same food?

Oh no! It is very important to vary the diet.

For instance freshwater fish can be fed with **TROPICAL FISH FLAKES** a basic food in flakes for all tropical fish, or alternatively, with **COLOR** that enhances the natural colour of fish, or with **BIOGRAN** a basic food in granules, or with freeze-dried food as **TUBIFEX** or **BLOODWORMS**.

FISH EAT IN DIFFERENT WAYS

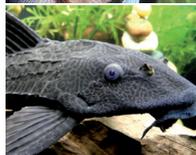
Fish eat at three level of aquarium water column:



fish with up-pointing mouth eat on the surface;



fish with a terminal mouth which is usually considered a "normal" mouth eat in mid water;



fish with mouth on the underside of their head eat on the bottom.

WHAT KIND OF FOOD MY FISH EAT?



TROPICAL FISH FLAKES and **BIOGRAN** are a basic nutrition to offer a balanced diet to tropical aquarium fish. Both flakes and granules float on the aquarium surface first, and then drop to mid-water, finally they lay on the bottom. This way all fish swimming at any level can feed.



VEGETABLE FLAKES, SPIRULINA FLAKES, VEGETABLE CICHLID GRANULES and PRO GUPPY are vegetable food for herbivorous fish such as: Platy, Xiphophorus, Black Molly, Guppy.



COLOR is a food in flakes enriched with canthaxanthin and natural ingredients that enhance the natural colour of tropical fish.



STICK-ON are food tablets that can be stuck to the aquarium glass so all fish eat at the same place. This way you can closely observe your fish while feeding, monitor their state of health and find dangerous diseases and parasites.



TABLET and **VEGETABLE TABLET** are food tablets for all bottom feeding fish. **VEGETABLE TABLET** is a specific food for herbivorous bottom feeding fish.

ALGAE WAFERS are low dissolving food tablets containing 10% more wood than most vegetable food. It is studied to feed many Loricariidae (Peckoltia and Panaques) because those species primarily eat logs and roots in the wild. Fish bite into the bark of logs and the peel of roots and suck the nourishing part.



ARTEMIA SALINA

Are small brachiopods crustaceans of the order Anostraca, ideal to feed some species of fish or to be used as food supplement. They are rich in lipids, in saturated fatty acids and have high content in calcium.

Artemia salina is an excellent food source for all kinds of fish and for invertebrates as well, because it increases pigments production and keeps all aquarium organisms healthy.



ARTEMIA is an animal-based fish food consisting of 100% freeze-dried ARTEMIA, brine shrimps with a high-protein content and ideal for both freshwater and saltwater fish and aquatic turtles.



Artemia eggs can remain in a metabolically inactive state for long, once they are activated become an ideal food source for both oviparous and ovoviviparous fry and for invertebrates.

ARTEMIA EGGS

A top quality product which guarantees the hatching of 85% of eggs.



RED MOSQUITO WORMS

Thanks to their shape and taste, red mosquito worms are one of the most appetizing fish food. No fish can resist such a meal. They are rich in proteins and amino acids, an ideal nourishment for fish which refuse food in flakes or granules.



BLOODWORMS CHIRONOMUS is a simple animal-based fish food consisting of 100% freeze-dried red mosquito worms. It is the best food source for all freshwater aquarium fish and it is necessary for all fish which feed on insects.



TUBIFEX

Tubifex (TUBIFEX TUBIFEX) is a slender segmented worm that may grow up to 3 cm in length. It has a thickness of a few tenths of a centimeter and belongs to the group of Annelida. Thanks to its high hemoglobin content it is a highly nourishing fish food.



TUBIFEX is a simple animal-based fish food consisting of 100% lyophilised Tubifex which are small aquatic worms. As it is rich in protein this food is necessary for all carnivorous freshwater fish.

KRILL

In the wild, Krill occupy an important position in the food chain of several species of fish and invertebrates. They constitute a separate order of the class Malacostraca. They are rich in Omega 3 the main function of which is to provide a high amount of proteins with low fats. This feature classifies krill as basic food.



KRILL is an animal-based fish food consisting of 100% freeze-dried KRILL (Euphausia Pacifica). Krill is the best food source for all medium/large sized saltwater aquarium fish as it is complete, balanced and natural. Its high nutritional content helps maintain the natural colours of tropical fish.



KRILL SMALL it is an animal-based fish food consisting of 100% freeze-dried KRILL. As it is complete, balanced and natural Krill is the best food source not only for all saltwater aquarium fish, but also for medium/large sized African cichlids and aquatic turtles.

FISH FOOD PACKED IN ENVIRONMENTALLY FRIENDLY TUBES

All fish food produced by PRODAC INTERNATIONAL is packed in tubes that are biodegradable including the cap. The tubes do not need any special treatment to start the decomposition process, they do not need light, heat, or mechanical action.

They completely biodegrade, both aerobically and anaerobically, when they are thrown in any place where other substances are decomposing, such as: refuse, bins, tips, compost or soil.

The tubs do not need special storage conditions, nor are they damaged by heat, light, humidity or the stresses imposed by transportation, shipment, warehousing or handling. The material of which they are made is free of heavy metals, ecologically safe and complies with Directive 94/62/EC of the European Parliament and European Council dated 20 December 1994 on packaging and packaging waste.



**BIODEGRADABLE
PLASTIC**
patented

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