# How to feed your aquarium fish close to nature



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## **Feeding close to nature**





# **The functions of the ingredients**

Fish food must contain all nutrients in a suitable form and in a balanced ratio as to ensure appropriate nutrition. The most important ingredients and their functions are:

## Protein

Proteins are primarily utilized for muscle buildup. Since only certain proteins are optimally digestible, **sera** uses protein sources of aquatic origin or insect larvae whose amino acid profile can be utilized perfectly by fish.

## Carbohydrates and fats

They are the most important energy sources for fish. They must be in a balanced ratio as to avoid fattening and organ damages. The oils used, such as marine fish oil and pure rapeseed oil, provide a very high percentage of valuable highly unsaturated fatty acids such as omega fatty acids.

## Minerals and trace elements

Among others, minerals and trace elements fulfill important key functions during metabolism. Insufficient supply there-

fore quickly can lead to severe deficiencies. The high quality raw materials of the **sera** foods, such as Krill and Spirulina, provide the fish with all required minerals and trace elements in a form that can be utilized optimally. Artificial supply is therefore not necessary.

## **Ballast substances**

These mostly indigestible nutrition components are not utilized by the body but considerably contribute to healthy digestion. Severe digestion problems may occur if fish are being fed food low in ballast substances for a longer time.

## Vital substances

Vitamins, pigments, antioxidants, complex secondary plant substances, natural immune modulators – the list of these partially essential substances is long. According to current state of knowledge, a varied diet with ingredients close to nature is the best protection against possible deficiencies. **sera** food fulfills this requirement and thus supports the liveliness and splendor of your fish.



# Immune protection by sera fish food



Strong immune system



colors



clear water

Best digestion



Healthy and balanced growth



Firm and even skeleton structure

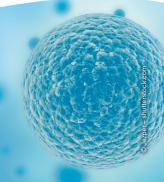
The basic principle of our food: Finely balanced components and highly functional, particularly valuable ingredients that we combine according to our always current research findings, form the basis for health, liveliness and beauty.

- ✓ Natural astaxanthin, beta glucanes, the probiotic *Bacillus subtilis* and MOS support the immune system of the fish. The sensitivity towards diseases is reduced, the fish lives healthier and longer.
- ✓ Natural pigments (from Haematococcus algae, Spirulina and Krill, among others) enhance the body colors; secondary plant substances have positive effects on the entire metabolism of the fish.
- ✓ Long chained, highly unsaturated omega-3 and omega-6 fatty acids have positive effects on nerve cells, heart and circulatory system.
- ✓ Naturally included vitamins are partially lost during processing and storage. **sera** adds them with individually matched vitamin blends manufactured on location, not with simple ready-to-use blends as others do.
- ✓ The balanced and appropriate supply with all required nutrients supports healthy, strong growth, liveliness, fertility and the well-being of the fish.

Bacillus subtilis is an intestinal stabilizer recommended by the European Food Safety Authority that is proven to have positive effects on growth, health, food utilization, water pollution and disease incidence of ornamental fish.



Mannan oligosaccharides (MOS) work in a prebiotic way. They effectively support intestinal health and immunity in a natural way, as well as growth, vitality and food utilization.





# More liveliness by extra vitamins

Vitamins are essential substances – that is essential, organic compounds the body cannot produce (in sufficient amounts).

Insufficient vitamin supply leads to deficiencies that may lead to loss of appetite, growth problems, increased sensitivity towards diseases or skin damages. Deficiencies in one vitamin cannot be compensated by excess supply of another vitamin.

Stress, as it may – for instance – occur after a transport, varying temperature or territory fights, increases the vitamin requirements of the fish. An additional vitamin dose often turns out very supportive in such situations as well as in case of a disease, for breeding or for juvenile fish. The liquid multivitamin preparation **sera Fishtamin** allows for directed and reliable vitamin supply.

**sera Fishtamin** is simply dripped directly onto the food prior to feeding. Fish lacking appetite can also be supplied by addition directly into the water.



prevents deficiencies with all important vitamins

for healthy, lively fish



# Suitable food for every fish

sera provides a broad range of food types, sizes and shapes for fulfilling the requirements of the many different ornamental fish. Besides the size of the fish, their mouth size and kind of teeth, the specific nutrient requirements and the different feeding habits are relevant for choosing the right food.

Due to the different floating or sinking behavior of the water stable **sera** food particles, the different food types are available in the different water layers and allow the different fish species to eat in a natural way.

The preferred eating habit can often be recognized by the body shape of the fish:

Fish with straight back, a mouth directed upwards and a dorsal fin shifted backwards, such as hatchetfish, prefer to dwell at the water surface. Food flakes such as **sera Vipan Nature** and FD food organisms floating at the surface are ideal for these fish species.

Fish with bended dorsal and ventral contours plus a mouth facing forwards, such as many cichlids, characins and barbs, mainly dwell in the middle water layers. They prefer to eat granulated food floating in the water, such as **sera Vipagran Nature**. They will also nibble enthusiastically at food tablets, such as **sera O-Nip Nature**, attached to the aquarium glass.

Bottom fish have a flat belly and a mouth directed downwards. Well-known members of this group include many catfish and loach species. Sinking food tablets such as **sera Viformo Nature** and chips such as **sera Vipachips Nature** or **sera Catfish Chips Nature** are best suited for them.

Tip: The symbol on the sera labels tells you at one glance whether the special food is intended for fish that prefer to eat at the water surface, in the middle zone or at the bottom.



# Staple food – the sera Vipan family



The sera Vipan Nature family includes three food types that are designed for the different water layers – top – center – bottom – and therefore allow for a natural and appropriate diet. Our extensive range of special food types is additionally available to you for special purposes and more variety.



## sera Vipan Nature – the all-rounder for "surface feeders"

The carefully manufactured flakes for all fish that eat at the water surface enhance health and liveliness due to their carefully selected ingredients with prebiotic effect.



## sera Vipagran Nature – the versatile in the middle water layers

The slowly sinking soft granules for all fish that eat in the middle water layers are not only excellently digestible and keep their shape particularly well, but also enhance health and liveliness thanks to prebiotically effective ingredients.



## sera Vipachips Nature – the basis for bottom dwellers

The quickly sinking chips keep their shape for a long time and thus ideally match the feeding habits of the fish eating at the bottom. Their health and liveliness is enhanced due to prebiotically effective ingredients.

## **Color food**

Valuable ingredients such as Haematococcus algae, Spirulina, Krill and Gammarus add highly functional pigments, which optimally support coloration, to sera color food. Carotenoids, especially the valuable astaxanthin of Haematococcus algae, additionally enhance disease resistance and liveliness.



## sera San Nature – the color food for "surface eaters"

The carefully manufactured flakes for all fish that eat at the surface support the color development in a natural way due to high quality ingredients such as Haematococcus algae and Krill.

## sera Bettagran Nature – the color food for fish in the middle water zone

The slowly sinking fine granules for all fish that eat in the middle water layers keep their shape particularly well and support natural color development due to valuable ingredients such as Haematococcus algae.





## sera Plankton Tabs Nature – the color food for all bottom dwellers

The excellently digestible food tablets with Krill support color development, healthy growth and fertility in a natural way of fish eating at the bottom as well as invertebrates in fresh and marine water.

## **Veggie food**

The varied and valuable herbal ingredients such as algae, herbs and vegetables provide herbivorous fish, whose digestive tract and physiology requires mainly herbal nutrition, with ballast substances and all necessary nutrients and vital substances.

## sera Flora Nature – the veggie food for "surface eaters"

The veggie food consisting of carefully manufactured flakes for mainly herbivorous fish that eat at the water surface supports healthy digestion and liveliness due to carefully selected ingredients rich in ballast substances, such as Spirulina algae.





## sera Guppy Gran Nature – the veggie food for fish in the middle water zone

The slowly sinking soft granules for all fish that eat in the middle water layers do not only keep their shape particularly well, but also support healthy digestion and liveliness due to selected ingredients such as Spirulina algae.

## sera Spirulina Tabs Nature – the veggie food for bottom dwellers and other Spirulina lovers

Due to the balanced composition and the high amount of Spirulina algae, the tasty food tablets support healthy digestion and liveliness of animals in fresh and marine water. Attaching the tablets to the aquarium glass allows for watching shy animals while they are eating.

Solvation Tables

Weggie Tablets

In the solution of the solut

Tip: The veggie food types are a welcomed variety also for carnivorous fish.

## **Treats**

Small food organisms such as small crustaceans and worms are an important natural food source, a highly desired treat and a fantastic addition. We use only gently dried food animals from clean waters, whose full nutritional contents are retained. Unlike in case of live and frozen food the water is not unnecessarily polluted, and there is no risk of transmitting a disease.



## sera GVG-Mix Nature – the flake food with whole food animals

This treat containing a high amount of trace elements optimally fulfills the natural requirements and provides healthy variation.

## sera O-Nip Nature – the treat tablets for healthy variety

Due to the high amount of food animals, the attaching tablets are particularly valuable for appropriate nutrition of mainly carnivorous fish and invertebrates.





# sera FD Daphnia Nature – the treat for increased readiness to spawn

This treat for all bigger fish consists of water fleas and is rich in ballast substances and minerals. It enhances readiness to spawn and metabolism.

# sera FD Tubifex Nature – the treat for strengthening and buildup

This power food consisting of Tubifex for all mainly carnivorous fish is rich in protein, supports healthy growth and strengthens the fish.







# sera FD Mixpur Nature – the treat mixture for community aquariums

The varied blend of Daphnia, Tubifex, bloodworms and Krill is particularly well suited for community aquariums.



## sera FD Bloodworms Nature – the treat for choosy and juvenile fish

The tasty bloodworms rich in protein for all mainly carnivorous fish are particularly well suited for finicky animals, breeding attempts and juvenile fish.

# sera FD Artemia Shrimps Nature – the treat for splendid color development

This natural food consisting of delicious, small brine shrimps for all fish and invertebrates in fresh and marine water supports optimal color development and strengthens disease resistance.





## sera FD Krill Nature – the treat for increased fertility

The valuable Krill is suitable for all bigger fish and invertebrates in fresh and marine water. The high amount of protein and natural, color enhancing astaxanthin enhances readiness to spawn, liveliness and color development.

## **Catfish food**

Catfish are usually rather shy aquarium inhabitants, some of which only come out at night and search for food either in the bottom substrate or by rasping and with suction. sera provides three catfish food products, sera Viformo Nature, sera Catfish Chips Nature and sera Catfish Tabs XXL Nature, whose different composition and structure optimally meets the corresponding requirements.

## sera Viformo Nature – the tablet food for catfish and loaches that look for food on the ground

The nutritious and easily digestible catfish food falls apart into small chunks and thus allows feeding fish with a small mouth (e.g. armored catfish or loaches) appropriately.



# Catfish Chips Catfish Food For Ancistral and Precis

# sera Catfish Chips Nature – the chips for rasping Ancistrus and plecos

These chips containing willow bark and alder cones for rasping and suckermouth catfish keep their shape for a long time and allow feeding the nocturnal catfish in a natural way.





# sera Catfish Tabs XXL Nature – Bottom or attaching tablets for bigger catfish

The high amount of Spirulina with many mineral and vital substances supports color development and health. The tabs keep their shape for a long time and thus allow eating slowly without polluting the water.

## **Cichlid food**

sera cichlid foods are not only excellently accepted but also optimally fulfill the requirements of cichlids due to the various food types that consider the different body sizes and feeding habits.



sera Cichlids Sticks Nature –
the universal food
for bigger, omnivorous cichlids
The tasty staple food consisting of floating sticks is easily digestible due to the
high amount of valuable protein.



sera Granugreen Nature – the staple food for herbivorous cichlids

The slowly sinking granules keep their shape and support digestion and optimal color development due to herbal components such as Spirulina algae and spinach.



sera Granured – the staple food for carnivorous cichlids

The slowly sinking granules keep their shape and support healthy development and optimal coloration due to their high protein amount, valuable fats and Krill.



sera Cichlid Green XL Nature – Spirulina chunks for bigger herbivorous cichlids

The floating granules with a high percentage of Spirulina algae support healthy digestion and optimal color development.



Cichlid Red XL

XL Cichlid Food
For carrivores

# sera Cichlid Red XL Nature – energy chunks for bigger carnivorous cichlids

The floating granules with a high amount of protein, valuable fats and Haematococcus algae support healthy development and optimal coloration.

## **Discus food**

sera special food for discus fish get a unique, irresistibly meaty consistency in water without swelling in a stressing way. They support breeding success and coloration of the fastidious discus fish in an incomparable way.



## sera Discus Granules Nature – the optimal basis for all discus fish

This staple food consisting of sinking, excellently digestible soft granules supports development, disease resistance and fertility due to optimally digestible protein and ingredients rich in minerals.



e-rera

Discus Color

## sera Discus ImmunPro Nature – the growth food for discus fish

The balanced growth food consisting of soft granules. With probiotics that support food utilization, quick growth and healthy development.



Due to the high amount of color optimizing algae such as Haematococcus and Spirulina, this color food consisting of easily digestible soft granules supports the color development of discus fish in a natural way.

## Fry food

sera fry foods excellently match the requirements of juvenile animals and support their healthy development from the beginning. They therefore help supporting metabolism, growth, color development and natural behavior optimally.

# sera Vipan Baby Nature – micro flakes for juveniles eating at the surface

The balanced, easily digestible composition supports healthy development and strong disease resistance due to the prebiotic effect of the ingredients.

# sera Vipagran Baby Nature – micro granules for juveniles eating in the middle water layers

The easily digestible fry food supports healthy development and strong disease resistance due to its balanced ingredients with prebiotic effect.

# sera Artemia-Mix – the live fry food for natural eating behavior

This instant blend allows hatching very small Artemia nauplii in an uncomplicated way. These are not only an ideal fry food but also an activity enhancing treat for bigger fish and invertebrates in fresh and marine water.

## sera Micron Nature – the powerful plankton food for the smallest ones

This finely powdered food for all small aquarium animals in fresh and marine water contains 51% Spirulina and 18% Krill. It resembles natural plankton and supports optimal development, color formation and disease resistance.



ipagran Baby

# **Shrimp and crustacean food**

The sera food types for the fascinating crustaceans meet the very special requirements of these invertebrates in an incomparable, innovative way. The sera granules keep their shape extremely well in water, their functional shape as well as their valuable composition close to nature allows for an appropriate, healthy diet.





## **Goldfish food**

sera goldfish food especially considers the requirements of these beautiful and tame coldwater fish. They not only effectively prevent fattening problems and the resulting organ damages, but additionally support shining colors.



Goldy Gran

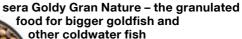
Coldfish

Goldy Color Spirulis

Color

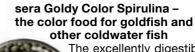
## sera Goldy Nature – flake food for smaller goldfish and other coldwater fish

The easily digestible staple food consisting of floating, gently manufactured flakes contains carefully selected herbal and animal ingredients that support healthy growth as well as the liveliness of the fish.



Due to its high quality ingredients such as insect meal, the staple food consisting of floating granules for goldfish is particularly easily digestible, strengthens the immune system and provides even very fastidious fancy variants with

all required nutrients.



The excellently digestible color food consisting of floating granules with a particularly high amount of Spirulina algae supports color formation and development as well as disease resistance of the goldfish.

# **Special food**

sera ImmunPro Nature is the probiotic growth food for quick and healthy growth. The probiotics are applied to the food in a particularly gentle procedure and stabilize the intestinal flora of the ornamental fish. They ensure reduced water pollution because of more efficient food utilization. Excellently suited as breeder food.

Growth Food



## sera ImmunPro Nature – probiotic growth food for ornamental fish

The growth food with over 50% protein percentage and probiotics that stabilize the intestinal flora. Food utilization improved this way minimizes water pollution and supports quick growth, strong development and brilliant coloration of ornamental fish.

sera Insect Nature is characterized by a particularly sustainable food concept. The main component of the food consists of Tenebrio larvae. It provides 100% of the animal proteins and thus matches the natural diet of most ornamental and biotope fish.

+ <4cm +



# **Good care during your vacation**

The holiday food sera Holiday and the automatic feeder sera feed A plus provide two excellent possibilities for reliable fish care while you are absent.

- Prepare portion containers provided with a date for every feeding day.
- It may be useful to leave the address of your pet store along with the phone number.
- It does not cause healthy, adult fish any trouble if they are only fed every other day for some time.
- Before you leave for a longer time, make sure the water is stable and clean (check and, if applicable, adjust ammonium, nitrite, nitrate, pH value; remove sludge, among others) and the technical equipment (e.g. filter flow) functions unobjectionably.



## sera Holiday - unburdened holidays

- Reliably provides the fish with all essential nutrients for over a week.
- Overfeeding is virtually impossible since the food tab, which is rich in protein, becomes soft layer by layer.



# sera feed A plus – the reliable automatic feeder

- Feeds your fish 1 6 times a day, depending on the settings.
- sera Vipagran Nature is particularly well suited for automatic feeders.



Tip: Let the automatic feeder do the feeding already one week before you leave. By doing so, you can check the function and the food amount it feeds every time.



- Feed small portions once or twice a day. (Occasional fasting for 1 – 2 days does not harm most fish.)
- Juvenile fish 3 6 times daily, if possible (no fasting days).

## **Amount**

- Feed only as much as is being eaten within a few minutes.
- If there are still food remainders after an hour, remove them (e.g. with the sera gravel cleaner) and feed less on the next day. Exception: long-term stable types such as sera Catfish Chips Nature can be grazed off in an interval of up to 24 hours.

### How to feed

- Use a spoon reserved for this purpose for feeding. By doing so you will always feed the same amount, and the food will not get dirty or moist.
- Distribute the food evenly on the water surface so all fish – not only the dominant ones – have access.

## Overfeeding

- Fish almost always appear hungry too much food, however, can lead to dangerous fattening.
- Constant overfeeding lowers water quality and supports algae growth and diseases.

## **Variety**

 Fish also like variety. Use small cans of different sera food with different functions (e.g. staple food, color food, treats) simultaneously.

## **Freshness**

- Light, oxygen and moisture reduce the food quality over time.
- Opened food can spoil, be contaminated by pathogens or by harmful insects.
   Ensure clean and dry withdrawal and that the can is always closed firmly again.
- Pay attention to the best before date and consume opened packages within 3 months.

## Observation

- The best opportunity to watch your fish closely is while feeding. You can quickly recognize diseases, conflicts and injuries at this time.
- When feeding newly added fish or introducing another food it may take a few days until the animals accept it.
- It may be a disease symptom if a fish shows no interest in food it liked to eat previously. Observe the animal closely.

## **Evacuating the air from floating granules**

If your fish do not like to eat at the surface or encounter problems due to swallowing too much air, but you still want to use floating granules, you can simply evacuate the air and thus make it sink.

You need a bigger syringe with, for instance, 50 ml contents (without a needle!), which is inexpensively available from pharmacies. You can re-use the cleaned and dried syringe several times.



The food to be de-aerated is filled into the syringe after you took the plunger out.



Now pour water into the syringe, filling it by approximately a third (cover the nozzle with your finger!).



The food floats upwards due to the encapsulated air.



Carefully put the plunger back in – only far enough to give it firm hold in the syringe! The syringe is now held with the nozzle directed upwards, the air is pushed out of it.



Now seal the nozzle with your finger and pull out the plunger.



The air escapes from the food due to the vacuum, and the de-aerated food sinks to the bottom. Feed it right away.

# **Systemic feeding**

sera provides food perfectly matching body size, requirements and feeding habits for every fish. A look at the swimming zone icon tells you immediately whether the food is intended for fish that prefer to eat at the water surface, in the middle zone or at the bottom. This makes choosing the correct food for your fish very easy.





For catfish and loaches searching for food at the bottom

For rasping Ancistrus and plecos

For bigger catfish

Viformo



Catfish Chips



Catfish Tabs XXL











- Free from dyes
- Free from preservatives
- Easily digestible



percentages of herbal protein and carotenoids



Protein and mineral substance source rich in trace elements and carotenoids



