



## **Nitrite Poisoning (NO<sub>2</sub>)**

When fish are overfed (i.e. the filter performance is insufficient), ammonium and/ or ammonia will develop, in the first phase.

In the second phase, the filter will turn the ammonium/ ammonia into nitrite. In the third phase, this is broken down into nitrate.

If the filter performance is insufficient and the filter cannot break down the entire amount of feed given, more and more nitrite will develop. Nitrite is a haemotoxin (a poison, which damages the fishes' blood) and which accumulates in the fishes' bodies until it reaches a lethal level.

If the nitrite levels in your aquarium are high, it is generally sufficient to cease feeding or severely reduce feeding until the filter has managed to lower the water's nitrite content to optimum levels.

However, if the nitrite level is alarmingly high (fish are gasping for oxygen and your drop test kit/ indicator kit indicates nitrite poisoning) you should immediately remove and transfer the fish, as you would do in the event of a power outage/ blackout ([LINK Power Outage/ Blackouts](#)). Then you need to clean the filter and carry out a 100% water change.

Subsequently, you will need to run the filters again (2 – 3 weeks). During this time you should feed the fish next to no feed.

With a little patience and with minimal feed amounts, your filter will soon have reached its previous performance again and will provide your fish with an optimal water quality.

As an emergency aquarium for your fish, you can use a bucket, bathtub or fish box made of Styrofoam, which you fill with tap water (at the appropriate temperature) in which you should place the fish as quickly as you can. Every second counts!

You will need to fit your emergency aquarium with an aeration stone (diaphragm pump), a heating rod and a thermometer. Our discus fish are quite able to survive in such an emergency aquarium filled with normal tap water for several weeks. However, since the emergency aquarium is not fitted with a filter, you must not feed your fish at all. Your fish are able to cope quite well for a few weeks without feed (e.g. holidays). (see [Running in Filters](#))