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Axolotl care

Axolotl (*Ambystoma mexicanum*) is a neotenic salamander native to Mexico. They are sometimes referred to as "Mexican walking fish", but they are not fish; they are an aquatic amphibian. Axolotls make great pets and it's a wonderful experience to observe them and care for them. Their lifespan is 10-15 years. Axolotls have specific environmental requirements and many health problems arise from inappropriate care and husbandry conditions. Below is a guide outlining basic requirements.

Enclosure

- Most axolotls are housed in indoor aquarium set-ups. The size of the aquarium should be 60-120cm long for an adult axolotl; the bigger the better. The tank should be filled approximately 2/3 to 3/4 with water. Axolotls are a completely aquatic species and need to be submerged in water at all times. A lid is sometimes required to prevent axolotls from jumping out of the water.
- Substrate can be provided by a layer of large pebbles, ensuring that the size of the pebbles is large enough so your axolotl can't swallow it (larger than the size of the head). Axolotls have a tendency to swallow pebbles and gravel, which can cause gastrointestinal obstructions. Fine sand can be used as a substrate. A bare aquarium floor without any substrate can be stressful for axolotls as they have nothing to "grip" onto.
- Hiding places, such as pipes and rock caves, are essential.

Lighting

- Axolotls have no eyelids and prefer low light levels. Dim lighting can be provided by a low wattage light source or room lighting. If using any aquarium lighting, ensure it does not emit heat as axolotls prefer cool water temperatures.
- Axolotls need to have places to hide away from the light.

Temperature

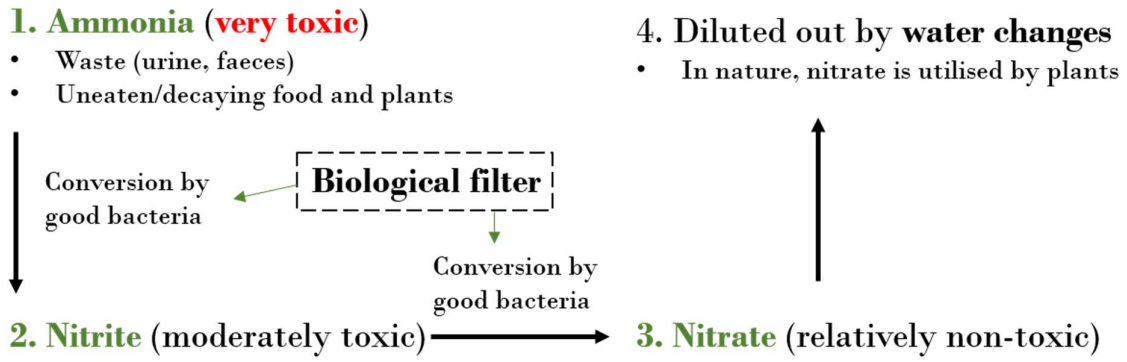
- Monitor the temperature of the water with a submersible aquarium thermometer.
- Water temperature should be between 16-18C. Temperatures over 24C can be fatal to axolotls.

Diet

- Axolotls are carnivores and in the wild eat a variety of worms, insects and small fish.
- Adults should be fed ~ 2 times a week with a few small bite-sized pieces.
- Offer a variety of foods, including worms (bloodworms, earthworms), silkworms, soft insects and small whole feeder fish (frozen to reduce the risk of introducing parasites). Avoid insects with hard exoskeletons. To minimise the risk of malnutrition, rotate between at least 3 varieties of different food items.
- Remove any uneaten food to reduce fouling the water.

Water quality

- Water quality is one of the most important aspects of axolotl health and poor water quality, in particular the failure of the **nitrogen cycle**, is a very common cause of disease.



- Axolotls eat, urinate and defecate in the water, and in general produce a lot of waste that can result in poor water quality. Remember that many harmful chemicals (such as ammonia) can't be seen, so water clarity is not a good indicator of quality.
- Aquariums need a filter to continuously filter the water and remove harmful waste.

    - Axolotls do not like strong currents and strong water movement, so water outlet from the filter should be dispersed over a wide area, such as a flat rock.
    - When needed, accumulated debris in the filter should be gently cleaned in aquarium water to avoid destroying the biological filter (good bacteria).
- Approximately 25% of the water needs to be removed weekly and replaced with conditioned or dechlorinated water.
- Clear water does not necessarily mean good water quality as many of the factors affecting water quality are invisible. Therefore, it is a good idea to regularly perform water quality testing (pH, ammonia, nitrite, nitrate and hardness) to ensure that the biological filter is functioning, and the water changes are adequate.
    - Ammonia and nitrite should always be zero.
    - There can be a small amount of nitrate present. This is an indicator that the biologic filter is functioning and that there are good bacteria present in the tank and the filter.
    - pH should be 7-8.
    - Axolotls prefer slightly "hard water". Aquarium salt can be added, ~ 5 grams per 10L of water.

Health care

- Any newly acquired axolotls should be quarantined and health checked.
- Annual health checks are recommended thereafter.
- Wash your hands after handling your axolotl or aquarium water, and between handling of different aquariums.