



BEGINNERS' GUIDE TO FISH KEEPING....



Fish keeping can be divided into **four main groups**:

1. Freshwater cold (e.g. goldfish);
2. Freshwater tropical (e.g. tetras);
3. Marine cold (some gobies);
4. Marine tropical (e.g. clowns).

Within each one of these, there are myriads of variations. But I will attempt to cover as much as possible while keeping it accurate and concise. For the beginner, I would recommend you to start off with a **freshwater set-up**. The reason is that freshwater fish tend to be more tolerant to environmental changes. Because fish swim, live, eat and defecates in the water, the quality of the water becomes very important. Smaller tanks can hold only small volumes of water, and the water quality can fluctuate very quickly with little warning. Larger tanks tend to be more stable (in terms of water quality parameters) and so you are less likely to end up with disasters. So, the **best tank size** to start with is the largest tank that you can afford to buy.

A starter tank should be at least standard 3 foot. Glass aquarium or plastic? Glass aquariums are heavier and you can get them in larger sizes and they do not scratch as easily. Plastic ones cannot withstand large volumes of water. But the story does not end there. You cannot just add water and fish like any instant noodle packet directions. You are creating a real living underwater world. It needs time to simmer, and you need to have a taste every so often before it is ready. The same applies to setting up an aquarium (although, I would advise against tasting the water - it is better to get it tested). The fish tank and stand should be situated on a strong stable and level floor. A sheet of polystyrene foam should be placed between the aquarium and the stand to





absorb any unevenness and to spread the entire weight of the tank more equally. The tank should not be placed in direct sunlight (to prevent excessive algal growth) and not along corridors where it is draughty. Make sure that you are happy with the location of your tank before filling it because once water and aquarium furniture are added, the tank becomes very heavy and even dangerous to move. Always drain the tank and remove as much aquarium furniture as possible before relocating an aquarium.

Other **things you need** are listed below:

Essential Equipment	Good to Have	Optional
Gravel	Light	Special lighting (grolux)
Filtration System	Plants	Algae scraper
Heater (with thermostat)	Rocks / Bogwood	
Thermometer	Bacteria starter	
Water conditioner	Water test kit	
Fish food	Gravel cleaner	
Nets	Air pump + air stone	

Once the tank is in place, **gravel** should be added (if using an undergravel filter, place the filter plate before adding gravel). Gravel should be from an aquarium shop since those sold in garden shops may leach out harmful chemicals. Gravel should be arranged such that it slopes towards the front. This helps to channel rubbish to the front where you can clean more easily.

You can add **aquarium furniture and plants** in the tank either before or after adding water - your choice. It is usually easier to plant in a dry tank but you cannot usually see what it will look like. *Heavier aquarium furniture like rocks should only be added after the tank is filled with water so as to spread the load across the base of the tank more evenly.

Water should be conditioned before adding to the tank. Water needs to be conditioned because the level of chlorine it contains is toxic to fish (even though does





not harm us). To avoid stirring up the gravel, place an ice-cream container in the tank and pour the water into this receptacle. It will absorb most of the force of the water and overflow into the tank in a gentler stream.

Turn on the **heater** and set to the desired temperature depending on the type of fish. A good starting point is 25°C. Your **filtration system** should be started and the **bacteria starter** added. *Never turn on the heater outside of water because it will be damaged.

If live plants were planted, you should **wait** at least 2 weeks before the first fish is introduced. This will give the plants time to establish themselves. If no plants were planted, it is a good idea to give the tank a week to stabilise.

Now the exciting part; what fish and how many? There are so many to choose from. The best place to seek advice is at a good aquarium shop. A very important piece of advice is not to buy on impulse. Do a thorough research, taking into account their diet, size and their compatibility. The order you introduce them into the tank is also very important. Those more dominant and slightly aggressive fish should be the last additions. The number of fish should be introduced over a period of at least ONE MONTH before the final stocking density is reached. This gives time for the good bugs in your filter to adjust to the new load.

When **introducing fish** into the tank, the bag should be floated horizontally in the aquarium for about 10 minutes (5 minutes longer for larger bags) to equalise the temperature. Then open the bag and gradually add tank water to the bag of fish for the next 15 minutes to double its original volume. This will slowly acclimatise the fish to the new water conditions. Then turn the bag on its side to allow the fish to swim out on their own. It is a good idea to feed resident fish in the opposite corner of the tank at the time new fish are released. This gives the new fish some time to wander around the tank without getting hassled by curious residents.





Now onto **tank maintenance**. The "gold standard" is to change 25% of the water every week. However, if your filter is rinsed regularly and you do not overfeed, water changes can be done less often (once a month). **Water changes** should be carried out together with a gravel clean. However, if you are using an undergravel filter, the gravel bed should not be disturbed as frequently.

Your tank should then be **re-filled** with conditioned water. This water should come from your cold water tap and not the hot tap (hot water dissolves the heavy metals in the piping that can harm your fish). This water should then be heated using your aquarium heater before adding it into your tank.

Now onto **feeding**. Fish should only be fed as much as they will consume within 2 minutes. Any uneaten food should be removed after such time. A rule-of-thumb is that the size of a fish's stomach is as big as its eye. This means that fish do not need to be fed too much. More often than not, fish die from overfeeding than underfeeding. Some fish can over-eat and die. Uneaten food will pollute the water and create poor water conditions, and the entire tank of fish will be unduly stressed, predisposing them to disease.

For more detailed information contact [The Fish Vet](#)

Dr. Richmond Loh

*DipProjMgt, BSc, BVMS, MPhil (Pathology) Murdoch,
MANZCVS (Aquatics & Pathobiology), CertAqV, NATA Sig.*
Aquatic Veterinarian & Veterinary Pathologist
Perth, Western Australia, AUSTRALIA.

