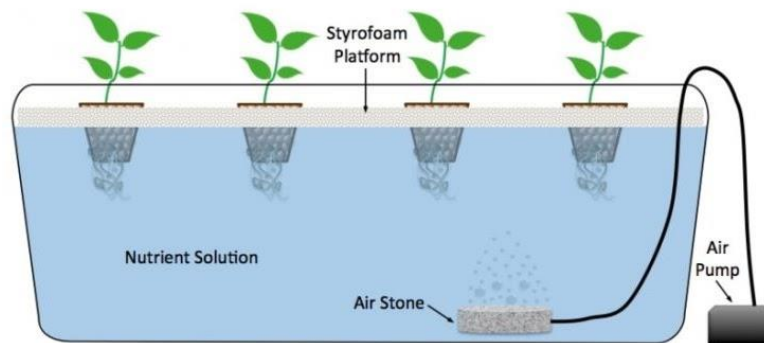


Types of hydroponic systems

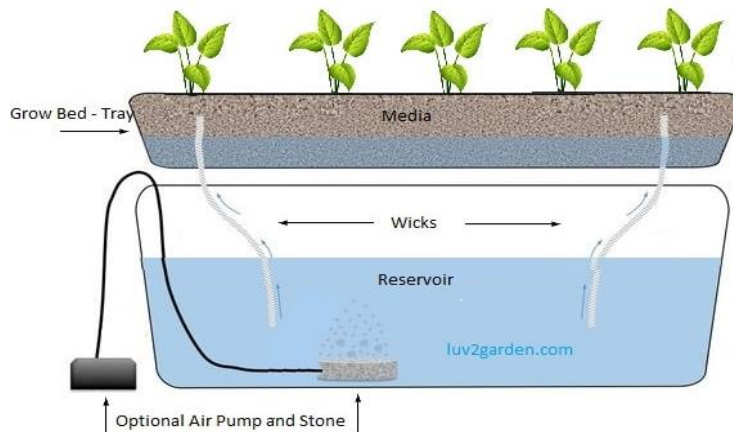
1. Deep water culture systems

Deep water culture hydroponics are simply plants suspended in aerated water. Deep water culture systems, also known as a DWC system, are one of the easiest and most popular methods of hydroponics on the market.



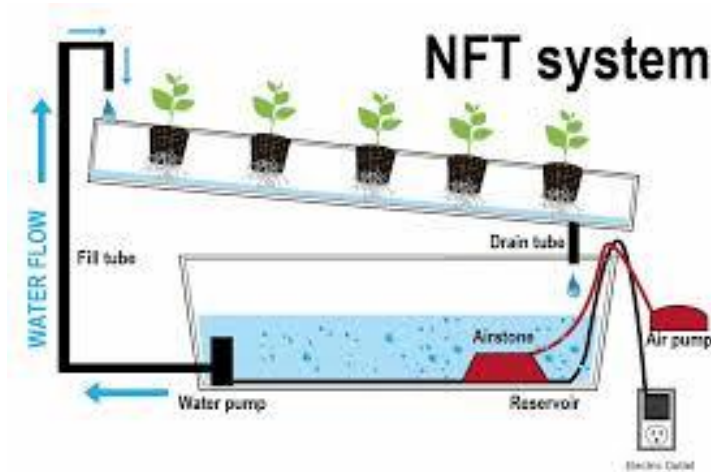
2. Wick systems

Wick systems are by far the most simple form of hydroponics. Wick systems are passive hydroponics - meaning they don't require mechanical parts like pumps to function. Wicks systems work by a process called capillary action. The wick absorbs the water it's immersed in like a sponge, and when it comes in contact with the porous growing media, it transfers the nutrient solution to the plants.



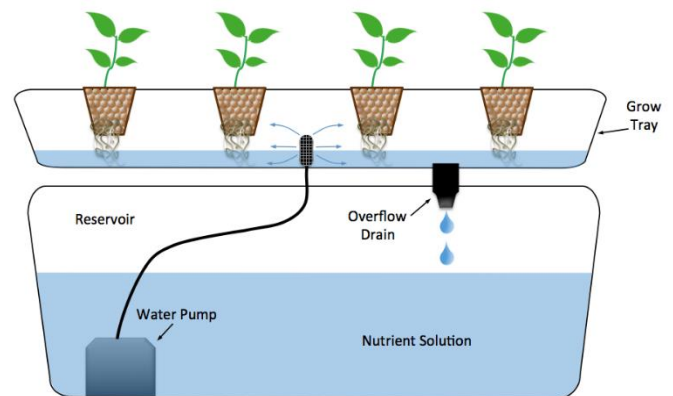
3. Nutrient film technique systems

Nutrient film technique systems are best suited for lightweight plants, like mustard greens, kale, lettuce, spinach as well as fruits like strawberries. Nutrient film technique (NFT) systems suspend plants above a stream of continuously flowing nutrient solution that washes over the ends of the plant's root systems.



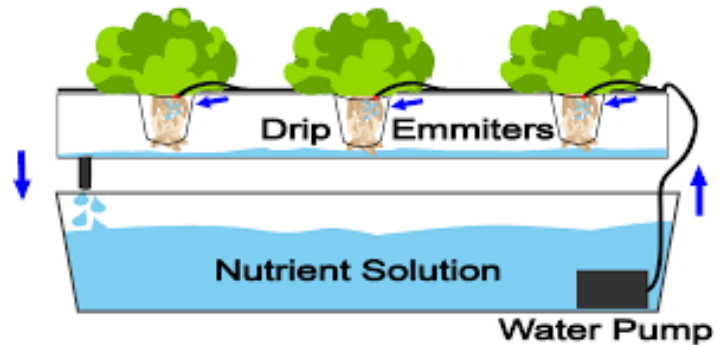
4. Ebb and flow systems

Ebb and flow systems (also called flood and drain systems) are one of the most popular hydroponic growing methods. Ebb and flow hydroponics work by flooding a grow bed with a nutrient solution from a reservoir below. The submersible pump in the reservoir is equipped with a timer.



5. Drip systems

Drip systems are the popular and widespread method of hydroponics, among commercial growers. In a hydroponic drip system, the aerated and nutrient-rich reservoir pumps solution through a network of tubes to individual plants. This solution is dripped slowly into the growing media surrounding the root system, keeping the plants moist and well-nourished.



6. Aeroponics

Aeroponics systems suspend plants in the air and expose the naked roots to a nutrient-filled mist. Water and nutrients are stored in a reservoir, and then pumped to a nozzle that atomizes the solution and distributes it as a fine mist. The mist is usually released from the top of the tower, allowing it to cascade down the chamber. Aeroponics do not need substrate media to survive. The root's constant exposure to air allows them to drink in oxygen and grow at an accelerated rate.

