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Shaping Lives...
Empowering Communities...

Center for Smart Agriculture

Hydroponics technology



Module 1: Prerequisites for hydroponics technology

Session 5 : Hydroponic Growing Systems - basic concepts and designs

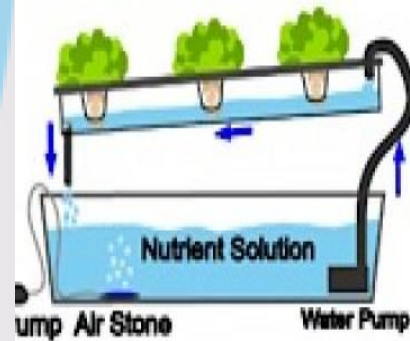


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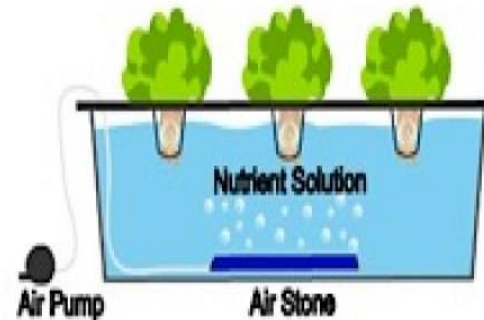
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Types of Hydroponics

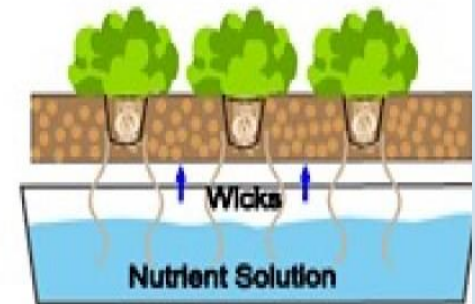
Nutrient Film Technique



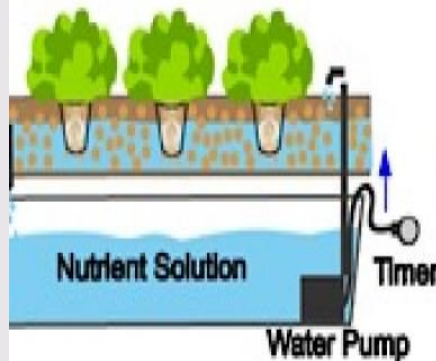
Deep Water Culture (DWC)



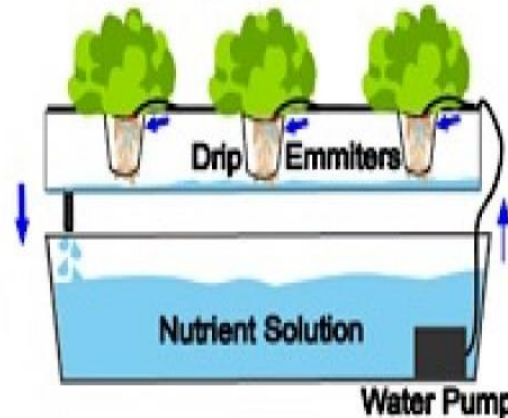
Wick System



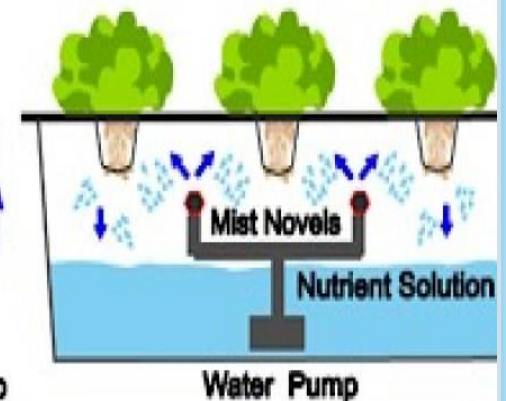
Ebb And Flow



Drip System



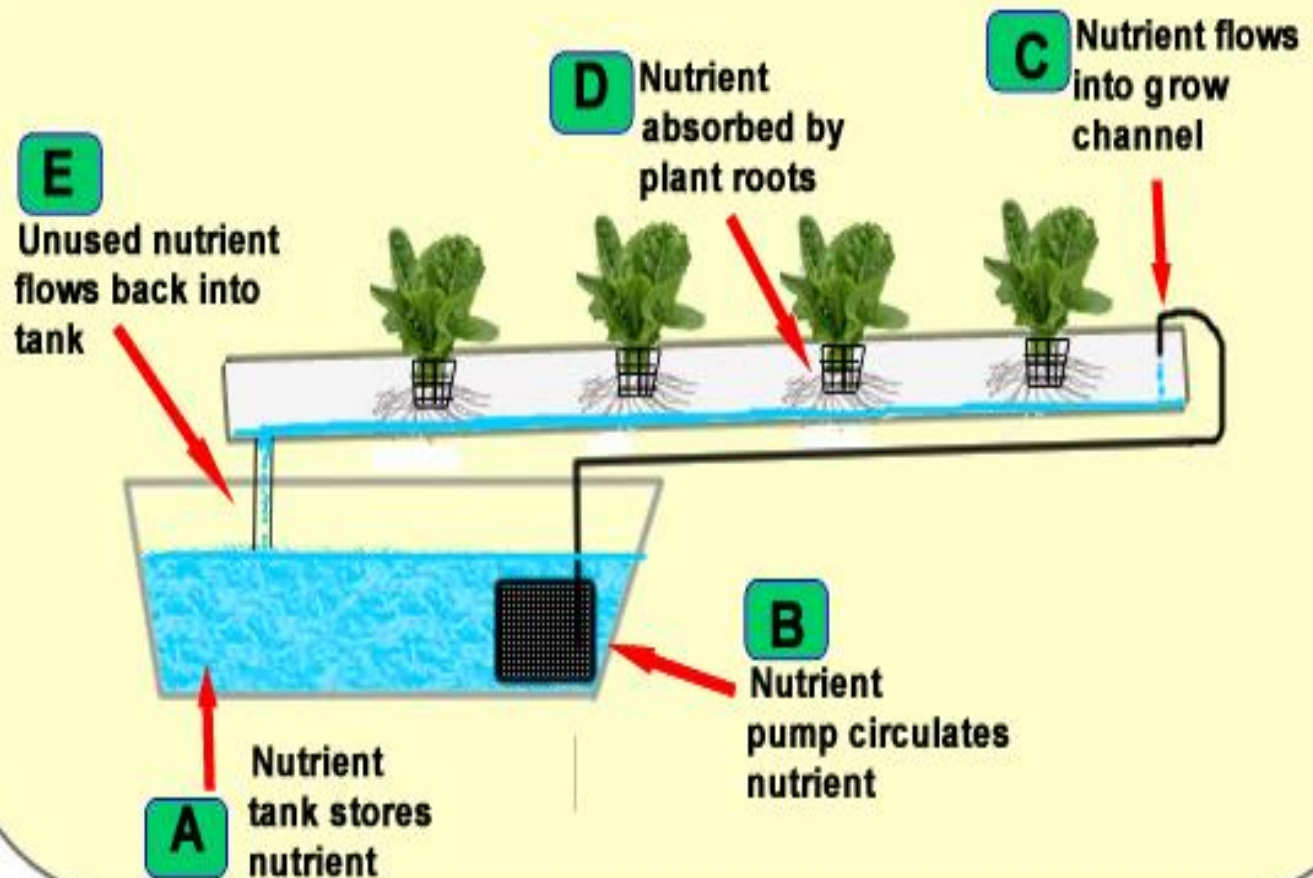
Aeroponics





1. Nutrient film technique systems

Nutrient Film Technique





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Pros of a nutrient film technique system

➤ **Low consumption:**

Since NFT hydroponics recirculate the water they do not demand large quantities of water or nutrients to function.

➤ **Modular design:**

Nutrient film technique systems are perfect for large-scale and commercial endeavors. Once you have one channel set up and functioning, it is very easy to expand.



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Cons of nutrient film technique system

➤ **Pump failure:**

If the pump fails and the channel is no longer circulating the nutrient film, your plants will dry out. In a matter of hours, your entire crop can perish if it is not being supplied with water.

➤ **Overcrowding:**

If the plants are spaced too close together or the root growth is too proliferate, the channel can become clogged. If the channel is obstructed by roots, water will be unable to flow and your plants will starve.



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Thank you....