What Is Aquaponics?
A system of aquaculture in which the waste produced by farmed fish or other aquatic animals supplies nutrients for plants grown hydroponically, which in turn purify the water.

**How It Works**

There are 3 components of Aquaponics; the fish, the plants and the beneficial bacteria. These three living entities each rely on the other to live.

- The bacteria consume the fish waste keeping the water clean for the fish.
- In the process, the bacteria provide the plants with a usable form of nutrients.
- In removing these nutrients through plant growth, the plants help to clean the water the fish live in.

**What Can You Grow?**

The fish and plants that you select for your aquaponic system should have similar needs as far as temperature and pH. As a general rule, warm, fresh water fish and leafy crops, such as lettuce, greens and herbs will do the best.

**Fish**
- tilapia
- blue gill
- brim
- sunfish
- crappie
- catfish
- carp
- koi
- fancy goldfish
- pacu

**Plants**
- leafy lettuce
- kale
- swiss chard
- microgreens
- basil
- mint
- chives
- watercress
- broccoli
- cauliflower
Benefits

- Use 5-10% of the water to grow 10 times more food per acre compared to traditional agriculture!
- All natural fertilizer source from fish waste.
- Efficient, sustainable and highly productive.
- Produce and fish free of additives and chemicals.
- Requires less back-bending labor.
- Eliminating soil eliminates soil borne diseases.
- When combined with a Greenhouse, you can grow year ‘round in any climate.

Resources

Websites
- coloradoaquaponics.com - Tawnya and JD Sawyer, CO
- quaponicsgardening.ning.com - Community Blog
- attra.ncat.org/attra-pub/aquaponic.html - ATTRA
- aquaponics.com - Nelson and Pade, WI
- backyardaquaponics.com - Joel Malcolm, Australia
- aquaponics.net.au - Murray Hallam, Australia
- friendlyaquaponics.com - Susanne Friend and Tim Mann, HI
- uvi.edu - University of Virgin Island
- aquaponicsinstitute.org - Nate Storey, WY

Books
- Aquaponic Gardening, Sylvia Bernstein
- Aquaponic Design Plans, David H. Dudley
- Aquaponics for Beginners, Nick Brooke

Podcasts
- Aquaponics for Everyone
- Beginner Aquaponics

YouTube Channels
- ZipGrow
- AquaponicGardening