

Learn How Hydroponics Will Change The World

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Hydroponics: (n)

The method of growing plants without soil, exposing roots to a mineral nutrient solution.

With venture capitalists investing billions of dollars in the hydroponics industry, everyone seems to be talking about it.



But what exactly is it?

Hydroponics is an agricultural technique that has existed for thousands of years. As agricultural technology advanced, hydroponics shifted from irrigation systems like the Gardens of Babylon to the automated, recirculating soilless systems we manufacture today.

Now there are dozens of types of hydroponic systems. And with the help of our research and development team, we designed and manufacture the most sustainable food production systems available worldwide.

If Brio Hydroponics makes the most sustainable systems worldwide, why isn't hydroponics more well-known?

1) Lack of knowledge: Farmers and entrepreneurs don't understand the benefits of hydroponics. Farms (and their business models) are passed down from generations, so it's intimidating to adopt new systems. We have helped hundreds of soil farmers add greenhouses to their farms, diversifying their crops and income sources.

2) Outdated economics: Our current agriculture system was created when water and land were abundant and inexpensive, therefore, soil-based farming was more favorable. Today, 70% of the world's fresh water and 40% of its ice-free land are being used for agriculture. With the population growing and the global climate changing, the current agricultural model needs reshaping.



The Future of Food

The early 1970s brought the first "Hydro Boom" when venture capitalists placed large investments in the hydroponics industry for the first time. Since then, hydroponics has been "The Future of Food." Entrepreneurs finally had the money they needed to build large-scale, multi-acre systems. The problem was these systems were designed to get rich quick and "take the farmer out of the farm." Within a decade, the hydroponics industry crashed, and soil farming proved to be longer lasting.

"Nature, to be commanded, must be obeyed." - Sir Francis Bacon

Our Founder-Director, Pravin Patel, has been researching and developing hydroponic systems since the 2000s. As he experimented with different growing techniques, media, and environmental controls, he found that – as the founder of the scientific method said – nature must be obeyed. Patel has helped Brio design and distribute systems that respect plants, farmers, and the environment. Now we're producing the most efficient systems worldwide.

Hydroponics: The environmental solution:

Compared with soil-based farming, our systems are:

- More consistent. Producing predictable quantities and quality for higher cropyields and profits.
- More efficient. Producing 10x the crops per area.
- Cleaner. Reducing pathogen risks by growing crops without pesticides or manure.
- Local. Reducing transportation costs by growing near or in urban centers.

NFTSystems

Nutrient Film Technique systems are designed with long, narrow channels in which plants (like lettuce) are placed at regular intervals. This is our primary system. It will be your work horse.

Nutrient-rich water continuously flows down the channels, past exposed plant roots. Any unused solution is captured at the end of each channel, funneled back to a reservoir, automatically remixed for nutrient balance and recirculated with the help of a pump.



Trough Systems

For vine crops, we have designed gutter systems that are drip-fed AND recirculating in which crops are rooted in a soilless medium, placed in a bag of growing medium on the gutter, and nutrient-rich water circulates back to the reservoir.

These gutters are elevated from the floor of the greenhouse so the roots' temperature can be regulated. We offer these hydroponic systems for vine or medical crops, but we suggest that first-time growers start with, and master, an NFT system before adding vine crops to a growing operation.



Dutch Bucket Systems

For vine and medical crops, we have designed 'Ducth Bucket' systems in which individual buckets are drip-fed in a line, and recirculate nutrient solution back to the reservoir.

Our Dutch Bucket systems are typically used for growing vine crops like tomatoes, cucumbers, and peppers. We offer these hydroponic systems for vine or medical crops, but we suggest that first-time growers start with, and master, an NFT system before adding Dutch buckets to their growing operation.



Vertigrow Tower System

The Vertigrow Tower System is easily installed in a short time, with little or no experience. The unique add-on capabilities of this system makes it easy to expand.

Mobility is a key advantage; it can be set up outdoors or indoors, in a greenhouse, under semi-protected covers, or in high tunnels.

Even with a limited floor plan, vertical growing systems can grow an impressive amount per square foot. Using hydroponic, aeroponic, and aquaponic methods, stacking towers, zip grow systems, rack stacks and green walls are all seen as viable methods to grow food. These systems can be huge elaborate and high tech greenhouse operations, small farm to table methods, allowing chefs to offer only the freshest herbs and greens that they grow themselves and many options in between.



DWC (Deep Water Culture)

Deep water culture (DWC) is a hydroponic method of plant production by means of suspending the plant roots in a solution of nutrient-rich, oxygenated water 24/7. The method has very low maintenance, once you set it up. It has Extremely fast growing time compared to soil and has very little moving parts and assembly

Many varieties of lettuce and lots of different herbs will work very well in DWC. They grow super-fast and healthy, making them a fantastic option. However, you can also grow tomatoes, peppers, and even larger fruits like squash; they just take a bit more effort.



What type of hydroponic grower are you?

Questions about hydroponics? We have answers. With years of knowledge and experience, Brio Hydroponics has earned the title of one of the top hydroponic growers in India. Speak with a hydroponic system expert today. Call or chat online. +919879948085/84/88





Large operations with custom growing needs. We can design a customized solution for you.





Small Business Grower

Full-time and part-time entrepreneurs. We have a turnkey business for you.

Farmers Market Grower

Part-time growers selling to small communities. Add some income with a simple, easy-to-run hydroponic system.



Home & Classroom Grower

New to hydroponics and eager to learn. We have home and classroom systems that are ready to go.



Medical Grower

Specialty systems and nutrients for medical herb. We have helped medicinal plant growers for decades.



I don't really know

New to hydroponics, but eager to get going? We can work with you to define your needs and get you up and running quickly. We are no longer limited by climate or season in the pursuit of clean, fresh food. We can now grow virtually any plant, anywhere at any time of year. With our simple, effective hydroponic systems, coupled with modern environmental controls, anyone can save precious resources like water, reduce their carbon footprint, and feed their community.

JOINUSNOW



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