I want to be like the Martian: Grow Food Inside

So I want to grow food, I am looking for some land in the middle of North Carolina. I have access to the principle tools to outfit my huge barn house:

1. Water / Air
2. Sun – Light
3. Soil - Nitrogen, Phosphorus, Potassium and Micro nutrients (Or Compost)

**Inner Voice:** Hold off, I thought you wanted to be situated near the people downtown somewhere in a Loft possibly Miami.

Miami Land is way too expensive, can’t afford any property with land.

**Inner Voice:** Well there has to be a solution, cars our driving themselves and you can grow food on Mars you just saw it on the movie the Martian right

Ahhh …. Vertical Farms and Hydroponic Technology:

The real estate of food has now changed we now have the opportunity to eat without leaving or purchasing anything but material from the store. New farms are popping up in a city near you with controlled farming. Let’s get into the essence of Vertical Farming:

* Producing food in vertical stack layers
* Controlled Environment (We now can control exposure) – the types of light, water, and fertilization
* Opportunity for mix used buildings and accessibility of food for all (Can you imagine eliminating starvation)

So a couple of factors are forcing the conception of these new technologies first off world hunger, pollution (less trucks on the road, less pollution from farming equipment) , and the new modo smaller is better as long as you’re in the city. Millennials are having a huge itch to move closer to the city and with that comes accessibility.

What is going to work to make this happen there are several technologies, remember the things you need to make things grow you combine all of those things inside of a controlled area and like magic these things happen:

Top Vertical Solutions:

Aeroponic – growing without soil using air and nutrient **mists** for the growth suspended in air environment

* Hydroponics – using mineral nutrient solutions in water to feed the plants, not suspended in air.
* Aquaponics – Combines hydroponic strategy, essentially plants in water with the combination of real animals emitting the host of their excretions which turn into nitrates which makes for creating food.
* Grow Light – fertilized the growth through emulating the electromagnetic spectrum

So how can you benefit, you can do this at home or you can sell some of the materials used to build up these Aqua systems:

Ideas:

1. PVC Piping
2. Fish
3. Pump and Sump system
4. Plant Housing

This list goes on and on, this would be a great project to start in a 3rd world country.