

# On the Menu

## All About Food

# A hydroponic paradise of produce

BY ELLE HARROW AND TERRY MARKOWITZ

**A**t Big Bend on Laguna Canyon Road, hidden behind a wall, is an amazing half-acre vertical hydroponic farm.

This is the farm of the future, a system of producing food using 90% less water, 50% less fertilizer and 70% less land than traditional farming while delivering 10 times the yield per square foot.

**Erik Cutter**, a Laguna resident, is the man behind *Alegría Fresh*, the first urban, hydroponic vertical farm in California. *Alegría* is a subsidiary of *EnviroIngenuity*, a Laguna company whose mission is to reduce waste and promote sustainable energy solutions.

This *Verti-Gro* system was patented by an organic chemist in Florida named *Tim Carpenter*. *Erik* bought the franchise and is the California distributor. He has a fascinating background, ranging from founding an automotive design business while still in college, earning a bachelor's degree in microbiology with cancer as a subspecialty, training as a chef and traveling the world.

Looking for an affordable property on which to build his dream farm, he found a location in the canyon that was divided by the flood channel where no permanent structures can be built. He persuaded the folks at City Hall to allow him go ahead with this project. Because it was so unusual, there was nothing in the code to prevent it once he convinced them he was not growing hallucinogenic substances.

After he got the city OK, he had to clear the 1,200 square feet of tall, heavy brush and construct five double rows of hydroponic vertical towers to grow more than 8,000 plants. Each tower consists of seven food-grade expanded polystyrene foam pots stacked on a pole that goes 16 inches into the ground. Rather than soil, the planting medium is coconut fiber, which is clean, has no insects or pests and retains water and oxygen. It also eliminates the chance of soil-borne diseases and the need for pesticides. Unlike dirt, when it gets on your hands or clothes, it brushes right off.

Each interlocking stack is automatically watered and fed nutrients from the top down. They drip through the pots with no waste. This system uses 90% less water, and because of its efficiency, the direct delivery to the roots means they are shorter and don't have to reach out for moisture, leaving more energy to grow bigger vegetables or fruits. They are also stronger, substantially more nutrient-rich and more naturally disease- and pest-resistant. The entire system is solar-powered and completely off-grid.

*Erik* and his partner *Jessica McLeish* want to become a local green "Pharmacy," providing nutrient-rich food to people who want to improve their health and prevent disease. *Erik* points out that a single leaf of green romaine contains 10,000 different phytochemicals but they lose their potency in a few days. Scientists have only assayed about 5% of them, and supplement makers can

only manufacture the ones we know about, so they are a poor substitute for the real thing.

Another important part of *Alegría's* mission is creating internships and jobs for young people and educating youth about nutrition.

*Cameron*, an intern we met, is working on a crop of edible flowers: borage, calendula, love in mist, allium and bee balm. These young adults are delivering beautiful salad-green bouquets and seasonal vegetables of same-day harvested produce between 4 and 6 p.m. to subscribers in Laguna Beach.

Here are some of the goodies you might get in your delivery: green summer crisp lettuce, rainbow swiss chard, blue kale, heirloom tomatoes, Japanese eggplant, chilis, herbs and strawberries

If you are interested in subscribing to this wonderful service, visit *AlegríaFresh.com* or call *Jessica* at (949) 294-3554.

Another option is to get your very own *Verti-Gro* home garden system with stacking pots in various sizes, seed kits, nutrient tank, pump, timer and plant food.

Beware, once you taste this exquisitely fresh produce, you may find it very difficult to go back to the supermarket stuff.

**ELLE HARROW and TERRY MARKOWITZ** were in the gourmet food and catering business for 20 years. They can be reached for comments or questions at *m.markowitz@cox.net*.





SCOTT SMELTZER | [scott.smeltzer@latimes.com](mailto:scott.smeltzer@latimes.com)

**ERIK CUTTER**, the managing director of Alegria Fresh, a hydroponic vertical farm in Laguna Beach, talks to members of the Nellie Gail Gardeners on Tuesday at the farm.