



**PHILIPS**

Horticulture

CityFarming



# The farm next door

What makes a customer choose one food retailer over another? Although the industry has been shifting thanks to trends such as online grocery shopping and the digitization of the in-store experience, fresh food is still king.

According to a recent article in Business Insider, 75% of consumers say that the produce department is their most important consideration when deciding where to buy food.

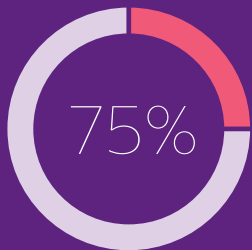
With that in mind, imagine that your produce department was stocked with fruits and vegetables that boasted a long list of advantages: sustainably-produced using far less water and fertilizer, 100% pesticide-free, locally-grown, better taste and more nutritious. Would such a change resonate with your customers' preferences? And how would it transform your brand's story?

## City Farming: Growing the food of the future

A quiet revolution is altering the world of food production thanks to a concept called city or vertical farming. Instead of raising foodstuffs on large, rural tracts of land, a city farm is a sustainable, reliable indoor vertical farming facility where crops are grown under LEDs tuned to special growing "recipes". Abandoned warehouses, disused factories, just about any large, indoor environment – including even an area within your own stores – can be turned into highly-efficient, local food-producing spaces. Imagine being able to offer customers lettuce, basil and other leafy greens at the pinnacle of their freshness because they were grown next-door, on-site.

City farms offer many advantages over conventional growing methods. Indoor crops consume far less water, are pesticide-free, and don't have to travel far from farm to fork – which means transportation costs and fuel use are drastically reduced while vitamins are retained. Additionally, farmers who grow indoors can plant crops vertically and in layers, allowing for more plants to grow in less amount of space.

Because crops grown in a city farm are more eco-conscious, sustainably-grown and fresher than produce trucked long distances, such foodstuffs automatically meet the demands of many modern shoppers. For example, current consumer research reveals that many of us are striving to embrace healthier lifestyles and that means we want our food to be fresh and nutrient-rich as well as delicious. Case in point, trend watchers predict a 20% increase in fresh food consumption by 2018 in the US market.



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Kate Hofman, co-owner GrowUp Urban Farms

### How LEDs grow food

Part of the reason LED lighting works so well for growing crops is because they are cooler than regular lamps, allowing farmers to place them closer to the plant. This assures that the entire plant receives the right amount of the right light, and, therefore, encourages homogenous growth.

In addition to uniformly exposing the plants to light, customizable light wavelengths are crucial for proper plant growth. This is where the idea of light recipes comes into play. Like a cook following a recipe that concretely lays out specific amounts of various ingredients, a light recipe instructs vertical farmers to tailor LED light wavelengths to various crops in order to optimize their growth and other variables such as texture and taste.

Though it may not be a change to make overnight, the innovative world of city farming could prove to be a valuable leap forward for food retailers looking to set themselves apart from the pack. In that world, retailers can expect nutritious, wholesome, eco-friendly vegetables delivered from a few miles away or even grown in a warehouse next door. And they can reap the benefits of satisfying customers who feel confident that they've chosen a retailer motivated to meet their demands for a healthy and sustainable future.

### GrowUp Urban Farms

One such company capitalizing on this method is GrowUp Urban Farms in east London. Located where real estate is at a premium, this city farm supplies fresh, top-quality and sustainable greens and herbs to local restaurants. Founded in 2013 by Kate Hofman and Tom Webster, GrowUp was created to build sustainable commercial urban farms growing food for local markets. “Everything is freshly-harvested to order and then delivered just around the corner to our local customers within 12 hours of harvest,” says co-owner Kate Hofman proudly.

GrowUp combines hydroponics (growing plants without soil) and aquaculture (fish farming) in a recirculating system. With 10 layers and 6,000 square feet of growing space, GrowUp plans to produce more than 1,995 kg of salads and herbs, and 3,991 kg of fish per year. Those are impressive numbers but you might still be wondering about quality – does food grown under LEDs taste good?

GrowUp has no reason to worry – their greens have been tried and tested by local restaurants and the consensus is unanimous: simply delicious. Joel Braham is the chef at The Good Egg restaurant in London: “We use it because it’s got an amazing flavor, really peppery, mustardy. It doesn’t matter what time of year we get the salad, even in the middle of the winter, it’s always the same. To find a salad producer that’s ten miles down the road in the middle of London is brilliant.”

