

The Future of Food



Experts predict that nine billion people will populate the Earth by 2050. Medical advancements have caused the average life span and birth survival rate to surge. These are outstanding successes, but they've created a problem: as farmland disappears due to overpopulation, what will people eat? If scientists don't discover an answer, the world might face a food crisis. Thankfully, there are possible solutions.

Vertical farming is the concept of cultivating food within skyscrapers. Using advanced greenhouse technology, it's feasible to produce fruit and vegetables indoors. If this idea becomes reality it will require significantly less land than fields. In fact, a 30-story building with a five-acre wide base could yield a yearly harvest equivalent to 2,400 acres. This exceeds traditional farming output because plants inside a building are sheltered from the weather. With climate, water and light control the effects of temperature droughts, and cloudy days are eliminated. Crops can be grown year-round. It's also beneficial that vertical farms can be constructed in close proximity to urban areas. As much as 30 percent of crops are wasted due to spoilage during transport. With a shorter distance between food and consumers harvested produce can be delivered while it's still fresh.

Indoor plant production has already been successfully implemented in Japan. The country has about 50 fully operational factories that grow everything from lettuce to strawberries. These facilities pump out food two to four times faster than traditional farming. When functioning at full capacity, they can produce up to three million vegetables per year.

Meat, on the other hand, will be trickier to copy, yet it is as essential as plants. Livestock consume more energy per food unit than any plant crop. For example, one pound of beef requires 16 pounds of grain and 2,500 gallons of water. Obviously, if everyone became a vegetarian, this would no longer be a problem. A campaign to convince billions of omnivorous humans to stop eating meat wouldn't stand a chance. Thus scientists are experimenting to create meat. To accomplish this, cells are taken from live animals and stored to grow into meat over time. In theory, this process could meet global demands. However, the idea is still in its infancy.

Until scientists achieve artificial food production, you should consider restricting your meat consumption and growing produce in your own yard. The world of 2050 will thank you!

1. What do you think about this idea for growing fruits and vegetables?