

FOOD SECURITY

How do we sustainably feed the world and protect our planet?

Top of the Bench
2024

HOW DOES OUR FOOD GET TO US?

Raw material production: Plants, animals, and other raw materials are used to make food products. Most of the raw materials come from plants and live stock.



Processing: Raw materials are transported into factories which are then turned into food products.



Packaging: Goods are prepared for transportation and sale. There are many different kinds of packaging that accommodate different food producers.



Distribution: food products are distributed to wholesalers, retailers and restaurants. food distribution circuits.



Transport: Food products are transported using a variety of methods, including air, sea, rail, and trucking.

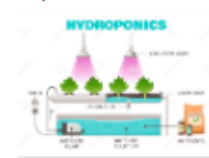


Sale: products are sold to end consumers in local or online stores restaurants and markets

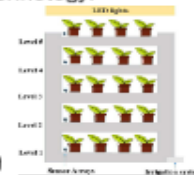


MODERN FARMING TECHNIQUES

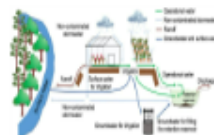
-Hydroponic farming: farming that uses a water-based nutrient solution, instead of soil to grow crops.



-Irrigation farming: farming that enables crops to grow in hot and dry conditions because of advanced water technology.



Modern Farming Techniques:



-Vertical farming: farming that grows crops on top of each other rather than in traditional horizontal rows.

What is soil quality?
-soil quality refers to the condition of soil, based on its capacity to perform ecosystem services that meet the needs of human and non-human life.

WHAT IS THE FUTURE OF FOOD?

Hinges on developing sustainable agricultural practices, advancing technology, and addressing the impacts of climate change



Grow plants without soil by using nutrient-rich water, supporting efficient, sustainable, and controlled farming systems.



Equitable access to nutritious food for a growing global population



Innovations like vertical farming, lab-grown proteins, and AI-driven crop management offer hope for resilient food systems despite increasing environmental and social-economic challenges.

WHAT IS THE PROBLEM WITH MEAT?

Top 3 most annually consumed meats are:
1. Pork, 2. Chicken, 3. Beef.

Some available alternatives you can get, that will give you the same amount of protein are tofu, beans, and lentils.

Currently the country with the largest annual meat consumption is USA – it makes up a large part of their diet. One of the main issues with rapid beef production is that too many cows are being bred to be made into beef, however cows produce methane which is a threatening greenhouse gas.

DID YOU KNOW? Places have started doing lab grown meat. This is made by growing muscle tissue out of a small number of animal cells.



This will mean that as many animals won't be needed or slaughtered. By having less livestock there is less methane, making it better for the atmosphere.

References:

1. "<https://assets.publishing.service.gov.uk/media/61ba0b1bd3bf7f055d72d831/2.1.11dFishImports.svg>" alt="United Kingdom Food Security - 18th November 2024
2. [Top 10 Most Consumed Meats In The World \(Updated 2023\)](#) - 19th November 2024
3. BBC News – 19th November 2024
4. [Lab-grown meat: How it's made, sustainability and nutrition | Live Science](#) - 19th November 2024

