



Plant Protein – Frozen Meals

Rootworks

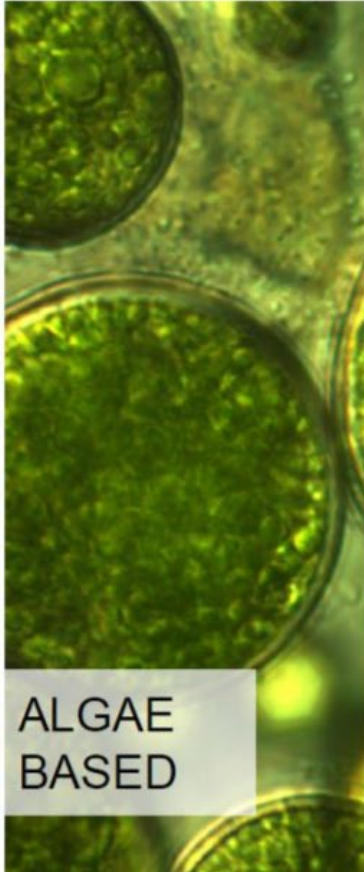


What's Alternate Protein?

Alternative proteins are plant and non-traditional animal based proteins



PLANT
BASED



ALGAE
BASED



FUNGAL
BASED



INSECT
BASED



LAB
GROWN

Alternative protein disrupted the meat industry and went mainstream

Quick serving restaurants offer alternative burgers



A range of players are active in meat space



For retailers, it 's becoming strategic growth axis



Growth of Flexitarian

"The emerging trend of flexitarianism is increasingly putting pressure on animal protein consumption"

Flexitarian

Flexitarian

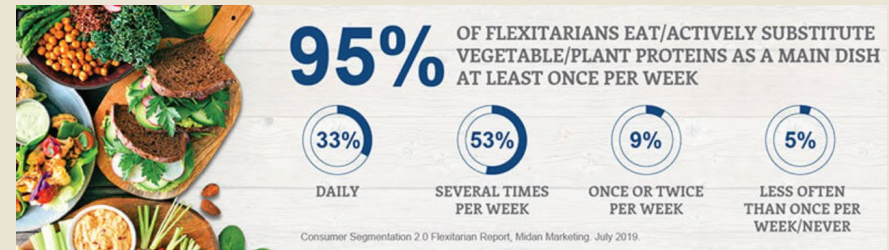
- Flexible Dietary Preferences
- Highest Need for Meat Like Texture and Taste
- Limited Potential for Pure Culinary Solutions
- Seen as Key for Male Consumer Appeal
- Primarily Consumers Seeking Healthier Lifestyles



Vegetarian

Vegan

- Strict Dietary Requirements
- Lowest Need for Meat Like Texture and Taste
- Easily Addressed Through Culinary Formulations



Vegetarian

- Semi-Strict Dietary Requirements
- Moderate Need for Meat Like Texture and Taste
- Can be Addressed Through Culinary Formulation
- Consumers Range from Vegetarians to Health Conscious and Weight Management
- Primarily Consumers are Women

Key Driver

Final call: Planet Catastrophe

Climate change



Source: CGIAR, 2019

CNN

Planet has only until 2030 to stem catastrophic climate change, experts warn

By Brandon Miller and Jay Cost
Published Oct 9, 2019 12:14:15 AM

TIME

Climate Change Made Australia's Devastating Bushfires More Likely, Scientists Confirm

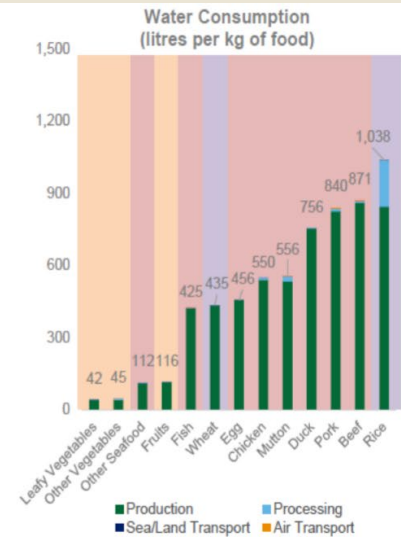
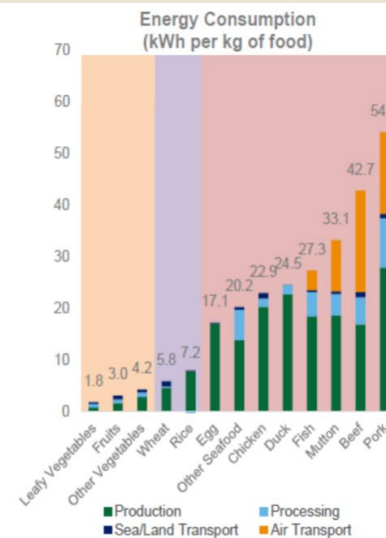
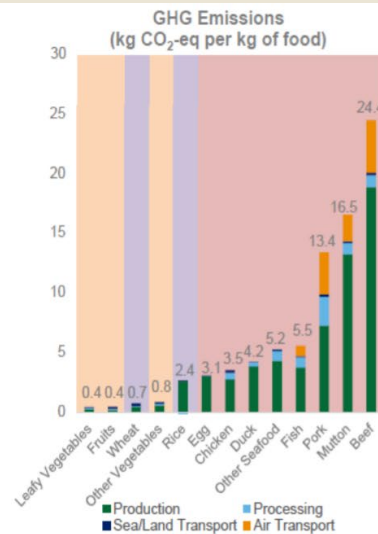
BBC

Final call to save the world from 'climate catastrophe'

CNBC

Bill Gates: Coronavirus may be 'once-in-a-century pathogen we've been worried about'

Environmental impact



Fibres

Carbohydrates

Proteins

Key Driver

Population Explosion

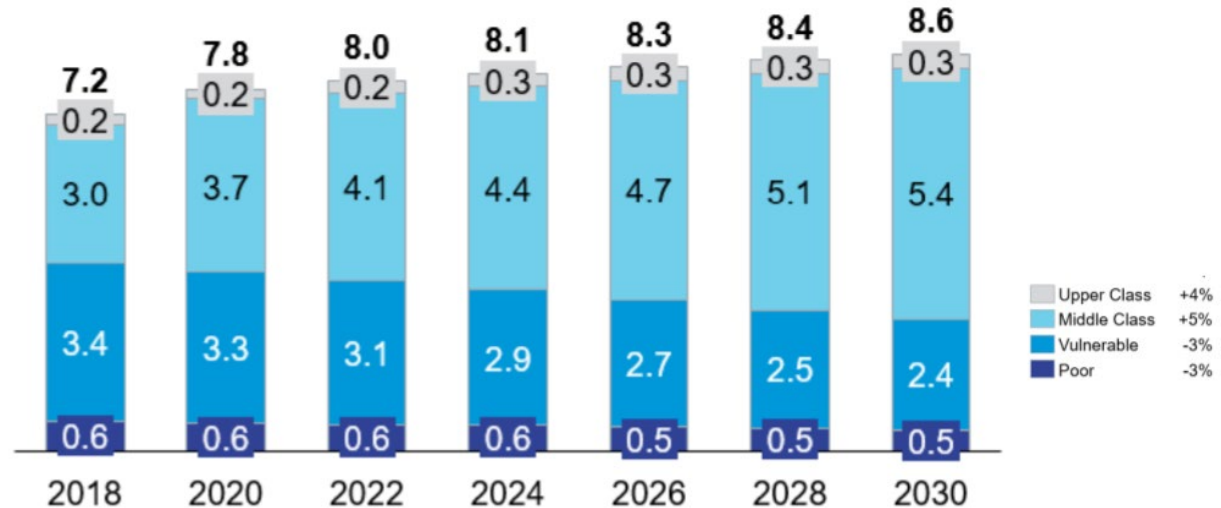
Population Growth (Billion)

7.7_{BIL} → **9_{BIL}**
(2019) (2050)

**NUMBER OF EARTHS NEEDED TO
SUSTAIN HUMAN ACTIVITY**



World Population by Social Economic Status (2018 – 2030), in million capita



- Protein consumption demand is projected to Increase from 280 T to 570T in 2050
- Significant growth in the middle-class population
- Increasing demand for quality and sustainable protein; - Meat production exacerbate sustainability problem (high greenhouse-gas emissions) - Meat consumption increases health risks e.g. cardiovascular disease, colorectal cancer and type 2 diabetes

COVID-19

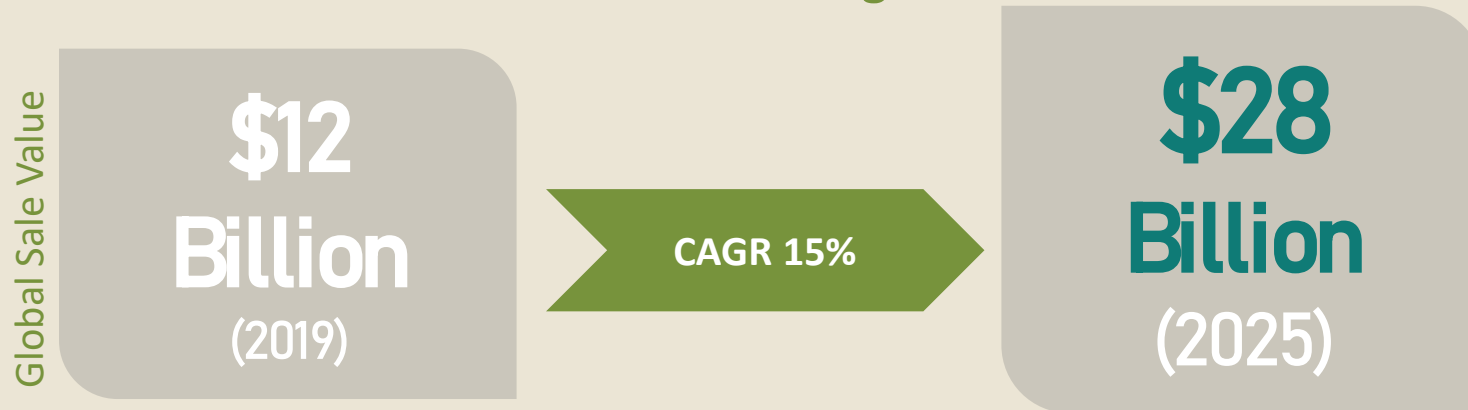
MINTEL

Plant-based alternatives

COVID-19 is providing an unexpected additional boost to plant-based proteins and alternatives. It will become even more important for meat substitutes to deliver on health, nutrition and 'clean label'. Manufacturers should also respond to consumers' demand for taste and enjoyment to justify the price tags.

The future is Plant-based

The Plant Based Meat Sector continuous to grow



Nutrition : Protein content is one of customers pain point

32% of consumers feel that plant-based protein is less nutritious compared to animal-based protein



Gaps in the market and room for improvement

As the market for plant-based alternatives grows, a wider range of ingredients are being used in order to broaden the product range. These ingredients are often used because of their ability to provide the consumer with high levels of protein and nutritional value, as well as for their functional properties

Source : EUROPEAN CONSUMER SURVEY ON PLANT-BASED FOODS (May 2020)

Frozen Asian Ready Meals

Plant Protein Based Meals



Thai Red Curry with Jasmine Rice



Vegetarian textured Protein cubes cooked in aromatic red curry paste enriched with Coconut Milk and accompanied with Jasmine Rice.



Net Weight: 320g

Thai Panang Curry with Jasmine Rice



Vegetarian textured protein cooked in a creamy Thai Curry flavored with Thai herbs and accompanied with Jasmine Rice



Net Weight: 320g

Thai Massaman Curry with Jasmine Rice



Vegetarian textured protein cubes cooked in a rich and mild Thai Curry flavored with Cumin, Cardamom and Cinnamon, accompanied with Jasmine Rice



Net Weight: 320g

Pad Thai



Vegetarian textured protein stir-fried with Flat Rice Noodles and Vegetables in a sweet and Tangy Tamarind Sauce.



Net Weight: 320g

Indian Tikka Masala with Basmati Rice



Vegetarian textured protein gently simmered in Fenugreek flavored creamy Tomato Gravy, accompanied with cumin flavored Basmati Rice.



Net Weight: 320g

Indian Jalfrezi with Pilau Rice



Vegetarian textured protein cooked with Onion and Bell Peppers, simmered in coriander and cumin flavored Tomato gravy, accompanied with Basmati Pulao Rice



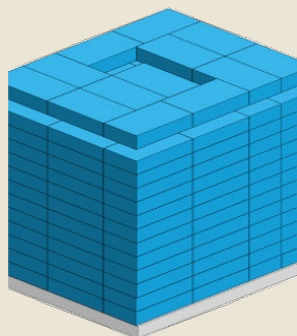
Net Weight: 320g

Rootworks Plant based meal range



Packaging and Storage Details

Net weight :	320g.
Weight / carton :	2.56kg.
Packing size :	320g. X 8 units
Inner cube dimension :	78 x 67 x 103 mm. (L X W x H)
Master carton dimension :	384 x 219 x 118 mm. (L X W x H)
Loading (40FT hand load) :	48,000 units (6,000 cartons) +/- 5%
Loading (20FT hand load) :	24,000 units (2,800 cartons) +/- 5%
Loading per pallet (40 x 48") :	169 cartons / pallet
Storage :	Frozen
Shelf Life :	18 months



Standard 40x48" pallet

169 cartons / pallet

36 pallets / container

Rootworks

F2P-2021

www.f2p.co.th
www.farm2plate.co