

BRINGING FOODTECH TO THE 21ST CENTURY

WORLDWIDE FOOD CHALLENGES



Food Security

Despite a reduction in global hunger, between 2014–2016 almost **800 million people** were chronically undernourished.

Source: “2016 World Hunger and Poverty Facts and Statistics,” World Hunger Education Service (2016)

An estimated **two billion people** worldwide do not get enough micronutrients, such as vitamin A, iodine, and zinc, in their diets.

Source: “Hidden Hunger—Approaches to Tackling Micronutrient Deficiencies,” International Food Policy Research Institute (2016)



Unhealthy Diets

The number of overweight and obese people worldwide will have grown from **1.3 billion in 2005 to 3.3 billion in 2030.**

Source: “Food Systems and Diets: Facing the Challenges of the 21st Century,” Global Panel on Agriculture and Food Systems for Nutrition (2016)

Globally, unhealthy diets constitute a greater health risk than those of alcohol, tobacco, drugs and unsafe sex, combined.

Source: Idem.



Food Safety

Food-borne diseases impede socioeconomic development by straining healthcare systems and harming national economies, tourism, and trade.

Source: “10 facts on food safety,” World Health Organization (2016)

Almost 1 in 10 globally (600 million ~) fall ill after eating contaminated food, and 420,000 die every year.

Source: Idem.

GLOBAL FOODTECH TRENDS



Global industry expected to grow to **\$250M BY 2022.**

Source: “Global Food Tech Market,” Research and Markets (2017)



Emerging Consumer Preferences:

Consumer empowerment, tech personalization, lifestyle and leisure, health, sustainability.



Hot Technologies:

Food eCommerce, ingredient innovation, alternative protein, packaging, food safety and traceability, nutrition recommendations, and IoT-enabled kitchen appliances.

STRENGTHS OF ISRAELI FOODTECH



Technological prowess

With expertise in biotech, sensors, data analytics, and IoT, Israel holds an advantageous position in the current shift to more-advanced foodtech solutions.



Agricultural innovation

Israeli agtech excellence, e.g. in plant genomics and plant-based protein, is a strong foundation for foodtech innovation.



Outward-looking entrepreneurs

With a negligible local market, Israeli entrepreneurs innovate for the needs of international markets.



Food culture

Food is at the heart of Israeli society, characterized by passion, curiosity, and ingenuity.

SUPPORTIVE SECTOR



Research centers

Governmental
ARO-Volcani

Academic

Hebrew University, Technion, Ben-Gurion University, Tel Aviv University



Venture capital firms

Foodtech focused Israeli venture capital firms—Copia, Foodlab Capital, GreenSoil Investments, Pontifax



Incubators

The Kitchen Foodtech Hub (Strauss), Trendlines



Foreign MNCs

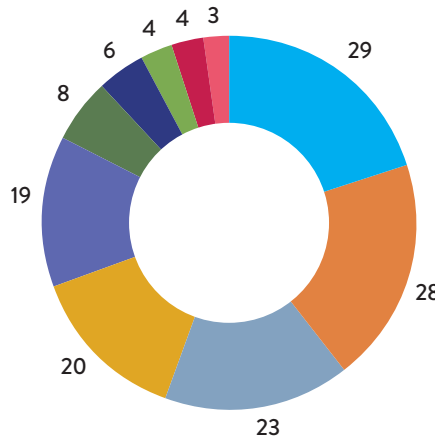
(acquired Israeli companies, established R&D in Israel) - Nestlé



Israeli MNCs

Frutarom, Cham Foods, Tadbik, Galam, Lycored, Tnuva, Strauss

ISRAELI FOODTECH COMPANIES BY SUBSECTOR



- Food-enhancing technology
- Food e-commerce
- Nutrition advice
- Food safety & traceability
- Packaging
- Food & beverage processing
- Alternative Protein
- Logistics
- Kitchen appliances
- Food aesthetics

Notes: **Food-enhancing technology** includes food ingredients and dietary supplements (excluding alternative protein). **Food e-commerce** includes online marketplaces, delivery platforms, and food store/shopping guides. **Nutrition advice** includes decision-support technologies, virtual nutritionists, and meal plans. **Food safety & traceability** includes testing and diagnostics tools for allergens, bacteria, and chemicals. **Alternative protein** includes in-vitro meat, insect-based protein, and algae-based protein. **Food aesthetics** includes food decoration technologies.

SUCCESS STORIES



Goji has developed a solid-state cooking technology for healthier, tastier, faster, and simpler food preparation; raised a total of \$70M since it was established in 2009.



Algatechnologies - global leader in premium natural astaxanthin, one of the world's most powerful antioxidants, sourced from the microalgae *Haematococcus pluvialis*; acquired by Grovepoint Capital for \$50M in early 2013.



StePac develops high-quality, precision-engineered, modified atmosphere/humidity packaging for fresh produce; acquired in 2015 by Johnson Matthey for \$28M.



Consumer Physics has developed a pocket-size molecular sensor that can scan meat, dairy, fruit, and vegetables for macro-nutrient information; has raised over \$21M since its establishment in 2011.



Enzymotec develops and manufactures nutritional ingredients and medical foods; raised \$63.5M in its Nasdaq IPO in 2013.

**START-UP
NATION
CENTRAL**

START-UP NATION CENTRAL IS YOUR BRIDGE TO ISRAELI INNOVATION.

Contact Start-Up Nation Central to help you to access the Israeli Foodtech Ecosystem, and connect with the relevant start-ups and industry figures.

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