



## Secure today feed tomorrow

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Globally: "The challenge is to deliver nutritious, safe and from affordable food to a Global population of over 9 billion in the coming decades, using less land, fewer inputs, with less waste and a lower environmental impact. All this has to be done in ways that are socially and economically sustainable." Food security occurs when all people are able to access enough safe and nutritious food to meet their requirements for a healthy life, in ways the planet can sustain into the future. However, food security faces a number of challenges across both production and consumption which research will be essential to solve. Many countries are facing the double burden of hunger and under nutrition alongside overweight and obesity, with one in three people across the globe currently suffering from some form of malnutrition (ref 1). Indeed it is not unusual to find people with different forms of malnutrition living side-by-side in one country, in one community, or even in the same household. The prevalence rates of overweight, obesity and diet-related non-communicable diseases (NCDs) such as cardiovascular disease, stroke, certain cancers and type II diabetes (ref 2), are increasing in every region, in both developed and developing countries. Globally there are now more people who are overweight or obese than underweight, with the two combined accounting for more than half of the world population: a new normal (ref 3). The estimated cost to the world economy of disease and death from overweight and obesity is \$2 trillion (ref 2). At the same time, around 795 million people face hunger on a daily basis and more than two billion people lack vital micronutrients (e.g. iron, zinc, vitamin A) (ref 1), affecting their health and life expectancy. Nearly a quarter of all children aged under five today are stunted, with diminished physical and mental capacities, and less than a third of all young infants in 60 low- and middle-income countries meet the minimum dietary diversity standards needed for growth..

**North-America Region:** The anticipation of eating regimen related sicknesses is one of the new societal difficulties of the 21st century. In October 2011, the total populace passed the 7 billion stamps. Such development will put a monstrous strain on the worldwide sustenance supply. These elements alone make the generation and circulation of sustenance a basic

issue for the 21st century. The natural nourishment industry is one of the quickest developing divisions of U.S. agribusiness. Customer interest for natural sustenance has kept on developing at a relentless pace of at least 20% every year since the 1990s. Around 73% of customary supermarkets and almost 20,000 common nourishment stores convey natural items, representing roughly 2.5% of aggregate sustenance deals in the United States. Residential deals appraisals of natural sustenance are \$17 billion (all sums are in U.S. dollars) for 2006, with 39% of those deals for leafy foods (Organic Trade Association 2006). The present interest for natural deliver is expanding speedier than supply, bringing about growing exchange holes amongst imports and fares. The natural area of the U.S. agrarian framework is requesting expanded consideration from makers, retailers, buyers, and strategy producers keen on natural and medical problems inside the nourishment framework.

**Europe:** The significant assembling centres in the globe are Europe which constitutes the dominant part share in the nourishment flavours and enhancer showcase alongside North America. European market is a develop advertise and has a few administrative bodies to manage stringently the utilization of sustenance flavours and enhancers, accordingly dealing with the purchasers of the countries. Germany constitutes the significant offer having 24% taken after by the UK (23%), Spain (10%), Netherland (5%) and Italy (9%). \$ 823 million US dollar is the market measure by estimation of the manufactured flavour and \$ 755.65 million US dollar is the market estimate by estimation of the characteristic in the year 2014.

**Asia pacific:** Asia Pacific is a colossal and progressively powerful market in the supply of sustenance and refreshment fixings. And in addition representing 35% of worldwide esteem included fixing supply in this classification; it is likewise a dissolving purpose of different patterns and impacts. In 2012, Asia Pacific represented 35% of worldwide utilization of significant worth included sustenance and drink fixings, proportional to just about 8.5 million tons out of a worldwide aggregate of 24.2 million tons. Asia Pacific is likewise one of the quickest developing locales, with a figure CAGR of 4% more than 2012-2017, behind just the Middle East and Africa,

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with 5%. This implies by 2017, Asia will have expanded its offer of the worldwide aggregate to 38%.

**USA:**

**Market structure**

The US is the world's biggest economy and its 320 million individuals created US\$48,000 per capita GDP in 2011. One of every five Americans live in one of the nation's eight biggest urban communities. Its customers expect aggressive estimating and offers, and are progressively worried about economical generation, transport and bundling. It is New Zealand's third biggest sustenance and refreshment showcase, with US\$2.1 billion fares in 2011. • US bundled sustenance deals totalled US\$332 billion out of 2011. The bread shop classification was worth 21 per cent of the aggregate; dairy, 16 per cent; solidified prepared nourishment, 10 per cent; ice cream parlour, 10 per cent; and sweet and flavourful snacks, 10 per cent. • Packaged sustenance deals expanded by a compound yearly development rate (CAGR) of 2.5 per cent amid 2006-2011, driven by more dinners eaten at home as opposed to eating out. The most noteworthy development was in lunch rooms, with a CAGR of 6.6 per cent over the five-year time frame. Pasta grew 5.9 per cent in that time, noodles, 4.8 per cent; spreads, 4.6 per cent; and dairy items, 3.4 per cent. • Fresh nourishment deals involved 78 million tons by volume in 2011; with meat at 31 per cent piece of the pie; vegetables, 25 per cent; organic products, 23 per cent; bland roots, seven per cent; and eggs, six per cent. Market development was stale from 2006-2011. • The US wine advertise is the world's second biggest behind France, totalling US\$34 billion out of 2011, equalling 2.73 billion litres. Still light grape wines overwhelm with a 86 per cent piece of the overall industry in esteem and 91 per cent in volume. Shimmering wines have an eight per cent share by esteem and five per cent in volume. CAGR deals development more than 2006-2011 was three per cent, with imports from Argentina up 13 per cent and New Zealand up 40 per cent. There has been change following the subsidence late in the decade, which hit the foodservice showcase especially hard.

**Market potential**

Total nourishment utilization is estimate to increment by a CAGR of 3 per cent amid the five years to 2016, because of the developing U.S. populace. Nourishment utilization in the U.S. is relied upon to reach \$968 billion by 2016. • Canned nourishment esteem deals are conjecture to develop by a one CAGR of 3.6 per cent to 2016, driven by expanding shopper requests for comfort. • There is popularity for solidified with sustenance items, especially from markets and eatery networks. The solidified sustenance advertise is estimate to develop at a

normal yearly rate of 1.5 per cent, achieving \$96.4 billion of every 2016. • The natural sustenance advertisement is a figure to develop by a 9.7 per cent CAGR in the vicinity of 2011 and 2016. The market is conjecture to reach \$46.5 billion by 2016, which is an expansion of > 50 per cent since 2010. • The main development of the dairy advertise is conjecture to moderate, to with a CAGR of 3.6 per cent in the vicinity of 2011 and 2016, achieving \$89.3 billion out of 2013. The dynamic yogurt part, in the United States is relied upon to keep on growing, due to the on-going pattern towards more beneficial choices. • The for basic supply retail showcase is relied upon to develop by a well CAGR of 3.5 per cent to 2016. • The foodservice deals are for relied upon to develop by a 3.2 per cent CAGR to 2015, with achieving \$562.5 billion. The most astounding development is figure in foodservice foundations in travel areas (i.e. motorway benefit/rail stations).

**Universities offering Food Education (Globally, Continent Wise (Europe, America, Asia pacific, Middle East))**

Mentioned below are some of the renowned Universities in Europe

- Technical University of Munich, Germany
- Lund University (Food Technology, Nutrition and Engineering)Agrocampus Ouest, France
- University of Goettingen, German
- Leibniz University, German
- Agricultural University of Athens, Greece
- Wageningen University and Research Centre, Netherlands
- Utrecht University, Netherlands
- University of Life Sciences in Lublin, Poland
- Moscow Agricultural Academy, Russian Federation

