

By 2050 the world's population is projected to grow by one-third, reaching between 9 and 10 billion. With globalization and expected growth in global affluence, a substantial increase in per capita meat, dairy, and fish consumption is also anticipated. The demand for calories from animal products will nearly double, highlighting the critical importance of the world's animal agriculture system. Meeting the nutritional needs of this population and its demand for animal products will require a significant investment of resources as well as policy changes that are supportive of agricultural production. Ensuring sustainable agricultural growth will be essential to addressing this global challenge to food security. Critical Role of Animal Science Research in Food Security and Sustainability identifies areas of research and development, technology, and resource needs for research in the field of animal agriculture, both nationally and internationally. This report assesses the global demand for products of animal origin in 2050 within the framework of ensuring global food security; evaluates how climate change and natural resource constraints may impact the ability to meet future global demand for animal products in sustainable production systems; and identifies factors that may impact the ability of the United States to meet demand for animal products, including the need for trained human capital, product safety and quality, and effective communication and adoption of new knowledge, information, and technologies. The agricultural sector worldwide faces numerous daunting challenges that will require innovations, new technologies, and new ways of approaching agriculture if the food, feed, and fiber needs of the global population are to be met. The recommendations of Critical Role of Animal Science Research in Food Security and Sustainability will inform a new roadmap for animal science research to meet the challenges of sustainable animal production in the 21st century.

The metabolic and health effects of both nutritive and non-nutritive sweeteners are controversial, and subjects of intense scientific debate. These potential effects span not only important scientific questions, but are also of great interest to media, the public and potentially even regulatory bodies. Fructose, High Fructose Corn Syrup, Sucrose and Health serves as a critical resource for practice-oriented physicians, integrative healthcare practitioners, academicians involved in the education of graduate students and post-doctoral fellows, and medical students, interns and residents, allied health professionals and nutrition researchers, registered dietitians and public health professions who are actively involved in providing data-driven recommendations on the role of sucrose, HFCS, glucose, fructose and non-nutritive sweeteners in the health of their students, patients and clients. Comprehensive chapters discuss the effects of both nutritive and non-nutritive sweeteners on appetite and food consumption as well as the physiologic and neurologic responses to sweetness. Chapter authors are world class, practice and research oriented nutrition authorities, who provide practical, data-driven resources based upon the totality of the evidence to help the reader understand the basics of fructose, high fructose corn syrup and sucrose biochemistry and examine the consequences of acute and chronic consumption of these sweeteners in the diets of young children through to adolescence and adulthood. Fructose, High Fructose Corn Syrup, Sucrose and Health fills a much needed gap in the literature and will serve the reader as the most authoritative resource in the field to date.

International Food Consumption Patterns and Global Drivers of Agricultural Production
Production and Use

Feeding the World in 2050

A Review of Foreign Farm Policy, Production, and Trade

Future Foods

How Feeding and Fueling the Planet Affects Food Prices

Global Trends, Opportunities, and Sustainability Challenges

Trends such as shifting dietary patterns and an increasingly sedentary lifestyle combined with smoking and alcohol consumption are major risk factors for noncommunicable chronic diseases such as obesity, diabetes, cardiovascular diseases such as hypertension and stroke, cancer dental diseases and osteoporosis. This report reviews the scientific evidence on the effects of diet, nutrition and physical activity on chronic diseases and makes recommendations for public health policies and programmes. Issues considered include the macro-economic implications of public health on agriculture and the global supply and demand for fresh and processed foods.

An understanding of food demand and food trends across countries and the ability to predict potential shifts in demand for different food products is an invaluable tool for all individuals involved in the agricultural sector. In a 2003 report, International Evidence on Food Consumption Patterns, ERS and collaborating economists estimated income and price elasticities of demand for broad consumption categories--such as food, clothing, education, and other goods--and for food categories such as cereals, meats, and dairy across 114 countries using 1996 International Comparison Program (ICP) data. These elasticities measure the degree to which consumption changes when prices or incomes change. This book provides an update on the International Evidence on Food Consumption Patterns using the 2005 International Date Program Data; and discusses global drivers of agricultural demand and supply.

Over the past two years, food prices have soared -- and plummeted. As crops are increasingly shifted to biofuel production, will food prices soar again? Will people starve as a result? What are the hidden relationships between the food on your plate and the gas in your car? Will economic recovery lead directly to massive price inflation in both food and energy? In this book, one of the world's leading experts untangles the complex global relationships between food, energy, and economics and helps readers come to their own conclusions about the future of food. Pat Westhoff reveals what really causes large swings in food prices and what is likely to cause them to rise and fall in the future. Westhoff discusses all the factors that drive changes in the cost of food: not just biofuel production, but also weather, income growth, exchange rates, energy prices, government policies, market speculation, and more. Next, he walks through several of the most likely scenarios for the future, offering insights that will be indispensable to consumers, commodity speculators, and policymakers alike.

To make full use of available food biodiversity to enhance the nutritional status of populations, a better understanding of food biodiversity information in dietary intake is required. Currently, there are few national and regional food consumption surveys that report food biodiversity, particularly at the cultivar/breed level. Co-published with Bioversity International, these pioneering guidelines will facilitate the adaptation of existing dietary assessment instruments to better capture food biodiversity

The World of Food

The Oxford Handbook of the Economics of Food Consumption and Policy

A Framework for Assessing Effects of the Food System

The Economics of Food

2017 Global Food Policy Report

Obesity Prevention

Impact on Food Security and Nutrition

The book provides knowledge of sustainable marketing tools in SMEs operating in the industry.

By 2050 the world will be faced with the enormous challenge of feeding 9 billion people despite being affected by climate change, rising energy costs and pressure on food growing land and other major resources. How will the world produce 70% more food by 2050 to feed a projected extra 2.3 billion people? What will be the impact of food shortages and high prices on areas in crisis such as sub-Saharan Africa? Where will future production growth come from? And how do we balance the need for environmental protection with sustainable agricultural production methods? This is the first text to present a scholarly, balanced approach to the contentious area of food production and supply up to 2050 - offering a readable and well-informed account which tackles the global food situation in all its totality, from agricultural production, technological advance, dietary concerns, population changes, income trends, environmental issues, government food and agriculture policy, trade, financial markets, macroeconomics and food security. Highly accessible and written by a specialist author with experience as an agricultural analyst, policy advisor and researcher, Global Food Futures synthesises the key issues in one volume.

Over the years, approaches to obesity prevention and treatment have gone from focusing on genetic and other biological factors to exploring a diversity of diets and individual behavior modification interventions anchored primarily in the power of the mind, to the recent shift focusing on societal interventions to design "temptation-proof" physical, social, and economic environments. In spite of repeated calls to action, including those of the World Health Organization (WHO), the pandemic continues to progress. WHO recently projected that if the current lifestyle trend in young and adult populations around the world persist, by 2012 in countries like the USA, health care costs may amount to as much as 17.7% of the GDP. Most importantly, in large part due to the problems of obesity, those children may be the first generation ever to have a shorter life expectancy than that of their parents. Obesity Prevention presents the most current research and proposals for addressing the pandemic. Past studies have focused primarily on either genetic or behavioral causes for obesity, however today's research indicates that a strongly integrated program is the best prospect for success in overcoming obesity. Furthermore, focus on the role of society in establishing an affordable, accessible and sustainable program for implementing these lifestyle changes is vital, particularly for those in economically challenged situations, who are ultimately at the highest risk for obesity. Using studies from both neuroscience and behavioral science to present a comprehensive overview of the challenges and possible solutions, The brain-to-society approach to obesity prevention focuses on what is needed in order to sustain a healthy, pleasurable and affordable lifestyle. Explores the "brain-to-society" approach to obesity prevention, focusing on an integrative approach to addressing the obesity pandemic Presents both the neuroscientific and the behavioral factors that impact eating habits Identifies the challenges and suggests solutions for altering attitudes toward food on both an individual and a societal level

IFPRI's flagship report reviews the major food policy issues, developments, and decisions of 2016, and highlights challenges and opportunities for 2017 at the global and regional levels. This year's report looks at the impact of rapid urban growth on food security and nutrition, and considers how food systems can be reshaped to benefit both urban and rural populations.

Fourteen Points for the Twenty-First Century

Sustaining Global Food Security

The Covid-19 Pandemic and Food Consumption Patterns

A Renewed Appeal for Cooperative Internationalism

Transforming food systems for affordable healthy diets

Global Change and the Challenges of Sustainably Feeding a Growing Planet

Concepts in Environmental Health Science

This book is a printed edition of the Special Issue "Beverage Consumption Habits around the World: Association with Total Water and Energy Intakes" that was published in Nutrients

Historically, the challenge for humans has been to secure a sufficient supply of food to stave off hunger and starvation. As a result, much of the research on food and agriculture in the past century has focused on issues related to production efficiency, food supply, and farm profitability. In recent years, however, farmers, agribusiness, policy makers, and academics have increasingly turned their attention away from the farm and toward the food consumer and to issues related to food consumption. This handbook provides an overview of the economics of food consumption and policy and is a useful reference for academics and graduate students interested in food economics and the consumer-end of the supply chain. It is also relevant to those employed in food and agricultural industries, policy makers, and activist groups. The first section covers the application of the core theoretical and methodological approaches of the economics of food consumption and policy. The second part concentrates on policy issues related to food consumption. Several chapters focus on the theoretical and conceptual issues relevant in food markets, such as product bans, labeling, food standards, political economy, and scientific uncertainty. Additional chapters discuss policy issues of particular interest to the consumer-end of the food supply chain, such as food safety, nutrition, food security, and development. The final section serves as an introduction to particular issues and current topics in food consumption and policy.

Food consumption patterns and practices are rapidly changing in Asia and the Pacific, and nowhere are these changes more striking than in urban areas. This book brings together scholars from anthropology, sociology, environmental studies, tourism, architecture and development studies to provide a comprehensive examination of food consumption trends in the cities of Asia and the Pacific, including household food consumption, eating out and food waste. The chapters cover different scales of analysis, from household research to national data, and combine different methodologies and approaches, from quantifiable data that show how much people consume to qualitative findings that reveal how and why consumption takes place in urban settings. Detailed case studies are included from China, India, Japan, Malaysia, Philippines, South Korea and Vietnam, as well as Hawai'i and Australia. The book makes a timely contribution to current debates on the challenges and opportunities for socially just and environmentally sound food consumption in urbanizing Asia and the Pacific. Chapter 3 of this book is freely available as a downloadable Open Access PDF under a Creative Commons Attribution-Non Commercial-No Derivatives 3.0 https://s3-us-west-2.amazonaws.com/tandfbis/rt-files/docs/Open+Access+Chapters/9781138120617_oachapter3.pdf

A comprehensive look at food production and consumption worldwide This global overview of agriculture discusses all of the primary aspects of food production and relates that information to human nutritional needs. It covers everything from food crop production to food preparation. Beginning with a detailed description of representative farms in different climates, World Food: Production and Use: Describes how and where food is produced and who produces it Compares and contrasts different farming systems and describes how local culture and environment influence food production and use Contains detailed information on human nutrition Features specific information on: grain crops; vegetables; root crops; fruits, berries and nuts; and farm animals and fish Discusses factors that impact food production, including weather, soil, fertility, and water Includes a chapter on increasing food supplies Addresses some of the issues surrounding Genetically-Modified Organisms (GMOs) Complete with a CD-ROM with color graphs, tables, and pictures, this is an ideal textbook for courses on world food systems in agriculture, agronomy, crop science, and food science programs. It is also an excellent resource for professionals working in agricultural or international development, relief agencies, or volunteer organizations such as the Peace Corps. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Encyclopedia of Trade, Labor, and Politics

THE NETHERLANDS IN THE GLOBAL FOOD SYSTEM

Malnutrition, Disease and Starvation in Post-Civil War Spain

Fructose, High Fructose Corn Syrup, Sucrose and Health

World Food

World Food Problem

Food in the Third World

Includes papers and case studies presented at a FAO workshop held in Rome, Italy from 8 to 10 October 2003

The Agricultural Outlook 2021-2030 is a collaborative effort of the Organisation for Economic Co-operation and Development (OECD) and the Food and Agriculture Organization (FAO) of the United Nations. It brings together the commodity, policy and country expertise of both organisations as well as input from collaborating member countries to provide an annual assessment of the prospects for the coming decade of national, regional and global agricultural commodity markets. The publication consists of 11 Chapters; Chapter 1 covers agricultural and food markets; Chapter 2 provides regional outlooks and the remaining chapters are dedicated to individual commodities.

This book explores the fundamental determinants of long term changes in agricultural land use and the associated implications for environmental and food security. The book is designed around the idea that each chapter focuses on one driver, or underlying determinant, of land use change at global scale. It starts with key factors which have been influential in the past, such as growth population, incomes and agricultural productivity, thereafter turning to new drivers such as biofuels, climate change and demand for environmental services. Specialized topics include food security outcomes, projections of future agricultural prices, greenhouse gas emissions, the role of globalization and market integration. The book draws heavily on the emerging body of literature on these topics, summarizes key findings and organizes these within a unifying economic framework.

Foreign Agriculture

Guidelines on assessing biodiverse foods in dietary intake surveys

World on the Move

Past Trends and Projections to 2000

The Nexus of Science and Policy

The Economics of Food, Farming, Natural Resources, and Rural America