2 ZERO HUNGER

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE


H. Nativ - Morris Kahn Marine Research Station

RESEARCH

Drought Threatens Marine Food Security

A new study by Dr. Igal Berenshtein from the Department of Marine Biology at the Leon H. Charney School of Marine Sciences, and colleagues, published in *Nature Communications*, reveals that extreme drought can severely impact marine ecosystems and fisheries. Focusing on the late 1980s in the Gulf of Mexico, researchers found that prolonged drought reduced Mississippi River flow and nutrient supply, triggering a collapse of around 40% in fish biomass, starting with small forage fish and cascading up the food chain.

The findings show that environmental factors, more than fishing itself, drove this decline. Looking ahead, climate projections suggest that more frequent and severe droughts could lead to further sharp drops in fish stocks, posing a growing risk to marine food security unless adaptive measures are taken.

'Mother of Dates'?

Researchers have identified a previously unknown species of wild date palm in southern Israel, notable for its unique traits and remarkable resilience. Led by Dr. Roi Galili and Prof. Guy Bar-Oz from the Haifa School of Archaeology and Maritime Cultures. The study suggests this could be the long sought 'mother of the date palm', echoing the significance of the discovery of wild wheat. The research was conducted in collaboration with Tel Aviv University, the Volcani Institute, and the Montpellier Institute in France.

Mediterranean Diet Linked to Improved Crohn's Outcomes

A new study published in *Clinical Nutrition* journal by a team of researchers, including Prof. Shira Zelber-Sagi, from the School of Public Health, at the Faculty of Social Welfare and Health Sciences, finds that adherence to the Mediterranean diet is associated with lower inflammation levels and higher remission rates in Crohn's disease patients. Benefits were strongest in the short term, highlighting the importance of maintaining healthy dietary habits, particularly limiting harmful food components, to support disease management.

PUBLIC ENGAGEMENT

From Waste to Worth: Israel's National Food Rescue Plan

Israel discards about 2.6 million tons of food each year while 2.8 million people face food insecurity. A new national plan, led by the Ministry of Environmental Protection and the Ministry of Agriculture and Food Security and supported by research from the Samuel Neaman Institute at the Technion, including Prof. Ofira Ayalon from the School of Environmental Sciences, brings together experts from government, academia, local authorities, and civil society to reduce food waste by up to 50% by 2050 through prevention, food rescue, regulation, and behavior change.

From Sea to Sustainability: Sea Wheat Gains European Recognition

The *SeaWheat project* at the Morris Kahn Marine Research Station, has been recognized as a 2025 'Success Story' by the prestigious COST program. Led by Prof. Muki Shpigel and Dr. Leigh Livne, the project explores the green algae *Ulva* ('sea wheat') as a sustainable resource for future food systems, aquaculture, and marine biotechnology. Connecting around 400 researchers from 36 countries and producing 47 scientific publications, *SeaWheat* highlights Israeli scientific leadership on the global stage and its contribution to sustainable solutions for marine ecosystems.

LEARNING AND STUDENTS

Bridging Communities Through Knowledge on Chronic Pain

As part of the course *'Chronic Pain: New Approaches to Measurement and Treatment'*, taught by Prof. Pavel Goldstein, from the School of Public Health, students are partnering with Wikimedia Israel to create Hebrew and Arabic Wikipedia entries on chronic pain. Working in Jewish-Arab pairs, they combine academic research with intercultural collaboration, producing reliable, accessible health information while fostering meaningful dialogue and connections beyond the classroom.

Tackling Food Waste: International Perspectives

An international webinar explored strategies for reducing food loss and waste in Germany, the UK, and Israel. The session was initiated and led by Prof. Ofira Ayalon from the School of Environmental Sciences and head of the Natural Resources and Environment Research Center.

From Knowledge to Practice: Nutrition & Physical Activity

A new course taught at the External Studies Unit offers practical, up-to-date knowledge of healthy nutrition and sports nutrition, addressing the needs of both the general population and athletes. Participants will explore physiological and nutritional principles, learn how to build healthy habits, debunk common myths, and gain practical tools to improve health and performance. Combining theory and hands-on applications, the 40-hour course supports a balanced, healthy lifestyle.

OPERATIONS

Archaeology Now: A Taste of History

The fascinating lecture series *'Archaeology Now'* returns to the Hecht Museum with a flavorful new season: 'Digging into the Plate - A Brief History of Food'. Through talks by leading researchers, the series explores the history of food, from wheat and ancient Egyptian beer to sugar in the Land of Israel, combining archaeology, botany, genetics, and culinary history to reveal how food has shaped human civilization.