

The members of INSAT-UCAR actively participated in the Scientific Symposium on "Valorization of Natural Bioresources in Functional Nutrition," organized by the Higher School of Food Industries of Tunis (ESIAT) of the University of Carthage (UCAR) in collaboration with the Technological Innovation and Food Safety (LITSA) Research Laboratory (1<sup>st</sup>, 2<sup>nd</sup> March 2024).

# **Professor Sami Fattouch** participated with a conference representing the PromedLife project, highlighting its objectives and roadmap. He presented the contributions of each partner (public and private structures) and the expected outputs of the project and its beneficial impacts on children and elder food habits, especially related to snacking.

# **Malek Ben Temessek** (member of PromedLife, researcher at INSAT-UCAR) participated with oral and poster presentations, respectively entitled "Development of a Novel Functional Beverage: Enhancing Milk Kefir with Date Syrup" and "Optimizing Date Syrup Production: A Study of Enhanced Extraction". She explored the potential integration of date syrup in fermented milk beverages. Her poster focused on the enhancement of date juice production using different processes including high pressure extraction which has been found as a soft method preserving the date pasta bioactive content with the highest yield in terms of polyphenols and antioxidant capacities, aligning with the project objectives WP3 and WP4.



**Malek Ben Temessek was awarded the "Best Poster Award" during the symposium.**

# **Hiba Ben Aribi** (member of PromedLife, researcher at INSAT-UCAR) participated with an oral presentation entitled "An Innovative AI-Powered Mobile Application for Early Childhood Nutrition Education", wherein she elaborated on the mobile application that she is developing aiming at promoting scientific and nutritional awareness of the Mediterranean diet and healthy lifestyle behavior, as part of WP6.

**Dr. Olfa Rebai** presented an oral presentation entitled "Development of Marshmallow Based Date and Carob Syrup: Biochemical, Nutritional, and Sensorial Consumer Evaluation". The developed date-syrup-based marshmallow products have been evaluated using sensory analysis at primary school in the region of Gafsa (South Tunisian). Pupils (7-12 years old) appreciated the products and gave positive feedback especially with regards to texture and taste. This work emphasizes the utilization of date syrup in snacks as outlined in PromedLife objectives.

**Marm Cherni** (supervised master's degree at the Tunisian Higher School of Health by Prof Fattouch and Dr Rebai) participated to this symposium with a poster entitled "Platform based on Artificial Intelligence for nutritional assessment of Tunisian foods and integration with a national food database". The work included the development of a Tunisian nutritional food database which was then converted into an AI-alimented web platform using OpenAI and integrating a Chat-based data access allowing children to have a conversation to improve their knowledge about food composition, richness on healthy substances and can elaborate artificial recipe with specific nutritional and health benefits, thus supporting of equilibrated lifestyle.