Dr. Carmen Hernández Brenes
Leader of the Food & Clinical Nutrition for Health Unit
National System of Researchers Level III

Contact:

https://www.linkedin.com/in/carmen-hern%C3%A1ndez-brenes-a728b2101/

chbrenes@tec.mx

https://tec.mx/en/research/institute-obesity-research/food-and-clinical-nutrition-for-health-unit

Degrees:

- PhD in Food Science – University of Arkansas, USA (2000)
- Master of Science – Texas A&M University, USA (1996)
- Food Engineering – Tecnológico de Monterrey (1994)

Research areas:

- Applied Food and Health Lipidomics - Translation of knowledge on lipids (as human and food metabolites) into applied solutions for the prevention of metabolic diseases
- Science-based Technology Acceleration – Design of technologies and processes to increase commercial feasibility of natural molecules with beneficial bioactivities for human health

Selected publications:

1. Arjonilla-Becerra, S. S., Mora-Godínez, S., Marín-Obispo, L. M., Méndez-López, L. F., Garza-Aguilar, S. M., Díaz de la Garza, R. I., Martínez, J. A., Hernández-Brenes, C., & de la Garza, A. L. 2024. Maternal cafeteria diet programs fecal microbiota and modulates serum fatty acid and amino acid levels in adulthood rats. Food Bioscience, 61, 104920. DOIi: 10.1016/j.fbio.2024.104920
2. Carrizales-Sánchez, A.K., Tamez-Rivera, O., García-Gamboa, R., García-Cayuela, T., Rodríguez-Gutiérrez, N.A., Elizondo-Montemayor, L., García-Rivas, G., Pacheco, A., Hernández-Brenes, C. and Senés-Guerrero, C. 2023. Gut microbial composition and functionality of school-age Mexican population with metabolic syndrome and type-2 diabetes mellitus using shotgun metagenomic sequencing. Frontiers in Pediatrics, 11:1193832. DOI: 10.3389/fped.2023.1193832
3. Rodríguez-Sánchez, D., Pacheco, A., Villarreal-Lara, R., Ramos-Parra, P.A., Ramos-González, M.R., Granados-Principal, S., Díaz de la Garza, R.I., García-Rivas, G. and Hernández-Brenes, C. 2019. Chemical Profile and Safety Assessment of a Food-Grade Acetogenin-Enriched Antimicrobial Extract from Avocado Seed. Molecules. 24, 2354. DOI: 10.3390/molecules24132354

Awards and recognitions:

- Certified Food Scientist (CFS). Institute of Food Technologists (2023)
- National Prize in Food Science and Technology (2019)

Current projects:

- Machine Learning for predicting metabolic health and disease in the OriGen cohort
- Artificial Intelligence Strategies to Validate Vegetable Oil Authenticity
- Mexican Avocado Research Chair
- Industrial Research Chair Sigma Alimentos-Tecnológico de Monterrey