



Dr. Marilena Antunes Ricardo
Research Professor – Healthy Foods Unit
National System of Researchers Level II

Contact:

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🌐 <https://tec.mx/en/research/institute-obesity-research/healthy-food-unit>

Degrees

- PhD in Biotechnology - Tecnológico de Monterrey, Mexico (2014).
- Master's Degree in Analytical Chemistry - Universidad de los Andes (2007).
- B.Sc. in Pharmaceutics - Universidad de los Andes, Venezuela (2004)

Research areas

- Functional foods in the immune system and their relationship with obesity
- Exploitation of by-products for the development of functional ingredients with anti-obesogenic activity.
- Evaluation of bioaccessibility, bioavailability and metabolism of active compounds simulating pathological processes using *in vitro* platforms.

Selected publications

1. Peña-Vázquez, G. I., Arredondo-Arenillas, A., Serrano-Sandoval, S. N., & Antunes-Ricardo, M. (2024). Functional foods lipids: unraveling their role in the immune response in obesity. *Critical Reviews in Food Science and Nutrition*, 1-22. <https://doi.org/10.1080/10408398.2024.2382942>
2. Ortega-Hernández, E., Martínez-Alvarado, L., Acosta-Estrada, B. A., & Antunes-Ricardo, M. (2023). Solid-State Fermented pineapple peel: a novel food ingredient with antioxidant and anti-inflammatory properties. *Foods*, 12(22), 4162. <https://doi.org/10.3390/foods12224162>
3. Ortega-Hernández, E., Camero-Maldonado, A. V., Acevedo-Pacheco, L., Jacobo-Velázquez, D. A., & Antunes-Ricardo, M. (2023). Immunomodulatory and antioxidant effects of spray-dried encapsulated kale sprouts after *in vitro* gastrointestinal digestion. *Foods*, 12(11), 2149. <https://doi.org/10.3390/foods12112149>

Awards and recognitions

- 25 Women in Science in Latin America and Canada 4th edition 2024. Awarded by the company 3M, Mexico City 2024.
- Mujer Tec 2024 Award, Science Category. Awarded by Tecnológico de Monterrey, Monterrey, Mexico 2024.

Current projects:

- Ciencia de Frontera (CF-2023-G-669) Activation of the antitumor immune response induced by compounds present in nopal (*Opuntia ficus-indica*) on colorectal cancer cells. National Council of Humanities, Sciences and Technologies (CONAHCYT).
- Development of a food prototype with prickly pear seed lipids: Evaluation of its *in vitro* and *in vivo* anti-obesogenic potential.
- Development of chickpea sprouts enriched with micronutrients as a functional ingredient with anti-obesogenic effects.