



3.7.10 Food Oxidative Stress and Cardiovascular Health

Publications: 11 | Q1: 7

COMPOSITION

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- **David Ramiro Cortijo.** *Profesor Ayudante Doctor. Universidad Autónoma de Madrid*
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STRATEGIC OBJETIVES

- To evaluate the impact of low birth weight and prematurity on cardiometabolic health with a follow-up strategy, analyzing the modulatory effect of lifestyle.
- To study the physiological mechanisms implicated in the association between risk factors and cardiometabolic programming, using animal models of prematurity and intrauterine growth restriction and dietary interventions.
- To assess the influence of sociocultural factors on women health during pregnancy and lactation, and the modulation of biological variables by lifestyle.
- Promotion of healthy habits during pregnancy and lactation.
- To extract and characterize healthy bioactive components from food by-products and to design ingredients and supplements to improve cardiometabolic health.
- To carry out intervention trials in healthy subjects with the designed ingredients, evaluating its anti-inflammatory and antioxidants properties and health effect.

RESEARCH LINES

- Relationship between nutrition and fetal and postnatal programming of cardiometabolic disease. Involvement of oxidative stress and inflammation
- Impact of prematurity on cardiometabolic health.
- Development of new functional ingredients from food by-products focused on cardiometabolic health.
- Study of food ingredient bioactivity, bioavailability and impact on cardiometabolic health.
- Analysis of breastmilk bioactive components and its relationship with maternal and infant health.

RESEARCH ACTIVITY

Doctoral Theses

- **Arribas Rodríguez SM, Ramiro Cortijo D.** Vascular effects of cocoa shell extract supplementation in a rat model of fetal programming of hypertension[dissertation]. Madrid: Universidad Autónoma de Madrid: 2024(21/11/2024). Director: Ruvira Hernando SA.

Publications

- **Burgos-Santamaría A, Rodríguez-Rodríguez P, Arnalich-Montiel A, Arribas SM, Fernández-Riveira C, Barrio-Pérez IM, Río J, Ligerio J, Quintana-Villamandos B.** OXY-SCORE and Volatile Anesthetics: A New Perspective of Oxidative Stress in EndoVascular Aneurysm Repair-A Randomized Clinical Trial. *Int J Mol Sci.* 2024; 25(19): 10770. Article. IF: 4.9; Q1
- **Castro AW, Zozaya C, Ruvira S, Arribas SM, López-Giménez MR, Ramiro-Cortijo D.** Online pilot intervention to improve nutritional and lifestyle in Spanish breastfeeding women. *Nutr Hosp.* 2024; 41(3): 619-27. Article. IF: 1.1; Q4
- **Cobeta IM, Bris RG, Rodríguez-Rodríguez P, Sáez A, Quintana-Villamandos B, Granado JMG, Arribas SM.** Fetal programming and lactation: modulating gene expression in response to undernutrition during intrauterine life. *Pediatr Res.* 2024; 95(7): 1764-74. Article. IF: 3.1; Q1
- **Gil-Ramírez A, Cañas S, Cobeta IM, Rebollo-Hernanz M, Rodríguez-Rodríguez P, Benítez V, Arribas SM, Martín-Cabrejas MA, Aguilera Y.** Uncovering cocoa shell as a safe bioactive food ingredient: Nutritional and toxicological breakthroughs. *Future Foods.* 2024; 10: 100461. Article. IF: 8.2; D1
- **Gil-Ramírez A, Rebollo-Hernanz M, Cañas S, Cobeta IM, Rodríguez-Rodríguez P, Gila-Díaz A, Benítez V, Arribas SM, Aguilera Y, Martín-Cabrejas MA.** Unveiling the Nutritional Profile and Safety of Coffee Pulp as a First Step in Its Valorization Strategy. *Foods.* 2024; 13(18): 3006.

Article. IF: 5.1; Q1

- **Herrero-Fernández B, Ortega-Zapero M, Gómez-Bris R, Sáez A, Iborra S, Zorita V, Quintas A, Vázquez E, Dopazo A, Sánchez-Madrid F, Arribas SM, González-Granado JM.** Role of lamin A/C on dendritic cell function in antiviral immunity. *Cell Mol Life Sci.* 2024; 81(1): 400. Article. IF: 6.2; Q1
- **Jantape T, Kongwattanakul K, Arribas SM, Rodríguez-Rodríguez P, Iampanichakul M, Settheetham-Ishida W, Phuthong S.** Maternal Obesity Alters Placental and Umbilical Cord Plasma Oxidative Stress, a Cross-Sectional Study. *Int J Mol Sci.* 2024; 25(19): 10866. Article. IF: 4.9; Q1
- **Ribeiro-Oliveira R, Rodríguez-Rodríguez P, Sousa JB, Ferreira IMPLVO, Arribas SM, Diniz C.** Managing hypertension using brewing bioactive peptides as angiotensin-converting enzyme inhibitors: Impact on vascular tone through ex vivo assays. *Pharmanutrition.* 2024; 28:100389. Article. IF: 2.4; Q3
- **Ruvira S, Rodríguez-Rodríguez P, Abderrahim F, Morales D, Cañas S, Valdivieso A, Ramiro-Cortijo D, Arribas SM.** Resistance artery vasodilator pathways involved in the antihypertensive effects of cocoa shell extract in rats exposed to fetal undernutrition. *J Physiol-London.* 2024; 602(22): 6065-85. Article. IF: 4.4; Q1
- **Silva-Fernández CS, de la Calle M, Camacho PA, Arribas SM, Garrosa E, Ramiro-Cortijo D.** Psychometric Reliability to Assess the Perception of Women's Fulfillment of Maternity Rights. *Eur J Invest Health Psychol Educ.* 2024; 14(8): 2248-61. Article. IF: 2.6; Q2
- **Silva-Fernández CS, de la Calle M, Suta MA, Arribas SM, Garrosa E, Ramiro-Cortijo D.** Psychometric Evaluation of Women's Knowledge of Healthcare Rights and Perception of Resource Scarcity during Maternity. *Healthcare (Basel).* 2024; 12(20): 2045. Article. IF: 2.7; Q2