



## PUBLICACIONES

### 2024

Caraballo I, Domínguez R, Guerra-Hernández EJ, Sánchez-Oliver AJ. (2020). Analysis of sports. Córdoba S, Tena-Garitaonaindía M, Álvarez-Mercado AI, Gámez-Belmonte R, Gómez-Llorente MA, Sánchez de Medina F, Martínez-Cañavate A, Martínez-Augustin, Gómez-Llorente C. Differential Modulation of mouse intestinal organoids with fecal luminal factors from obese, allergic, asthmatic children (2024). *International Journal of Molecular Sciences* 2024, 25, 886.

Jurado-Fasoli L, Sanchez-Delgado G, Di X, Yang W, Kohler I, Villarroya F, Aguilera CM, Hankemeier T, Ruiz JR, Martinez-Tellez B. Cold-induced changes in plasma signaling lipids are associated with a healthier cardiometabolic profile independently of brown adipose tissue. *Cell Rep Med* 2024 Feb 20; 5 (2): 101387

Méndez-Gutiérrez A, Aguilera CM, Cereijo R, Osuna-Prieto FJ, Martínez-Téllez B, Rico MC, Sánchez-Infantes D, Villarroya F, Ruiz JR, Sánchez-Delgado G. Cold exposure modulates potential brown adipokines in humans, but only FGF21 is associated with brown adipose tissue volume. *Obesity*. 2024 Mar; 32 (3): 560-570.

Origuela V, Ferrer-Aguilar P, Gázquez A, Pérez-Cruz M, Gómez-Roig M, Gómez-Llorente C, Larqué E. Placental MFSD2A expression in fetal growth restriction and maternal and fetal DHA status (2024). *Placenta* 150: 31-38.

Ruiz-Marín CM, Álvarez-Mercado AI, Plaza-Díaz J, Rodríguez-Lara A, Gallart-Aragón T, Sánchez-Barrón MT, de Reyes Lartategui S, Alcaide-Lucena M, Fernández MF, Fontana L. (2024). A clustering study of sociodemographic data, dietary patterns and gut microbiota in healthy and breast cancer women participating in the MICROMA study. *Mol Nutr Food Res*, 2400253.

### 2023

Álvarez-Mercado AI, del Valle-Cano A, Fernández MF, Fontana L. Gut microbiota and breast cancer: The dual role of microbes. (2023). *Cancers*, 15: 443.

Biedma-Rodríguez C; Gacto MJ; Anguita-Ruiz, A.; Alcalá, R.; Aguilera, C.M.; Alcalá-Fdez, J. Bustos-Aibar M\*, Aguilera CM\*, Alcalá-Fdez J, Ruiz-Ojeda FJ, Plaza-Díaz J, Plaza-Florido A, Tofe I, Gil-Campos M, Gacto MJ, Anguita-Ruiz A. Shared gene expression signatures between visceral adipose and skeletal muscle tissues are associated with cardiometabolic traits in children with obesity. *Comput Biol Med*. 2023 Sep.

Camacho J, Vitale R, Morales-Jimenez D, Gomez-Llorente C. Variable-selection ANOVA simultaneous component analysis (VASCA). (2023). *Bioinformatics* 39.

Chávez-Guevara IA, Amaro-Gahete FJ, Osuna-Prieto FJ, Labayen I, Aguilera CM, Ruiz JR. The role of sex in the relationship between fasting adipokines levels, maximal fat oxidation during exercise, and insulin resistance in young adults with excess adiposity. *Biochem Pharmacol*. 2023 Aug 18:115757.

González-Gil EM, Anguita-Ruiz A, Kalén A, De Las Lamas Perez C, Rupérez AI, Vázquez-Cobela R, Flores K, Gil A, Gil-Campos M, Bueno G, Leis R, Aguilera CM. Longitudinal associations between cardiovascular biomarkers and metabolic syndrome during puberty: the PUBMEP study. *Eur J Pediatr* 2023 Jan;182(1):419-429.



Learning Positive-Negative Rule-Based Fuzzy Associative Classifiers with a good trade-off between Complexity and Accuracy. *Fuzzy Sets and Systems*, 465, 15 August 2023, 108511.

Molina NM, Jurado-Fasoli L, Sola-Leyva A, Sevilla-Lorente R, Canha-Gouveia A, Ruiz-Durán S, Fontes J, Aguilera CM, Altmäe S. Endometrial whole metabolome profile at the receptive phase: influence of Mediterranean Diet and infertility. *Front Endocrinol (Lausanne)* 2023 Apr 19; 14: 1120988.

Ortiz-Arrabal O, Bermejo-Casares F, Garzón I, Mesa-García MD, Gómez-Llorente C, Alaminos M. Optimization of human skin keratinocyte culture protocols using bioactive molecules derived from olive oil. *Biomed Pharmacother* 2023; 164:115000.

Palma-Morales M, Mesa-García MD, Rodríguez- Huertas J. Added Sugar Consumption in Spanish Children (7–12 y) and Nutrient Density of Foods Contributing to Such Consumption: An Observational Study. *Nutrients* 2023; 15(3), 560.

Plaza-Díaz J, Fontana L, Álvarez-Mercado AI. Editorial: Interplay between gut microbiota and the immune system in liver surgery and liver diseases. (2023). *Front Cell Infect Microbiol*, 13:1188092.

Ruiz-Ojeda FJ, Anguita-Ruiz A, Rico MC, Leis R, Bueno G, Moreno LA, Gil-Campos M, Gil Á, Aguilera CM. Serum levels of the novel adipokine isthmin-1 are associated with obesity in pubertal boys. *World J Pediatr* 2023 Jan 3.

Torres-Martos, Á.; Bustos-Aibar, M.; Ramírez-Mena, A.; Cámara-Sánchez, S.; Anguita-Ruiz, A.; Alcalá, R.; Aguilera, C.M.; Alcalá-Fdez, J. Omics Data Preprocessing for Machine Learning: A Case Study in Childhood Obesity. *Genes* 2023, 14, 248.

Vázquez-Aguilar A, Sánchez-Rodríguez E, Rodríguez-Pérez C, Rangel-Huerta OD, Mesa MD. Metabolomic-Based Studies of the Intake of Virgin Olive Oil: A Comprehensive Review. *Metabolites* 2023; 13(4):472.

## 2022

Acosta FM, Sánchez-Delgado G, Martínez-Téllez B, Osuna-Prieto FJ, Méndez-Gutiérrez A, Aguilera CM, Gil A, Llamas-Elvira JM, Ruiz JR. A larger brown fat volume and lower radiodensity are related to a greater cardiometabolic risk, especially in young men. *European Journal of Endocrinology*. 2022, 187:171-183.

Álvarez-Mercado AI, Plaza-Díaz J, de Almagro MC, Gil A, Moreno-Muñoz JA, Fontana L. *Bifidobacterium longum* subsp. *infantis* CECT 7210 reduces inflammatory cytokine secretion in Caco-2 cells cultured in the presence of *Escherichia coli* CECT 515. (2022). *Int J Mol Sci*, 23, 10813.

de la Torre-Aguilar MJ, Gomez-Fernandez A, Flores-Rojas K, Martin-Borreguero P, Mesa MD, Perez-Navero JL, Olivares M, Gil A, Gil-Campos M. Docosahexaenoic and Eicosapentaenoic Intervention Modifies Plasma and Erythrocyte Omega-3 Fatty Acid Profiles But Not the Clinical Course of Children With Autism Spectrum Disorder: A Randomized Control Trial. *Front Nutr*. 2022; 9:790250.

de Lamas C, Kalén A, Anguita-Ruiz A, Pérez-Ferreirós A, Picáns-Leis R, Flores K, Moreno LA, Bueno G, Gil Á, Gil-Campos M, Aguilera CM\*, Leis R. Progression of metabolic syndrome and associated cardiometabolic risk factors from prepuberty to puberty in children: The PUBMEP study. *Front Endocrinol* 2022; 13: 1082684.



Iglesia Altaba I, Larqué E, Mesa MD, Blanco-Carnero JE, Gomez-Llorente C, Rodríguez-Martínez G, Moreno LA. Early Nutrition and Later Excess Adiposity during Childhood: A Narrative Review. *Horm Res Paediatr.* 2022; 95(2):112-119.

Jurado-Fasoli L, Di X, Sanchez-Delgado G, Yang W, Osuna-Prieto FJ, Ortiz-Alvarez L, Krekels E, Harms AC, Hankemeier T, Sch Nke M, Aguilera CM, Llamas-Elvira JM, Kohler I, Rensen PCN, Ruiz JR, Martinez-Tellez B. Acute and long-term exercise differently modulate plasma levels of oxylipins, endocannabinoids, and their analogues in young sedentary adults: A sub-study and secondary analyses from the ACTIBATE randomized controlled-trial. *EBioMedicine.* 2022; 85: 104313.

Llorente-Cantarero FJ, Aguilera CM, Pérez-Navero JL, Gil A, Benítez-Sillero JD, Gil-Campos M. Fitness Levels and Gender Are Related With the Response of Plasma Adipokines and Inflammatory Cytokines in Prepubertal Children. *Front Nutr* 2022; 9: 883871.

Llorente-Cantarero FJ, Leis R, Rupérez AI, Anguita-Ruiz A, Vázquez-Cobela R, Flores-Rojas K, González-Gil EM, Aguilera CM, Moreno LA, Gil-Campos M, Bueno G. Prepubertal Children With Metabolically Healthy Obesity or Overweight Are More Active Than Their Metabolically Unhealthy Peers Irrespective of Weight Status: GENOBOX Study. *Front Nutr* 2022 ;9:821548.

Martínez-Téllez B, Sánchez-Delgado G, Acosta FM, Alcantara JMA, Amaro-Gahete FJ, Martínez-Avila WD, Merchan-Ramirez E, Muñoz-Hernández V, Osuna-Prieto FJ, Jurado-Fasoli L, Xu H, Ortiz-Álvarez L, Arias-Téllez MJ, Méndez-Gutiérrez A, Labayen I, Ortega FB, Schönke M, Rensen PCN, Aguilera CM, Llamas-Elvira JM, Gil Á, Ruiz JR. No evidence of brown adipose tissue activation after 24 weeks of supervised exercise training in young sedentary adults". *Nature Communications* 2022, Sep 12; 13 (1): 5259

Méndez-Gutiérrez A, Aguilera CM, Osuna-Prieto FJ, Martínez-Téllez B, Prados MCR, Acosta FM, Llamas-Elvira JM, Ruiz JR, Sánchez-Delgado G. Exercise-induced changes on exerkines that might influence brown adipose tissue metabolism in young sedentary adults. *Eur J Sport Sci.* 2023;23(4):625-636.

Ortiz-Arrabal O, Chato-Astrain J, Crespo PV, Garzón I, Mesa-García MD, Alaminos M, Gómez-Llorente C. Biological effects of maslinic acid on human epithelial cells used in tissue engineering. *Frontiers in Bioengineering and Biotechnology* 2022; 10:876734. DOI: 10.3389/fbioe.2022.876734

Oses M, Medrano M, Sanchez JM, Portillo MP, Aguilera CM, Altmäe S, Labayen I. Peripheral blood mononuclear cells-expressed miRNA profiles derived from children with metabolic-associated fatty liver disease and insulin resistance. *Pediatr Obes* 2022: e12966

Pérez-Gimeno G, Rupérez AI, Gil-Campos M, Aguilera CM, Anguita A, Vázquez-Cobela R, Skapino E, Moreno LA, Leis R, Bueno-Lozano G. Height-based equations as screening tools for high blood pressure in pediatric practice, the GENOBOX study. *J Clin Hypertens (Greenwich)* 2022;21.

Plaza-Díaz J, Izquierdo D, Torres-Martos Á, Baig AT, Aguilera CM, Ruiz-Ojeda FJ. Impact of Physical Activity and Exercise on the Epigenome in Skeletal Muscle and Effects on Systemic Metabolism. *Biomedicines.* 2022 Jan 7; 10 (1): 126.

Rangel-Huerta OD, De La Torre-Aguilar MJ, Mesa MD, Flores-Rojas K, Perez\_Navero JL, Gil A, Gil\_Campos M. The Metabolic Impact of Two Different Parenteral Nutrition Lipid Emulsions in Children after Hematopoietic Stem Cell Transplantation: A Lipidomics Investigation. *International Journal of Molecular Sciences* 2022; 23(7):3667.



Rodriguez-Ayllon M, Plaza-Florido A, Mendez-Gutierrez A, Altmäe S, Solis-Urra P, Aguilera CM, Catena A, Ortega FB, Esteban-Cornejo I. The effects of a 20-week exercise program on blood-circulating biomarkers related to brain health in overweight or obese children: The ActiveBrains project. *J Sport Health Sci* 2022; S2095-2546(22)00121-1.

## 2021

Aragón-Vela J, Fontana L, Casuso RA, Plaza-Díaz J, Rodríguez-Huertas J. Differential inflammatory response of men and women subjected to an acute resistance exercise. (2021). *Biomed J*, 44: 338-345. IF: 7,892 (Q1)  
Categoría: Biochemistry & Molecular Biology

Bouassi T, Libanio D, Mesa MD, Oke OE, Gil AH, Tona K, Ameyapoh Y. Supplementation with liquid whey and ACIDAL® ML in drinking water affect gut pH and microflora and productive performance in laying hens. *Br Poult Sci*. 2021; 62(1):138-146.

Fontana L, Plaza-Díaz J, Robles-Bolívar P, Valente-Godínez H, Sáez-Lara MJ, Abadía-Molina F, Gómez-Llorente C, Gil A, Álvarez-Mercado AI. (2021). *Bifidobacterium breve* CNCM I-4035, *Lactobacillus paracasei* CNCM I-4034 and *Lactobacillus rhamnosus* CNCM I-4036 modulate macrophage gene expression and ameliorate damage markers in the liver of Zucker-Lepr<sup>fa/fa</sup> rats. *Nutrients*, 13, 202.

Gil-Campos M, Pérez-Ferreirós A, Llorente-Cantarero FJ, Anguita-Ruiz A, Bedoya-Carpente JJ, Kalén A, Moreno LA, Bueno G, Gil Á, Aguilera CM, Leis R. Association of Diet, Physical Activity Guidelines and Cardiometabolic Risk Markers in Children. *Nutrients* 2021, Volume 13, Issue 9, 2954.

Gómez-Roig MD, Pascal R, Cahuana MJ, García-Algar O, Sebastiani G, Andreu-Fernández V, Martínez L, Rodríguez G, Iglesia I, Ortiz-Arrabal O, Mesa MD, Cabero MJ, Guerra L, Llurba E, Domínguez C, Zanini MJ, Foraster M, Larqué E, Cabañas F, Lopez-Azorín M, Pérez A, Loureiro B, Pallás-Alonso CR, Escuder-Vieco D, Vento M. Environmental Exposure during Pregnancy: Influence on Prenatal Development and Early Life: A Comprehensive Review. *Fetal Diagn Ther*. 2021; 48(4):245-257.

González-Gil EM, Huybrechts I, Aguilera CM, Béghin L, Breidenassel C, Gesteiro E, González-Gross M, de Henauw S, Kersting M, Donne CL, Manios Y, Marcos A, Meirhaeghe A, De Miguel-Etayo P, Molina-Hidalgo C, Molnár D, Papadaki A, Widhalm K, Moreno LA, Bel-Serrat S. Cardiometabolic Risk is Positively Associated with Underreporting and Inversely Associated with Overreporting of Energy Intake Among European Adolescents: The Healthy Lifestyle in Europe by Nutrition in Adolescence (HELENA) Study. *J Nutr*. 2021;151(3):675-684.

Hernández Á, Jaramillo S, García-Borrego A, Espejo-Calvo JA, Covas MI, Blanchart G, de la Torre R, Carrasco-Pancorbo A, Mesa MD, Fernández-Prior MÁ, Castañer O, Fitó M. From Green Technology to Functional Olive Oils: Assessing the Best Combination of Olive Tree-Related Extracts with Complementary Bioactivities. *Antioxidants (Basel)*. 2021; 10(2):202.

Llorente-Cantarero FJ, Aguilar-Gómez FJ, Bueno-Lozano G, Anguita-Ruiz A, Rupérez AI, Vázquez-Cobela R, Flores-Rojas K, Aguilera CM, Moreno LA, Gil Á, Leis R, Gil-Campos M. Impact of Physical Activity Intensity Levels on the Cardiometabolic Risk Status of Children: The Genobox Study. *Int J Sport Nutr Exerc Metab*. 2021 Dec 1:1-9.

Llorente-Cantarero FJ, Aguilar-Gómez FJ, Leis R, Bueno G, Rupérez AI, Anguita-Ruiz A, Vázquez-Cobela R, Mesa MD, Moreno LA, Gil Á, Aguilera CM, Gil-Campos M. Relationship between Physical Activity, Oxidative



Stress, and Total Plasma Antioxidant Capacity in Spanish Children from the GENOBOX Study. *Antioxidants* (Basel). 2021; 10(2):320.

Llorente-Cantarero FJ, Jurado-Castro JM, Leis R, Vázquez-Cobela R, González-Gil EM, Aguilera CM, Bueno G, Moreno LA, Gil A, Gil-Campos M. Evaluation of Sedentary Behavior and Physical Activity Levels Using Different Accelerometry Protocols in Children from the GENOBOX Study. *Sports Med Open*. 2021 Nov 24;7(1):86.

Mesa MD, Gil F, Olmedo P, Gil A. Nutritional Importance of Selected Fresh Fishes, Shrimps and Mollusks to Meet Compliance with Nutritional Guidelines of n-3 LC-PUFA Intake in Spain. *Nutrients*. 2021; 13(2):465.

Ordóñez-Díaz MD, Gil-Campos M, Flores-Rojas K, Muñoz-Villanueva MC, Mesa MD, de la Torre-Aguilar MJ, Gil Á, Pérez-Navero JL. Impaired Antioxidant Defence Status Is Associated with Metabolic-Inflammatory Risk Factors in Preterm Children With Extrauterine Growth Restriction: The BIORICA Cohort Study. *Front Nutr*. 2021; 8:793862.

Pastor-Villaescusa B, Plaza-Díaz J, Egea-Zorrilla A, Leis R, Bueno G, Hoyos R, Vázquez-Cobela R, Latorre M, Cañete MD, Caballero-Villarraso J, Gil Á, Cañete R, Aguilera CM. Evaluation of the gut microbiota after metformin intervention in children with obesity: A metagenomic study of a randomized controlled trial. *Biomed Pharmacother*. 2021; 134:1111171.

Pires LV, González-Gil EM, Anguita-Ruiz A, Bueno G, Gil-Campos M, Vázquez-Cobela R, Pérez-Ferreirós A, Moreno LA, Gil Á, Leis R, Aguilera CM. The Vitamin D Decrease in Children with Obesity Is Associated with the Development of Insulin Resistance during Puberty: The PUBMEP Study. *Nutrients*. 2021;13(12):4488.

Plaza-Díaz J, Álvarez-Mercado AI, Robles-Sánchez C, Navarro-Oliveros M, Morón-Calvente V, Toribio-Castelló S, Sáez-Lara MJ, MacKenzie A, Fontana L, Abadía-Molina F. (2021). NAIP expression increases in a rat model of liver mass restoration. *J Mol Histo*, 52: 113-123.

Plaza-Florido A, Altmäe S, Esteban FJ, Cadenas-Sanchez C, Aguilera CM, Einarsdottir E, Katayama S, Krjutškov K, Kere J, Zaldivar F, Radom-Aizik S, Ortega FB. Distinct whole-blood transcriptome profile of children with metabolic healthy overweight/obesity compared to metabolic unhealthy overweight/obesity. *Pediatr Res*. 2021; 89 (7): 1687-1694

Rodríguez Lara A, Mesa-García MD, Medina KAD, Quirantes Piné R, Casuso RA, Segura Carretero A, Huertas JR. Assessment of the Phytochemical and Nutritional Composition of Dark Chia Seed (*Salvia hispánica* L.). *Foods* 2021; 10(12):3001.

Sánchez-Rodríguez E, Vázquez-Aguilar LA, Biel-Glesson S, Fernández-Navarro JR, Espejo-Calvo JA, Olmo-Peinado JM, de la Torre R, Fito M, Covas MI, Romero C, Brenes M, Martínez de Victoria E, Gil A, Mesa MD. May bioactive compounds from the olive fruit improve the postprandial insulin response in healthy adults? *Journal of Functional Foods* 2021, 83:104561.

Valdivieso-Ugarte M, Plaza-Díaz J, Gómez-Llorente C, Lucas Gómez E, Sabés-Alsina M, Gil A. In vitro examination of antibacterial and immunomodulatory activities of cinnamon, white thyme and clove essential oils. (2021) *J of Functional Foods*, 81.