



Curriculum vitae of Daniela Erba

PHOTO



EDUCATION

1993 Degree in Biological Sciences (110/110 with honors).

PROFESSIONAL EXPERIENCES

2001 Researcher at the University of Milan in the Department of Food, Environmental and Nutritional Sciences DeFENS. 2016 Member of the Board of Director of the Italian Society for Human Nutrition (SINU).

From 2002 Assistant Professor of Human Nutrition and from 2003 Assistant Professor of Applied Nutrition then Principles of Dietetic (Undergraduate Course in Herbal Sciences and Technologies, Faculty of Pharmacy, University of Milan); from 2012 to 2016 Assistant Professor in Physiology of Exercise and Nutrition for Wellbeing (Graduate course of Exercise Science, Faculty of Exercise and Sports Sciences, University of Milan).

Tutor for student's thesis for undergraduate and graduate courses and for PhD in Food System at the University of Milan

RESERACH FIELDS

Her research interests have been focused on:

- the investigation of levels of exposure to oligoelements/contaminants with diet, and of the influences of dietary factors or food processing on the bioavailability and metabolism of minerals (casein phosphopeptides, organic acids, chemical form of Se, phytate, germination and fermentation of cereal grains).



- the study of the antioxidant ability of dietary polyphenols to prevent the oxidative damage to cellular macromolecules (lipids, proteins and DNA). In particular, by investigating the antioxidant properties of catechins and teaflavins (the main polyphenol compounds of green and black tea) and isoflavones (daidzein and genistein, the main flavonoids of soya beans and derived products) by in vitro (cell culture) and in vivo protocols (EU project PHYTOHEALYH, MIPAAF project BIOAGRIBIO).
- the study of the effect of innovative agronomic approaches on carotenoid and mineral contents in different varieties of tomatoes, with the aim to optimize their nutritional value (EU project TRUEFOOD).
- nutritional characterization of primitive wheat (einkorn) and study on the functional property of cereal-based food produced by conventional or innovative formulation (Glycemic Index, intestinal wellbeing, involving also research projects with private funds).
- effect of dietary habit and nutrient intakes on cytotoxicity and genotoxicity of fecal water (in cell culture),
- biotechnological approaches to improve nutritional properties of cereal by-products

She participated in an International Cooperation Agreement with Cote d'Ivoire.

MOST RELEVANT RECENT PUBLICATIONS

Daniela Erba, Donato Angelino, Alessandra Marti, Federica Manini, Franco Faoro, Federico Morreale, Nicoletta Pellegrini, Maria Cristina Casiraghi. Effect of sprouting on nutritional quality of pulses. *Int J Food Sci Nutr* 2018.
DOI:10.1080/09637486.2018.1478393

Erika Meroni, Nadia Papini, Franca Criscuoli, Maria C. Casiraghi, Luca Massaccesi, Nicoletta Basilico and Daniela Erba. Metabolic responses in endothelial cells following exposure to ketone bodies. *Nutrients* 2018, 10, 250 Doi:10.3390/nu10020250.

Elisa Garuglieri, Erika Meroni, Cristina Cattò, Federica Villa, Francesca Cappitelli* and **Daniela Erba**. Effects of sub-lethal concentrations of silver nanoparticles on a simulated intestinal prokaryotic–Eukaryotic Interface. *Frontiers in Microbiology* 2018, 8, article 2698, doi: 10.3389/fmicb.2017.02698

Marilù Decimo, Mattia Quattrini, Giovanni Ricci, Maria Grazia Fortina, Milena Brasca, Tiziana Silvetti, Federica Manini, **Daniela Erba**, Franca Criscuoli and Maria Cristina Casiraghi Evaluation of microbial consortia and chemical changes in spontaneous maize bran fermentation. *AMB Expre* 2017,7,205 DOI 10.1186/s13568-017-0506-y

Luca Massaccesi, Barbara Bonomelli, Monica Gioia Marazzi, Lorenzo Drago, Massimiliano Marco Corsi Romanelli, **Daniela Erba**, Nadia Papini, Alessandra Barassi, Giancarlo Goi, and Emanuela Galliera. Plasmatic soluble receptor for advanced glycation end products as a new oxidative stress biomarker in patients with prosthetic-joint-associated infections? *Disease Markers* Article ID 6140896.

Costanza Jucker, **Daniela Erba**, Maria Giovanna Leonardi, Daniela Lupi, and Sara Savoldelli Assessment of Vegetable and Fruit Substrates as Potential Rearing Media for *Hermetia illucens* (Diptera: Stratiomyidae) Larvae. *Environ Entomol* 2017, 46, 1415-1423. doi: 10.1093/ee/nvx154

Marti A, Parizad PA, Marengo M, **Erba D**, Pagani MA, Casiraghi MC. In vitro starch digestibility of commercial gluten-free pasta: the role of ingredients and origin. *J Food Sci* 2017, 82: 1012-1019.

Erba D., Manini F., Meroni E., Casiraghi MC: Phytate/calcium molar ratio does not predict accessibilità in ready-to-eat dishes. *J sci Food Agric* 2017, 97:3189-3194.

D.N. Yao, K.N. Kouassi, **D. Erba**, F. Scazzina, N. Pellegrini, M.C. Casiraghi Nutritive Evaluation of the Bambara Groundnut Ci12 Landrace [*Vigna subterranea* (L.) Verdc. (Fabaceae)] Produced in Côte d'Ivoire. *Int. J. Mol. Sci.* 2015, 16, 21428-21441

Erba Daniela, Soldi Sara, Malavolti Marcella, Aragone Giovanni, Alexandra Meynier, Vinoy Sophie, Casiraghi M. Cristina. Fecal water genotoxicity in healthy free-living young Italian people. *Food Chem Toxicol* 2014; 64:104-109

Erba D, Casiraghi MC, Ribas-Agusti A, Caceres R, Marfà O, Castellari M. Nutritional value of tomatoes (*Solanum lycopersicum* L.) grown in green house by different agronomic techniques. *J Food Comp Anal* 2013; 31:245-251.

Massaccesi L, Goi G, **Erba D**, Romano CL, Drago L. Human erythrocytes's membrane and cytosolic glycohydrolases as new tool for the evaluation of oxidative stress in patients with prosthetic-joint-associated infection. *Biochimica Clinica* 2013;37:SS(May): WO14.s500.

Daniela Erba, M.Cristina Casiraghi, Cristina Martinez-Conesa, Giancarlo Goi, Luca Massaccesi. Isoflavone supplementation reduces DNA oxidative damage and increases O-beta-N-acetyl-D-glucosaminidase activity in healthy women. *Nutr Res* 2012;32:233-240.

Daniela Erba, Alyssa Hidalgo, Jessica Bresciani, Andrea Brandolini. Environmental and genotypic influences on trace element and mineral concentrations in whole meal flour of einkorn (*Triticum monococcum* L. subsp. *monococcum*). *J Cereal Sci* 2011 54 250-254.

Spadafranca A, **Erba D**, Foti F, Testolin G. The consumption of soy products positively affect DNA resistance to oxidative stress in healthy subjects. *Nutrition, Metabolism & Cardiovascular Diseases* 2008;18(9):e45

Woolever TMS, Brand-Miller JC, Abernethy J, Astrup A, Atkinson F, Axelsen M, Biorck I, Brighenti F, Brown R, Brynes A, Casiraghi C, Cazaubiel M, Dahlqvist L, Delpont E, Denyer GS, **Erba D**, Frost G, Granfeldt Y, Hampton S, Hart VA, Hatonen KA, Henry CJ, Hertzler S, Hull A, Jerling J, Johnston K, Lightowler H, Mann N, Morgan L, Panlasigui LN, Pelkman C, Perry T, Pfeiffer AFH, Pieters M, Ramdath DD, Ramsingh RT, Robert SD, Robinson C, Sarkkinen E, Scazzina F, Sison DCD, Sloth B, Staniforth J, Tavola N, Valsta LM, Verkooijen I, Weickert MO, Weseler AR, Wilkie P, Zhang J. Measuring the glycemic index of food: interlaboratory Study. *Am J Clin Nutr* 2008;87(suppl):247S-257S.