

Bioactive Research Group

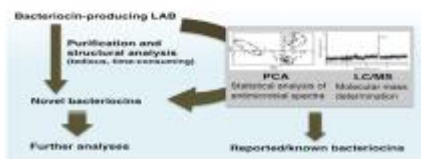
- The interaction mechanism of food bioactive compounds with human gut microbiota, specifically with Lactic Acid Bacteria, and their health effects



- Inhibition strategies for biofilm formation



- Biological activity (antimicrobial, antioxidant, anticancer) and bioavailability analysis



- Production mechanisms of secondary metabolites (bacteriocin) from bacteria and optimization of their production

Research Group Members

Prof. Dr. Yeşim Ekinçi

PhD Students:

Gizem Özan

Thesis Students

Ongoing Doctoral Thesis:

Gizem Özan, “European cranberrybush (*Viburnum opulus* L.) fruit polyphenolics: Biological activity (antimicrobial, antibiofilm, mutagenic, antimutagenic, anticancer), bioavailability, biotransformation by and effect on gut microbiota”

Completed Theses:

PhD Theses:

- Fatma Özen, Inhibition of biofilm formation on medical surfaces by novel plasma system, 2017
- Suheir Nassar, The efficacy of oral supplementation with probiotic in preterm infants in the prevention of necrotizing enterocolitis: A randomized, double-blind, controlled study, 2016
- Aytül Bayraktar Sofu, Bacterial diversity dynamics of traditional Turkish ezine cheese as evaluated by PCR–DGGE analysis, 2009
- Ufuk Çelikkol Akçay, Regeneration of lentil (*Lens culinaris Medik*) and genetic transformation by using *Agrobacterium tumefaciens*-mediated gene transfer, 2008

Master Theses:

- Gizem Özan, Evaluation of interaction of phenolic compounds present in European cranberrybush juice with Lactic Acid Bacteria, 2016
- Selen Gezen, Investigation of effects of Turkish black tea polyphenols on human gut microbiota in *in vitro* batch fermentor cultures, 2016
- Süreyya Çorbacıoğlu, Association of II-33 and II-18r1 gene polymorphisms with bronchopulmonary dysplasia, 2016
- Ezgi Özcan, Metabolism of Turkish black tea phenolics by human gut microbiota, 2014
- Gamze Melis Başer, Biological and chemical characterization of shalgam juice, 2013
- Fatma Özen, *Origanum minutiflorum* as a potential therapy for the eradication of *Helicobacter pylori*, 2013
- Kubra Aydın, Expression Profiles of TGF- β and TLR pathways in *Porphyromonas gingivalis* and *Prevotella intermedia* challenged osteoblasts, 2013
- Ceyda Gürol, Elimination of bacteria in milk by plasma corona discharge, 2010
- Gülhas Solmaz, Inhibition of oral biofilms by essential oils extracted from Asian herbs, 2010
- Buket Erbay, Taze kesilmiş elma dilimlerinde renk değişiminin bilgisayarlı görüntüleme sistemi ile incelenmesi, 2007

- Aytül Bayraktar Sofu, Yoğurtların depolama esnasında mikrobiyal ve kimyasal değişimlerinin bilgisayarlı görüntüleme sistemiyle belirlenmesi ve elde edilen verilerin yapay sinir ağlarıyla değerlendirilmesi, 2006
- Murat Gürel, Propiyonik Asit Bakterileri kullanılarak yapılan yoğurtların kalite kriterlerinin belirlenmesi, 2006