

FOOD NUTRITION

PP141

Effect of storage temperature on the production of volatile metabolites in chicken meat of similar microbiological quality, based on the microbial counts

Anastasia LYTOU¹, Lemonia- Christina Fengou¹, Pengchemg Dong², Yimin Zhang², Professor Nikos Chorianopoulos¹, **George Nychas¹**

1Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, Agricultural University of Athens, Athens, Greece, 2College of Food Science and Engineering, Shandong Agricultural University, Shandong, China

PP142

INACTIVATION BEHAVIOR OF SALMONELLA UNDER ACIDIC FOOD PRESERVATION STRESS: INDIVIDUAL CELL HETEROGENEITY AND POPULATION DYNAMICS (HETERO - INACTIVATION)

Zafeiro Aspidou¹, Anagnostis Argyriou¹, Konstantinos Koutsoumanis²

1inab Certh, Themi , Greece, 2lab Of Food Microbiology And Hygiene, Dep Of Food Science And Technology, School Of Agriculture, Aristotle University Of Thessaloniki, Thessaloniki,

PP144

Microbial stability of home-made dried fruits and vegetables.

Maria - Parthena Kiosi¹, Evaggelia Bolia¹, Ioanna Mantzourani², Stavros Plessas², Olga Pagonopoulou³, Athanasios Alexopoulos¹

1Democritus University Of Thrace, Dept Of Agricultural Development, Laboratory of Microbiology, Biotechnology and Hygiene , Orestiada, Ελλάδα, 2Democritus University Of Thrace, Dept Of Agricultural Development, Laboratory of Food Processing , Orestiada, Ελλάδα, 3Democritus University Of Thrace, Dept of Medicine, Laboratory of Physiology, Alexandroupolis, Ελλάδα

PP145

DETERMINATION, CHARACTERIZATION AND BIOPROTECTIVE PROPERTIES OF THE MICROFLORA OF NATURALLY FERMENTED TRADITIONAL GREEK YOGURT FROM SHEEP AND COW MILK OF DIFFERENT ARTISANAL DAIRY PRODUCERS

Paraskevi Bouki¹, Christina Tsadila², Chrysanthi Mitsagga¹, Ioannis Giavasis¹, Dimitris Mossialos²

1Laboratory of Food Microbiology and Biotechnology, Department of Food Science and Nutrition, University of Thessaly, Karditsa, Greece, 2Microbial Biotechnology-Molecular Bacteriology-Virology Laboratory, Department of Biochemistry & Biotechnology, University of Thessaly, Larisa, Greece

PP146

Effect of 12-week probiotic consumption immobilized on oat flakes on blood and urine biomarkers and human microbiome

Panoraia Bousdouni¹, Aikaterini Kandyliari^{1,2}, Panagiota Potsaki¹, Olga Papagianni¹, Marilena Stylianou¹, **Ioanna Prapa³**, Chrysoula Pavlatou³, Grigoria Mitropoulou³, Yiannis Kourkoutas³, Ioanna Farmakioti⁴, Electra Stylianopoulou⁴, Giorgos Skavdis⁴, Marirena Grigoriou⁴, Antonis E. Koutelidakis¹

1 Laboratory of Nutrition and Public Health, Food Science and Nutrition Department, University of the Aegean, Lemnos, Greece

2 Laboratory of Food Chemistry and Analysis, Food Science and Human Nutrition Department, Agricultural University of Athens, Greece;

3 Laboratory of Applied Microbiology & Biotechnology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, Greece *4 Laboratory of Molecular Developmental Biology and Neurobiology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, Greece*

PP147

MULTISPECTRAL IMAGING (MSI) FOR THE DISCRIMINATION OF DIFFERENT MICROORGANISMS FORMING BIOFILMS ON STAINLESS STEEL SURFACES
Aikaterini Psarafti¹, Anastasia Lytou¹, Lemonia-Christina Fengou¹, George-John Nychas¹, **Nikos Chorianopoulos¹**

1 Agricultural University Of Athens, Department Of Food Science And Human Nutrition, Athens, Greece

PP148

Physicochemical and microbiological characteristics of yogurts fortified with apple pulp

Despoina Christodoulakou¹, Ana Bako¹, Mariangela Giatra¹, Constantina Pappa¹, Eleni Sakadani¹, Panagiotis Kandyli¹, Dimitra Dimitrellou¹

1 Department of Food Science and Technology, Ionian University, Argostoli, Greece

PP149

Application of ATR-FTIR spectroscopy as a PAT tool for discriminating among Tuber species, their origin and maturity status

Georgios Bekiaris¹, **Vassileios Daskalopoulos¹**, Nick Kalogeropoulos², Georgios I. Zervakis¹, Elias Polemis¹

1 Laboratory of General and Agricultural Microbiology, Agricultural University of Athens, Iera Odos 75, 11855 Athens, Greece

2 Department of Nutrition and Dietetics, School of Health Science and Education, Harokopio University of Athens, 176 76 Athens, Greece

PP150

Directed fermentation of black olives cv. Konservolia by functional cultures in lab and industrial scale

Athena Grounta¹, Dimitra Dourou¹, Nefeli Lampoglou¹, **Agapi Doulgeraki¹**, Anthoula Argyri¹, Chrysoula Tassou¹

1 Institute Of Technology Of Agricultural Products/hellenic Agricultural Organization - Dimitra, Lykovrissi, Greece

PP151

Effect of organic herbs on the quality and safety of chicken broth

Agapi Doulgeraki¹, Vasiliki Bikouli¹, Anthoula Argyri¹, **Polyxeni Chrysanthou¹**, Eleni Lambrinea¹, Chrysoula Tassou¹, Antonios Manolitsakis²

1Institute of Technology of Agricultural Products/Hellenic Agricultural Organization - DIMITRA, Lykovrissi, Greece, 2Agroktimata Kritis, Rethymno, Greece

PP152

Microbiological quality and safety assessment of various chicken meat products as influenced by manual processing operations

Dimitra Dourou¹, Athena Grounta¹, Agapi Doulgeraki¹, Anthoula Argyri¹, Nikos Choriantopoulos^{1,2}, Pengchemg Dong³, Yimin Zhang³, George-John Nychas², Chrysoula Tassou¹

1Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, Lykovrissi, Greece, 2Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Athens, Greece, 3College of Food Science and Engineering, Shandong Agricultural University, Shandong, China

PP153

Survey: Microbiological quality of fish from retail

Lemonia-Christina Fengou¹, Anastasia Lytjou¹, Anastasios Stamatou¹, George-John Nychas¹

1Agricultural University Of Athens, Athens, Greece

PP154

Occurrence and contamination levels of ochratoxin A and aflatoxins in corn-based products from markets in Greece

George Frountis^{1,2}, Dimitra Dourou¹, Anthoula Argyri¹, Agapi Doulgeraki¹, Marinou Chronopoulos², George - John Nychas², Chrysoula Tassou¹

1Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, Athens, Lykovrissi, 14123S. Venizelou 1, Greece, 2Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Athens, Iera Odos 75, 11855 Athens, Greece

PP155

EVALUATION OF THE GREEK PDO ANEVATO CHEESE WITH METAGENOMICS AND VOLATOLOMICS

Maria Govari^{1,2}, Marina Papadelli², Dimitra Tsoliakou^{1,2}, Maria Gkerekou^{1,2}, Panagiotis Skandamis¹, John Kapolis², Konstantinos Papadimitriou¹

1Agricultural University Of Athens, Athens, Greece, 2University of the Peloponnese, Antikalamos, Greece

PP156

Assessment of the microbiota of industrial dry sourdoughs through MALDI-TOF and metagenomics

Maria-Chrysanthi Kafentzi¹, Marina Papadelli¹, John Kapolis¹, Konstantinos Papadimitriou²

1Department Of Food Science And Technology, University Of Peloponnese, Antikalamos, Kalamata, Greece, 2Agricultural University of Athens, Department of Food Science & Human Nutrition, Laboratory of Food Quality Control and Hygiene, Iera Odos 75, 11855, Greece, Greece

PP157

Development of novel biomarkers as time-temperature indicators of freshness or spoilage of fresh, vacuum-packed prawns and squid

Myrsini Kakagianni¹, Athina Griangelou¹, Ioannis Giavasis¹

¹University Of Thessaly, Karditsa, Ελλάδα

PP158

Cytotoxic effect of selected cell-free probiotic supernatants on colon cancer cell lines

Ioanna Kokkinopoulou¹, Aniana Diakoumi¹, Christos Velesiotis¹, Alexanos Savvidis², Dimitris G Hatzinikolaou², Amalia D Karagouni², Paraskevi Moutsatsou¹

¹Department of Clinical Biochemistry, Medical School, National and Kapodistrian University of Athens, University General Hospital "ATTIKON", Athens, Greece, ²Department of Botany, Faculty of Biology, National and Kapodistrian University of Athens, Athens, Greece

PP159

EVALUATION OF DIFFERENT ENCAPSULATION METHODS OF LACTOBACILLUS PLANTARUM 2035 TO ENHANCE ITS VIABILITY IN BEER ENVIRONMENT

Maria Liakou¹, Panagiotis Kandyliis

¹Aristotle University Of Thessaloniki, Thessaloniki, Greece

PP160

Application of alternative preservation methods for fruits and production of novel highly preservable products

Pantelis Natskoulis¹, Panagiotis Theodoropoulos², Athanasios Tsiotinas³

¹ELGO-DIMITRA / Institute Of Technology Of Agricultural Products, Greece, ²Federation of Professionals, Craftsmen, and Merchants of Arcadia (OEBEA), Tripoli, Greece, ³Agricultural & Livestock Cooperative of Arcadia - AKSA "The Union", Tripoli Greece

PP161

Production of wine with enhanced varietal aroma from cv. "Moschofilero"

Aspasia Nisiotou¹, Panagiotis Theodoropoulos², Athanasios Tsiotinas³, Evangelos Kalogris⁴

¹ELGO "DIMITRA", Lykovrysi, Greece, ²OEVEA, Tripoli, Greece, ³AKSA "ENOSI", Tripoli, Greece, ⁴Ktima Kalogri, Kapsia, Arcadia, Greece

PP162

Fungal mycobiota isolated from Kefalonian cheeses

Konstantina Ntonti¹, Sotiria Milla¹, Panagiotis Kandyliis¹, Dimitra Dimitrellou¹

¹Department of Food Science and Technology, Ionian University, Argostoli, Greece

PP164

Bacterial communities of fresh mussels stored at 2 and 4°C

Dimitrios Anagnostopoulos¹, Anastasia Lytou², Lemonia Fengou², **Foteini Parlapani¹**, George Nychas², Ioannis Boziaris¹

1Laboratory of Marketing and Technology of Aquatic Products and Foods, Department of Ichthyology and Aquatic Environment, School of Agricultural Sciences, University of Thessaly, Phytoko Street, 38446 Volos, Greece, Volos, Greece, 2Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Iera Odos 75, Athens, Greece

PP165

Developing stable functional ingredients for the food industry containing immobilized cells of a wild-type plant-based presumptive probiotic strain on high-fiber content supports

Chrysoula Pavlatou¹, Ioanna Prapa¹, Yiannis Kourkoutas¹

1Laboratory of Applied Microbiology and Biotechnology, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupoli, Greece

PP166

Effectiveness of probiotic immobilized on lyophilized banana powder on patients with Irritable Bowel Syndrome

Panoraia Bousdouni¹, Panagiota Potsaki¹, Aikaterini Kandyliari^{1,2}, Olga Papagianni¹, Ioanna Prapa³, Chrysoula Pavlatou³, Grigoria Mitropoulou³, **Yiannis Kourkoutas³**, Ioanna Farmakioti⁴, Electra Stylianopoulou⁴, Giorgos Skavdis⁴, Marirena Grigoriou⁴, Antonis E. Koutelidakis¹

1 Laboratory of Nutrition and Public Health, Food Science and Nutrition Department, University of the Aegean, Lemnos, Greece

2Laboratory of Food Chemistry and Analysis, Food Science and Human Nutrition Department, Agricultural University of Athens, Greece;

3Laboratory of Applied Microbiology & Biotechnology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, Greece 4Laboratory of Molecular Developmental Biology and Neurobiology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, Greece

PP167

DISCRIMINATION OF BIOFILM CELLS FROM PLANKTONIC AND OF DIFFERENT MICROBIAL GROUPS USING FT-IR

Aikaterini Psarafi¹, LEMONIA-CHRISTINA FENGOU¹, ANASTASIA LYTOU¹, GEORGE-JOHN NYCHAS¹, NIKOS CHORIANPOULOS¹

1Agricultural University Of Athens, Athens, Greece

PP168

Tracking of Salmonella in sesame edible seeds imported in Greece

Patra Sourri¹, Mitre Elissavet¹, Georgia Charvourou¹, Aphrodite Smpiraki², Anthoula Argyri¹, Agapi Doulgeraki¹, Chrysoula Tassou¹

1Institute Of Technology Of Agricultural Products, Hellenic Agricultural Organization – Dimitra, Lykovrissi, Greece, 2Hellenic Ministry of Rural Development and Food - Veterinary Laboratory of Chalkida, NRL for Salmonella, Chalkida, Greece

PP169

Volatile metabolites analysis coupled with machine learning for the rapid quality assessment of chicken meat

Maria Konstantina Spyratou¹, **Anastasia Lytou¹**, **Eirini Lariou¹**, **Athanasios Mallouchos¹**, Anastasios Stamatiou¹, Nikolaos Chorianopoulos¹, George-John Nychas¹
1Agricultural University Of Athens, , Greece

PP170

Bioprotective effect of probiotic lactic acid bacteria against Salmonella enterica in orange juice

Stamatia Vitsou Anastasiou^{1,2}, Olga Papadopoulou², **Anastasios Stamatiou¹**, Nikos Chorianopoulos¹, Emilia Papakonstantinou³, George-John Nychas¹, Chrysoula Tassou²
1Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, Athens, Greece, 2Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, Athens, Greece, 3Laboratory of Dietetics and Quality of Life, Department of Food Science and Human Nutrition, Athens, Greece

PP172

Potential of Fourier transform infrared spectroscopy for the rapid monitoring of ochratoxin A and aflatoxin B1 in foods

George Froutis¹, Dimitra Dourou¹, Anthoula Argyri¹, Agapi Doulgeraki¹, Nikos Chorianopoulos², George-John Nychas², **Chrysoula Tassou¹**
1Institute of Technology of Agricultural Products, Hellenic Agricultural Organisation DIMITRA, S. Venizelou 1, 14123, Lycovrissi, Athens, Greece, 2Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Iera Odos 75, 11855, Athens, Greece

PP173

Predicting the survival of probiotic Lactiplantibacillus plantarum in fruit juice as a function of pH and storage temperature.

Sofia Tsaloumi¹, Stamatia Vitsou-Anastasiou², Konstantina Stasinou¹, Chrysoula Tassou², Konstantinos Koutsoumanis¹
1Laboratory of Food Microbiology and Hygiene, Department of Food Science and Technology, School of Agriculture, Aristotle University Of Thessaloniki, , Greece, 2Institute of Technology of Agricultural Products, Hellenic Agricultural Organization DIMITRA, , Greece

PP175

Comparative genomics of Bacillus cereus isolates responsible for sweet curdling of milk.

George Tsiolas¹, . Maria Kyritsi¹, . Vasiliki Schoretsaniti³, Maria Gougouli³, Sofia Michailidou¹, Anagnostis Argiriou^{1,2}
1Institute of Applied Biosciences, Centre for Research and Technology Hellas, Thessaloniki, Greece, 2Department of Food Science and Nutrition, University of the Aegean, Lemnos, Greece, 3MEVGAL S.A., Koufalia, Greece

PP177

Modeling the survival of two probiotic strains encapsulated in a whey protein isolate - gum arabic coacervate matrix under harsh conditions

Stamatia Vitsou Anastasiou^{1,2}, Olga S. Papadopoulou¹, Agapi I. Doulgeraki¹, Anthoula A. Argyri¹, George-John E. Nychas², Chrysoula C. Tassou¹



1Institute of Technology of Agricultural Products - ITAP, Athens, Greece, 2Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Athens, Greece

PP178**Survival of Lactic acid bacteria and pathogens in a fermented product made from soy beverage during cold storage**

ANASTASIOS AKTYPIS¹, Ekaterini Papaioannou², Helen Stamati³, Eugenia Manolopoulou⁴

¹Dairy Laboratory, Department of Food Science and Human Nutrition, Agricultural University of Athens, Athens, Greece, ²Laboratory of Animal Breeding and Husbandry, Faculty of Animal Science and Agriculture, Agricultural University of Athens, Athens, Greece, ³Dairy Laboratory, Department of Food Science and Human Nutrition, Agricultural University of Athens, Athens, Greece, ⁴Dairy Laboratory, Department of Food Science and Human Nutrition, Agricultural University of Athens, Athens, Greece

PP178a**DESIGN AND DEVELOPMENT OF FUNCTIONAL STRAINED YOGHURT WITH PROBIOTIC CULTURES ENCAPSULATED IN PREBIOTIC MATRICES**

Christiana Tsirimiagkou^{1,2}, **Vasiliki Giatrakou**¹, Athina Geronikou^{1,2}, Katerina Velivasaki², Evangelia Kristalli¹, Evita Katsorida², Katerina Pissaridi^{1,2}

¹Hellenic Research & Innovation Center, 12131, Athens, Greece

²YIOTIS S.A., Nourishing Products Industry, 12131, Athens, Greece

PP178b**Fate of Salmonella enterica in orange juice and in consequent simulated human gastrointestinal system in the presence of free or encapsulated probiotic lactic acid bacteria**

Stamatia Vitsou Anastasiou^{1,2}, Olga S. Papadopoulou¹, Ismini-Maria Patsopoulou¹, Aikaterini Frantzi², Nikos Chorianopoulos², George-John E. Nychas² and Chrysoula C. Tassou^{1*}

¹Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, S. Venizelou 1, Lycovrissi, 14123, Athens, Greece, *mail to ctassou@elgo.gr

²Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Iera Odos 75, 11855, Athens, Greece

PP178_c**Natural Fruit Juices Enriched With Probiotic Bacteria And Other Biofunctional Constituents In Encapsulated Form**

Olga S. Papadopoulou¹, Agapi I. Doulgeraki³, Thomas Moschakis³, Anthoula A. Argyri¹, George-John E. Nychas², Aimilia Papakonstantinou², Konstantinos P. Koutsoumanis³ and **Chrysoula C. Tassou**^{1*}

¹ Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, Athens, Greece

² Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Athens, Greece

³. Laboratory of Food Microbiology and Hygiene, Department of Food Science & Technology, Faculty of Agriculture, Aristotle University, Thessaloniki, 54124, Greece

PP178_d

Effect of microencapsulation on the survival of probiotic bacteria in model food and in orange juice during heat treatment

Stamatia Vitsou Anastasiou^{1,2}, **Olga S. Papadopoulou**¹, Ismini-Maria Patsopoulou¹, Agapi I. Doulgeraki³, Anthoula A. Argyri¹, George-John E. Nychas², Kostas Koutsoumanis³ and Chrysoula C. Tassou^{1*}

¹*Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, S. Venizelou 1, Lycovrissi, 14123, Athens, Greece,*

²*Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Iera Odos 75, 11855 Athens, Greece*

³*Laboratory of Food Microbiology and Hygiene, Department of Food Science and Technology, School of Agriculture, Aristotle University, GR-541 24 Thessaloniki, Greece*

PP178_e

Application of novel olive fruit processing methods and technologies for the high-efficiency production of olive oil and olive paste with improved quality and nutritional characteristics

A. Argyri^{1*}, C. Tassou¹, P. Gotsiou², S. Grigorakis², S. Tzanakakis³, I. Sofios³, A. Monachogios⁴, A. Koutalas⁵, G. Pastras⁶, D. Kompis⁷, I. Stathopoulos⁸

¹ Institute of Technology of Agricultural Products, Hellenic Agricultural Organization - DIMITRA, Lycovrissi, Greece

² Mediterranean Agronomic Institute of Chania (M.A.I.Ch.), International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), Chania, Greece

³ PETROKOLYMPPOS SPV, Rethymno, Greece

⁴ BIOSITIA S.A., Sitia, Greece

⁵ Agricultural Cooperative of Rethymno "ENOSI A.C.R.", Rethymno, Greece

⁶ Agricultural Cooperative of Stefani, Korinthos, Greece

⁷ Agricultural Cooperative of Agios Nikolaos Voion – MALEAS, Neapoli, Greece

⁸ IOANNIS P. STATHOPOULOS -Arcadia, Kyparissia, Greece