



Scientific Conference on:
***Statistical Methods and Models for Classifying,
 Choosing and Experimenting Food and Wine***

**University of Naples ‘Federico II’
 Saints Marcellino and Festo Complex
 (7 and 8 September 2017)**

**Portici Realm
 (9 September 2017)**

The ASA – Association for Applied Statistics and the ‘Federico II’ University of Naples (Department of Economics and Statistics, Department of Political Science, Department of Agricultural Sciences, Department of Pharmacy) in partnership with:

- **AICQ** – The Italian Association for Quality Culture
- **AISS** – The Italian Academy for Six Sigma
- **ASSIRM** – The Italian Association for Marketing, Social and Opinion Research
- **SIPSA** – The Italian Society for Health Psychology
- **SIS** – The Italian Statistical Society
- **Associazione scientifica “Centro di Portici”**

organise in Naples a scientific conference aimed at promoting applications and new techniques for classifying, choosing and experimenting food and wines.

The conference will last two and a half days. Scientific reports at the conference will be partly delivered on invitation of the Scientific Committee and partly spontaneously contributed by participants. At each invited session two basic speeches will open the discussion, one of which will be held by an academic and the other by an expert from a company or institution currently using statistics. This juxtaposition is aimed at favouring a better understanding between the academia and the production world. Contributed papers have been solicited through a call for papers. Also a round-table and two participated experiments for the sensorial evaluation of wines and coffees will be held.

The conference activities will be financed through a participation fee and funds that will be raised from private companies and public institutions.

Official languages of the conference will be Italian and English. A good practice would be to write the PowerPoint transparencies in English so that also non-Italian participants can follow oral presentations in Italian.

Other basic information on the conference can be found at the following website:

www.statfood2017.unina.it

and emails can be sent to the following address:

statfood2017@unina.it

Partner journals

The conference organizers will allow publishing, after a 'blind refereeing' process, full texts of the invited papers and of a selection of the contributed papers. The journals interested to host such papers are the following:

Epidemiology, Biostatistics and Public Health

Micro & Macro Marketing

Statistica Applicata – Italian Journal of Applied Statistics

Sei Sigma & Qualità

All journals publish in English, though Micro & Macro Marketing and Sei Sigma & Qualità host papers also in Italian.

Conference session topics include, but are not limited to the following areas of special interest:

Experiments on food and wine for choice and preference elicitation

Conjoint measurement and analysis for food and wine preference elicitation

Social and economic surveys on food and wine

Longitudinal studies on food and wine consumption and evaluation

The future of wine and food: scenarios and forecasts

Measurement of food and beverages quality

Qualitative and quantitative methods for sensorial research

Education and training for sensorial evaluation

Methods and models for food and beverages classification

Matching demand and offer of food and beverages

Economic and social issues about regional wines

Fine wines and food, and tourism

Official statistics on food and beverages

Food and beverages markets

Forgery of branded food and wine products

Relationships between food, health and life quality

Psychology and food

Is the interaction between food and wine a scientific issue?

PROGRAMME

Thursday 7 September 2017

- 9.30 – 10.15 *Welcome coffee*
- 10:15 – 11:00 **Welcome addresses** (chair: Simona Balbi, Federico II University of Naples)
 Rector of Federico II University of Naples
 Director of the Department of Economics and Statistics
 Director of the Department of Political Science
 Director of the Department of Pharmacy
- 11:00 – 12:00 **“Sensory Analysis and Statistics”** (Chair: Francesco Palumbo, “Federico II”
 University of Naples) - Plenary session of invited papers jointly organised by
 Assirm and ASA
“Sensory and consumer data: Multiblock analysis approaches” (Thormod
 Næs, Norwegian Institute of Food, Fisheries and Aquaculture Research,
 Tromsø, Norway)
“Tasting within firms: Related errors and the possibility to prevent them”
 (Gian Paolo Zoboli, Adacta spa, Italy)
 Public debate
- 12:00 – 13:00 **1st session of contributed papers** (parallel presentation)
- Basilica: “Consumers’ heterogeneity and sensory analysis”:** Chair: Rosaria
 Romano (University of Calabria)
*“Investigating heterogeneity among consumers using choice-based conjoint
 analysis models: an overview of methods”:* Daniele Asioli (Norwegian
 University of Life Sciences, Ås, Norway), Thormod Næs (University of
 Copenhagen, Copenhagen, Denmark)
*“The role of psychological and physiological variables on consumers’
 implicit attitudes toward plant-based and animal-based dishes”:* Danny
 Clicerì, Renzo Fusi, Sara Spinelli, Caterina Dinnella and Erminio Monteleone
 (University of Florence)
*“Approaching individual differences between assessors in sensory descriptive
 analysis”:* Jannie S. Vestergaard (SenseOfNordicFood, Denmark)
- Pagano 1 Room: “Wine and food recognition”:** Chair: Maria Gabriella
 Grassia (Federico II University of Naples)
“Typicality-based classifiers for wine recognition: first results”: Francesco
 Gagliardi (independent scholar, Italy), Angela Brindisi (Centro Italiano
 Ricerche Aerospaziali, Capua) and Marco Miele (Istituto di Scienze dell’
 Alimentazione, CNR, Avellino)
*“Assessment of quality and compositional attributes of Colombian Arabica
 coffees through a profile regression based analysis”:* Simone Di Zio, Lara
 Fontanella and Annalina Sarra (G D’annunzio University of Chieti-Pescara)
*“A chemometric approach to evaluate the concentration of polychlorinated
 biphenyls and heavy metals in *M. merluccius* from Mediterranean Sea”:*
 Davide Passaretti, Domenico Vistocco, Patrizia Papetti (University of
 Cassino) and Sara Spognardi (Tre University of Rome)

Pagano 2 Room: “Consumer attitudes towards food”: Chair: Paolo Mariani (Bicocca University of Milan)

“*Food ingredients market and consumer sensitivity*”: Luigi Bollani and Anna Claudia Pellicelli (University of Turin)

“*Italians and wine: opinion and feeling from Twitter*”: Livia Celardo and Francesca Greco (La Sapienza University of Rome), Domenica Fioredistella Iezzi (Tor Vergata University of Rome)

“*Travelling through Neapolitan taste between tradition and innovation*”: Enrica Amaturò, Cristiano Felaco and Maria Gabriella Grassia (Federico II University of Naples)

13:00 – 14:30

Lunch

14:30 – 15:30

“**Methods and Tools for Food Quality Evaluation**” (Chair: Alessandro Celegato, AICQ-AISS, PSV - Project Service and Value, Italy) - Plenary session of invited papers jointly organised by AICQ and AISS

“*Italian food quality elicited through social media*” (Vito Santarcangelo, University of Catania; Antonio Bionso, Fabio Fanari, Simonpietro Olanda e Nicolò Montesano, iInformatica srls, Italy; Alessandro Celegato; PSV, Italy)

“*Consumer evaluation of strawberry jams by hedonic scales and textual descriptions*” (Simona Balbi, Rossella Di Monaco, Sharon Puleo, Germana Scepi and Maria Spano (Federico II University of Naples), and Michelangelo Misuraca (University of Calabria)

Public debate

15:30 – 16:30

2nd session of contributed papers (parallel presentation)

Basilica: “Preference elicitation techniques”, Chair: Francesca Bassi (University of Padua)

“*Analysis of preferences in the consumption of nano-foods*”: Maria Teresa Gorgitano (Federico II University of Naples), Cosimo Vitale (Universitas Mercatorum, Rome)

“*Techniques for eliciting preferences in a wine tasting experiment*”: Luigi Fabbri (University of Padua) and Alfonso Piscitelli (Federico II University of Naples)

“*Multi-dimensional blocks in Predictive Path Modeling*”: Pasquale Dolce (Oniris, StatSC, Nantes, France) and Mohamed Hanafi

Pagano 1 Room: “Food and wine image”, Chair: Anna Maria Parroco (University of Palermo)

“*Project FIVE: Food Image Variety Evaluation*”: Emma Zavarrone (IULM University of Milan), Simona Balbi and Alessia Forciniti (Federico II University of Naples), and Francesco P. Natale (Bocconi University of Milan)

“*Social representation theory: A useful approach to reduce information asymmetries in the wine sector*”: Chiara Mignani and Alessio Cavicchi (University of Macerata), and Lucia Bailetti (CIAS Innovation, Matelica, Italy)

“*Land of fires: The dimension of food consumption in online journalism*”: Enrica Amaturò, Ciro Clemente De Falco and Alessandro Grieco (Federico II University of Naples)

Pagano 2 Room: “The future of food”, Chair: Simone Di Zio (G. d’Annunzio University of Chieti-Pescara)

“*Eating styles and the future of diets: alternative scenarios*”: Gerarda Martino (ASL Pescara), Mario Mazzarella (Innovairre, Milan) and Antonio Pacinelli (G. d’Annunzio University of Chieti-Pescara)

“*Food habit trends: scenarios of events impact*”: Manuela Nicosia (Istat, Rome) and Antonio Pacinelli (G. d’Annunzio University of Chieti-Pescara)

“*The influence of the Chinese culinary philosophy on the future of global nutrition*”: Lucrezia Di Sebastiano (G. d’Annunzio University of Chieti-Pescara)

16:30 – 17:00

Coffee break

17:00 – 18:00

3rd session of contributed papers (parallel presentation)

Basilica: “Preference analysis and conjoint studies”, Chair: Antonio Giusti (University of Florence)

“*A fractional experiment for a conjoint choices study*”: Luigi Fabbris and Manuela Scioni (University of Padua)

“*The use of conjoint analysis utility scores as cluster seeds: Results based on a dry-cured ham survey*”: Paolo Mariani, Andrea Marletta (Bicocca University of Milan), Lucio Masserini (University of Pisa)

“*Sensory evaluation experiment of seven white wines to define consumers’ preference by wine attributes*”: Antonio D’Ambrosio and Alfonso Piscitelli (Federico II University of Naples)

Pagano 1 Room: “Food quality and health”, Chair: Francesco Palumbo (Federico II University of Naples)

“*The importance of health aspects in the perception of food quality, assessment of the impact of visual communication on the organoleptic characteristics perceived by the consumers*”: Lucia Irene Bailetti, Matteo Bonfini and Chiara Mignani (CIAS Innovation, Macerata)

“*The impact of clean skins on the effectiveness of health warning labels on wine bottles*”: Kai Rasmus Becker (Free University of Bozen-Bolzano)

“*Buying organic food: The role of trust in the theory of planned behaviour*”: Luigina Canova and Anna Maria Manganelli (University of Padua)

Pagano 2 Room: “Wine economics”, Chair: Eugenio Brentari (University of Brescia)

“*Efficiency of Prosecco growers to meet growing future demand*”: Cristina Salvioni and Roberto Benedetti (G. d’Annunzio University of Pescara)

“*Two possible extensions for an economic re-valuation index: A case study on the Italian dry-cured ham*”: Paolo Mariani and Andrea Marletta (Bicocca University of Milan)

“*Food consumption. A research model to help identify trends*”: Alberto Magnani and Fabio Patrìtti

18:15 – 20:00

Wine-tasting: *Participated experiment of Campania wine tasting* (Organiser: Alfonso Piscitelli, Federico II University of Naples, and the Committee for wine-tasting session)

Friday 8 September 2017

- 9:00 – 10:00 **“Psychological Factors in Food Choice”** (Chair: Daniela Caso, SIPSA, Federico II University of Naples) - Plenary session of invited papers organised by SIPSA
“Buying organic food: The role of trust in the theory of planned behaviour” (Luigina Canova, Anna Maria Manganelli, University of Padua)
“Mediterranean diet and health” (Guido Iaccarino, University of Salerno, and Maddalena Ilario, Health and Innovation Programmes, Campania District)
“Randomized controlled trials to increase water consumption” (Valentina Carfora, Federico II University of Naples)
 Public debate
- 10:00 – 11:00 **4th session of contributed papers** (parallel presentation)
- Basilica: “Evaluating Consumers’ Perception”**, Chair: Cristina Davino (University of Macerata)
“Assessing heterogeneity in consumer analysis across product similarities and within consumer’s differences”: Cristina Davino (University of Macerata), Rosaria Romano (University of Calabria) and Domenico Vistocco (University of Cassino and Southern Lazio)
“Investigating consumers’ perception of palm oil attributes”: Stefania Capecci (Federico II University of Naples)
“Assessing consumers’ perception and WTP for ‘non-added sulphite’ wines through experimental auctions: A case study in Italy and Spain”: Mario Amato (Federico II University of Naples), Tiziana De Magistris, Petjon Ballco and Belinda Lopez Galan (Centro de Investigación y Tecnología Agroalimentaria de Aragón, Zaragoza, Spain), and Fabio Verneau (Federico II University of Naples)
- Pagano 1 Room: “Food quality and media”**, Chair: Benito Vittorio Frosini (Sacred Heart Catholic University of Milan)
“Brand extension acceptability in food and beverage product categories: The role of brand trust on consumer perceived fit”: Giovanna Galli, Maria Cristiana Martini and Marcello Tedeschi (University of Modena and Reggio Emilia)
“Media’s food quality representation. The palm oil case on national newspapers”: Enrica Amaturò and Domenico Trezza (Federico II University of Naples)
“Expo in Milan: A wasted opportunity to discuss food and nutrition in Italy?”: Enrico Ciccarelli, Marina Marino and Barbara Saracino (Federico II University of Naples)
- Pagano 2 Room: “Measuring Consumer Preferences through Experimental Economics”**, Chair: Maria Rosaria Carillo (Parthenope University of Naples and Scientific Association “Centro di Portici”)
“Innovation in traditional food: An experiment on consumer trust, taste and expectation for ‘ultrasound’ extra-virgin olive oil”: Teresa Del Giudice (Federico II University of Naples)

“Natural versus enriched food: Analyzing consumer preferences”: Francesco Caracciolo (Federico II University of Naples and Scientific Association “Centro di Portici”)

“Consumer evaluation of extra virgin olive oil bitterness under different information scenarios”: Riccardo Vecchio (Federico II University of Naples and Scientific Association “Centro di Portici”)

11:00 – 11:30

Coffee break

11:30 – 13:00

Round table on “People’s Taste as a Food Market Driver” (chair and discussant: prof. Pasquale Lombardi, Federico II University of Naples)

Participants:

Luigi D’Ambra (Federico II University of Naples)

Alessio Cavicchi (University of Macerata)

Gian Paolo Zoboli (Adacta spa, Italy)

(to be defined) (Altroconsumo)

(to be defined) (La Molisana Co., Italy)

13:00 – 14:30

Lunch

14:30 – 15:30

“Statistics and Wine Evaluation” (Chair: Francesca Bassi, SIS, University of Padova) – Plenary session of invited papers organised by SIS.

“Cragging: a promising algorithm for evaluating the multifaceted quality of Italian wine” (Eugenio Brentari, Marika Vezzoli, University of Brescia)

“Wine: chemistry, statistics or magic? The role of AIS sommeliers and of statistics in drafting the Guida Vitae” (Manuela Cornelli, AIS - Italian Association of Sommeliers)

Public debate

15:30 – 16:30

5th session of contributed papers (parallel presentation)

Basilica: “Willingness to pay for wines”, Chair: Giovanni Cicia (Federico II University of Naples)

“Consumers’ preferences and willingness to pay for sparkling wines: An analysis through experimental auctions”: Riccardo Vecchio, Luigi Cembalo, Francesco Caracciolo, Maria Tiziana Lisanti, Angelita Gambuti, Luigi Moio, Tiziana Siani and Paola Piombino (Federico II University of Naples), and Giuseppe Marotta, Concetta Nazzaro (University of Sannio)

“Assessing consumers’ willingness to pay for socially responsible wine”: Marco Lerro, Riccardo Vecchio, Luigi Cembalo (Federico II University of Naples)

“Investigating the psychological determinants lowering the consumption of foods involved by a food scandal: the case of wines from Land of Fires”: Valentina Carfora, Carla Cavallo, Giovanni Cicia, Riccardo Vecchio, Daniela Caso, Teresa Del Giudice (Federico II University of Naples)

“Sauvignon Blanc wine quality assessment using an innovative wine press”: Filippa Bono, Pietro Catania, Mariangela Vallone (University of Palermo)

Pagano 1 Room: “Wine and food quality analysis”, Chair: Germana Scepi (Federico II University of Milan)

“Social and cultural taste: a multidimensional approach”: Felaco Cristiano and Mazza Rocco (Federico II University of Naples)

“Classifying olive fruits using PLS-DA in high dimensional hyperspectral data”: Mario Fordellone and Maurizio Vichi (La Sapienza University of Rome), Raffaele Casa, Andrea Bellincontro and Fabio Mencarelli (University of Tuscia)

“Wine authenticity assessed via trimming”: Andrea Cappozzo and Francesca Greselin (Bicocca University of Milan)

Pagano 2 Room: “Managing Food Quality”, Chair: Alberti Ritieni (Federico II University of Naples)

“Food security and risk management”: Andrea Sicari (Federico II University of Naples)

“Food at 4.0 time between the environment and health”: Antonio Limone (Istituto Zooprofilattico Sperimentale del Mezzogiorno, Portici)

“Five years of mycotoxins monitoring in pasta of durum wheat”: Alberto Ritieni (Federico II University of Naples)

16.30 – 16.45	<i>Conference closing</i> (Luigi Fabbris, ASA, University of Padua)
17:00 – 17:30	<i>XLSTAT Presentation</i>
17:30 – 18:15	<i>ASA Annual Assembly</i>
18:30 – 19:30	Coffee-tasting - <i>Participated experiment of coffee tasting</i> (Organiser: Rossella Berni, University of Florence)
20:30 –	<i>Social dinner</i>

Saturday 9 September 2017

Chinese Room (Sala Cinese), Portici Realm

9:00 – 9:30	Welcome addresses (chair: Giovanni Cicia, Federico II University of Naples) Prof. Matteo Lorito, Director of Department of Agricultural Sciences Prof. Pasquale Lombardi, President of the Agricultural and Veterinary School Prof. Francesco Palumbo, chair of the Conference Organizing Committee
9:00 – 9:30	<i>The Role of Statistics in Typical and Innovative Food</i> <i>“Applications of chemometric to the assessment of virgin olive oil quality, typicality and geographical origin ”</i> (Raffaele Sacchi, Federico II University of Naples) <i>“Individual differences in physiological and psychological variables on food preferences”</i> (Rossella Di Monaco, Federico II University of Naples) <i>“Measuring temporality of sensations in wine”</i> (Paola Piombino, Federico II University of Naples)

"Measuring consumers preferences and willingness to pay for a radical innovation: An experimental auction on insects as alternative source of protein" (Luigi Cembalo, Federico II University of Naples)

"Food and Gastronomy as drivers of regional innovation according to the EU Smart Specialisation Strategy: the role of consumer science" (Alessio Cavicchi, University of Macerata)

"Innovation VS Consumer's Perception - Challenges and opportunities"
(Lucia Bailetti, CIAS Innovation, Matelica, Italy)

Local Organizing Committee

prof. Simona Balbi (Federico II University of Naples, co-chair)
 prof. Maria Gabriella Grassia (Federico II University of Naples)
 dr. Michelangelo Misuraca (University of Calabria)
 prof. Francesco Palumbo (Federico II University of Naples, co-chair)
 dr. Alfonso Piscitelli (Federico II University of Naples)
 dr. Maria Spano (Federico II University of Naples)
 dr. Riccardo Vecchio (Federico II University of Naples)

Scientific Programme Committee

prof. Simona Balbi (Federico II University of Naples)
 prof. Francesca Bassi (SIS, University of Padua)
 prof. Rossella Berni (University of Florence)
 prof. Eugenio Brentari (SIS, University of Brescia)
 prof. Daniela Caso (SIPSA, Federico II University of Naples)
 Eng. Alessandro Celegato (AICQ-AISS, PSV- Project Service and Value)
 prof. Giovanni Cicia (Federico II University of Naples)
 prof. Luigi D'Ambra (Federico II University of Naples)
 prof. Cristina Davino (University of Macerata)
 prof. Adriano Decarli (University of Milan)
 dr. Simone Di Zio (Università di Chieti-Pescara)
 dr. Luciana Donnarumma (Assirm, Adacta)
 prof. Luigi Fabbris (University of Padua, chair)
 prof. Benito Vittorio Frosini (Sacred Heart Catholic University of Milan)
 prof. Antonio Giusti (University of Florence)
 prof. Maria Gabriella Grassia (Federico II University of Naples)
 prof. Paolo Mariani (Bicocca University of Milan)
 prof. Francesco Palumbo (Federico II University of Naples)
 prof. Anna Maria Parroco (University of Palermo)
 prof. Alfonso Piscitelli (Federico II University of Naples)
 prof. Eugenio Pomarici (University of Padua)
 prof.ssa Germana Scepi (Federico II University of Naples)

Committee for wine-tasting session (September 7)

Prof. Luigi Fabbris
 Dr. Alfonso Piscitelli (coordinator)
 Dr. Raffaele Piscitelli
 Prof. Eugenio Pomarici