High-level metrology services in food and nutrition for the enhancement of food quality and safety



Research activities cover the whole food chain, from primary production to final consumption, "from farm to fork"

Multidisciplinary approach

Agrifood

Sustainable development

Food quality and safety

Traceability and authenticity

Environmental safety

Consumer sciences

Human health

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METROLOGY IN FOOD AND NUTRITION

offers services for



NEW METHODS AND DEVICES

Development of analytical methods for food quality, safety, traceability and authenticity

> Method validation and performance evaluation

Set up of new (integrated) measurement devices

Development of smart sensors

HARMONIZATION AND STANDARDIZATION

Provision of PT schemes and Interlaboratory tests

Standardisation and harmonization of methods and procedures

RM PREPARATION

Development and production of agrifood RMs (matrix-RMs and primary-RMs)

SERVICES

ANALYTICAL SERVICES

Food analysis (e.g. chemical and microbiological contaminants, nutritional properties, technological parameters, authenticity/fraud detection, sensory analysis)

Agroecosystem characterisation (e.g. environmental matrices, aquatic ecosystems, soil microbiota, air pollutants, bioindicators, bioavailability, plant pathogens)

Food Contact Material characterisation (e.g. composition, migration, technological parameters)

Total diet studies

EDUCATION

Training for academic and professionals

e-learning courses and webinars

Social and living labs

IN FIELD and IN PLANT EXPERIMENTS

Testing different production conditions and technologies

Characterisation of processes

Development of innovative technologies and evaluation of their effects on food quality & safety

KITCHEN-LAB EXPERIMENTS

Study of the effects of domestic practices for food preparation and storage on food quality & safety

Development of best practices

e-SERVICES

Tools for measurement standardization and harmonization

Access to: food data, data on environmental and health impact, food traceability and authenticity data, nutrition values

Data collection, sharing, interoperability

Development of integrated traceability systems





















STORAGE AND DISTRIBUTION

RETAIL

PREPARATION AND DOMESTIC STORAGE WASTES FINAL CONSUMPTION

PROCESSING

PACKAGING







