



The Greek Node of METROFOOD-RI

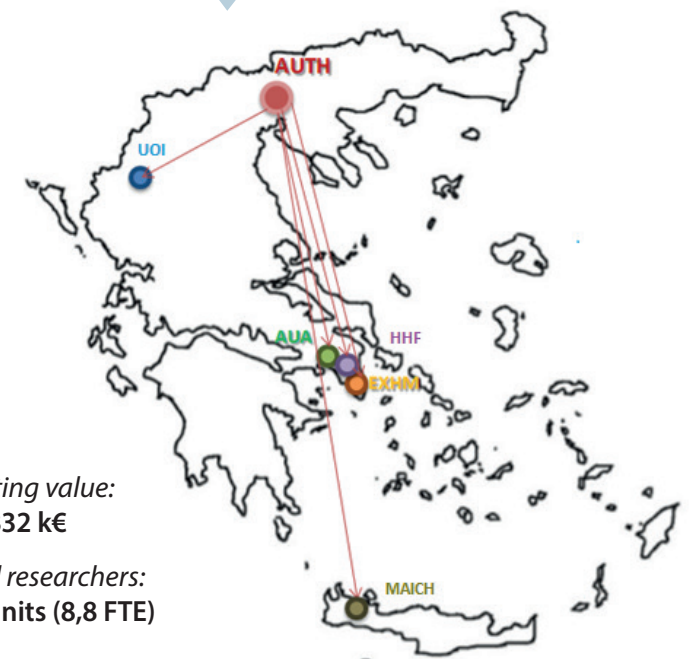
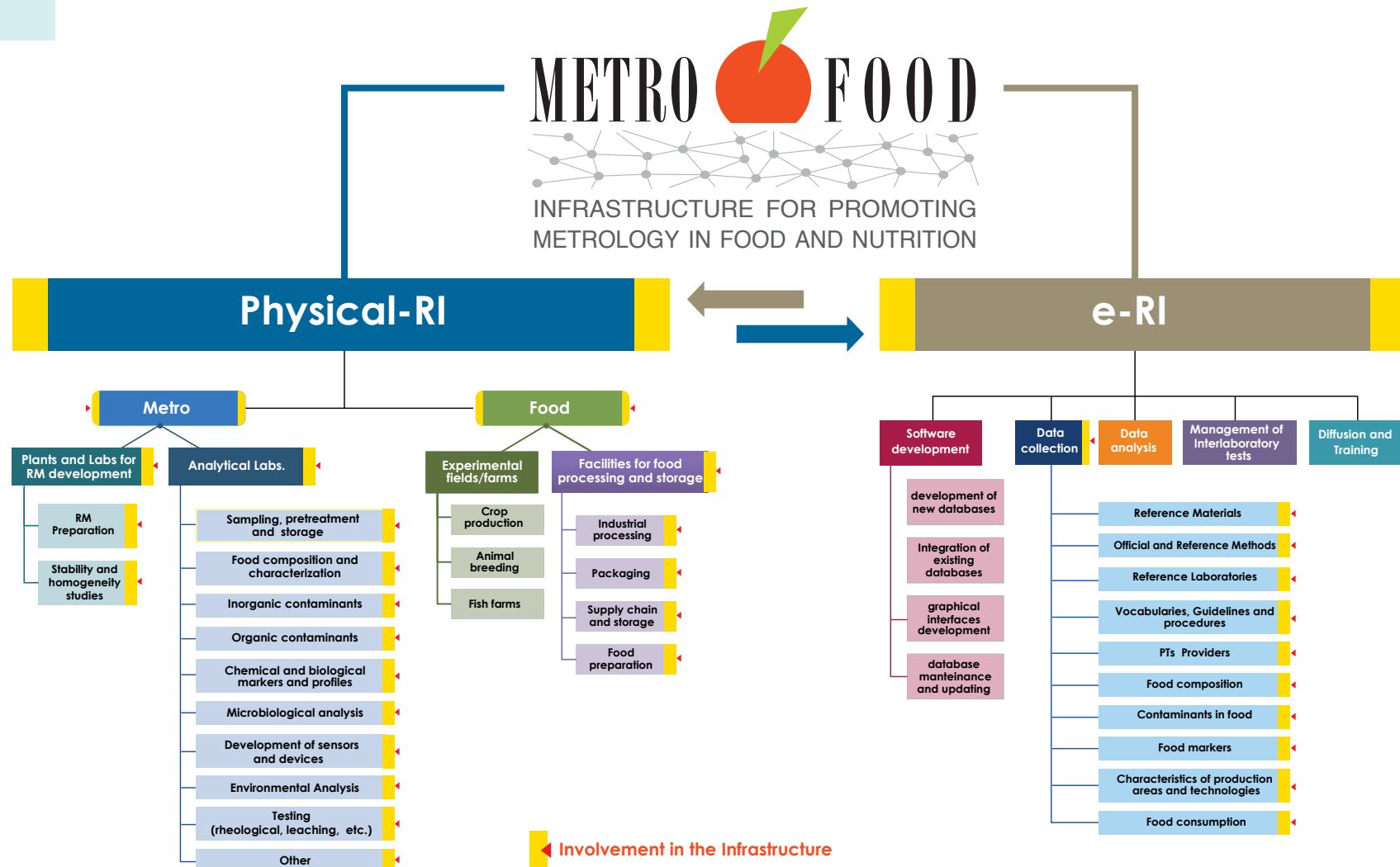
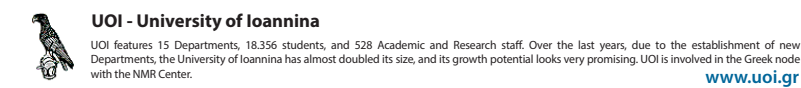
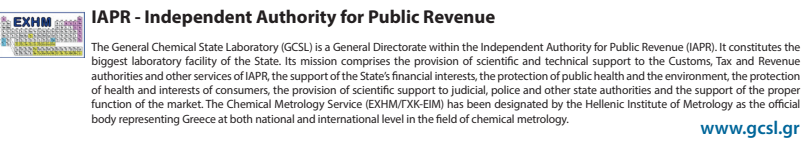
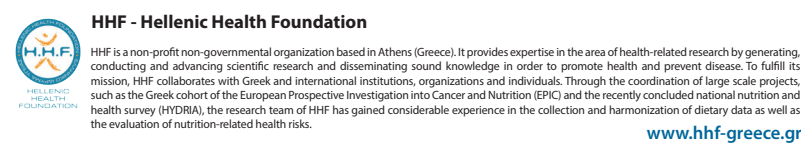
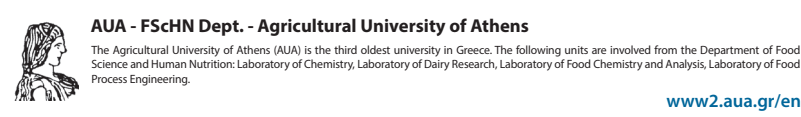
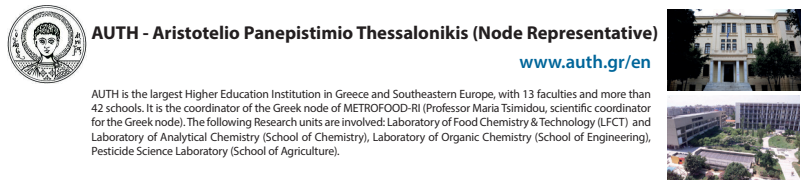
To enhance quality and reliability of measurement results

To make available and share data, information and metrological tools

To enhance scientific excellence in the field of food quality & safety

To strengthen scientific knowledge, promoting scientific cooperation and integration

PARTNERS



Pre-existing value:
• tot. 10.832 k€

Involved researchers:
• tot. 65 units (8,8 FTE)

MINISTERIAL SUPPORT

Ministry of Development & Investments, involved in the EU-InterMinisterial Group.

Physical Facilities

RM Units

Facilities for RM preparation and stability & homogeneity studies – Lab. for RM production equipped with various milling and mixing apparatus, as well as a pre drying and a lyophilization unit (CHRIST), clean room available for the production of reference materials.

Analytical Labs

UHPLC-DAD-FL, UHPLC-DAD-ELSD, UPLC-MS-MS, LC-QTOF MS/MS, LC-MS-MS, preparative HPLC, GC-MS-MS-TQ, GC-IT-MS, GC-MS, GC-FID-Olfactometry FT-MIR (ATR, Drifts), FTIR-Microscope and FT Raman-Microscope, liquid state NMR (500 MHz), nano-spray-dryer, UV-vis spectrophotometers, Laboratory of sensory analysis, ICP-OES, IC-ICP-AES, ultracentrifuge, LC-MS/MS, NMR 600 (and solid state), XRD, SEM, DSC, Thermogravimetric analyzer (TGA), laminar flow clean bench, CO₂ Incubator / Cell Culture Incubator, PCR cyclers, Bone Density and Human Body Measurement System, ICPMS, high-speed milling unit, Accelerated solvent extraction.

Food

Facilities for Food Packaging and Storage
- Industrial processing;
- Packaging Food storage;
- Food preparation

ANALYTICAL CAPACITIES

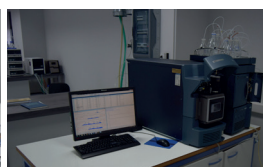
ANALYTICAL CAPACITIES																																																				
OTHER ANALYTICAL CAPACITIES	MATERIALS		AGROECOSYSTEM				NUTRITION		AUTHENTICITY TRACEABILITY				FOOD QUALITY				FOOD SAFETY																																			
	Ceramic materials and composites	Plastic materials	Soils and sediments characterization	Bio-availability studies	Air pollution	Wet & Dry depositions	Bio-indicators	Others	Surface and groundwater quality characterization	Proteins and amino-acids	Water	Minerals	Other	Genetic markers	Elemental profiles	Metabolic profiles	Rare earth elements	Sensory profiles	Trace elements	Non target analysis	Isotopes of heavy elements	Isotopes of light elements	Other	Microbiological analysis	Biological analysis	Bioactive compounds	Physico-chemical analysis	Nutritional quality	Organoleptic properties	Other	Foodborne viruses and Prions	Radiocativity	Parasites	Phenols	Hydrocarbons	Hormones	Biotin	Biotin	Biogenic amines	Nanomaterials	Pathogenic micro-organisms	GMO	Food contact materials (migration)	Allergens	Additives	Other toxins (marine, freshwater, bacterial)	Mycotoxins	Veterinary drugs	VOCs	Pesticides	Chemical speciation	Trace elements
	Other	Others	Soils and sediments characterization	Bio-availability studies	Air pollution	Wet & Dry depositions	Bio-indicators	Others	Surface and groundwater quality characterization	Proteins and amino-acids	Water	Minerals	Other	Genetic markers	Elemental profiles	Metabolic profiles	Rare earth elements	Sensory profiles	Trace elements	Non target analysis	Isotopes of heavy elements	Isotopes of light elements	Other	Microbiological analysis	Biological analysis	Bioactive compounds	Physico-chemical analysis	Nutritional quality	Organoleptic properties	Other	Foodborne viruses and Prions	Radiocativity	Parasites	Phenols	Hydrocarbons	Hormones	Biotin	Biotin	Biogenic amines	Nanomaterials	Pathogenic micro-organisms	GMO	Food contact materials (migration)	Allergens	Additives	Other toxins (marine, freshwater, bacterial)	Mycotoxins	Veterinary drugs	VOCs	Pesticides	Chemical speciation	Trace elements



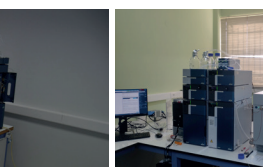
UHPLC-DAD-ELSD



FT-IR



UPLC-MS-MS



QTOF LC MS-MS



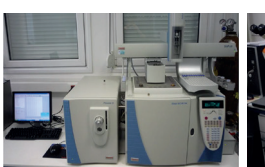
LC-MS-MS



Preparative HPLC



GC-MS-MS-TQ



GC-IT-MS



FT-RAMAN



DSC



ASE

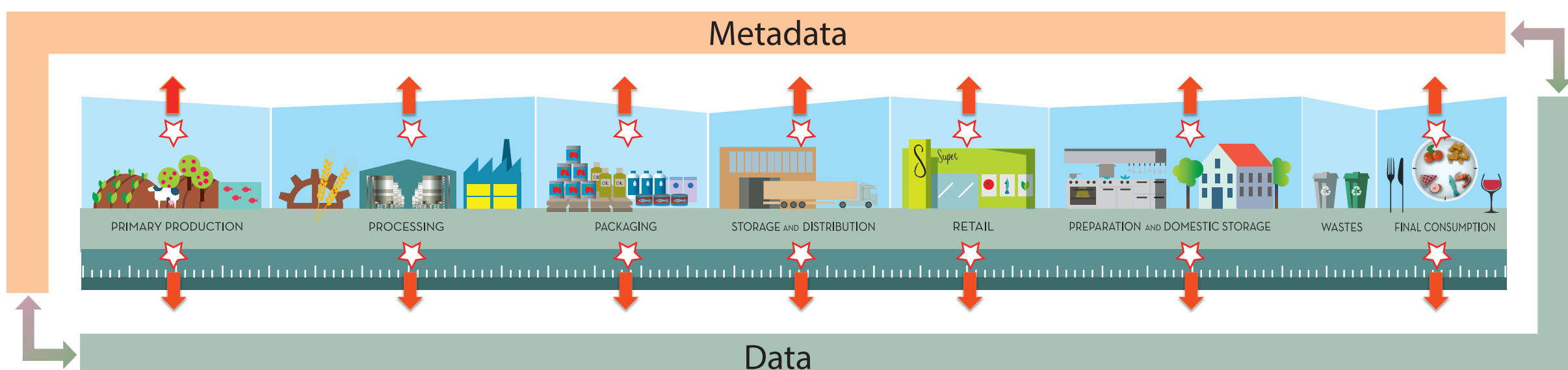
Electronic Facilities

Software

The existing Greek Food Composition Tables (GrFCT), compiled by the Hellenic Health Foundation (HHF), are being expanded in order to meet recent challenges and be applied to food consumption data from HYDRIA, the Greek National Nutrition and Health survey. The GrFCT are in the process to be enriched with data on the composition of food brand names and of the most widely consumed food supplements in Greece, as well as the Glycemic Index of commonly consumed foods, based on the HYDRIA database. The data retrieved from the HYDRIA survey refer to the dietary habits of a recent representative sample of more than 4.000 individuals, male and female over 18 years of age, from all 13 regions of Greece

- Data Base / Data Calculation
- Calculation / Data Processing
- Modeling / Data Integration
- E-learning platforms
- Other e-facilities

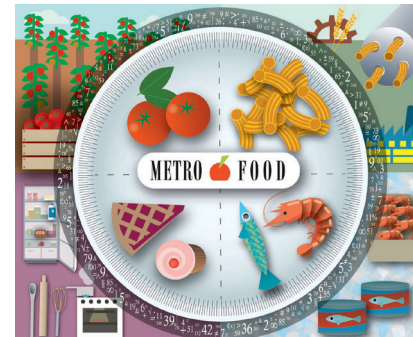
Food Chain Data



Food Quality & Safety Data



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