



The German 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

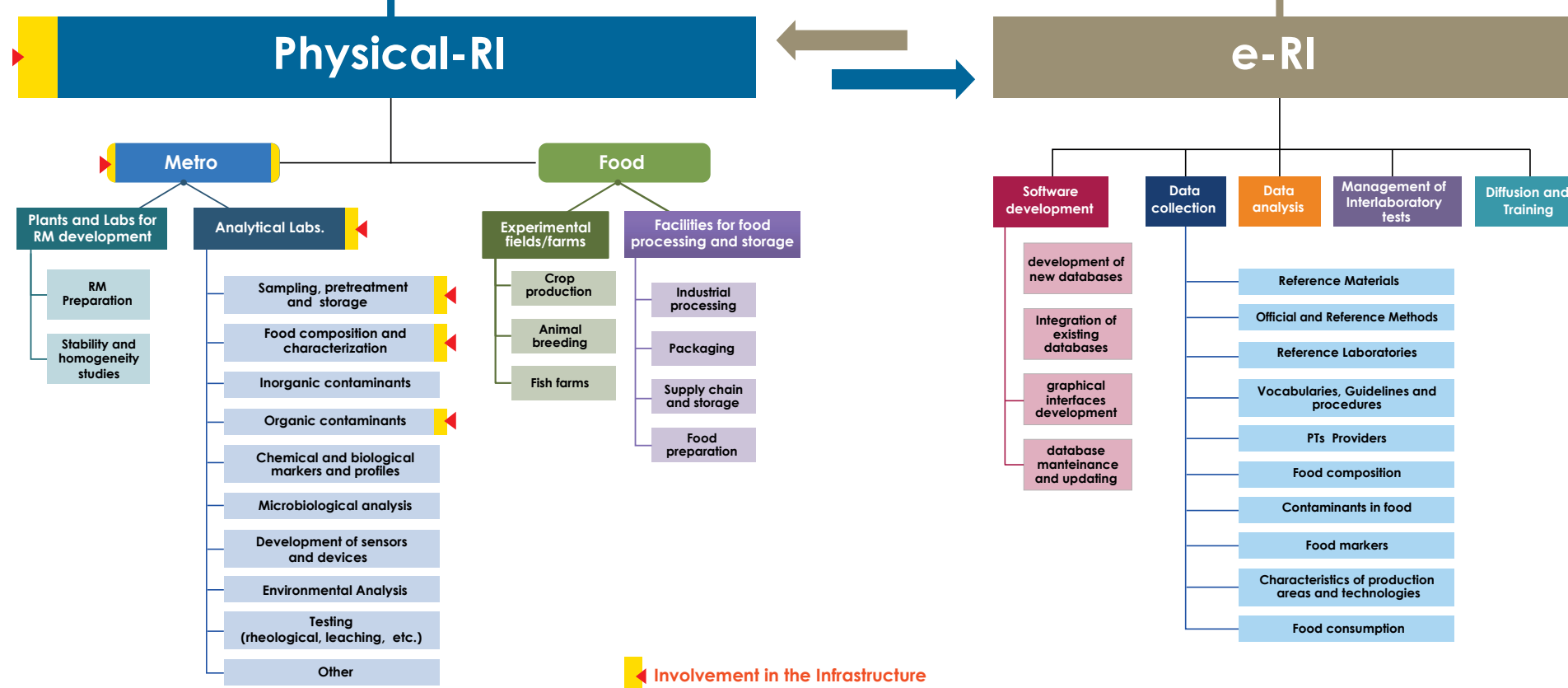


TUM - Technical University Munich

The Technical University Munich (TUM, Technische Universität München) is one of the two biggest universities in Munich, Germany, and regularly ranked number one or two among the German universities in international research surveys. Among TUM's faculties the Center of Life and Food Sciences Weihenstephan (WZW) plays an important role in technology and analyses of foods and investigating the effects of foods and nutrition on human health. The Chair of Analytical Food Chemistry (ALC) belongs to the WZW Faculty and is dedicated to develop and validate new methods for bioactive trace compounds (e.g. vitamins and mycotoxins) in foods and validate them. ALC is also involved in standardizing the respective methods on a national level in strong collaboration with the German Federal Institute of Risk Assessment (BfR).



www.tum.de



Pre-existing value:
• 305 k€

Involved researchers:
• 4 units (0,2 FTE)

Research Areas:
• Analysis of Vitamins, Contaminants in Foods

MINISTERIAL SUPPORT

Bavarian State Ministry for Food, Agriculture and Forestry

Physical Facilities

Analytical Labs

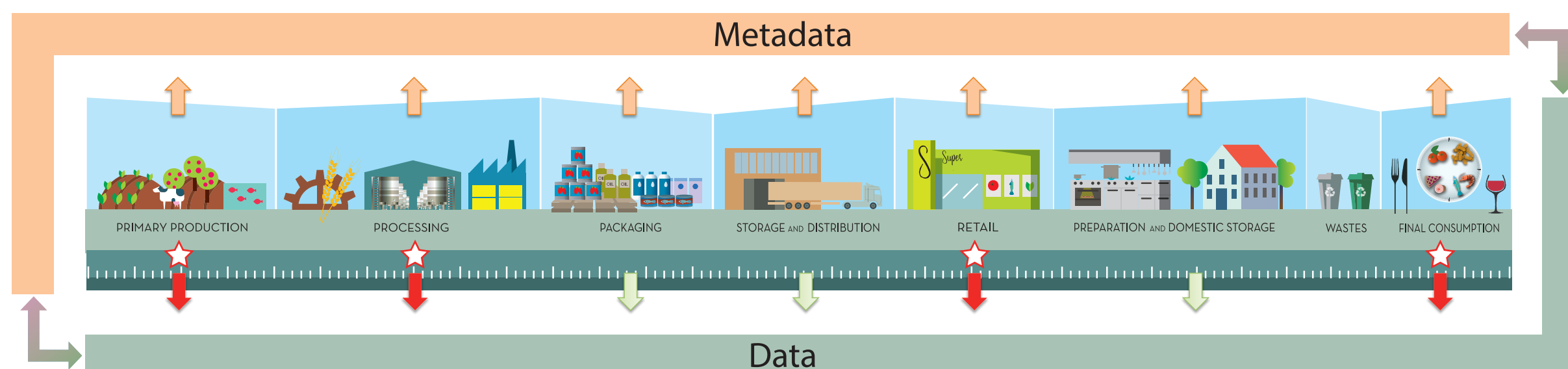
The Chair of Analytical Food Chemistry (ALC) is operating an LC- triple-quadrupole mass spectrometer for stable isotope dilution assays (SIDAs) and has access to NMR spectrometry for accurate quantitation of reference compounds. ALC has developed, validated and published SIDAs for almost all mycotoxins regulated in the EU and for the vitamin group of folates.



ANALYTICAL CAPACITIES																																															
FOOD SAFETY										FOOD QUALITY					AUTHENTICITY TRACEABILITY				NUTRITION		AGROECOSYSTEM			MATERIALS		OTHER ANALYTICAL CAPACITIES																					
Food contact materials (migration)	GMO	Pathogenic micro-organisms	Nanomaterials	Biogenic amines	Biocides	Hormones	Hydrocarbons	Phenols	Foodborne viruses and Prions	Radioactivity	Other	Organoleptic properties	Nutritional quality	Physico-chemical analysis	Bioactive compounds	Biological analysis	Microbiological analysis	Additration	Other	Isotopes of light elements	Isotopes of heavy elements	Non target analysis	Trace elements	Sensory profiles	Rare Earth Elements	Elemental profiles	Metabolic profiles	Genetic markers	Other	Vitamins	Carbohydrates	Fatty acids	Proteins and amino-acids	Water	Minerals	Other	Surface and groundwater quality characterization	Soils and sediments characterization	Bio-availability studies	Air pollution	Wet & Dry depositions	Bio-indicators	Other	Metals	Ceramic materials and composites	Plastic materials	Other



Food Chain Data



Food Quality & Safety Data