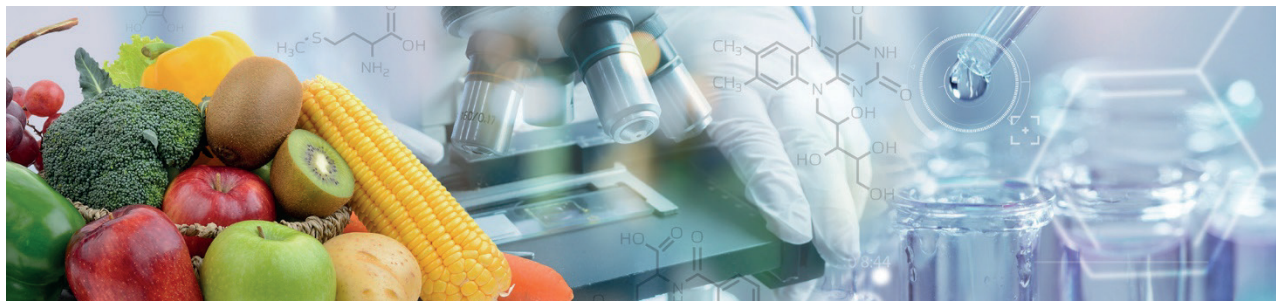


## TIMED CENTER CORE FACILITIES BIOACTIVE INGREDIENTS RESEARCH



There is a wealth of substances and plant substances, so-called phytamines, in nature. Adequate natural extracts and plant substances with measurable biological effects are increasingly used in modern medicine and nutrition for the prevention and treatment of diseases. In the future, they may become a potential alternative to the conventional drugs of today.

For specific applications, it is of great importance to know and to describe the basic **molecular mechanisms** involved. This research group therefore focuses its work on the **identification and characterization of phytamines** and the analysis of **physiological effects** in suitable in-vitro and in-vivo experimental systems. Molecular, biochemical, biophysical and cell biological levels can be investigated to explore the influence of plant components and their active pharmaceutical constituents.

The thematic fields cover everything from the investigation of the components of cosmetic products to the **modification of nutritional products**.

Moreover, a wide variety of active ingredients and unknown interactions in the food sector are being researched. A further topic is **quality assurance in the area of food quality** (food control) through various measuring methods (microbiological and molecularbiological analyses, HPLC, GC-MS).

In addition to basic research, the research group at the *FH Upper Austria, Wels Campus* develops functional foods and highly effective natural pharmaceuticals and nutraceuticals. This is done in cooperation with innovative partners from science and industry.

### Services

- » Analytics of plant raw materials
- » Characterization of bioactive ingredients
- » Development of in-vitro and in-vivo test systems
- » Design and engineering of functional foods
- » Development of dietary supplements
- » Testing of cosmetics
- » Conducting clinical studies in humans and animals with partner institutes

 [phyto@timed-center.at](mailto:phyto@timed-center.at)