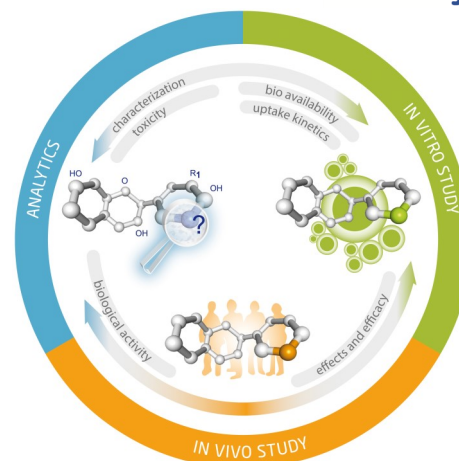




BioTeSys

Analytical testing laboratory

Product development & Quality assurance



Independent accredited laboratory as an long-term partner

BioTeSys Analytics offers a variety of analytical services mainly based on HPLC/UV-Vis/DAD/Fluor. and UPLC/MS/MS. As an independent analysis partner accredited according to DIN ISO/IEC 17025:2005 we perform, on your behalf:

- detection of active ingredient profiles,
- quality control of intermediate and end products,
- supplier qualification,
- verification of raw material specifications,
- external quality control,
- customized preanalytics.

BioTeSys develops also tailor-made analytical methods on customer request, validating them according to the European ICH guideline and referring to GLP principles.

The flexible accreditation also offers the possibility to react quickly to new standards and novel customer requests.

Examination spectrum

BioTeSys has many years of expertise in the areas of:

- food & feed,
- food supplements & nutraceuticals,
- cosmetics & oral care,
- medical devices,
- botanicals,
- biological and chemical ingredients,
- samples from clinical studies.

Competent, reliable, flexible

BioTeSys offers opportunities for its customers:

- **Quality assurance & Product development & Outsourcing:** content tests, stability tests with adherence to applicable quality guidelines.
- **Ingredients related analytics & Method development / validation:** identity check, purity check, degradation products of an ingredient, linearity and calibration curve, variance, outlier, bias, selectivity, trueness and recovery, working range, LOD and LOQ, robustness, sensitivity.
- **Analysis of clinical study samples:** physiological samples from *in vitro* and *in vivo* clinical trials.

We assess the analyses according to current quality standards (FCC, Ph. Eur., USP, AOAC, DAB and validated methods).

The independent testing by BioTeSys accredited contract laboratory ensures guarantees for the quality of the declared products and provides manufacturer and consumer the necessary security for marketing and application.

Contact:

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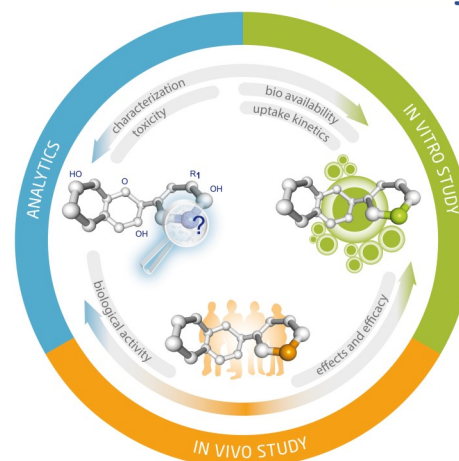




BioTeSys

Analytical testing laboratory

Bioactive substances & Clinical samples



Among our portfolio...

Enzyme Products

A large variety of lactase preparations are available on the market for people suffering from lactose intolerance. The way these enzyme preparations act is based on the use of either “acidic lactase” or “neutral lactase”. Accordingly, optimum enzyme activity will be observed at approximately pH 2.5 or pH 6.5, respectively.

The measurement methods are based on an indirect photometrical determination of enzyme activity according to the Food Chemical Codex.

BioTeSys adjusts the sample preparation specifically to the product and follows, on customer request, the entire manufacturing and development process of the preparations according recognised and internationally accepted standards. The independent examination by the accredited contract laboratory ensures the enzyme activity declared for the preparations by the manufacturer.

Oxygen Radical Absorbance Capacity (ORAC)

The ORAC value is a sum parameter which comprises all antioxidant active components of a raw material, a product, a mixture or an extract. Strongly influenced by environmental factors such as temperature, humidity, mechanical processing, it is especially appropriate for quality control purposes.

For blended products, the ORAC reference value is the result of reactions between all active components of the mixture. Deviations from this reference value thus show up changes in the product.

Therefore, the method is particularly suitable for:

- raw material testing;
- monitoring of maturing processes, storage and transport conditions;
- monitoring of manufacturing processes of sensitive products.

This method is validated and accredited at BioTeSys.

Antioxidative Status

We offer the determination of relevant parameters in both physiological matrices and in your product (e.g. food, beverages, extracts, cosmetics) such as:

- vitamins, malondialdehyde, glutathione, coenzyme Q10, tocopherols/tocotrienols, carotenoids, flavonoids, and other secondary plant compounds;
- ORAC, TEAC, total polyphenols, total flavonoids.

Physiological samples

We offer the analysis of leading substances in extracts and cells from *in vitro* bioavailability studies. We examine the different uptake mechanisms and determine the uptake kinetics and efficiency of uptake from *in vivo* bioavailability studies.

BioTeSys is your partner in the development and implementation of new concepts in the fields of food supplements, cosmetics and consumer health care, and supports you in your marketing strategies.

