

behrotest[®] devices for the

determination of fibers





Fibers

Fibers are an important element of human nutrition and are directly connected with the natural components of foodstuff. Basically, the term refers to a group of fundamental food components that enter the stomach and small intestines undigested and reach the colon nearly unaltered. Fibers are comprised of indigestible plant parts and consist mainly of various types of starch-free polysaccharides (NSP) and lignin.

Determination of the fiber content of food

Fibers play an important role in human nutrition. The fiber content is generally determined by means of the classic AOAC 985.29 total crude fiber analysis (the so-called Prosky method) and the AOAC 991.43 total crude fiber analysis (applicable for the determination of total crude fiber content in grain, beans, vegetables and fruits and complies with the German "Official analysis procedure L00.00-18 for the determination of total fiber content" in acc. with § 64 LFGB).

Both methods subject the sample to a series of enzymatic digestions that simulate the actual digestion process that takes place in the human and animal digestive system. They calculated the undigested residues that remain at the end of the analysis.

behrotest® filtration unit EN 6

The filtration unit EN 6 performs the last filtration and rinsing phase required by the enzymatic method for the determination of fibers.

Maximum 6 sample positions

Combined with the behrotest® shaking water bath SWB 26, the behrotest® EN 6 reduces the required time in comparison to the manual process considerably.

Glass funnels facilitate the introduction of digested samples and solvents in the equipment.

A vacuum function accelerates the filtration and rinsing phase.



EN 6



SWB 26

EN 6

behrotest® shaking water bath SWB 26

The behrotest® shaking water bath SWB 26 is used for the simulation of enzymatic digestions, exactly according to these methods. With the multiple digestions of sample copies/duplicates at predefined temperatures using various enzymes (α -amylase for gelification, protease to remove proteins, amyloglucosidase to remove starch). Uninterrupted and even sample mixing (shaking) ensures that the samples do not overheat.

Technical data

Volume in l	26
Weight in kg	13.8
Temperature range	0 °C to 99 °C
Adjustment scale	0 °C to 99 °C in 0.1 °C increments
Temperature stability	±0.1 °C
Shaking speed	50 rpm up to 200 rpm

This could also be of interest to you:



Extraction units for crude fiber

Extraction units for crude fat

Determination of crude protein according to Kjeldahl:

- Infrared rapid digestion units with manual and programmable operation
- Block digestion systems, also with fully automated lift
- Steam distillation units for (nearly) all requirements
- Titration units



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