

behrotest® devices for the

determination of fibers



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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 LOO.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-V

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

- » Practical addition and removal of max. 6 behrotest[®] crucibles
- » Space-saving equipment: perfect sizes for any conventional lab table
- » Simple extraction of sample in the designated collection bottle
- » Low filtration times: behrotest® Diaphragm vacuum pump, with high chemical resistance, to facilitate work during filtration and rinsing
- » Glass funnels facilitate the introduction of digested samples and solvents in the equipment.

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



behrotest® water bath with magnetic stirrer

The behrotest® temperature controlled water bath with magnetic stirrer 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 (a-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	20	
Temperature setting range	5°C to 99°C	
Temperature stability	±0.1°C	
Shaking speed	50 rpm up to 600 rpm	
Tension	220-240 V - 50/60 Hz	
Power	Max. 1400 Watt	
W x D x H in cm	35 x 60 x 34	



Туре		ArtNo.
WBMR	behrotest® temperature controlled water bath	B00696814
	with magnetic stirrer and lid	

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









behr Labor-Technik GmbH • Spangerstraße 8 • 40599 Düsseldorf/Germany Tel.: (+49) (0) 211 – 7484717 • Fax: (+49) (0) 211 – 7484748 eMail: info@behr-labor.com • Internet: www.behr-labor.com