

DIETARY FIBER EXTRACTION

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What is the difference between dietary fiber and raw fiber?

It is basically an analytical type of difference. Both procedures are aimed at calculating the indigestible residue of a food substance, or, everything that is not fat, protein or carbohydrate. Whereas the procedure for determining dietary fiber foresees the use of enzymes, raw fiber determination involves chemical reagents only (acids and bases).

The procedure for determining dietary fiber exposes the sample to a series of enzymatic digestions that simulate the real digestive process which takes place in the human and animal digestive tract, calculating the undigested residue remaining at the end of the analysis.

On the other hand, in analyzing raw fiber the sample is digested using diluted solutions of acids and bases. Again the final undigested residue of the sample is measured. In this case the most widely used official procedure is the Weende method (official in Italy, France, England, Sweden and the USA).

Generally speaking, dietary fiber analysis is carried out on foods intended for human consumption whereas raw fiber analysis is carried out on animal feeds or on raw materials of vegetable origin, e.g. cereals.

GDE ENZYMATIC DIGESTION UNIT

The GDE performs enzymatic digestion, a delicate phase where samples are immersed in a thermostatic water bath and stirred. **Continuous and constant sample mixing** is necessary in order to prevent the sample from overheating. The unit consists of an immersion heating head, a transparent tank and a VELP 6-place magnetic stirrer to ensure **excellent thermoregulation and precision**.

INSTRUMENT	POWER SUPPLY	CODE No
GDE	230 V / 50-60 Hz	F30400209
GDE	115 V / 50-60 Hz	F30410209

AOAC



GENERAL FEATURES AND PERFORMANCE

TEMPERATURE RANGE	Ambient to 105 °C
POWER	900 W
DIMENSIONS (WxHxD)	413x295x410 mm (16.2x11.6x16.1 in)
WEIGHT	6.2 Kg (13.66 lb)

OPTIONAL ACCESSORIES

CODE No

Beaker, 400 ml	A00000999
Stirring bar, 6x35 mm	A00001056