

Technical Datasheet

Analysis Name: Total Dietary Fiber in Foods

Method Number: OM-AOAC-991.43_TDF

Scope of Application: This method applies to processed foods, grain and cereal products, fruits and vegetables which do not contain low molecular weight fiber, or in regions where low molecular weight fiber is excluded from the definition of total dietary fiber. Not applicable to oily samples.

Description: Duplicate test portions of dried foods undergo sequential enzymatic digestion by heat stable α -amylase, protease, and amyloglycosidase to remove starch and protein. For total dietary fiber (TDF), enzyme digestate is treated with alcohol to precipitate soluble dietary fiber before filtering, and TDF residue is washed with alcohol and acetone, dried, and weighed. TDF residue values are corrected for protein by kjeldahl, ash, and blank.

Sample Weight Required: 25 g

Method Reference: AOAC 991.43

Analytical Platform: Enzymatic, Gravimetric

Special Information: If insoluble, soluble, & total dietary fiber results are needed, OM-AOAC-991.43_SDF_IDF should be chosen. This method is not suitable to determine non-digestible oligosaccharides (NDOs) such as fructooligosaccharides (FOS), inulin, galactooligosaccharides (GOS), resistant maltodextrins, polydextrose. Low molecular weight fiber should be analyzed with AOAC_2017.16 or AOAC_2011.25. Presence of gum (ie guar gum) needs to be communicated at the time of sample submission.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Total Dietary Fiber	TDF	g/100 g	0.5	Culinary: 3-60% Cereals: 3-50%