



NQAC

Nestlé Quality Assurance Center  
Dublin

# 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.

**Description:** Duplicate test portions of dried foods undergo sequential enzymatic digestion by heat stable  $\alpha$ -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 cannot determine values for fiber sources containing low molecular weight fiber including, but not limited to maltodextrin-resistant starches and fructans (inulin or fructooligosaccharides). Low molecular weight fiber should be analyzed with AOAC-2017.16. 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%