Rapid Integrated Dietary Fiber Method

Leading the way in dietary fiber analysis

For over 30 years, Neogen’s Megazyme range has been at the forefront of innovation in dietary fiber testing.

Our Rapid Integrated Total Dietary Fiber (RINTDF) method has been validated as AOAC 2022.01 and 2017.16. It overcomes limitations identified in AOAC 2009.01 and 2011.25 and is the only method that accurately measures all components of dietary fiber including resistant starch and NDO (non-digestible oligosaccharides) without prior knowledge of the fiber profile.

RINTDF Advantages:

Our K-RINTDF assay kit is the only commercially available product that can be used to measure fiber according to these AOAC methods and offers the following benefits:

• More accurate dietary fiber content measurement
• Most encompassing method regardless of fiber component profile of samples
• Allows for more cost-effective fiber fortification of foods without the need for costly over-supplementation linked to under-estimation issues of previous methods
• Improves labelling regulatory compliance for manufacturers

Your Trusted Testing Partner

With our added value service and support worldwide from experienced scientists, we can be your trusted partner for all your analytical needs. Our Megazyme range is manufactured in-house at our site in Ireland, and we are pleased to say that we can support you with:

• Trusted methods compatible with the officially validated standards
• Ultra-pure enzymes for more accurate results
• Secure stock & global supply chain
• Excellent technical support
• Additional support tools such as our user-friendly MegaCalc sheets to facilitate calculations

For more information, contact us at infomz@neogen.com

Visit megazyme.com

Our Popular Dietary Fiber Kits

K-RINTDF
Rapid Integrated Total Dietary Fiber

K-TDFR
Total Dietary Fiber

K-INTDF
Integrated Total Dietary Fiber

View our Dietary Fiber Range
Rapid Integrated Total Dietary Fiber Assay Kit (K-RINTDF)

For the measurement of soluble and insoluble total dietary fiber according to the CODEX definition of dietary fiber.

**Example Workflow**

Please refer to each product’s technical specification sheet before completing the workflow.

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Dried and defatted food sample (1g)

Starch Hydrolysis
Pancreatic α-amylase PAA & amyloglucosidase AMG
(4 h, 37°C, pH 6.0)
Change pH to ~ 8.2, Heat to ~ 95°C

Protein hydrolysis
Add Protease (60°C, pH 8.2)
Change pH to ~ 4.5, ~ 60°C

AOAC 2022.01 Method

Filtration 1

Water insoluble fraction

Water soluble fraction, alcohol precipitation, filtration 2

Ethanolic filtrate
Desalt in tube + In-line HPLC - TOSOH TSK

Protein and Ash determined on residues

SDFP

AOAC 2017.16 Method

Ethanol precipitation + Filtration

Ethanol filtrate
Desalt in tube + In-line HPLC - TOSOH TSK

Protein and Ash determined on residues

SDFS (NDO)

Insoluble DF

HMWDF

Protein and Ash determined on residues

Insoluble DF = SDFP + SDFS

Soluble DF = SDFP + SDFS
```

**DF:** Dietary Fiber,
**HMWDF:** High Molecular Weight Dietary Fiber,
**SDFP:** Water soluble Dietary Fiber which precipitates in 78% ethanol,
**SDFS:** Water soluble Dietary Fiber that remains soluble in 78% ethanol (= NDO: non-digestible oligosaccharides).
**AOAC 2017.16:** measures Total Dietary fiber as HMWDF + SDFS (=NDO)
**AOAC 2022.01:** measures Total dietary fiber split as soluble (SDFP + SDFS) and insoluble fiber

Please refer to the relevant validation materials for full details on the validated sugars and acids protocol.