

The Thermo Scientific NutraChek Solution is an easy-to-use, validation ready instrument and software package for non-destructive ingredient identity testing. The NutraChek Solution ensures compliance with Current Good Manufacturing Practice (cGMP) requirements for companies that manufacture, label or package dietary supplements.

Thermo Scientific NutraChek Solution

Transform your identity analysis



The NutraChek™ Solution is a complete package for ingredient identification analysis by FT-NIR technology. The Thermo Scientific Antaris II FT-NIR analyzer, combined with the fiber optic probe, conclusively identifies incoming ingredients in their original container. Analysis is as simple as placing the probe into or against your sample and

pulling the trigger. The near-infrared technique offers many advantages:

- Analysis that takes only seconds
- Non-destructive analysis in situ or directly through packaging material
- No consumable, solvents or sample preparation
- Only one analysis for conclusive identity result

The NutraChek Advantage

	Traditional/Wet Chemistry Techniques	NutraChek Solution Advantage
Actual Analysis Time	30 minutes for a single technique, multiple techniques for some compounds	✓ Less than a minute
Conclusive Test Result	Multiple techniques for 100% identity assurance for many compounds	✓ Conclusive result based on spectral match to known compounds
Sample Preparation	Multiple steps leading to operator error in results	✓ Not required – samples run in original container or through plastic packaging
Consumables/Chemicals	Reagents, solvents, TLC plates, columns	✓ Not needed
QC Operator	Chemistry degree and several weeks instrumentation training required	✓ Minimal training – one button is all that is needed for analysis
Location of Analysis	Laboratory	✓ At-line – in the ingredient receiving area



RESULT Software

Easy and quick implementation of the NutraChek Solution is achieved using Thermo Scientific RESULT software. A single click runs the entire workflow forcing compliance with method SOP's, digital signatures and automated electronic archiving of identification test results. RESULT™ is compatible with bar code entry and export to LIMS via text, Microsoft® Excel® and OPC.

Regulatory Compliance

The NutraChek Solution ensures that cGMP requirements are met for electronic record retention, validation of analytical instruments and documentation of processes. RESULT contains an electronic audit trail database to track software changes and to retain records on how identification test results were generated. NutraChek is based on the award-winning Antaris™ FT-NIR platform. The Antaris FT-NIR analyzer family was developed to meet pharmaceutical qualification and validation requirements. The Thermo Scientific ValPro qualification system includes traceable reference standards, United States Pharmacopoeial performance testing (USP General Chapter <1119>), qualification services, and a design traceability protocol based on the FDA's quality system regulation. RESULT software provides essential functionality for electronic record and signature management compliant with 21 CFR Part 11.

Complete Solution

The NutraChek Solution offers everything needed for ingredient identification testing to meet cGMP requirements in the dietary supplement industry. This powerful, yet easy-to-use package was developed for quick implementation and includes a nutraceutical spectral library containing many commonly used compounds. To ensure your success, an application scientist will come on site to help with method development, training and system qualification for your specific needs.

System Specifications

Instrument Dimensions

40.6 × 63.5 × 33 cm (H × W × D)

Weight

47.7 kg

Source

Long-life high intensity halogen NIR source

Spectral Range

12000–3800 cm⁻¹ (833 – 2630 nm)

Resolution

4 cm⁻¹ standard (2 cm⁻¹ option)*

Wavelength Precision

0.1 cm⁻¹

Sealed and Desiccated

Yes

Operating Temperature Range

15–35 °C

Power Requirements

110/220 VAC

Regulatory Approvals



The NutraChek Package Includes

- Antaris II FT-NIR analyzer
- RESULT, Thermo Scientific OMNIC and Thermo Scientific TQ Analyst software package
- ValPro™ Qualification Package
- IQ, OQ instrument installation and commissioning
- 3 day on-site method development and training
- Dedicated nutraceutical identification workflow
- Nutraceutical spectral library
- Annual updates for new compounds to spectral library
- Written SOP for instrument and workflow operation

Options Include

- 3 year lease to own
- SabIR Fiber Optic Probe
- Sample Cup Spinner accessory

NutraChek Solution – Nutraceutical Spectral Library

Acetyl-L-Carnitine	Calcium Silicate	Ginkgo Biloba Extract	Lycopene
Alanine, L-	Candex	Glucosamine	Magnesium Stearate
Alpha Lipoic Acid	Carnuba Wax	Glutamic Acid, L-	Manganese Gluconate
Artichoke Extract	Cellulose	Glutamine, L-	Methionine, L-
Ascorbic Acid	Chasteberry	Glycine	Milk Thistle Extract
Ascorbyl Palmitate	Choline Bitartrate	Grape Seed	N Aceptyl L Cysteine
Aspartic Acid, L-	Cinnamon Extract	Green Tea Extract	Niacin
B-1 Thiamine Hydrochloride	Citric Acid	Gum Arabic	Potassium Iodide
B-12 Cyanocobalamin	Colloidal Silicon Dioxide	Histidine, L-	Proline, L-
B-2 Riboflavin	Croscarmellose Sodium	Inositol	Rosemary Extract
B-3 Niacinamide	Crystalline Fructose	Isoleucine, L-	Rutin
B-6 Pyridoxine HCL	Curcumin	L Cysteine	Soy Protein Isolate
Beta Carotene	Dong Quai 4:1 Extract	Lecithin	Taurine
Bilberry Extract	Dry Mixed Tocopherols	Leucine, L-	Threonine, L-
Biotin	E-Succinate	Licorice Root	Valine, L-
Black Cohosh	Flax Seed	L-Selenomethionine	Zinc Citrate
		Lutein FloraGlo	

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