

Food testing solutions

From testing to table

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# Expertise every step of the way

Medallion Labs provides the knowledge you need to get your product to the table with confidence.

More than 150 years ago, long before we became known as Medallion Labs, we were founded as General Mills' exclusive internal lab. For decades our team was charged with protecting General Mills' products, its family of brands and the consumers who enjoyed



them. In 1974 our role expanded, allowing us to bring our services to thousands of food and ingredient companies across the globe while continuing to serve General Mills as its lab of record. Medallion Labs blends advanced science, discerning expertise and distinguished service to build a crucial set of solutions designed to give you the certitude you need to bring safe, healthy food to tables around the globe. These solutions are both designed and carried out by leading scientists who approach each project as problem solvers, aligning their experience and expertise with your end game.

Every day we uphold our mission to protect the variety of industries and clients we serve from the pitfalls of a competitive, highly regulated industry. It is rigorous science delivered through carefully crafted nutritional labeling and food safety solutions that allows our entire team to deliver on this mission.



CHEMISTRY



MICROBIOLOGY





Quality  
Guaranteed



# Our commitment to quality

Medallion Labs is an ISO/IEC 17025 Accredited Testing Laboratory. Our accredited status means that our Quality Management System and in-scope analytical methods meet the stringent requirements of an internationally recognized standard of quality for testing laboratories in the Food and Pharmaceutical industry. It also means that you, our customer, can expect high-quality, reliable results time after time. ISO/IEC 17025 accreditation requires that we have in-place the quality policies, procedures and detailed work instructions necessary to ensure proper technical, as well as managerial, operating practices in our laboratories. To see the details of our accreditation, visit [a2la.org](http://a2la.org) and search certificates 2769.01 and 2769.02.

Medallion's accreditation is recognized across the globe through a Mutual Recognition Agreement with the International Laboratory Accreditation Corporation (ILAC), and we hope it provides you with the same high level of confidence that we have in our work.



# Chemistry



## Our expert scientists deliver reliable, accurate and cost-effective chemical analyses.

At Medallion Labs, we're experts at testing for standard nutrition label requirements. We use the official methods of the Association of the Official Analytical Chemists (AOAC), American Association of Cereal Chemists (AACC), and American Oil Chemists' Society (AOCS). Or, we employ our team of expert scientists to produce robust equivalent methods to meet the requirements for your sample.

We are innovative leaders, continuously developing new methodology to meet NLEA requirements. Our technical experts are here to help provide you with the resources needed to determine the right tests for your products.



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A	Acrylamide		\$223.00
	Aflatoxin	Aflatoxin B1, B2, G1 and G2	\$143.00
	Allulose		\$271.00
	Alpha-Amylase Activity		\$271.00
	Alpha-Amylase Inhibitor		\$475.00
	Aluminum	ICP-MS	\$56.00
	Amino Acid Profile - Acid Hydrolyzed Amino Acids		\$319.00
	Amino Acid Profile - Base Hydrolyzed Amino Acids	Tryptophan	\$223.00
	Amino Acid Profile - Hydroxyproline	Collagen	\$208.00
	Amino Acid Profile - Performic Acid Oxidation Amino Acids	Cystine/Methionine	\$223.00
	Amino Acid Profile - Physiologically Free Amino Acids	With Tryptophan	\$319.00
	Amino Acid Profile - Physiologically Free Amino Acids	Without Tryptophan	\$176.00
	Amylose and Amylopectin		\$271.00
	Anisidine Value (in Foods)		\$271.00
	Anisidine Value (in Oils)		\$133.00
	Anthocyanins		\$271.00
	Antimony	ICP-MS	\$56.00
	Antioxidant Activity	DPPH	\$297.00
	Arsenic	ICP-MS	\$70.00
	Ash		\$23.00
B	Avenanthramides	Requires Moisture	\$641.00
	Barium	ICP-MS	\$56.00
	Beta-Amylase Activity		\$271.00
	Beta-Glucan		\$139.00
	Beta-Glucan	Mushroom, Yeast	\$271.00
	Beta-Glucanase Activity		\$271.00
C	Boron	ICP-MS	\$56.00
	Brix		\$70.00
	Cadmium	ICP-MS	\$70.00
	Calcium	ICP-OES	\$37.00
	Calories by calculation	Requires: Ash, Moisture, Fat, and Protein	no charge
	Carbohydrates by calculation	Requires: Ash, Moisture, Fat, and Protein	no charge
	Cholesterol		\$143.00
	Chromatograms		\$27.00
	Chromium	ICP-MS	\$56.00
	Cobalt	ICP-MS	\$56.00
	Color Analysis (Hunter)		\$70.00
	Color Analysis (Minolta)		\$70.00
	Color Analysis in Oils (Lovibond)		\$100.00



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	Consultation		*call for pricing
	Copper	ICP-OES	\$37.00
	Custom Serving Size Report Fee	Request for results to be reported in a custom serving size. Standard reporting for nutritional testing is 100g. Each serving size requested is \$27.	\$27.00
D	Density		\$70.00
	Deoxynivalenol (Vomitoxins)	DON, Vomatoxin	\$143.00
	Differential Scanning Calorimetry (DSC)	Call for consultation	\$271.00
	DP Characterization (DP Profile)		\$271.00
E	Englyst Starch	Glycemic Response	\$575.00
	E-Tongue		\$372.00
F	Falling Number		\$80.00
	Farinograph		\$213.00
	Fat by Gas Chromatography	Includes fatty acid profile	\$205.00
	Fat by Gravimetric	Acid or Base Hydrolysis	\$49.00
	Fiber (CODEX Definition) - Total	AOAC 2009.01	\$430.00
	Fiber (CODEX Definition) - Total, Soluble, Insoluble	AOAC 2011.25	\$484.00
	Fiber (Crude)		\$61.00
	Fiber (Gravimetric) - Total	AOAC 991.43	\$188.00
	Fiber (Gravimetric) - Total, Soluble, Insoluble	AOAC 991.43	\$227.00
	Fiber (Rapid Integrated Method) - Total	AOAC 2017.16	\$478.00
	Fiber (Rapid Integrated Method) - Total, Soluble, Insoluble	AOAC 2017.16	\$531.00
	Fiber (Resistant Oligosaccharides) - Total	AOAC 2001.03 with AOAC 991.43 digestion	\$478.00
	Fiber (Resistant Oligosaccharides) - Total, Soluble, Insoluble	AOAC 2001.03 with AOAC 991.43 digestion	\$531.00
	Flavor Characterization	Call for consultation	\$531.00
	Free Amino Nitrogen		\$165.00
	Free Fatty Acids		\$77.00
	Freeze Drying (Lyophilization) Sample Preparation		*call for pricing
	Fructans/Inulin	Fructooligosaccharides	\$314.00
	Fumonisin	Fumonisin B1, B2, and B3	\$143.00
G	Glucuronic/Galacturonic Acid		\$271.00
	Gluten/Gliadin Allergens		\$160.00
H	Headspace Gases	N, O, CO2	\$325.00
	Heavy Metals Package	Arsenic (As), Cadmium (Cd), Lead (Pb), Mercury (Hg)	\$150.00
	Hexanal		\$99.00
I	Iodide		\$234.00
	Iron	ICP-OES	\$37.00
J	Jelly Bloom		\$133.00
L	Lead	ICP-MS	\$70.00
	Lipase Activity		\$300.00

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M	Lipoxygenase Activity		\$271.00
	● Magnesium	ICP-OES	\$37.00
	● Manganese	ICP-OES	\$37.00
	● Mercury		\$94.00
	● Metals Screen I	Calcium (Ca), Iron (Fe), Potassium (K), and Sodium (Na)	\$96.00
	● Metals Screen II	Metals I plus Copper (Cu), Magnesium (Mg), Manganese (Mn), Phosphorus (P), and Zinc (Zn)	\$150.00
	Mock Nutritional Label	Nutritional Analysis Required. Results will be reported per serving size. Each serving size requested is \$50.	\$50.00
	● Moisture		\$23.00
	Moisture (Karl Fischer Titration)		\$56.00
	Moisture Isotherm	Specific to shelf life and product stability	*call for pricing
N	● Molybdenum	ICP-MS	\$70.00
	● Nickel	ICP-MS	\$56.00
	● Nitrogen		\$29.00
	Nutritional Analysis	Includes required NLEA nutrients; pricing may vary with matrix	\$1,401.00
	Nutritional Analysis with Mock Nutritional Label	Includes required NLEA nutrients, plus mock nutritional label; pricing may vary with matrix	\$1,451.00
O	Ochratoxin	Ochratoxin A	\$143.00
P	Particle Size Distribution (Alpine Granulation)	Sieve sizes required; pricing listed per sieve	\$43.00
	Particle Size Distribution (Microtrac)		\$186.00
	Particle Size Distribution (Rotap)	Sieve sizes required; pricing listed includes up to 6 sieves	\$70.00
	PDCAAS - Invitro (Protein Quality)		\$1,592.00
	Pectin		\$271.00
	Peroxidase Activity		\$271.00
	● Peroxide Value		\$77.00
	Pesticide Multi-Residue Analysis (MRA) - Analyte Confirmation	Prerequisite: MRA Screen; Confirmation for up to 5 analytes	\$213.00
	● Pesticide Multi-Residue Analysis (MRA) - Basic Screen		\$489.00
	● Pesticide Multi-Residue Analysis (MRA) - Expanded Screen		\$659.00
	Pesticide Multi-Residue Analysis (MRA) - Glyphosate		\$297.00
	● Pesticide Multi-Residue Analysis (MRA) - Organic Screen		\$319.00
	pH (direct or in solution)		\$23.00
	Phenolics	Bound, Free, Total	\$271.00
	● Phosphorus	ICP-OES	\$37.00
	Photos of Sample Received	Request for photographs of samples or packaging to be sent upon receipt by the lab. Samples can be photographed individually or combined into one. Each photo requested is \$27.	\$27.00
	Phytic Acid		\$271.00
	Polyphenol Oxidase Activity		\$300.00

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R	Potassium	ICP-OES	\$37.00
	Protease Activity	Fungal, Papain, Pepsin, Bromelain, Bacterial	\$271.00
	Protein (Dumas)		\$29.00
	Proximate Analysis	Includes Ash, Moisture, Protein, Fat by GC; pricing may vary with matrix	\$280.00
	Refractive Index		\$70.00
	Resistant Starch	RS2 and RS3	\$260.00
	Salt (Chlorides)		\$80.00
	Sample Processing - Basic	Includes the handling and processing of a single sample or composite of multiple samples involving no, limited, or full grinding.	\$9.00
	Sample Processing - Complex	Composite or single sample involving special instructions (examples: shelling nuts, peeling, deboning, contents only capsule, multiple component entrées). Charged \$26 per 15-minute increment.	\$26.00-\$129.00
	Selenium	ICP-MS	\$70.00
S	Sodium	ICP-OES	\$37.00
	Sodium Bicarbonate		\$125.00
	Specific Gravity		\$100.00
	Starch (Total)		\$117.00
	Starch Gelatinization		\$410.00
	Sugar Alcohols	Sorbitol, Maltitol, Erythritol, Xylitol, Mannitol, Isomalt, and Lactitol	\$303.00
	Sugar Profile	Fructose, Galactose, Glucose, Lactose, Maltose and Sucrose	\$113.00
	Sugars, Total by Calculation	Includes Sugar Alcohols and Sugar Profile	\$346.00
	T2/HT2 Toxin		\$143.00
	Texture Analysis	Call for consultation	\$197.00
T	Tin	ICP-MS	\$56.00
	Titrateable Acidity		\$59.00
	Trypsin Inhibitor Activity		\$410.00
	Viscosity by Brookfield Viscometer	Call for consultation	\$329.00
	Viscosity by RapidVisco Analyzer	Call for consultation	\$350.00
	Viscosity by Rheology Property Characterization	Call for consultation	\$329.00
	Vitamin A (Beta-Carotene)		\$101.00
	Vitamin A (Retinol)		\$101.00
	Vitamin B1	Thiamin	\$91.00
	Vitamin B2	Riboflavin	\$75.00
V	Vitamin B3	Niacin	\$80.00

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W	• Vitamin B5	Pantothenic Acid	\$122.00
	• Vitamin B6	Pyridoxine	\$117.00
	• Vitamin B9	Total Folate by Microbiological Method	\$160.00
	• Vitamin B9	Dietary Folate Equivalents (DFE); Includes Microbiological and LCMS Methods	\$300.00
	• Vitamin B9	Folic Acid by LCMS	\$160.00
	• Vitamin B12	Cyanocobalamin	\$154.00
	• Vitamin C		\$70.00
	• Vitamin D		\$285.00
	• Vitamin E	Natural or Synthetic	\$114.00
	• Vitamin K		\$415.00
Z	Water Activity		\$49.00
	Water Holding Capacity		\$77.00
	Water Vapor Transmission Rate (WVTR)	Specific to shelf life and product stability	*call for pricing
	• Zeaxalenone		\$143.00
	• Zinc	ICP-OES	\$37.00







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CARBOHYDRATES			
Beta-Glucan			\$139.00
Beta-Glucan	Mushroom, Yeast		\$271.00
Beta-Glucanase Activity			\$271.00
Carbohydrates by calculation	Requires: Ash, Moisture, Fat, and Protein		no charge
Englyst Starch	Glycemic Response		\$575.00
• Fiber (CODEX Definition) - Total	AOAC 2009.01		\$430.00
• Fiber (CODEX Definition) - Total, Soluble, Insoluble	AOAC 2011.25		\$484.00
Fiber (Crude)			\$61.00
• Fiber (Gravimetric) - Total	AOAC 991.43		\$188.00
• Fiber (Gravimetric) - Total, Soluble, Insoluble	AOAC 991.43		\$227.00
Fiber (Rapid Integrated Method) - Total	AOAC 2017.16		\$478.00
Fiber (Rapid Integrated Method) - Total, Soluble, Insoluble	AOAC 2017.16		\$531.00
Fiber (Resistant Oligosaccharides) - Total	AOAC 2001.03 with AOAC 991.43 digestion		\$478.00
Fiber (Resistant Oligosaccharides) - Total, Soluble, Insoluble	AOAC 2001.03 with AOAC 991.43 digestion		\$531.00
Fructans/Inulin	Fructooligosaccharides		\$314.00
Resistant Starch	RS2 and RS3		\$260.00
Starch (Total)			\$117.00
Sugar Alcohols	Sorbitol, Maltitol, Erythritol, Xylitol, Mannitol, Isomalt, and Lactitol		\$303.00
• Sugar Profile	Fructose, Galactose, Glucose, Lactose, Maltose and Sucrose		\$113.00
Sugars, Total by Calculation	Includes Sugar Alcohols and Sugar Profile		\$346.00
ENZYMES			
Alpha-Amylase Activity			\$271.00
Alpha-Amylase Inhibitor			\$475.00
Beta-Amylase Activity			\$271.00
Beta-Glucanase Activity			\$271.00
Lipase Activity			\$300.00
Lipoxygenase Activity			\$271.00
Peroxidase Activity			\$271.00
Polyphenol Oxidase Activity			\$300.00
Protease Activity	Fungal, Papain, Pepsin, Bromelain, Bacterial		\$271.00
Trypsin Inhibitor Activity			\$410.00
FEES			
Chromatograms			\$27.00
Consultation			*call for pricing
Custom Serving Size Report Fee	Request for results to be reported in a custom serving size. Standard reporting for nutritional testing is 100g. Each serving size requested is \$27.		\$27.00

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Mock Nutritional Label	Nutritional Analysis Required. Results will be reported per serving size. Each serving size requested is \$50.	\$50.00
Photos of Sample Received	Request for photographs of samples or packaging to be sent upon receipt by the lab. Samples can be photographed individually or combined into one. Each photo requested is \$27.	\$27.00
Sample Processing - Basic	Includes the handling and processing of a single sample or composite of multiple samples involving no, limited, or full grinding.	\$9.00
Sample Processing - Complex	Composite or single sample involving special instructions (examples: shelling nuts, peeling, deboning, contents only capsule, multiple component entrées). Charged \$26 per 15-minute increment.	\$26.00-\$129.00
<b>FOOD SAFETY: CONTAMINANTS; MINERAL, INORGANIC &amp; TRACE ANALYSIS</b>		
Acrylamide		\$223.00
Antimony	ICP-MS	\$56.00
Arsenic	ICP-MS	\$70.00
Cadmium	ICP-MS	\$70.00
Heavy Metals Package	Arsenic (As), Cadmium (Cd), Lead (Pb), Mercury (Hg)	\$150.00
Lead	ICP-MS	\$70.00
Mercury		\$94.00
<b>FOOD SAFETY: MYCOTOXINS</b>		
Aflatoxin	Aflatoxin B1, B2, G1 and G2	\$143.00
Deoxynivalenol (Vomitoxins)	DON, Vomatoxin	\$143.00
Fumonisin	Fumonisin B1, B2 and B3	\$143.00
Ochratoxin	Ochratoxin A	\$143.00
T2/HT2 Toxin		\$143.00
Zearalenone		\$143.00
<b>FOOD SAFETY: PESTICIDES/HERBICIDES</b>		
Pesticide Multi-Residue Analysis (MRA) - Analyte Confirmation	Prerequisite: MRA Screen; Confirmation for up to 5 analytes	\$213.00
Pesticide Multi-Residue Analysis (MRA) - Basic Screen		\$489.00
Pesticide Multi-Residue Analysis (MRA) - Expanded Screen		\$659.00
Pesticide Multi-Residue Analysis (MRA) - Glyphosate		\$297.00
Pesticide Multi-Residue Analysis (MRA) - Organic Screen		\$319.00
<b>LIPIDS, FATS &amp; OIL STABILITY</b>		
Anisidine Value (in Oils)		\$133.00
Cholesterol		\$143.00
Color Analysis in Oils (Lovibond)		\$100.00

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• Fat by Gas Chromatography	Includes fatty acid profile	\$205.00
• Fat by Gravimetric	Acid or Base Hydrolysis	\$49.00
• Free Fatty Acids		\$77.00
Hexanal		\$99.00
• Peroxide Value		\$77.00
<b>MINERAL, INORGANIC &amp; TRACE ANALYSIS</b>		
• Aluminum	ICP-MS	\$56.00
• Antimony	ICP-MS	\$56.00
• Arsenic	ICP-MS	\$70.00
• Barium	ICP-MS	\$56.00
• Boron	ICP-MS	\$56.00
• Cadmium	ICP-MS	\$70.00
• Calcium	ICP-OES	\$37.00
• Chromium	ICP-MS	\$56.00
• Cobalt	ICP-MS	\$56.00
• Copper	ICP-OES	\$37.00
• Heavy Metals Package	Arsenic (As), Cadmium (Cd), Lead (Pb), Mercury (Hg)	\$150.00
• Iron	ICP-OES	\$37.00
• Lead	ICP-MS	\$70.00
• Magnesium	ICP-OES	\$37.00
• Manganese	ICP-OES	\$37.00
• Mercury		\$94.00
• Metals Screen I	Calcium (Ca), Iron (Fe), Potassium (K), and Sodium (Na)	\$96.00
• Metals Screen II	Metals I plus Copper (Cu), Magnesium (Mg), Manganese (Mn), Phosphorus (P), and Zinc (Zn)	\$150.00
• Molybdenum	ICP-MS	\$70.00
• Nickel	ICP-MS	\$56.00
• Phosphorus	ICP-OES	\$37.00
• Potassium	ICP-OES	\$37.00
• Selenium	ICP-MS	\$70.00
• Sodium	ICP-OES	\$37.00

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• Tin	ICP-MS	\$56.00
• Zinc	ICP-OES	\$37.00
<b>NUTRITIONAL LABELING</b>		
• Ash		\$23.00
• Calcium	ICP-OES	\$37.00
Calories by calculation	Requires: Ash, Moisture, Fat, and Protein	no charge
Carbohydrates by calculation	Requires: Ash, Moisture, Fat, and Protein	no charge
• Cholesterol		\$143.00
• Fat by Gas Chromatography	Includes fatty acid profile	\$205.00
• Fat by Gravimetric	Acid or Base Hydrolysis	\$49.00
• Fiber (CODEX Definition) – Total	AOAC 2009.01	\$430.00
• Fiber (CODEX Definition) – Total, Soluble, Insoluble	AOAC 2011.25	\$484.00
• Fiber (Gravimetric) – Total	AOAC 991.43	\$188.00
• Fiber (Gravimetric) – Total, Soluble, Insoluble	AOAC 991.43	\$227.00
Fiber (Resistant Oligosaccharides) – Total	AOAC 2001.03 with AOAC 991.43 digestion	\$478.00
Fiber (Resistant Oligosaccharides) – Total, Soluble, Insoluble	AOAC 2001.03 with AOAC 991.43 digestion	\$531.00
• Iron	ICP-OES	\$37.00
• Metals Screen I	Calcium (Ca), Iron (Fe), Potassium (K), and Sodium (Na)	\$96.00
• Metals Screen II	Metals I plus Copper (Cu), Magnesium (Mg), Manganese (Mn), Phosphorus (P), and Zinc (Zn)	\$150.00
Mock Nutritional Label	Nutritional Analysis Required. Results will be reported per serving size. Each serving size requested is \$50.	\$50.00
• Moisture		\$23.00
Moisture (Karl Fischer Titration)		\$56.00
Nutritional Analysis	Includes required NLEA nutrients; pricing may vary with matrix	\$1,401.00
Nutritional Analysis with Mock Nutritional Label	Includes required NLEA nutrients, plus mock nutritional label; pricing may vary with matrix	\$1,451.00
PDCAAS – Invitro (Protein Quality)		\$1,592.00
• Phosphorus	ICP-OES	\$37.00
• Potassium	ICP-OES	\$37.00
• Protein (Dumas)		\$29.00
Proximate Analysis	Includes Ash, Moisture, Protein, Fat by GC; pricing may vary with matrix	\$280.00
• Sodium	ICP-OES	\$37.00
Sugar Alcohols	Sorbitol, Maltitol, Erythritol, Xylitol, Mannitol, Isomalt, and Lactitol	\$303.00
• Sugar Profile	Fructose, Galactose, Glucose, Lactose, Maltose and Sucrose	\$113.00

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	Sugars, Total by Calculation	Includes Sugar Alcohols and Sugar Profile	\$346.00
	Vitamin A (Beta-Carotene)		\$101.00
●	Vitamin A (Retinol)		\$101.00
●	Vitamin B1	Thiamin	\$91.00
●	Vitamin B2	Riboflavin	\$75.00
●	Vitamin B3	Niacin	\$80.00
●	Vitamin B5	Pantothenic Acid	\$122.00
●	Vitamin B6	Pyridoxine	\$117.00
●	Vitamin B9	Total Folates by Microbiological Method	\$160.00
●	Vitamin B9	Dietary Folate Equivalents (DFE); Includes Microbiological and LCMS Methods	\$300.00
●	Vitamin B9	Folic Acid by LCMS	\$160.00
●	Vitamin B12	Cyanocobalamin	\$154.00
●	Vitamin C		\$70.00
●	Vitamin D		\$285.00
●	Vitamin E	Natural or Synthetic	\$114.00
	Vitamin K		\$415.00
<b>PHYSICAL TESTING</b>			
	Brix		\$70.00
	Color Analysis (Hunter)		\$70.00
	Color Analysis (Minolta)		\$70.00
	Color Analysis in Oils (Lovibond)		\$100.00
	Density		\$70.00
	Differential Scanning Calorimetry (DSC)	Call for consultation	\$271.00
	Falling Number		\$80.00
	Farinograph		\$213.00
	Jelly Bloom		\$133.00
	Particle Size Distribution (Alpine Granulation)	Sieve sizes required; pricing listed per sieve	\$43.00
	Particle Size Distribution (Microtrac)		\$186.00
	Particle Size Distribution (Rotap)	Sieve sizes required; pricing listed includes up to 6 sieves	\$70.00
	Refractive Index		\$70.00
	Specific Gravity		\$100.00
	Texture Analysis	Call for consultation	\$197.00
	Viscosity by Brookfield Viscometer	Call for consultation	\$329.00
	Viscosity by RapidVisco Analyzer	Call for consultation	\$350.00
	Viscosity by Rheology Property Characterization	Call for consultation	\$329.00

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	Water Holding Capacity		\$77.00
<b>PROTEIN</b>			
	Amino Acid Profile – Acid Hydrolyzed Amino Acids		\$319.00
	Amino Acid Profile – Base Hydrolyzed Amino Acids	Tryptophan	\$223.00
	Amino Acid Profile – Hydroxyproline	Collagen	\$208.00
	Amino Acid Profile – Performic Acid Oxidation Amino Acids	Cystine/Methionine	\$223.00
	Amino Acid Profile – Physiologically Free Amino Acids	With Tryptophan	\$319.00
	Amino Acid Profile – Physiologically Free Amino Acids	Without Tryptophan	\$176.00
	PDCAAS – Invitro (Protein Quality)		\$1,592.00
●	Protein (Dumas)		\$29.00
<b>SHELF LIFE</b>			
	Anisidine Value (in Foods)		\$271.00
	Anisidine Value (in Oils)		\$133.00
	Consultation		*call for pricing
	Flavor Characterization	Call for consultation	\$531.00
●	Free Fatty Acids		\$77.00
	Hexanal		\$99.00
	Light Oxidation		*call for pricing
	Moisture Isotherm	Specific to shelf life and product stability	*call for pricing
●	Peroxide Value		\$77.00
	pH (direct or in solution)		\$23.00
	Water Activity		\$49.00
	Water Vapor Transmission Rate (WVTR)	Specific to shelf life and product stability	*call for pricing
<b>SPECIALIZED ASSAYS</b>			
	Allulose		\$271.00
	Alpha-Amylase Activity		\$271.00
	Alpha-Amylase Inhibitor		\$475.00
	Anisidine Value (in Foods)		\$271.00
	Anisidine Value (in Oils)		\$133.00
	Anthocyanins		\$271.00
	Avenanthramides	Requires Moisture	\$641.00
	Beta-Amylase Activity		\$271.00
	Beta-Glucan	Mushroom, Yeast	\$271.00
	Beta-Glucanase Activity		\$271.00
	DP Characterization (DP Profile)		\$271.00

This catalog does not encompass all of Medallion's testing capabilities. Call or e-mail to inquire about analyses not listed. Prices and offerings are subject to change without notice.



Englyst Starch	Glycemic Response	\$575.00
E-Tongue		\$372.00
Fiber (Rapid Integrated Method) – Total	AOAC 2017.16	\$478.00
Fiber (Rapid Integrated Method) – Total, Soluble, Insoluble	AOAC 2017.16	\$531.00
Flavor Characterization	Call for consultation	\$531.00
Free Amino Nitrogen		\$165.00
Freeze Drying (Lyophilization) Sample Preparation		*call for pricing
Glucuronic/Galacturonic Acid		\$271.00
Headspace Gases	N, O, CO2	\$325.00
Iodide		\$234.00
Lipase Activity		\$300.00
Lipoxygenase Activity		\$271.00
PDCAAS – Invitro (Protein Quality)		\$1,592.00
Pectin		\$271.00
Phenolics	Bound, Free, Total	\$271.00
Phytic Acid		\$271.00
Polyphenol Oxidase Activity		\$300.00
Protease Activity	Fungal, Papain, Pepsin, Bromelain, Bacterial	\$271.00
Starch Gelatinization		\$410.00
Trypsin Inhibitor Activity		\$410.00
Vitamin K		\$415.00
<b>VITAMINS</b>		
Vitamin A (Beta-Carotene)		\$101.00
● Vitamin A (Retinol)		\$101.00
● Vitamin B1	Thiamin	\$91.00
● Vitamin B2	Riboflavin	\$75.00
● Vitamin B3	Niacin	\$80.00
● Vitamin B5	Pantothenic Acid	\$122.00
● Vitamin B6	Pyridoxine	\$117.00
● Vitamin B9	Total Folate by Microbiological Method	\$160.00
● Vitamin B9	Dietary Folate Equivalents (DFE); Includes Microbiological and LCMS Methods	\$300.00
● Vitamin B9	Folic Acid & 5-Methyl Tetrahydrofolate by LCMS	\$160.00
● Vitamin B12	Cyanocobalamin	\$154.00
● Vitamin C		\$70.00
● Vitamin D		\$285.00
● Vitamin E	Natural or Synthetic	\$114.00
Vitamin K		\$415.00

This catalog does not encompass all of Medallion's testing capabilities. Call or e-mail to inquire about analyses not listed. Prices and offerings are subject to change without notice.

# Microbiology



**Foodborne illnesses caused by pathogenic bacteria affect millions of people each year. These microorganisms also contribute to spoilage and decreased product shelf life.**

To preserve the integrity of your food product, microbiological control is essential. That's where Medallion Labs comes in. Our scientists understand the importance of keeping your products safe for consumers.

As such, this team assesses microbiological contamination of food products for indicator and spoilage organisms. Constantly evaluating and incorporating advances in methodology to our analysis programs, these experts are able to deliver the reliable, actionable data you need to maintain the safety of your product.





ISO/IEC 17025 Accredited

A	• Aerobic Plate Count		\$22.00
	Anaerobic Plate Count		\$27.00
B	Bacillus cereus		\$28.00
C	• Coliforms		\$23.00
	• Coliforms (High Sensitivity Petrifilm)		\$23.00
E	• E. coli		\$26.00
	Enterobacteriaceae		\$27.00
L	Lactic Acid Bacteria		\$29.00
	• Listeria genus (ELFA)	25g	\$39.00
	• Listeria genus (ELFA)	125g	\$46.00
	• Listeria genus (PCR)	25g	\$39.00
	• Listeria genus (PCR)	125g	\$46.00
	• Listeria monocytogenes (ELFA)	25g	\$55.00
	• Listeria monocytogenes (ELFA)	125g	\$60.00
	• Listeria monocytogenes (PCR)	25g	\$41.00
	• Listeria monocytogenes (PCR)	125g	\$51.00
M	• Mold		\$25.00
S	• Salmonella (ELFA)	25g	\$36.00
	• Salmonella (ELFA)	375g	\$46.00
	• Salmonella (PCR)	25g	\$39.00
	• Salmonella (PCR)	375g	\$49.00
	Staphylococcus aureus		\$39.00
Y	• Yeast		\$25.00
	• Yeast and Mold	DRBC	\$25.00
	Yeast and Mold	Low water activity (DG18)	\$39.00



# Submit a sample

Everything we do at Medallion Labs, from our testing approach to the way we collect samples is designed to maintain the integrity of your results. Please follow the instructions below to ensure we're able to deliver accurate data you can use to bring your product to market.

## Online Submission

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Medallion Labs is proud to offer customers an online order submission process to ensure we handle, prepare and test your products with accuracy and speed.

[CLICK HERE](#) to visit the online order form.

### **Medallion Labs**

Wing 5  
9000 Plymouth Ave. N.  
Minneapolis, MN 55427





## Sample Collection and Preparation

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WHEN ASSEMBLING YOUR PRODUCT FOR TESTING, PLEASE USE THE FOLLOWING GUIDELINES:

- Collect a sample that is well-blended and homogeneous.
- Include specific grinding, handling or composite instructions with the order.
- Include sample matrix/composition descriptions and estimates on the order form.

**Note: Medallion Labs cannot accept unidentified samples.**

Please contact Medallion Labs for guidance on an appropriate sample size for your submission.

## Shipping Your Sample

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TO ENSURE THE INTEGRITY AND SECURITY OF SAMPLES SENT TO MEDALLION, WE ASK THAT OUR CUSTOMERS OBSERVE THE FOLLOWING GUIDELINES WHEN SHIPPING SAMPLES:

- Secure each food sample in its own container. Seal each sample package completely to prevent leakage. ***This is very important to prevent cross-contamination.***
- Use packing materials that are strong enough to travel without damage or leakage.
- For samples needing refrigeration, please package and ship them appropriately and clearly mark "refrigerate" on the outside of the package to ensure continuous refrigeration.
- Label each sample individually with the identification you would like included on the final report.  
***CAUTION: Do not use magic marker for labeling pesticide residue samples. This will contaminate the matrix.***
- Enclose a Medallion Order Form with sample identifiers and matrices, purchase order and analyses you would like performed on each sample.
- If you would like your samples or shipping coolers sent back to you, please provide your UPS or FedEx shipping number or include a return label with your product.
- Additional fees may apply for sample return or for special disposal.
- If at all possible, please ship your samples to arrive during the business week (Monday–Friday).

# Sample Privacy

At Medallion Labs, we understand how important privacy is to our customers, which is exactly why we've made it a priority to provide full confidentiality to all of our partners over the past four decades. We've achieved this by establishing not only the right systems, but also the right team to oversee the handling of your product. The graph below highlights how we preserve the anonymity and integrity of your samples.

1 Medallion Sample Entry	Samples are received and sorted by Medallion personnel by noon for most shipping companies, or samples are dropped off directly.	Samples are prioritized based on requested turnaround time and analysis. The customer is contacted via email or phone if clarification is needed.	Samples are entered into our Laboratory Information Management System (LIMS), each sample is labeled with a unique Medallion ID, and a sample receipt notification is emailed.
/// FIREWALL ///			
2 Sample Handling Facility	Samples are homogeneously prepared as a composite or individually per the customer's request.	Samples are replaced into sealed cups and stored in appropriate condition. If possible, a portion of the sample is retained in our library for 60 days.	Samples are delivered to laboratories and stored in the appropriate temperature condition until analyzed.
3 Laboratory Testing	Samples are pulled from storage, tested by the approved method and then reported.	All analysis is stored and results are calculated through LIMS.	Test results are reviewed at the analyst level. Once the entire submission is complete it is promoted to a final library approval by a designated approver.
/// FIREWALL ///			
4 Reporting of Results	After the entire submission is approved a final report is sent to the customer via email.	Invoices for final reports are emailed to the customer the following week.	Customer questions are handled by the Customer Service team, who can be reached at 1800-245-5615 or info@medlabs.com.

## Fees

CHROMATOGRAMS		\$27.00
CONSULTATION		*call for pricing
CUSTOM SERVING SIZE REPORT FEE	Request for results to be reported in a custom serving size. Standard reporting for nutritional testing is 100g. Each serving size requested is \$27.	\$27.00
MOCK NUTRITIONAL LABEL	Nutritional Analysis Required. Results will be reported per serving size. Each serving size requested is \$50.	\$50.00
PHOTOS OF SAMPLE RECEIVED	Request for photographs of samples or packaging to be sent upon receipt by the lab. Samples can be photographed individually or combined into one. Each photo requested is \$27.	\$27.00
SAMPLE PROCESSING - BASIC	Includes the handling and processing of a single sample; composite involving no grinding, composite involving limited grinding, or a composite involving full grinding.	\$9.00
SAMPLE PROCESSING - COMPLEX	Composite or single sample involving special instructions (examples: shelling nuts, peeling, deboning, contents only capsule, multiple component entrees). Charged \$26 per 15-minute increment.	\$26.00 – \$129.00



# Standard Terms and Conditions

OCTOBER 2022

All services provided by Medallion Laboratories ("Medallion") are subject to the following terms and conditions. As our customer, you ("Customer") understand and agree that placement of any order for our services constitutes acceptance of these terms and conditions. To the extent that any Customer order contains any terms or conditions that vary from the terms and conditions stated herein, all such additional or varying terms and conditions shall be of no force or effect, and shall not be part of the Customer-Medallion relationship or contract, even if Medallion performs the requested service.

**CONFIDENTIALITY:** Medallion agrees that, for a period of five (5) years from the submission of each sample, it will not disclose Customer's Confidential Information related to such sample to any third party without prior written consent. Medallion shall use the standard of care that it applies to its own confidential information, but not less than a reasonable standard of care, to preserve the confidentiality of such Confidential Information. Medallion also agrees that it will keep Customer's Confidential Information confined within the Medallion Laboratories division of General Mills and will not disclose it outside that division. "Confidential Information" means (a) the samples Customer submits to Medallion, (b) information furnished by Customer related to those samples and identified by Customer as being confidential (or by its nature or the form or manner in which it was disclosed is readily recognizable as being confidential), and (c) the test results generated by Medallion for Customer. Confidential Information does not include information that (i) was possessed by Medallion before receipt from Customer; (ii) is or becomes a matter of public knowledge through no fault of Medallion; (iii) is rightfully received by Medallion from a third party without obligations of confidentiality; or (iv) is independently developed by Medallion.

**PAYMENT TERMS:** Payment terms are net 30 days. Medallion's prices are subject to change without notice.

**BILLING:** All fees or bills are charged directly to the Customer, unless a third party has been authorized via a signed statement indicating payment responsibility. It is assumed that the paperwork submitted with a sample describes the testing desired. If changes are made after the originally requested testing is initiated or completed, the Customer must accept payment responsibility. Please notify Medallion immediately if changes in testing are necessary.

**SAMPLE SUBMISSION:** Samples must be collected, prepared and shipped according to proper procedures and accompanied by a Medallion "Analytical Request Order Form" for the desired analysis. Sample preparation, collection, and shipping instructions, and Medallion Analytical Request Order Forms are available online at [Medallionlabs.com](https://medallionlabs.com). Customer must include all information requested on the form and use the newest forms as available on the Medallion website, to avoid processing delays. Samples will typically be held for two (2) months, except: (1) where samples have been utilized for testing and thereby consumed; (2) where micro samples are destroyed; (3) where suspect samples are autoclaved; (4) where samples are returned early at the request of the Customer; (5) where storage will compromise the integrity of the sample; or (6) where circumstances exist that prevent samples from being held for the typical two (2) month time period. As a matter of clarity, any samples submitted for micro testing, or samples that enter the micro lab, will not be returned to Customer, and will be destroyed by Medallion.

**HAZARDOUS SUBSTANCES AND PATHOGENS:** Any sample containing or suspected to contain a pathogen or substance that is considered hazardous must be clearly identified as such on the container and communicated to Medallion before shipping. Medallion reserves the right to refuse any sample which may pose a risk to employees. Any sample refused by Medallion will be destroyed and will not be returned to Customer. Destruction of such samples is at Customer's expense.

**ANALYSIS:** Medallion strives to complete all analyses within the turnaround times specified on its website. Medallion also makes every attempt to deliver rush turnaround in a compressed time, which is also specified on the website. In most cases, rush turnaround is five working days unless the test itself requires a longer time for completion. Rush analysis is offered contingent upon pre-notification and approval of Medallion. However, a rush fee of 100% surcharge of the list fee will be added to the invoice for each analysis completed in five or fewer working days (or when the test itself requires substantial time for completion, a compressed timeline agreed upon in advance) at the request of the Customer. Notwithstanding the confidentiality provisions set forth above, Medallion reserves the right to outsource an analysis entirely at Medallion's expense and without prior notification to Customer (so long as the party conducting the analysis is under confidentiality obligations consistent with those contained herein), unless Customer requests otherwise. Reported results relate only to the items tested and test reports shall not be reproduced except in full.

**RETEST ANALYSES:** Retests performed at the Customer's request may be charged to the Customer if the retest confirms the original results. In the event the retest results significantly differ from the original result, the Customer will not be charged for the duplicate test.

**LITIGATION:** Medallion prefers to not provide Services in situations where test results are intended to be used in litigation, and Medallion's fees for its Services reflect this assumption. Accordingly, if Customer uses test results in litigation, or otherwise becomes involved in a dispute, and Medallion is required to be involved in such litigation or dispute, Customer will pay for Medallion's costs associated with such litigation or dispute, including compliance with all document subpoenas, required oral or written testimony or preparation of same, or any other activities related to Services provided by Medallion for the Customer. Such costs include, but are not limited to, hourly charges, travel, accommodations, mileage, counsel, and all other expenses associated with said litigation or dispute.

**WARRANTY AND LIMITS OF LIABILITY:** Medallion warrants that all services will be performed in a timely manner by competent personnel. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. Any services performed by Medallion under proper technical direction by Customer, which are determined by Customer to have been performed improperly in light of the above warranty, and which after investigation by Medallion are acknowledged in writing by Medallion's Managing Director to have been performed improperly, shall be corrected by Medallion without charge to Customer, provided that Customer provides Medallion with a written request for such correction within two (2) months after Customer knew or should reasonably have known of the problem. In no event will Medallion (including its affiliates, i.e., all entities owned, controlled, or under common control with, General Mills, Inc. (collectively, "General Mills")) be liable for any indirect, consequential, incidental, punitive, or special damages or for acts of negligence that are unintentional in nature, including, without limitation, damages for lost profit, business interruption, or other pecuniary loss, regardless of whether Medallion has been advised of the possibility of such damages. Customer further understands and agrees that Medallion's total liability (including any liability of General Mills) for damages relating to, or arising in connection with, any services provided hereunder, regardless of the form of action or theory of recovery shall not exceed the greater of \$2,500 or the amount paid by the Customer for the particular analytical service. Medallion and General Mills accept no legal responsibility for the purpose for which the Customer uses the test results or reports, or for any consequence of such use. Medallion and General Mills provide no guidance regarding and accept no legal responsibility for the purpose for which the Customer uses the test results or reports, and shall have no legal responsibility for any consequence of such use. Customer agrees to indemnify and defend Medallion and General Mills from all claims, damages, liabilities, and expenses relating to Customer's use of Medallion's services or Customer's marketing, distribution, sale, or other dissemination of Customer's products or services. The allocations of liability in this WARRANTY AND LIMITS OF LIABILITY section represent the agreed and bargained-for understanding between the Customer and Medallion. Medallion's fees for the Services provided hereunder reflect such allocations.

**GOVERNING LAW:** This Agreement shall be governed by and construed in accordance with the laws of Minnesota without regard to its conflict of laws principles.

**INDEPENDENT CONTRACTOR:** The parties agree that Medallion's Services are provided as an independent contractor and that individuals who work on Services will not be deemed employees of Customer for any reason.

**PUBLICITY:** Customer will not publicly announce or otherwise disclose this Agreement or any term hereof without the advance written consent of Medallion. Without limiting the foregoing, Customer will (i) refrain from making any use of Medallion's name, trademarks, or logos, or the test reports provided hereunder, in any marketing, sales, public relations, or other materials without Medallion's advance written consent to the specific use; and (ii) not use Medallion's name or data (or the name or data of any General Mills entity) in any manner which might cause harm to Medallion's (or General Mills') reputation and/or business. Under no circumstances is the name of Medallion (or of any of its General Mills affiliates) to be published, either alone or in association with that of any other party, without prior written approval.



[medallionlabs.com](https://medallionlabs.com)

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