

Columbia Food Laboratories, Inc.

quality analytical services for the food industry



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ANALYTICAL PORTFOLIO

Columbia Food Laboratories, Inc is located 20 miles east of Portland, Oregon overlooking the scenic Columbia River Gorge. We are dedicated to the food industry and the customers that it serves. From the producer to the processor and from the processor to the consumer, we provide numerous services to help assure that only the safest products reach the consumer's table. Our clients encompass both small and mid-sized agricultural producers as well as Fortune 500 corporations. And, since we have USDA soil and vegetation import permits, we are able to serve international as well as domestic customers.

Confidentiality is maintained in all interactions with clients, from sample receipt through the final report. Columbia Food Laboratories uses officially-recognized methodology whenever possible. We run a matrix "spike(s)" along with each job and can provide QC data and method references upon request. We also participate in inter-laboratory proficiency testing through American Proficiency Institute, USDA, FAPAS and AOCS. And, our certification by the Japanese Ministry of Health, Labour and Welfare authorizes our laboratory to certify products for export to Japan.

Our services are divided into three primary categories: microbiology, nutrition and pesticide related testing. We provide FDA nutrition labeling, analysis for more than 550 individual pesticides (including herbicides in soil), pathogen testing and many others. This brochure lists our test portfolio. If you need an analysis not listed, please let us know. At Columbia Food Laboratories we frequently conduct special analyses and compose custom profiles (screens) for specific customer needs. We try very hard, not to just run tests, but to help our customers solve problems.

Microbiological Analyses

Aerobic Plate Count (APC)	Listeria sp. (immunocapture)
Aerobic Spore Forming Bacteria	Listeria sp. (PCR; 1-2 days TAT)
Aflatoxin (by ELISA or HPLC/MS)	Listeria sp. (USDA culture)
Alicyclobacillus (acido-thermophilic)	Listeria monocytogenes (PCR; 1-2 days)
Anaerobic Plate Count	Mesophilic Anaerobes
Anaerobic Spore Forming Bacteria	Micro Profile A (E.col 0157/List./Salm.)
Bacillus cereus	Micro Profile B (APC, Y & M)
Bacteria ID (One Colony)	Micro Profile C (APC, Coliform, E. coli)
Clostridium botulinum (PCR; 2 day TAT)	Micro Profile D (APC, Coliforms, E.coli, Y & M)
Clostridium perfringens	Micro Profile G (Profile C, Salmonella, Staph., Y&M)
Coliform, MPN or Petrifilm	Micro Profile L (Profile G, Listeria)
Coliforms + E. coli (MPN or Petrifilm)	Micro Profile X (Profiles A & G)
Deoxynivalenol (Vomitoxin) (by ELISA)	Ochratoxin A (by ELISA)
Dicumarol	Patulin
E. coli, MPN or Petrifilm	Pseudomonas
E. coli, O157:H7 (presumptive, by immunocapture)	Psychrotropic Organisms
E. coli, O157:H7 (confirmed by culture)	Salmonella (immunocapture)
E. coli, O157:H7 (PCR; 1 day TAT)	Salmonella (immunocapture, 375 g/honey)
Enterobacter	Salmonella (PCR; 1-2 days TAT)
Fumonisin (by ELISA)	Shelf Life Study
Guaiacol (Alicyclobacillus metabolite)	Shigella (presumptive)
Halophilic Organisms	Staph. A Enterotoxin
Howard Mold Count	Staphylococcus
Lactic Acid Bacteria	Yeast & Mold
Lactobacillus Count	Yeast & Mold, Osmophilic
Lipolytic Organisms	Zearalenone (ZON) (by ELISA)

Nutritional Analyses

Acidity, free (in Honey)	Lead
Alcohol (by GC)	Limonin (in citrus juice)
Ammonia	Lycopene
Anisidine Value	Magnesium
Arsenic	Mercury
Ash, acid insoluble	Methyl Anthranilate (in grape essence)
Ash, muffle furnace	Methylene Chloride (residual)
Benzoic acid	Moisture, forced air oven
BHA / BHT	Moisture, refractometer (in Honey)
Bostwick Consistency (xsec @ y°F)	Moisture, toluene
Brix (via refractometer)	Moisture, vacuum oven
Bromide, Inorganic	Niacin
Cadmium	Nitrate
Cafestol / Kahweol (in Coffee)	Nitrite
Caffeine	Nitrogen, Dumas
Calcium	Nonfat Solids
Calories (Proximate)	Nutrition Profile, Basic (without label)
Carbohydrates	Nutrition Profile, Minimum (Proximate with or without Na)
Chloro-1,2-propanediol (3-MCPD)	Organic Acids Profile
Cholesterol	Peroxide Value
Copper	pH
Cyanide, Total	Phosphorus
Diastase (in honey)	Polysorbates
Essential Oils	Polyunsaturated Fatty Acids, cis cis
Ethoxyquin	Potassium
Ethylene Oxide	Propylene Oxide (MDL <50 ppm or <1 ppm)
Fat, acid hydrolysis (Mojonnier)	Protein
Fat, Babcock (butterfat)	Proximate
Fat, ether extract	Redox Potential
Fatty Acid Profile (C3-C8)	Riboflavin
Fatty Acid Profile (C8-C24)	Salt (measured as chloride)
Fatty Acid Profile (C8-C24 w/ omega-3)	Saturated/Unsaturated Fatty Acids
Fatty Acid Profile (C8-C24 w/ trans)	Scoville Heat Value
FD&C Color Red # 40	Sodium
FDA Basic Nutrition Label (by analysis)	Solids
FDA Nutr. Label + Folate	Sorbic Acid (K Sorbate)
FDA Nutr. Label + Mono & PUFA Fat	Sorbitol
FDA Nutr. Label + Potassium	Styrene
FDA Nutr. Label + Vitamin E	Sudan Dyes I, II, III, IV
FDA Nutr. Label + B1, B2, B3, Folate	Sugar Profile (regular for food labels or special for honey)
Fiber, acid detergent	Sulfite, modified Monier-Williams (Sulfur Dioxide)
Fiber, crude	TBHQ (tert-Butylhydroquinone)
Fiber, total dietary (TDF)	Theobromine
Fiber, total dietary + insoluble/soluble	Thiamin
Folic Acid (Folate)	Titanium Dioxide
Formic Acid (in honey)	Titrateable Acidity
Free Fatty Acids	Tocopherol (Vitamin E)
Glycoalkaloids (in Potatoes)	UF Profile (in honey)
Granulation (Mesh Size)	Vanilla Extract Profile (AOAC 990.25)
Headspace / Volatiles Analysis	Vitamin A, Retinol & Carotene
Heavy Metals Profile A (As, Cd, Pb, Hg)	Vitamin B6
Heavy Metals Profile B (As, Pb, Hg)	Vitamin C
Hydroxydecanoic acid (10-HDA)	Vitamin D
Hydroxymethylfurfural (HMF), in Honey	Volatile Oils
Insoluble Solids	Water Activity
Iodine Number	Water-Phase Salt
Iron	Zinc

Pesticide Residue Analyses

Abamectin (Avermectin) (Agrimek)	Amitrol	Benfluralin (Balan)
Acephate (Orthene)	Anilazine (Dyrene)	Benomyl (Benlate)
Acetamiprid (Intruder)	Apple / Pear Pesticide Profile	Benoxacor
Acetochlor (Harness)	Aramite	Bensulide (Prefar)
Acifluorfen (Blazer)	Arochlor 1016 - 1268 (PCB's)	Bentazon (Basagran)
Acrinathrin (Rufast)	Aspon	BHC (alpha, beta, delta, gamma isomers)
Agritox (Trichloronate)	Asulam	Bifenazate (Acramite)
Alachlor (Lasso)	Atrazine	Bifenox (Modown)
Aldicarb (Temik), and metabolites	Azinphos-Methyl (Guthion), & O analog	Bifenthrin (Capture)
Aldrin	Azoxystrobin (Quadris)	Binapacryl
Allethrin	Banrot (Thiophanate-methyl+Etridiazole)	Bispyribac-sodium
Allidochlor (Randox)	Basic Pesticide Profile	Bitertanol (Baycor)
Ametryn	Benalaxyl (Galben)	Boscalid (Endura)
Amitraz (Mitac)	Bendiocarb (Dycarb)	Bromacil

Bromadiolone (Hawk) (Maki)
 Bromophos and Bromophos Ethyl
 Bromopropylate (Acarol)
 Bromoxynil (Buctril)
 Bromuconazole
 Bronate (Bromoxynil + MCPA)
 Butachlor (Machete)
 Butralin (Amex)
 Butylate (Sutan)
 Cadusafos (Rugby)
 Captafol (Difolatan)
 Captan
 Carbamate Pesticide Profile
 Carbanolate (Banol)
 Carbaryl (Sevin)
 Carbazim (MBC)
 Carbofuran (Furadan), and metabolites
 Carbophenothion (Trithion)
 Carbophenothion Methyl (Methyl Trithion)
 Carboxin (Vitavax)
 Carfentrazone-ethyl (Aim) (Shark)
 Chloramphenicol, by ELISA or HPLC/MS
 Chlorantraniliprole (Altacor) (Coragen)
 Chlordane
 Chlordecone
 Chlordimeform (Galecron)
 Chlorethoxyfos (Fortress)
 Chlorfenapyr (Alert) (Pirate)
 Chlorfenvinphos (CFV)
 Chlorflurenal-methyl (Maintain)
 Chlorimuron-ethyl (Classic)
 Chlorinated Hydrocarbons (EPA 8120)
 Chlormequat
 Chlormitrofen (CNP)
 Chlorobenzilate
 Chloroneb (Terraneb)
 Chlorophacinone
 Chloropicrin (Chlor-O-Pic)
 Chlorothalonil (Bravo)
 Chlorpropham (CIPC)
 Chlorpyrifos (Lorsban) (Dursban)
 Chlorpyrifos Methyl
 Chlorsulfuron (Glean)
 Chlorthion
 Chlorthiophos
 Clethodim (Select)
 Clodinafop-propargyl (Discover)
 Clofentezine (Apollo)
 Clomazone (Command)
 Cloprop (3-CPA)
 Clopyralid (Stinger)
 Cloransulam-methyl (FirstRate)
 Clothianidin (Clutch)
 Columbia Pesticide Profile
 Coumaphos
 Crossbow (Triclopyr + 2,4-D)
 Crotoxyphos
 Curtail (Clopyralid + 2,4-D)
 Curtail M (Clopyralid + MCPA)
 Cyanazine (Bladex)
 Cyanophos (Cyanox)
 Cycloate (Ro-Neet)
 Cyfluthrin (Baythroid)
 Cyhexatin (Plictran)
 Cymoxanil (Curzate)
 Cypermethrin (Ammo) (Barricade)
 Cyprazine
 Cyprodinil (Vanguard)
 Cyromazine (Trigard)
 D, 2,4 (2,4-D)
 Dacthal (Chlorthal-dimethyl)
 Dalapon
 Daminozide (Alar)
 DB, 2,4 (2,4-DB)
 DDT, and metabolites DDD, DDE
 DEF (Tribufos)
 Deltamethrin (Decis)
 Demeton S (Systox)
 Desmedipham (Betanal AM) (Betanex)
 Diallate (DATC)
 Diazinon, and oxygen analog Diazoxon
 Dibromochloropropane (Fumazone)
 Dicamba (Banvel)
 Dichlobenil (Casoron)
 Dichlofenthion (Nemacide)
 Dichlofluanid (Euparen)
 Dichloropropene-1,3 (Telone)
 Dichlorvos (DDVP) (Vapona)
 Diclobutrazol (Vigil)
 Diclofop-methyl (Hoelon)
 Dicloran (Botran) (DCNA)
 Dicofol (Kelthane)
 Dicrotophos (Bidrin)
 Dieldrin
 Diethyl ethyl (Antor)
 Diethofencarb
 Difenconazole (Dividend)
 Diflubenzuron (Dimilin)
 Diisopropyl naphthalene-2,6 (DIPN)
 Dilan (Prolan)
 Dimethachlor
 Dimethametryn (Dimepax)
 Dimethenamid (Frontier)
 Dimethoate (Cygon)
 Dimethomorph (Acrobat)
 Dimethylnaphthalene-1,4 (1,4-Sight)(DMN)
 Diniconazole (Spotless)
 Dinitroaniline Herbicide Profile
 Dinocap (Crotothane) (Mildane)
 Dinoseb (Dinitro)
 Dioxathion (Delnav)
 Diphacinone
 Diphenamid (Enide)
 Diphenylamine (DPA)
 Diquat
 Disulfoton (Di-syston), and metabolites
 Dithiocarbamates
 Diuron (Karmex), and metabolite
 DNOC (Dinitroresol)
 Dodine (Cyprex)
 DP, 2,4 (2,4-DP) (Dichlorprop)
 EBDC
 Edifenphos (Hinosan)
 Endosulfan (Thiodan), and E. sulfate
 Endothall
 Endrin, and endrin aldehyde
 EPN
 EPTC (Eptam)
 Esfenvalerate (Asana)
 Etaconazole
 Ethalfuralin (Sonalan)
 Ethephon
 Ethiofencarb (Croneton)
 Ethion
 Ethirimol (Milstem)
 Ethofumesate (Nortron)
 Ethoprop (Ethoprophos) (Mocap)
 Ethoxyquin
 Ethylene Dibromide (EDB)
 Etoxazole (Zeal)
 Etridiazole (Terrazole)
 Etrimefos
 Extended Pesticide Profile
 Famoxadone
 Famphur (Bash)
 Fenamidone
 Fenamiphos (Nemacur)
 Fenarimol (Rubigan)
 Fenbuconazole (Enable)
 Fenbutatin
 Fenhexamid (Decree) (Elevate)
 Fenitrothion (Sumithion)
 Fenobucarb
 Fenoxaprop-P-ethyl (Puma)
 Fenpropathrin (Danitol)
 Fenson
 Fensulfothion (Dasanit)
 Fenthion (Baytex)
 Fenvalerate (Pydrin)
 Ferbam
 Fipronil (Regent)
 Flamprop-methyl (Mataven)
 Flonicamid (Beleaf)
 Fluazifop-butyl (Fusilade)
 Fluazinam (Omega)
 Fluchloralin (Basalin)
 Flucythrinate (Cybolt) (Payoff)
 Fludioxonil (Maxim) (Sapphire)
 Flufenacet
 Flumetsulam (Broadstrike) (Python)
 Flumiclorac-pentyl (Resource)
 Flumioxazin (Valor)
 Fluometuron (Cotoran)
 Fluoxastrobin
 Fluridone (Sonar)
 Fluroxypyr (Starane)
 Flusilazole (Nustar)
 Flutolanil (Folistar) (Prostar)
 Fluvalinate (Apostan) (Mavrik)
 Folpet (Phaltan)
 Fomesafen (Flexstar)
 Fonofos (Dyfonate)
 Foramsulfuron (Option)
 Forchlorfenuron
 Fosetyl-Aluminum (Alette)
 Fumigants Pesticide Profile
 Fusion (Fenoxaprop + Fluazifop)
 Glufosinate (Finale) (Liberty)
 Glyphosate (Accord/Roundup/Touchdown)
 Halosulfuron-methyl (Manage) (Permit)
 Haloxyfop-methyl (Verdict)
 HCB (Hexachlorobenzene)
 Heptachlor, and heptachlor epoxide
 Heptenophos (Hostaquick)
 Herbicide Profile, Ionic
 Herbicide Profile, Non-Ionic
 Hexaconazole (Anvil)
 Hexazinone (Velpar)
 Hexythiazox (Hexygon)
 Honey Pesticide Profile
 Hop Pesticide Profiles A & B
 Imazalil (Deccoil)
 Imazamethabenz-methyl (Assert)
 Imazamox (Raptor)
 Imazapic (Cadre)
 Imazapyr (Arsenal)
 Imazaquin (Scepter)
 Imazethapyr (Pursuit)
 Imidacloprid (Admire) (Provado)
 Imidoxone (Phosmet Oxygen Analog)
 Indole-3-butyric acid (IBA)
 Indoxacarb (Avaunt)
 Iprodione (Rovral)
 Isobenzan (Telodrin)
 Isodrin
 Isufenphos (Amaze), and oxygen analog
 Isoprocarb (MIPC)
 Isopropalin (Paarlan)
 Isoprothiolane
 Isoxaben (Gallery)
 Krovar (Bromacil + Diuron)
 Lactofen (Cobra)
 Lambda-Cyhalothrin (Karate) (Warrior)
 Lenacil (Venzar)
 Lindane
 Linuron (Lorox)
 Malathion, and oxygen analog Malaoxon
 Maleic Hydrazide (MH-30)
 Mancozeb (Dithane)
 Maneb
 MCPA (Rhomene)

MCPB (Tropotox)
 MCPP (Mecopex) (Mecoprop)
 Mecarbam (Afos)
 Mepronil (Basitac)
 Merphos (Folex)
 Mesotrione (Callistro)
 Metalaxyl / Mefenoxam (Ridomil /Gold)
 Metaldehyde (Deadline) (Slug Fest)
 Metam-sodium (Vapam)
 Methamidophos (Monitor)
 Methidathion (Supracide)
 Methiocarb (Mesuroil), and metabolites
 Methomyl (Lannate)
 Methoprene
 Methoxychlor (Marlate)
 Methoxyfenozide (Intrepid) (Runner)
 Methyl Bromide
 Methyl Paraoxon
 Methyl Parathion (Pennacp-M)
 Metobromuron (Patoran)
 Metolachlor (Dual)
 Metribuzin (Sencor)
 Metsulfuron-methyl (Ally) (Escort)
 Mevinphos (Phosdrin)
 Mexacarbate (Zectran)
 Mint Pesticide Profile
 Mint Pesticide Profile, Expanded (oil)
 Mirex
 Molinate (Ordram)
 Monocrotophos (Azodrin)
 Monolinuron (Aresin)
 Myclobutanil (Rally)
 Naled (Dibrom)
 Naphthaleneacetic acid (NAA)
 Napropamide (Devrinol)
 Neburon (Propuron)
 Nicosulfuron (Accent)
 Nitrapyrin (N-Serve)
 Nitrofen (Tok)
 Norflurazon (Predict) (Solicam)
 Novaluron
 Nuarimol
 Omethoate (Folimat)
 Onion Pesticide Profile
 Organochlorine Pesticide Profile
 Organophosphate Pesticide Profile
 Oryzalin (Surflan)
 Ovex (Chlorfenson)
 Oxadiazon (Ronstar)
 Oxadixyl (Ripost)
 Oxamyl (Vydate)
 Oxycarboxin (Plantvax)
 Oxydemeton-methyl (Metasystox-R)
 Oxydemeton-methyl Sulfone
 Oxyfluorfen (Goal)
 Oxytetracycline (Terramycin)
 Oxythioquinox (Morestan) (Quinomethion.)
 Paclobutrazol
 Paraquat (Gramoxone)
 Parathion, and oxygen analog Paraoxon
 PCA (Pentachloroaniline)
 Pebulate (Tillam)
 Pendimethalin (Prowl)
 Pentachlorophenol (PCP)
 Permethrin (Ambush) (Pounce)
 Perthane (Ethylan)
 Phenmedipham (Betanal)

Phenothrin (Sumithrin)
 Phenthoate (Cidal)
 Phenylphenol, o- (Orthoxenol)
 Phorate (Thimet), and metabolites
 Phosalone (Rubitox) (Zolone)
 Phosmet (Imidan)
 Phosphamidon (Swat)
 Phoxim (Baythion)
 Picloram (Tordon)
 Piperonyl Butoxide
 Pirimicarb (Rapid) (Pirimor)
 Pirimiphos-ethyl (Pirimicid)
 Pirimiphos-methyl (Actellic)
 Potato Pesticide Profile
 Potato Pesticide Profile, Expanded
 Primisulfuron-methyl (Beacon)
 Prochloraz
 Procymidone (Sumilex)
 Prodiamine (Barricade)
 Profenofos (Curacron)
 Profluralin (Tolban)
 Promecarb (Carbamult)
 Prometon (Pramitol)
 Prometryn (Caparol)
 Pronamide (Kerb) (Propyzamide)
 Propachlor (Ramrod)
 Propamocarb (Banol)
 Propanil
 Propargite (Comite) (Omite)
 Propazine (Milogard)
 Propetamphos (Catalyst)
 Propham (IPC)
 Propiconazole (Tilt)
 Propineb
 Propoxur (Baygon)
 Prothiofos (Tokuthion)
 Pymetrozine (Fulfill)
 Pyraclostrobin (Cabrio) (Headline)
 Pyraflufen-ethyl (Edict) (ET)
 Pyrazon (Chloridazon)
 Pyrazophos (Afugan)
 Pyrethrins
 Pyrethroid Pesticide Profile
 Pyridaben (Sanmite)
 Pyridate (Tough)
 Pyrimethanil (Scala)
 Pyriproxyfen
 Quinalphos (Bayrusil)
 Quinclorac (Facet)
 Quinoxifen
 Quintozene (PCNB)
 Quizalofop-ethyl (Assure)
 Resmethrin
 Rimsulfuron (Matrix)
 Rodenticides Profile
 Ronnel (Fenchlorphos)
 Schradan (OMPA)
 Sethoxydim (Poast)
 Siduron (Tupersan)
 Silvex (2,4,5-TP)
 Simazine (Princep)
 Simetryn
 Soil Pesticide Profile
 Spinetoram (Delegate) (Radiant)
 Spinosad (Conserve)
 Spiromesifen

Strawberry Pesticide Profile
 Streptomycin (by ELISA)
 Strychnine
 Sulfallate (Vegadex)
 Sulfentrazone (Authority) (Spartan)
 Sulfometuron-methyl (Oust)
 Sulfosulfuron (Maverick)
 Sulfotep (Bladafum)
 Sulprofos (Bolstar)
 Sweet Potato / Yam Pesticide Profile
 T, 2,4,5 (2,4,5-T)
 Tebuconazole (Folicur)
 Tebufenozide (Confirm) (Mimic)
 Tebupirimfos
 Tebuthiuron (Spike)
 Tecnazene (TCNB) (Fusarex)
 Tefluthrin (Force)
 Temephos (Abate)
 TEPP
 Terbacil (Sinbar)
 Terbufos (Counter)
 Terbutylazine (Primatol-M)
 Terbutryn
 Tetrachlorvinphos (Gardona)
 Tetraconazole
 Tetradifon (Tedion)
 Tetramethrin
 Tetrasul
 Thiabendazole (TBZ) (Mertect)
 Thiamethoxam (Actara)
 Thifensulfuron-methyl (Harmony/Pinnacle)
 Thiobencarb (Saturn)
 Thiodicarb (Larvin)
 Thiometon (Thitox)
 Thionazin (Zinophos)
 Thiophanate-methyl (Topsin-M)
 Thiram
 Tolclofos-methyl
 Tolyfluanid (Euparen M)
 Topramezone (Impact)
 Toxaphene
 Tralkoxydim (Achieve)
 Tralomethrin (Scout X-TRA)
 Triadimefon (Bayleton)
 Triadimenol (Baytan)
 Triallate (Far-Go)
 Triasulfuron (Amber)
 Triazine / Triazinone Herbicide Profile
 Triazophos
 Trichlorfon (Dylox)
 Triclopyr (Garlon)
 Tridiphane (Tandem)
 Trifloxystrobin (Flint)
 Triflumizole (Procure)
 Trifluralin (Treflan)
 Triforine (Funginex)
 Trimec
 Triphenyltin Hydroxide (Fentin Hydroxide)
 Tylosin (in Honey)
 Vermolate (Vernam)
 Vinclozolin (Ronilan)
 Warfarin
 Water Pesticide Profile
 Zineb
 Ziram
 Zoxamide

