



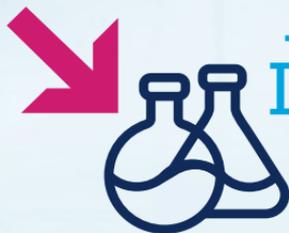
2021 ANNUAL LAB TEST CATALOG

KNOW
Your Numbers

TESTS
for DNA, Brain
Health, Weight
Management,
Thyroid, Food
Allergies
& More

**NEW
LABS**

See pages
12 & 13



A photograph of a young woman with long blonde hair and a man with short brown hair, both smiling and looking out towards the right. The woman is in the foreground, wearing a white top with a scalloped edge. The man is behind her, wearing a blue and white striped shirt. The background is a bright, hazy sky over water.

2021 ANNUAL LAB TEST CATALOG

At Life Extension, we want to be your partner on a journey to better health. That's why we offer hundreds of lab tests and lab tests panels: because Knowledge is power, especially when it comes to your health.

We are committed to helping you find out whether you are at risk for heart disease, stroke, diabetes and beyond. Our Comprehensive Health Test Panels ensure you walk into your next check-up with accurate information.

Our neurotransmitter tests help determine your susceptibility to brain and mood conditions. We can even determine if imbalances, infections or bacterial invaders in your digestive system are affecting your health.

We believe that a longer, richer life is within reach, and that laboratory testing can get you there. So let's get started. Your answers await.

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1-2-3 Easy

A Lab-Testing How-To



1. Order
Order from your local health food store.



2. Draw
Take your form to a local lab. Or collect at home for saliva, breath, etc.



3. Review
Go over results with your doctor.*



Know...
Your Numbers.
Your Truth.
Your Health.

Accurate Results
Confidential

Available at your local health food stores.

Comprehensive Health Panels

Status check on your health

Know Your Risk

- **NEW Serum Magnesium**—Magnesium is essential for heart, bone and brain health. Most of us don't get enough.
- **Insulin & Blood Sugar**—Diabetes
- **Cholesterol**—Heart disease HDL, LDL, triglycerides, ApoB
- **Cardiovascular Risk**—Stroke, heart attack (C-reactive protein, homocysteine)
- **Hormones**—DHEA-S estradiol, free & total testosterone

Men Only: PSA (prostate cancer)

Women Only: Progesterone (sleep, mood, night sweats)

- **Vitamin D**—Cancer, heart disease, immune deficiency
- **Liver & Kidney Health**
- **Blood Cell Counts**—White, red, and blood platelets

Comprehensive Blood Test Panels

LIPID PROFILE

ApoB Particle Count

Total Cholesterol

LDL (low-density lipoprotein) HDL (high-density lipoprotein)

Triglycerides

Cholesterol/HDL Ratio

Estimated CHD Risk

CARDIAC MARKERS

C-Reactive Protein (high-sensitivity)

Homocysteine



COMPLETE BLOOD COUNT (CBC)

Red Blood Cell Count

Hemoglobin, hematocrit, MCV, MCH, MCHC, RDW

White Blood Cell Count Lymphocytes, monocytes, eosinophils, neutrophils, basophils

Platelet Count

METABOLIC PROFILE

Insulin levels

Hemoglobin A1c (HbA1c)

Glucose

Kidney Function Tests Creatinine, BUN, uric acid, BUN/creatinine ratio

Liver Function Tests

AST, ALT, LDH, GGT, total bilirubin, alkaline phosphatase

Blood Minerals

Calcium, potassium, phosphorus, sodium, chloride, iron, and **NEW** Serum Magnesium

Blood Proteins

Albumin, globulin, total protein, albumin/globulin ratio

HORMONES

DHEA-S

Free & Total Testosterone

Estradiol (an estrogen)

TSH (thyroid function)

Vitamin D 25-hydroxy

Progesterone - Female Panel Only

CANCER MARKER

PSA (Prostate Specific Antigen) **Male Panel Only**

Know Yourself, Know Your Health

Male Panel Blood Test

Item #LC322582

Our Male Panel measures data essential to a man's health: complete blood count (CBC), chemistry panel (including cholesterol), prostate specific antigen (PSA), estradiol, DHEA and both free and total testosterone.

The Male Panel also reports on markers like C-reactive protein, vitamin D, homocysteine, insulin and more.



Female Panel Blood Test

Item #LC322535

This panel offers basic bloodwork, as well as other important lab tests specifically for women. It measures data essential to a woman's health: complete blood count (CBC), chemistry panel (including cholesterol), hormones like estradiol, progesterone, DHEA and both free and total testosterone.

The Female Panel also reports on markers like C-reactive protein, circulating vitamin D levels, insulin and more.

PRO TIP:

Whether you're a man or a woman, get this test every year...and take charge of your health!

Head Check

Neurotransmitter testing



Neurotransmitters play a role in heart rate, memory, even anxiety, ADHD and depression. Balanced neurotransmitter health is essential for your mood, cognition, attitude, coping skills, energy, sleep and overall well-being. That is why we offer both basic and comprehensive neurotransmitter testing.

Neurotransmitter Panels

Because neurotransmitters control a wide range of neurological and biological functions, the overuse of these powerful chemical messengers can lead to disaster.

Not sure? Check out the chart on the next page. Start out with our

basic test, or dive right in with our comprehensive panel.

Mood swings, depression, anxiety, fatigue, insomnia, poor impulse control or other more serious issues? Don't wait—Try one of our neurotransmitter tests today!

Neurotransmitter Panel (Basic)

Item #LC100058 | [Urine](#)

Best Value

Neurotransmitter Panel (Comprehensive)

Item #LC100085 | [Urine](#)

Neurotransmitters Measured	Basic Item #LC100058	Comprehensive Item #LC100085
Serotonin: happiness and well-being	•	•
GABA: major inhibitory neurotransmitter	•	•
Dopamine: regulates pleasure/reward pathways, motor control and memory	•	•
Norepinephrine: attention, focus, heart rate, blood flow and inflammation	•	•
Epinephrine/adrenaline: stress response, heart rate, blood pressure and more	•	•
Glutamate: major excitatory neurotransmitter	•	•
Glycine: sleep quality, aggression and serves as an anti-inflammatory agent	•	•
Histamine: sleep/wake cycles and inflammatory response	•	•
PEA (phenylethylamine): energy, mood and aggression and serves as a biomarker for ADHD	•	•
DOPAC: primary metabolite of dopamine. Indicates healthy/unhealthy dopamine levels		•
3-MT: formed by the metabolism of dopamine. High levels may cause over-stimulation		•
Normetanephrine: metabolite of (and indicator for) healthy norepinephrine levels.		•
Metanephrine: metabolite of epinephrine		•
5-HIAA: indicator of serotonin synthesis and healthy/unhealthy serotonin levels		•
Tryptamine: metabolite of tryptophan that can be implicated in sleep concerns		•
Tyrosine: dopamine precursor that affects mood, mental performance, energy and more		•
Tyramine: tyrosine metabolite implicated in head discomfort and blood pressure management		•
Taurine: low levels of this amino acid can lead to sleep, irritability and concentration problems		•

Food Allergy Tests

Maybe it's something you ate



Food Safe Allergy Tests

Allergic reactions to food can cause serious health problems.

These tests will help you discover your sensitivity to common and uncommon meats, shellfish, veggies, spices and more.



Our basic panel will help you get a baseline—choose our combo test for a more in-depth analysis.

Food Safe Allergy (Basic)
Item #LCM73001 | [Finger Stick](#)

Best Value

Food Safe Allergy (Combo)
Item #LCM73003 | [Finger Stick](#)

Potential Food Allergen	Food Safe Allergy Test (Basic) Item #LCM73001	Food Safe Allergy Test (Combo) Item #LCM73003
	Tests for 95 foods	Plus 95 more!
Dairy	Cow's milk, casein, cheddar cheese, cottage cheese, goat's milk, mozzarella and whey	+ Parmesan cheese, sheep's milk and yogurt
Meats	Beef, buffalo, chicken, egg white, egg yolk, lamb, pork and turkey	+ Duck egg, duck meat and venison
Vegetables	Asparagus, beet, black olive, broccoli, cabbage, carrot, cauliflower, celery, cucumber, garlic, green bean, kidney bean, lentil, lettuce, lima bean, onion, pea, potato, pumpkin, soybean, spinach and tomato	+ Alfalfa, artichoke, bamboo shoot, bean sprout, black bean, bok choy, Brussels sprout, butternut squash, chili pepper, eggplant, endive, garbanzo bean, green olive, green pepper, jalapeño, kale, kelp, kohlrabi, mung bean, navy bean, okra, pinto bean, radishes, rutabaga, sweet potato, water chestnut, watercress, yam, yellow squash and zucchini
Fruits	Apple, apricot, avocado, banana, blueberry, cranberry, grapefruit, lemon, orange, papaya, peach, pear, pineapple, plum, raspberry, red grape, strawberry and watermelon	+ Blackberry, boysenberry, cantaloupe, cherry, currants, fig, kiwi, mango, pomegranate, rhubarb and white grape
Grains	Barley, buckwheat, corn, gliadin, gluten, hemp, oat, quinoa, rice, teff and wheat	+ Amaranth, arrowroot, brown rice, flaxseed, hops, millet, psyllium seed, safflower seed, sorghum and wild rice
Nuts	Almond, peanut, pecan, pumpkin seed, sesame seed, sunflower seed and walnut	+ Brazil nut, cashew, chia seed, coconut, hazelnut, macadamia nut, pine nuts and pistachios
Spices	NOT INCLUDED IN TEST	Allspice, basil, black pepper, cilantro, cinnamon, cloves, coriander, cumin, dill, ginger, horseradish, mustard, nutmeg, oregano, parsley, peppermint, poppy seed, rosemary, sage, spearmint, tarragon, thyme, turmeric and vanilla
Shellfish	Clam, crab, lobster, oyster and shrimp	Clam, crab, lobster, oyster and shrimp
Fish	Cod, halibut, salmon, sardine, sole, tuna, tilapia and trout	Cod, halibut, salmon, sardine, sole, tuna, tilapia and trout
Miscellaneous	Baker's yeast, brewer's yeast, candida screen, cane sugar, coffee, honey, mushroom and xanthan gum	+ Carob, cocoa, corn starch, corn sugar, maple sugar, tapioca and tea

Microbiome Tests

Gut check on your diet

Comprehensive Stool Analysis w/Parasitology x1

Item #LC100083 | **Fecal**

Find out what may be causing gastrointestinal complaints, as well as which treatments will be most effective.

This test measures:

Nutrient absorption—A healthy diet won't matter if you can't digest it.

Microbiome—Know your levels of healthy and unhealthy bacteria.

Intestinal health markers—Helps identify risk for colorectal cancer, hemorrhoids and more.

Inflammation—Measures indicators of IBD, IBS, infection and disease.

Immune response—IgA immunoglobulin is your first line of defense.

Infection—Tests for candida yeast, salmonella, and parasites like giardia & cryptosporidium.

GI Pathogen Profile

Item #LC100084 | **Fecal**

Acute diarrhea is often caused by viral infections. This is our best test to detect viruses, parasites and bacteria, such as those transmitted during international travel.



Sound Familiar?

GI problems can lead to:

- IBD/IBS
- Nutritional deficiencies
- Bloody stool
- Joint and/or abdominal pain
- Food sensitivity
- Fever and vomiting
- Diarrhea
- Gastrointestinal symptoms

SIBO Home Breath Kit (Lactulose)

Item #LC100063 | [Breath](#)

Digestive bacteria belong in your small intestine. When they grow elsewhere, it can mean bloating, flatulence, diarrhea & more.

Sound familiar? Test for Small Intestinal Bacterial Overgrowth, or SIBO. It detects hydrogen and methane gas produced when bacteria consume lactulose.

Try this test today...and put a stop to unexplained bloating, discomfort and gas!



1-2-3 Easy A Lab-Testing How-To



1. Order
Order from your local health food retailer.



2. Draw
Take your form to a local lab. Or collect at home for saliva, breath, etc.



3. Review
Review with your doctor.*

*Lab tests are available only in the continental US and in Anchorage, AK. Restrictions apply to MA, MD, NY, NJ, RI, PA.

Microbiome Tests

Gut check on your diet



NEW: GI360™

Gastrointestinal Microbiome Assessment

The GI360™ Profile uses cutting edge technology to detect pathogens, viruses, parasites and bacteria that can contribute to gastrointestinal problems.

Microbiome diversity:

Get a head count on your good and bad gut microorganisms.

Standardized

susceptibility: Learn what will evict unwanted

organisms—from grapefruit seed extract to Amoxicillin.

Parasitology: Microscope stool analysis will reveal parasites ranging from tiny protozoa to tapeworms and more.

Stool chemistry: Measures fecal fat, immunoglobulin IgA, even carbs to help detect poor nutrient absorption, pancreatitis, colorectal cancer and more. Choose GI360™ today.

GI360™

Item #LC100088 | **Fecal**



Test for Toxins

Breathe easily & know the truth

NEW Environmental Pollutants Profile

Item #LC100089 | [Urine](#)

Some pollutants, like toluene, won't show up in your stool. So our Environmental Pollutants Profile tests your urine for 8 different chemicals.

Easy collection: This test requires a dried urine sample, easily collected via the included urine collection card. No fuss, no mess!

Scientific evaluation: Liquid Chromatography/Triple Quadrupole Mass Spectrometry detects metabolically derived organic acids and other evidence of pollutant exposure.

Results: Your results are provided in an easy-to-read report. You and your physician can then develop a targeted detox and avoidance plan.

Know what you've been exposed to. Try our NEW Environmental Pollutants Profile today.



Have I Been Exposed?

Detects 14 metabolites caused by exposure to 8 pollutants not easily detected by other tests

Xylene	3-Methylhippurate 2-Methylhippurate
Toluene	Hippurate Benzoate
Benzene	t,t-Muconic Acid
Trimethylbenzene	3,4-Dimethylhippurate
Styrene	Mandelate Phenylglyoxylate Mandelate + Phenylglyoxylate
Phthalate	Monoethyl Phthalate Phthalate Quinolate
Paraben	Para-Hydroxybenzoate
Methyl Tert-butyl Ether	Alpha-Hydroxyisobutyrate

Check Your Age

Keep tabs on changes



Basic Thyroid Panel

Item #LC304131 | [Blood](#)

Measuring the hormones that govern healthy thyroid function is essential as you age.

Thyroid-Stimulating Hormone (TSH):

Evaluates overall thyroid function

Total & Free Thyroxine (T4):

Measures the total amount of T4 produced by the thyroid gland, as well as what is available for cells and tissue to use.

Free Tri-iodothyronine (T3):

Measures the amount of T3 (the active form of the hormone) available.

Tired, depressed, or overweight? Your thyroid could be the problem. Try this panel today.

Omega-3 Index Complete

Item #LC100066 | [Finger Stick](#)

Deficient in omega-3 fatty acids? Too high in omega-6s or trans fats?

This test measures:

- Omega-3 Index
- Trans Fat Index
- Omega-6 to Omega-3 Ratio
- Arachidonic acid (AA) to EPA ratio (a key inflammation marker)

Full Fatty Acid Profile:

- Omega-3s
- Omega-6s
- Monounsaturated fats
- Saturated fats
- Trans fats

Know your omega-3 health today!

Best Value!

Age-Related Biomarkers	Healthy Aging (Basic) Item #LC100025	Healthy Aging (Comprehensive) Item #LC100026
Complete Blood Count (CBC)	•	•
C-Reactive Protein (high-sensitivity)	•	•
Vitamin B12	•	•
Folate	•	•
Vitamin D 25-hydroxy	•	•
Hemoglobin A1c (HbA1c)	•	•
Thyroid Stimulating Hormone (TSH)	•	•
Ferritin	•	•
Insulin	•	•
Complete Metabolic Panel with Lipids and Glucose	•	•
Free T3		•
Free T4		•
Urinalysis		•
Fibrinogen		•
Homocysteine		•

Healthy Aging Panels

These tests help you stay proactive about preventing or postponing age-related diseases.

These tests identify biomarkers associated with heart health, inflammation, vitamin and mineral balance, hormone levels, blood sugar and more.

Just entering your golden years? Go with our basic panel. Choose our

comprehensive Healthy Aging Panel to test even more age-related biomarkers.

Healthy Aging Panel (Basic)

Item #LC100025 | **Blood**

Best Value

Healthy Aging Panel (Comprehensive)

Item #LC100026 | **Combo**

Heart Health Panels

Cholesterol, triglycerides & nutrient levels

NMR LipoProfile®

Small LDL Particle Count, Insulin & More

Our NMR LipoProfile® tests measure small, dense LDL particles that are extremely dangerous—and often overlooked by standard tests.

LDL particle size: Measures large and small LDL particles in your blood.

HDL: High-density Lipoprotein carries away LDL cholesterol and harmful fats.

LP-IR score: This metabolic marker can help detect type 2 diabetes early.

Inflammation & vitamin D: High C-reactive protein and other inflammation markers are bad, but optimal levels (50-80 ng/ml) of circulating vitamin D is a good thing.

Most Affordable

NMR LipoProfile®

Item #LC123810 | Blood

Best Value

NMR LipoProfile® PLUS

Item #LC100049 | Blood

Most Affordable

Best Value

Heart Disease Risk Factors	NMR LipoProfile® Item #LC123810	NMR LipoProfile® PLUS Item #LC100049
Standard cholesterol test LDL, HDL, triglycerides & total cholesterol	•	•
Large & small LDL particle numbers & LDL particle size	•	•
HDL particle number (HDL-P)	•	•
LP-IR Insulin resistance, diabetes risk	•	•
C-reactive protein (high sensitivity)		•
Myeloperoxidase (MPO)		•
Homocysteine & Fibrinogen		•
Vitamin D 25-hydroxy		•

Wellness, Your Way



Chemistry Panel & Complete Blood Count (CBC) Blood Test

Item #LC381822

Basic yearly blood tests for wellness & prevention

This combination panel helps assess cardiovascular health and overall wellbeing. It measures your cholesterol, triglycerides and blood cell count, as well as liver and kidney function.

This panel also measures your blood sugar levels, electrolyte and fluid balance, plus all-important kidney and liver function.

This panel can help you detect signs of heart disease, anemia, clotting and immune disorders, as well as metabolic conditions that could threaten your health.

Vitamin D, 25-Hydroxy Blood Test

Item #LC081950

Are you getting enough vitamin D?

Vitamin D is an essential nutrient. This simple 25-hydroxyvitamin D blood test can determine whether your levels fall within an optimal range.

From healthy immune function and bone density to heart health and mood disorders, vitamin D is critical for optimal health.



Nutrition Check-In

Get the skinny on your diet



Thyroid Panels

You saw our Basic Thyroid Panel on page 14—these tests go even further.

Thyroid hormones: Measures TSH (thyroid-stimulating hormone), T4 (thyroxine), and T3 (tri-iodothyronine) which govern thyroid function. (Both tests)

Reverse T3: This is the inactive version of the T3 hormone. For some people, the body converts thyroid hormone T4 into too much reverse T3, which can cause debilitating fatigue. (Both tests)

Antibodies: Antithyroglobulin (ATA) and thyroid peroxidase (TPO) can sometimes attack proteins involved in thyroid hormone production, making them inoperable. (#LC100018 only)

Thyroid Panel with Reverse T3

Item #LC100044 | [Blood](#)

Thyroid Panel—Comprehensive

Item #LC100018 | [Blood](#)

Nutrient Panel

Item #LC100024 | Blood

Vitamin, mineral, and other nutrient deficiencies can affect your mental and physical well-being.

Hair loss, brittle nails, insomnia, rashes, fatigue and other chronic health conditions are often associated with nutritional deficiencies.

This test will tell you which vitamins, minerals and antioxidants are missing from your diet.



Weight Loss Panel (Comprehensive)

Item #LC100028 | Blood

This test helps map factors that may be interfering with your weight loss goals.

Sex hormones: An imbalance here can impact your ability to lose weight (and keep it off).

Thyroid hormones: Understand the relationship between your thyroid, metabolism & weight.

Stress hormones: High levels of stress can trigger your body to store additional belly fat.

Insulin resistance: High insulin levels can make your body resistant, which increases fat storage.



Inflammation & health: Inflammation, anemia & vitamin D status are all important factors when it comes to weight-loss.

Armed with these results, you'll finally be on a path to a healthy weight!

Hormone Health Panels

Tests for men & women



Basic Hormone Panels

Hormone changes can cause weight gain, increase our risk for diseases and affect our quality of life.

Female Panel: Measures hormones that are central to a woman's health, like progesterone and estradiol, the main female sex hormone.

Male Panel: Focuses on hormones important to men's health, such as testosterone. This test also screens for potential prostate issues by measuring prostate specific antigen (PSA) levels.

Add-Ons: Boosts value by adding a few extra measurements.

Get tested today!

Male Hormone Panels

Basic

Item #LC100012 | Blood

Add-On

Item #LCADDM | Blood

Female Hormone Panels

Basic

Item #LC100013 | Blood

Add-On

Item #LCADDF | Blood

Why should I test these hormones?

Free & Total Testosterone	Men: bone density, fat distribution, muscle strength, sex drive, mood, energy, sperm production & more
	Women: libido, bone & muscle mass, heart health, mood, well-being & menopausal symptoms
DHEA-S	Men & Women: hormone balance, immune function, energy, mood, muscle & bone mass
Estradiol	Men: abdominal fat, enlarged prostate & increased cardiovascular risk. Low levels can lead to osteoporosis.
	Women: menstrual cycle, skin elasticity, bone strength and bladder & vaginal health
PSA	Men: Both benign prostate hyperplasia (BPH) and prostate cancer development
Progesterone	Women: Weight gain, insomnia, anxiety, depression, migraines, uterine fibroids, ovarian cysts, osteoporosis & cancer

Add-Ons

Female	Measures total estrogens and pregnenolone (the mother hormone), a precursor to other hormones.
Male	Measures a testosterone metabolite (DHT), which can negatively affect the prostate, as well as pregnenolone.

Hormone Health Panels

Tests for men & women



Comprehensive & Elite Hormone Panels

Sex, stress & thyroid: Monitoring testosterone, DHEA, prostate specific antigen, and estrogen levels is critical as you age—keeping an eye on stress (cortisol) and thyroid health is also a good idea.

General health: Both comprehensive and elite tests give you a full chemistry panel (which includes blood lipids) and blood count. Our elite panels go further, measuring vitamin D & more.

Prostate & endocrine: For men, hormones can affect the health of your prostate. For both men and women, insulin and insulin-like growth factor should be tested as you get older.

Not sure which one?

The helpful chart (opposite) will help you choose between Comprehensive and Elite.

Female Hormone Panels

Comprehensive

Item #LC100011 | Blood

Elite *Best Value*

Item #LC100017 | Blood

Male Hormone Panels

Comprehensive

Item #LC100010 | Blood

Elite *Best Value*

Item #LC100016 | Blood

Comprehensive vs. Elite Hormone Panels

HORMONES BEING MEASURED	Comprehensive Hormone Panels		Elite Hormone Panels	
	Male	Female	Male	Female
SEX HORMONES				
DHEA-S	•	•	•	•
DHT	•		•	•
Testosterone	•	•	•	•
Estradiol (E2)	•	•	•	•
Pregnenolone	•	•	•	•
Total Estrogens & Progesterone		•	•	•
Estrone				•
Sex Hormone Binding Globulin (SHBG)	•	•	•	•
FSH/LH			•	•
STRESS HORMONE				
Cortisol	•	•		
THYROID HORMONES				
TSH	•	•	•	•
Free T3 and Free T4	•	•	•	•
Reverse T3			•	•
GENERAL HEALTH MARKERS				
Chemistry Panel (Complete Metabolic Panel with Lipids)	•	•	•	•
Complete Blood Count (CBC)	•	•	•	•
Vitamin D & Ferritin			•	•
Hemoglobin A1C (HbA1C)			•	•
Cardiac Markers (C-Reactive Protein, Homocysteine, ApoB)			•	•
PROSTATE CANCER MARKERS				
PSA (Screening Test for Prostate Cancer)	•		•	
Free PSA & % Free PSA			•	
ENDOCRINE HORMONE				
Insulin, as well as Insulin-Like Growth Factor 1 (IGF-1)			•	•

2021 ANNUAL
LAB
TEST CATALOG



**NEW
LABS**



See pages
12 & 13

Available at your local health food stores.