Georgina Naturopathic

Lab Menu

Check the tests that interest you and bring this checklist to your visit.
Prices listed are what the lab charges, no mark up by me ❤

Complimentary In-Office

☐ Urine Dipsticks

Tests for infection, pregnancy, and the presence of sugar, blood, protein, bilirubin and ketones.

☐ Blood Glucose & Hemoglobin A1C

Finger prick tests to show current blood sugar and long-term blood sugar regulation, respectively.

☐ Rapid Strep Test

Throat swab to check for strep throat infection.

☐ Vaginal pH

Test done after a gyne exam. Vaginas are usually acidic in order to prevent infection.

Blood

☐ Complete Blood Count (CBC) 9

Provides an overview of blood cell number, size, colour and shape. Used for diagnosing anemias. $23 billed if abnormal result requires hematologist review.

- ☐ Add reticulocyte count 14

  To assess bone marrow function.

☐ Ferritin 11

Iron storage. Measure if you suspect iron deficiency anemia.

☐ Iron & Total Iron Binding Capacity (TIBC) 16

Helps to identify anemia of chronic disease and iron overload.

☐ Vitamin B12 17

Deficiency can cause tingling and anemia with large immature red blood cells because this vitamin is needed for their maturation.

☐ Folate in Red Blood Cells 19

Reflects folate consumption over last 4 months. Like B12, deficiency can cause anemia with large immature red blood cells. Most common cause of deficiency is overcooked vegetables. When folate is high, it may be building up because the enzyme that converts it to its active form is not functioning well.

☐ Anti-Parietal Cell Antibody 32

Checks for autoimmune destruction of parietal cells in the stomach, which normally secrete acid and a protein needed for B12 absorption in the intestines. If you are unable to absorb B12 in the intestines, you can still absorb B12 under the tongue or intramuscularly.

☐ Intrinsic Factor Blocking Antibody 26

Another autoimmune interference with B12 absorption in the intestines. If positive, supplement B12 under the tongue or intramuscularly.

☐ Thyroid Stimulating Hormone (TSH) 10

The most important test for assessing thyroid function. Since this hormone signals for the thyroid gland to make hormone, its levels are inversely proportional to the level of actual thyroid hormone. If result is abnormal, $21 is billed for additional testing.

☐ Thyroperoxidase Antibody (TPO) 10

Autoimmune destruction of the enzyme that produces thyroid hormone. Interestingly, this antibody can be present in both hypo- and hyperthyroidism.

☐ Thyrotropin Receptor Antibodies (TSI) 80

Checks for hyperthyroidism/Graves disease. TSIs mimic TSH, leading your body to overproduce thyroid hormone.

☐ Anti-Thyroglobulin Antibody 10

Checks for autoimmune or cancer-mediated destruction of thyroid hormone precursor.

☐ Free T3 19

Active thyroid hormone. Measure with T4 (inactive thyroid hormone) to see if a selenium deficiency may be causing an issue with activation.

☐ Thyroxine Free (FT4) 21

☐ Islet Cell Antibody 26

Present in type 1 diabetes.

☐ Anti-Nuclear Antibody (ANA) 21

Order if showing symptoms of lupus. If positive, will require further testing, but a good first step.

☐ Complement 3 & 4 13

Help to detect various autoimmune and inflammatory conditions, such as ulcerative colitis (UC).

☐ HLA B27 26

Genetic marker associated with UC, ankylosing spondylitis, Reiter's syndrome & psoriatic arthritis.

☐ Erythrocyte Sedimentation Rate (ESR) 4

Indicates the presence of inflammation.

☐ C-Reactive Protein (CRP) 5

Indicates the presence of inflammation.

- ☐ High Sensitivity CRP 5

Detects small amounts of CRP. More useful for assessing heart disease risk.

- ☐ Apolipoprotein A1 35

Used for transporting fats and cholesterol back to the liver for excretion and inversely related to coronary artery disease risk. This test is usually done with apolipoprotein B to calculate the ratio.

- ☐ Apolipoprotein B 35

Reflects quantity of cholesterol-laden particles in the blood and risk for coronary artery disease.

- ☐ Brain Natriuretic Peptide (BNP) 75

Released when the brain senses high blood volume to promote more peeing. Levels correspond to severity of heart failure because the heart is unable to efficiently pump blood, and it backs up to the brain.

- ☐ Galectin 3 85

Used to monitor fibrosis in heart failure.

- ☐ Potassium 4

Monitor when on heart or blood pressure medication, with arrhythmias or muscle weakness.

- ☐ Magnesium 4

Monitor when on heart or blood pressure medication. Deficiency symptoms include muscle cramping and arrhythmias. Also measure if calcium or potassium is abnormal.

- ☐ Prothrombin Time (PT) / International Normalized Ratio (INR) 7

Monitor when on warfarin or suspecting a bleeding or clotting disorder.

- ☐ IgE Allergy Test 21

This test exposes your blood sample to allergens of your choosing, including foods, animals, molds, dust, pollens, latex, drugs and industrial chemicals, and observes for an immediate immune response. Price is per allergen or set.

    - ☐ Add an interpretation report from LifeLabs 11
- ☐ IgE Allergy Test – 19 Foods 194
- ☐ IgE Allergy Test -16 Inhalants 194
- ☐ IgE Allergy Test – 15 Molds 194
- ☐ IgG Food Sensitivity Test 299

This test exposes your blood sample to 220 foods and sees which foods trigger a delayed immune response. Provides a useful guide for a trial elimination of foods that may be causing your abdominal pain, eczema or brain fog.

    - ☐ 125 Foods Option 210
    - ☐ Vegetarian Option 259
    - ☐ Add one food 20

☐ Lyme Disease Tests 142-659

13 different lyme disease tests are available, including ELISAs, IgG, IgM, IgA, IgG 31 kDa epitope, immunoblots, western blots and panels combining these.

☐ Anti-Müllerian Hormone (AMH) 70

Assesses ovarian reserve.

☐ Follicle Stimulating Hormone (FSH) 13

Stimulates maturation of eggs and sperm. Measure as part of a fertility workup, abnormal menstruation, low libido, decreased muscle mass or if a child is late entering puberty. Take sample on cycle day 3, if possible.

☐ Luteinizing Hormone (LH) 11

Stimulates ovulation and progesterone formation in people with ovaries, testosterone formation in the testes and puberty in children. Measure with follicle stimulating hormone on cycle day 3.

☐ Estradiol 29

This form of estrogen comes 80% from ovaries and 20% from fat cells. Measure when you suspect a hormone imbalance, such as abnormal or absent vaginal bleeding, trouble conceiving or undesirable breast enlargement. Take sample on cycle day 3, if possible.

☐ Estrone 39

This form of estrogen comes 80% from fat cells and 20% from the ovaries; thus, it is the main form of estrogen after menopause. Measure when you suspect a hormone imbalance.

☐ Progesterone 16

Test on cycle day 21 to determine if ovulation has occurred and to determine if levels are high enough to maintain a pregnancy. If high, measure aldosterone.

☐ Total Testosterone 17

Part of a fertility workup and to investigate erectile dysfunction, presence or absence of masculine features and untimely puberty. Best measured in the morning.

☐ Bioavailable Testosterone 57

Testosterone that is not bound and is available to function. Best measured in the morning.

☐ Prolactin 16

Part of a fertility workup, and to investigate unexpected breast enlargement, lactation and hypothyroidism. Also consider testing with headaches and vision problems to rule out a tumor.

☐ Androstenedione 39

A sex hormone precursor elevated in polycystic ovarian syndrome due to the absence of ovulation. Also used to monitor prostate health and treatment.

☐ Dehydroepiandrosterone Sulphate (DHEAS) 22

Sex hormone precursor that is high in polycystic ovarian syndrome and excess hair growth. It is low in chronic stress because the body makes cortisol instead. If <50% of reference value, you would benefit from adrenal support, such as B vitamins and adaptogen herbs.

☐ Dihydrotestosterone (DHT) 65

Most active form of testosterone. Used to monitor prostate conditions, excess hair growth or central balding.

☐ Leptin 80

Satiety hormone secreted primarily by fat cells and biomarker of bone formation. May be deficient in obese children or in children experiencing poor bone growth (observed in children on vegetarian diets). In obese adults, leptin is usually high with cells developing a resistance to it.

☐ Insulin-like Growth Factor (IGF) 90

Reflects growth hormone status. Can investigate if growing too much or too little.

☐ C-Peptide 32

Indicates insulin production by the pancreas.

☐ Glucose 4

Most useful when the test is done fasting. Used to diagnose diabetes.

☐ 2 h Glucose Tolerance Test (GTT) 16

Done fasting. You have a sample taken at baseline and 2 h after drinking a sugary drink. Bring a snack for AFTER the test.

☐ 4 h Insulin Glucose Challenge 25

Fasting. No idea what they do here, but it takes 4 hours and they take samples at 6 time points. Bring a snack for AFTER the test.

☐ Hemoglobin A1C 12

Used to assess long-term blood glucose regulation.

☐ Insulin 21

Another measure for diabetes. Best done fasting. Must also order fasting-glucose in order to interpret result. Avoid biotin supplementation 24 h before the test.

☐ Adrenocorticotropic Hormone (ACTH) 63

This hormone orchestrates your stress response by stimulating release of cortisol and adrenaline. Levels of this hormone can reveal pituitary and adrenal issues, since these glands produce and receive the signal of this hormone, respectively.

☐ Aldosterone 63

This hormone is involved in maintaining blood volume, as reflected in your diastolic blood pressure. If diastolic blood pressure is high, order together with sodium and potassium. If your body cannot make this hormone, it will make sex hormones instead, causing the development of masculine traits. Measure if progesterone is high.

☐ Parathyroid Hormone (PTH) 63

Hormone that regulates your blood calcium levels.

☐ Total Calcium 4

Used for monitoring over-supplementation of vitamin D (after 6 months of vitamin D injections), and investigating arrhythmias and bone disorders.

☐ Ionized Calcium 11

Measures free calcium in the blood that is not being carried by proteins. Useful in seeing if the problem lies with the carrier proteins.

☐ Phosphate 3

Involved in calcium regulation.

☐ Bicarbonate 3

Regulates blood pH. Order with other electrolytes.

☐ Sodium 4

An electrolyte.

☐ Chloride 4

An electrolyte.

☐ Albumin 4

An indicator of the liver's protein production abilities. Order with sodium, chloride and bicarbonate for a corrected anion gap calculation.

☐ Total protein 3

Order with albumin to determine the albumin-globulin ratio to investigate swelling, malnutrition, liver disease, kidney disease, heart failure, multiple myeloma and inflammatory disorders. Ensure adequate hydration before the test.

☐ Immunoglobulin (IgG, IgA, IgM or IgD) 8

A low or a high result indicates immunocompromise, leading to recurrent infections. Price per immunoglobulin type.

☐ IgE 13

☐ IgG Fractionation (IgG1, IgG2, IgG3, IgG4) 200

☐ Protein Electrophoresis 19

To investigate an abnormal albumin, total protein or immunoglobulin result, or if suspecting a protein production disorder, such as multiple myeloma, amyloidosis, lymphoma, leukemia or MS.

☐ Vitamin D 25 Hydroxy 35

Vitamin made by sunshine on your skin with calcium regulation and immune functions.

☐ Vitamin D 1,25 Hydroxy 78

Same as above, but after it has been activated by your kidneys. Can be used to assess cardiovascular risk in patients with psoriasis.

☐ Vitamin A (Retinol) 16

Used for investigating vitamin A overdose and deficiency.

- ☐ Zinc 14

Needed by hair, skin, sperm and taste buds. Deficiency results in the inability to taste.

- ☐ Lactate, Lactic Acid 14

Normal product of glucose breakdown in the absence of oxygen. Elevated when not enough oxygen is getting to cells. You would likely be experiencing rapid breathing, nausea, and sweating.

- ☐ Urate, Uric Acid 4

High during periods of excessive cellular growth and death, such as injuries, cancer and chemo, and in kidney issues. Can confirm presence of gout, if experiencing joint pain.

- ☐ Creatinine & eGFR 4

Assesses kidney function. Order with urea.

- ☐ Urea 3

- ☐ Amylase 4

This enzyme leaks out into your blood with pancreatitis, the symptoms of which are severe abdominal pain, fever, loss of appetite or nausea. Order together with lipase.

- ☐ Lipase 12
- ☐ Ceruloplasmin 7

This protein carries copper. Investigate if you suspect copper processing or storage issues.

- ☐ Copper 21

Measure copper directly. Mostly to assess toxicity or deficiency, as in the case of excessive zinc consumption.

- ☐ Lead 21

Heavy metal found in old paints, toys, pipes, cars and many other sources. Any detectable amount is problematic.

- ☐ Mercury 16

To measure short-term occupational exposure. For long-term dietary exposure, consider hair analysis.

- ☐ Metals, Elements Panel, Erythrocytes 209

Measures toxic and essential elements packed in red blood cells, including arsenic, boron, cadmium, calcium, cesium, chromium, copper, iron, lead, magnesium, manganese, mercury, molybdenum, phosphorus, potassium, selenium, thallium, and zinc.

- ☐ Metal Implant Profile 259

Measures six metals used in orthopedic and dental implants (chromium, cobalt, molybdenum, nickel, titanium, & vanadium). Elevated levels may be associated with excessive wear or corrosion.

- ☐ Trichlorobenzene 475

Occupational hazard for dry cleaners, construction and soil remediation workers, automotive and metal working industries. Chronic exposure can result in memory loss and nervous system issues.

☐ Prostate Specific Antigen (PSA) 30

Screening for prostate cancer. Opinions are mixed on whether to screen, so best leave it up to you to decide for yourself. If you decide, start at age 50 years if no risk factors are present, or 5 years earlier with family history or of African descent. Best ordered together with PSA ratio to differentiate from benign prostatic hyperplasia in midrange PSA values.

☐ PSA Ratio 50

☐ CA125 35

Cancer marker used for following progression and detecting recurrence of ovarian cancer, and for peritoneal spread of colon cancer. Not useful for initial cancer diagnosis.

☐ CA15-3 20

Cancer marker used for following progression and detecting recurrence of breast cancer. Not useful for initial cancer diagnosis.

☐ Carcinoembryonic Antigen (CEA) 35

Cancer marker used for following progression and detecting recurrence of gastrointestinal cancer, especially colon. Not useful for initial cancer diagnosis.

Blood Combos

☐ Celiac 120

Includes two tests used to diagnose celiac disease (tissue transglutaminase antibody (tTG) IgA and deamidated gliadin IgG antibodies). Must be consuming gluten for an accurate result.

☐ Liver Enzymes & Bilirubin 10

Liver enzymes leak out into the blood when liver cells are damaged. If your skin or eyes are yellowing, you may have excess bilirubin in your blood from the breakdown of red blood cells. This test will help figure out if the issue is before, at, or after the liver.

☐ Methylation Panel (B12, Folate, Homocysteine) 65

The body uses methylation to prevent genes from replicating. This is important in cancer prevention. The methylation cycle regenerates substances that are needed for methylation. This cycle requires adequate B12 and folate from the diet, both of which are tested. Homocysteine builds up with the cycle is not working well. It is associated with increased risk of stroke.

☐ Glucose-6-Phosphate Dehydrogenase & Complete Blood Count 43

Assesses for drug-induced anemia stemming from an inability to repair damaged red blood cells. Complete blood count assesses current state of red blood cells.

☐ Healthy Living Assessment 100

Assesses iron status, blood sugar and calcium regulation, thyroid, liver and kidney function, electrolytes, clotting, cardiovascular risk and lipids.

☐ Add folate, B12, ESR, fasting insulin & vitamin D 80

To check for folate and B12 deficiency anemias and inflammation, and further investigate blood sugar and calcium regulation.

Urine

☐ Chemical urinalysis 5

Checks for presence of infection, sugar, blood, protein, bilirubin and ketones.

☐ Urine culture 11

Identifies infection causing organisms.

☐ Urine microscope 2

Identifies urinary tract cells, blood cells, tumor cells, crystals, bacteria, and parasites.

☐ Urobilinogen 3

Measures red blood cell breakdown product.

☐ Arsenic 67

A heavy metal found in food and water. This test detects exposure in the last few days. Prior to collection, avoid seafood for 72 hours. Available as a 24 h or random urine.

☐ Cadmium 40

Urine is the best test for this heavy metal, found in food and made airborne by burning cigarettes, batteries, plastics and coal. The test is a random urine.

☐ Thallium 60

A heavy metal found in electronics, pesticides, cigarettes and food grown in contaminated soil. Symptoms of exposure are vomiting, diarrhea, leg pains, neuropathy and hair loss. Can be detected up to two months after exposure. Best as a 24 h urine.

☐ Metals, Toxic Elements 84

Includes the following elements: aluminum, antimony, arsenic, barium, beryllium, bismuth, cadmium, cesium, gadolinium, lead, mercury, nickel, platinum, tellurium, thallium, thorium, tin, tungsten and uranium.

☐ Toxic Element Clearance Profile 169

Includes the following elements: aluminum, antimony, arsenic, barium, cadmium, cesium, gadolinium, gallium, lead, mercury, nickel, niobium, platinum, rubidium, sulfur, thallium, thorium, tin, tungsten and uranium. Timed or 24 h urine.

☐ Comprehensive Urine Elements Profile 169

Includes the following elements: aluminum, antimony, arsenic, barium, bismuth, bismuth, cadmium, calcium, cesium, chromium, cobalt, copper, gadolinium, gallium, iron, lead, lithium, magnesium, mercury, molybdenum, nickel, niobium, platinum, potassium, rubidium, selenium, strontium, sulfur, thallium, thorium, tin, tungsten, uranium, vanadium, and zinc. Timed or 24 h.

☐ Calcium 4

Used for assessing calcium intake, absorption and loss. Available as 24 h or random urine.

☐ Potassium 4

Monitor when on heart or blood pressure medication, or when arrhythmias or muscle spasms occur.

☐ Creatinine Clearance 8

The gold-standard kidney function test, which is a 24 h urine. You can instead get a decent estimate of your kidney function with the creatinine blood test.

☐ Porphyrins 32

Combined with iron to make heme. Can build up in the body if this process is defective, as with an inherited enzyme deficiency, liver problem or heavy metal toxicity. Classic symptoms are colored urine, blistering, and mania. 24 h urine.

☐ Porphyrin Profile 154

A more detailed analysis of individual porphyrin levels. Used for inferring heavy metal exposure and clearance. First morning urine.

☐ Urate, Uric Acid 3

High during periods of excessive cellular growth and death, such as injuries, cancer and chemo, and in kidney issues. Can confirm presence of gout, if experiencing joint pain.

Breath

☐ H. pylori 97

Gastrointestinal bacteria that presents with abdominal pain that is worse on an empty stomach, nausea, frequent burping and bloating. An appointment at LifeLabs is required for sample collection. You will be given a urea drink with tagged carbons. H. pylori has an enzyme to break down the urea to carbon dioxide. If tagged carbons are detected in the carbon dioxide you exhale, H. pylori is likely present.

☐ Small Intestinal Bacterial Overgrowth (SIBO) 232

Another cause of frequent burping, bloating and pain is too much bacteria in the small intestine. Usually most of our bacteria are in the large intestine, but if food moves slowly, more bacteria can grow in the small intestine. This test measures exhaled hydrogen and methane gases after drinking a lactulose solution. If the gases measure over 20 ppm within 2 h, excess gas is being made by bacteria in the small intestine. After 2 h, the gas is made by the bacteria in your large intestine, which is normal.

Hair

☐ Metals, Toxic Elements Exposure Profile 84

Measures metals in hair, including aluminum, antimony, arsenic, barium, beryllium, bismuth, cadmium, cesium, chromium, cobalt, copper, gadolinium, germanium, gold, lead, manganese, mercury, nickel, palladium, platinum, selenium, silver, tellurium, thallium, thorium, tin, titanium, tungsten, uranium, vanadium, and zinc. Hair the best way to measure long term dietary mercury exposure, mainly from fish.

Tissue, discharge, sputum

☐ PAP 19

Cervical cancer screening. Every 3 years, ages 21 to 69. Sample taken during a gyne exam.

- ☐ Vaginal Swab 5

Checks for bacteria and Candida (yeast). Sample taken during gyne exam.

- ☐ Trichomonas Swab 2

Checks for Trichomonas (parasite). Sample taken during gyne exam.

- ☐ Fertility Semen Analysis 25

Examines number, motility and structure.

- ☐ Post-vasectomy Semen Analysis 10

Checks for presence of semen to verify procedure success.

- ☐ Strep Throat Screen 13

Checks for strep throat infection.

- ☐ Culture & Sensitivity 13

Determines which infectious organisms are present and which antibiotics can kill them.

- ☐ Fungal Culture of Skin, Nails or Hair 11

Stool

- ☐ Occult Blood 5

Screening for colon cancer and other intestinal bleeding. Every 2 years in people ages 50 to 74.

- ☐ Fecal Immunochemical Test (FIT) 40

More reliable than occult blood in cases of bleeding from the lower part of the gastrointestinal tract.

- ☐ Calprotectin 110

Elevated in inflammatory bowel disease.

- ☐ Elastase 150

Normally present in stool. Low in severe pancreatic insufficiency, such as in chronic pancreatitis.

- ☐ Ova & Parasites Swab - Polymerase Chain Reaction 28

Identifies parasites present and estimates quantity.

- ☐ Gut Pathogen Profile 319

Identifies disease-causing organisms and determines susceptibility to several antibiotics and antimicrobial herbs to help guide treatment selection.

- ☐ Microbial Ecology Profile 455

Identifies disease-causing and commensal organisms. Includes susceptibility testing.

- ☐ Comprehensive Profile 635

Includes all above stool tests.

LifeLabs Processing Fee	12