Testing Services Overview
Advanced Clinical Laboratory Solutions
The GI Effects® Profiles are advanced stool tests that provide immediate, actionable clinical information for the management of gastrointestinal health. Utilizing cutting-edge technologies and biomarkers, these tests can reveal important information about the root cause of many common gastrointestinal symptoms such as gas, bloating, indigestion, abdominal pain, diarrhea, and constipation.

The GI Effects Profiles go beyond standard parameters for identifying gastrointestinal disorders. The profiles use the best of molecular, microscopic, and immunoassay approaches to evaluate anaerobes, parasites, firmicutes/bacteriodetes ratio, absorption, inflammation, and sensitivities.

Genova offers comprehensive testing for all parasites on every parasitology exam ordered. Testing incorporates a microscopic ova and parasite (O&P) exam, as well as 6 protozoan PCR targets, with the novel reflex Blastocystis spp. subtyping 1-9. A macroscopic examination for worms is included in the Gut Pathogen Profile and as an add-on to the GI Effects profiles.

The CDSA 2.0™ Profile with Parasitology evaluates digestion, absorption, and the microbiome. Parasites are evaluated using microscopic examination and EIA testing. Sensitivities are provided for treating pathogenic flora. The profile may be indicated for chronic GI symptoms and acute bowel pattern changes.

SIBO Profiles are non-invasive breath tests that capture exhaled hydrogen and methane gases following patient ingestion of a lactulose solution.

- Clinicians now have the option of a 2- or 3-hour SIBO assessment. The 3-hour SIBO profile provides insight into gas levels over a longer period of time, and is recommended for patients with slower gastrointestinal transit or constipation.

Genova offers a full line of serum allergy testing and assessment including IgG/IgE Foods, Inhalants, Molds, and Spices. Symptoms such as migraines, aching joints, fatigue, gastrointestinal disorders, and others have been linked to food sensitivity and environmental allergies.

- **IgG Food Antibodies** is an ELISA test that provides insight into delayed reactions/sensitivities to specific foods. Additionally, the IgG Food Antibody Assessment includes information on implementing an Elimination Diet based on the patient test results.

- **IgE Food Antibodies Profile** analyzes serum levels of total IgE antibodies for 19 combined foods and total IgE.

- **IgE Inhalants** is a chemiluminescent test to evaluate serum IgE antibody levels to 14 region-specific common pollens and environmental inhalants. It is an ideal test for patients with suspected environmental and/or seasonal allergies.

- **IgE Mold** is a chemiluminescent test to evaluate serum IgE antibody levels to 15 molds. It is an ideal test for patients with suspected environmental allergies specific to molds.

- **IgG Spices** utilizes ELISA technology to evaluate serum for levels of IgG and total IgE antibodies for 24 frequently used culinary herbs and spices. It is an ideal test for patients with suspected intolerance to spices and herbs.
Nutritional Profiles

**NutrilEval®** provides an assessment of core nutrients in 5 key areas: **Antioxidants, B Vitamins, Digestive Support, Essential Fatty Acids, and Minerals.** NutrilEval was designed for the clinical management of symptoms and conditions related to nutritional and digestive insufficiencies. NutrilEval testing may be helpful in:

- Mood disorders
- Fatigue and/or sleep disturbances
- Health and sports fitness optimization
- Gastrointestinal/digestive complaints
- Malnutrition and/or weight issues
- Fibromyalgia

Amino acid testing can be done using plasma or urine samples. We also offer the option of ordering one or more of the following select genomics testing SNPs: **MTHFR, COMT, TNF-α, APOE**

Methylation Panel

The **Methylation Panel** measures plasma levels of key amino acids and intermediate metabolites involved in the cycles of methylation, homocysteine transsulfuration, and folate metabolism. Additionally, single nucleotide polymorphisms are analyzed using a buccal swab to give insight into genetic predispositions that affect enzymatic activity within these pathways.

ION Profile

The **ION Profile** evaluates organic acids, amino acids, fatty acids, nutrient and toxic elements, vitamins, and antioxidants. It is a comprehensive health assessment option. The ION Profile requires a blood and urine collection.

Organix® Comprehensive Profile

The **Organix® Comprehensive Profile** is a nutritional test that provides insights into organic acids and a view into the body’s cellular metabolic processes. Identifying nutrient dependent metabolic enzyme dysfunction allows individualized treatment and improved patient outcomes.

Endocrinology Profiles

**One Day Hormone Check™** is a convenient salivary hormone test that evaluates unbound, bioavailable hormone levels over 24 hours. Specimens are examined for levels of estradiol, estrone, estriol, progesterone, the progesterone/estradiol ratio (P/E2), testosterone, cortisol, DHEA, and melatonin.

**Complete Hormones™** is our most comprehensive urinary hormone test, designed to assist in the clinical management of hormone-related conditions. This hormone test assesses parent hormones, their metabolites, and key metabolic pathways.

- **Complete Hormones and Essential Estrogens** now include the option of ordering one or more of the following select genomics testing (SNPs): MTHFR, COMT, CYP1B1, VDR

**Adrenocortex Stress Profile (ASP)** is an at-home salivary hormone test to evaluate key stress hormones: cortisol and DHEA. Six samples provide diurnal cortisol assessment and **Cortisol Awakening Response (CAR)** calculation. Diurnal cortisol measurement uncovers specific stressors throughout the circadian rhythm, while CAR represents HPA axis resiliency. Clinicians have three cortisol testing options: ASP alone, CAR alone, or ASP with CAR.

**Hormonal Health™** provides a focused overview of hormonal balance in both pre- and post-menopausal women. It uses a single serum sample to evaluate dynamics of sex steroid metabolism that can profoundly affect a woman's health throughout her lifetime.
**GENOMICS PROFILES**

Genovations® Profiles are available with a simple buccal swab specimen collection.

The CardioGenomic Plus™ evaluates genetic variations, called single nucleotide polymorphisms (SNPs), in genes that modulate blood pressure regulation, lipid balance, nutrient metabolism, inflammation, and oxidative stress.

The DetoxGenomic™ Profile evaluates SNPs in genes associated with increased risk of impaired detoxification capacity, especially when exposed to environmental toxins.

The EstroGenomic™ Profile evaluates SNPs in genes that modulate estrogen metabolism, coagulation, cardiovascular disease, and osteoporosis.

The NeuroGenomic™ Profile evaluates SNPs in genes that modulate methylation, glutathione conjugation, oxidative protection, and vascular oxidation.

The ImmunoGenomic® Profile evaluates genetic variations in genes that modulate immune and inflammatory activity. These variations can affect balance between cell-mediated (Th-1) and humoral (Th-2) immunity, trigger potential defects in immune system defense and stimulate mechanisms related to chronic inflammatory responses.

All Genovations Profiles can include numerous a la carte SNPs Add-ons.

**ENVIRONMENTAL PROFILES**

The Toxic Effects CORE Profile evaluates six common toxic chemical classes. A comprehensive, cost-effective tool, CORE includes Chlorinated Pesticides, PCBs, Volatile Solvents, Bisphenol A, Organophosphates, and Phthalates and Parabens. The Toxic Effects CORE tests uses both blood and urine samples. All component tests of the Toxic Effects CORE are available as separate profiles.

**GENOVA DIAGNOSTICS**

The Genova Diagnostics team will improve the lives and well-being of individuals by bringing insights to the complexity of health.

Chronic diseases are often complex, and Genova’s system-based testing helps physicians develop targeted treatments for their patients. Easy-to-read color graphic reports synthesize test results into actionable information and facilitate physician-patient communication. Our internationally renowned lab is committed to the highest standards. Genova has a Medical Education team that provides consultation to healthcare professionals, and a variety of educational resources, enabling clinicians to order the right test for their patients.

For more information on Genova Diagnostics, please visit our website at www.gdx.net.