

FlorInScan

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FlorVaScan: Comprehensive Analysis of the Vaginal Flora
FlorInScan: Comprehensive Analysis of the Gut Ecology System

Examples of our Genetic Profiles:

FEMgen: Sporadic breast cancer
OSTEogen: Osteoporosis
THROMBOgen: Thrombosis
LIPIDgen: Lipid metabolism disorders
DIABETOgen: Diabetes type II
COLOgen: Sporadic colon carcinoma

Comprehensive Analysis of the Gut Ecology System

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LABORATOIRES **RÉUNIS**

The Intestinal Microbiota

The main task of the gut is the digestion and resorption of food. Furthermore, the gut is the centre of the immune system of the entire human body; more than 70% of the lymphocytes are localised here.

The intestinal epithelium serves as a barrier against external pathogens. In this context, the microflora of the gut plays a pivotal role. More than 1000 bacterial species have colonised the gastrointestinal tract. The total number of bacterial cells in the human intestine (~100 trillion) is estimated to exceed the total number of somatic and germ cells of the human body by 10-fold. Taken together, these cells weigh between 1,5 and 2 kg. Meanwhile, more and more studies have proven the importance of these bacteria on body physiology and health.

The main tasks of an intact intestinal flora are:

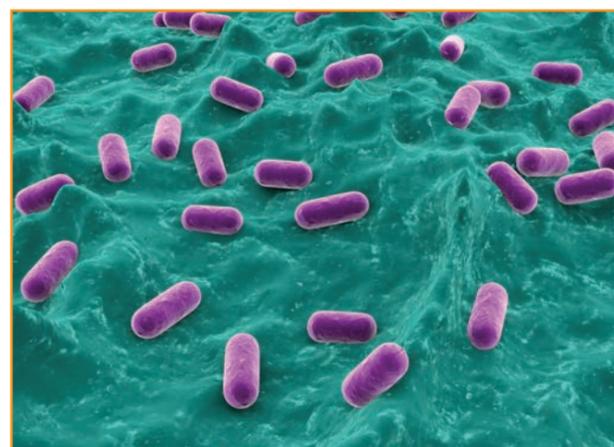
- Barrier function to prevent colonisation of pathogens
- Synthesis of K and B vitamins
- Production of short chain fatty acids (acetate, propionate and butyrate) by fermentation of carbohydrates and thereby increase of the epithelial proliferation rate, boost of the tight-junction integrity and energy balance, facilitation of the epithelial cell differentiation and thus decrease of a cancerogenic risk in the colon
- Modulation of the intestinal immunity

Thus, serious consequences of an altered microflora can be a disruption of the barrier function leading to an increased susceptibility to infection. Furthermore, the permeability of the mucosa can be increased which may result in food allergies and moreover in a disruption of the mucosa.

Main causes of an altered intestinal microflora (dysbiosis)

The reasons for an altered microflora are versatile. Recently, numerous studies have been carried out and published in the literature which clearly show that a dysbiosis can be detected in patients suffering from various illnesses¹⁻⁹:

- Irritable bowel disease (ulcerative colitis, Crohn's disease)
- Irritable bowel syndrome (IBS)
- Colon cancer
- Diabetes type 2
- Metabolic syndrome
- Insulin resistance
- Obesity
- Coeliac disease
- Allergies
- Infections of the gut
- Rheumatoid arthritis
- Stress and depression
- Partial nutrition
- Drug intake (e.g. antibiotics, corticosteroids, laxantia)



Why FlorInScan

FlorInScan is an extensive stool test that includes the analysis of the fecal microflora and further important parameters:

- Identification of fungal microbiota
- Determination of digestive parameters (digestion residues and pancreatic-1-elastase)
- Detection of fecal hemoglobin
- Determination of the pH

Additionally, with **FlorInScan Plus**:

- Inflammatory and permeability markers of the mucosa (calprotectin, alpha-1-antitrypsin)
- Immunological markers (secretory IgA)

From all received results, insights may be gained concerning the cause of a medical condition and accordingly, targeted therapies and nutritional actions may be implemented. Furthermore, by determination of the individual intestinal microflora, probiotic therapies (for the treatment of e.g. irritable bowel syndrome) can be optimised¹⁰⁻¹².

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Indications for a FlorInScan analysis are:

- Gastrointestinal disorders
- (Food) allergies
- Susceptibility to infection
- Diabetes type 2
- Skin diseases
- Autoimmune diseases

Results and interpretation

For each patient, you will receive a detailed and individualised report which will be graphically supported for a better visualisation. In addition, we will provide you with an extensive interpretation of the results and will moreover give you recommendations for further diagnostic investigations and possible therapies.

Additional information

For FlorInScan and FlorInScan Plus, a stool sample is required. The corresponding sampling tube and instructions for sampling and shipment are available on request at Laboratoires Réunis. The stool samples are stable for 48 h if stored at 4-8°C and should therefore be sent to the laboratory the same day.

