The Intestinal Permeability test, also referred to as a “leaky gut” test, is a non-invasive method for assessing gastrointestinal mucosal integrity.

The lining of the gut wall is often subjected to a wide variety of insults from substances such as alcohol, caffeine, medicines, environmental chemicals and pathogenic micro-organisms (pathogenic bacteria, yeasts and parasites) in the gut. The impact of chronic stress also affects the permeability of the gut wall over time.

The mucosal lining of the small and large intestines act as a barrier to the penetration of toxic compounds, molecules and bacteria into the bloodstream. Intestinal injury, intestinal inflammation leads to activation the immune system, and food intolerances. Abnormal activation of the immune system can lead to autoimmune conditions. In the past few years, there has been considerable interest in changes to the gut barrier and the link with intestinal inflammation, increased permeability and auto-immune disease.

Conditions Associated with Intestinal Permeability

- Acne
- ADHD
- Arthritis
- Autism
- Auto-immune diseases
- Chemotherapy
- Coeliac disease
- Crohn’s disease
- Eczema
- Failure to thrive
- Food allergy
- Food sensitivity
- Giardiasis
- Inflammatory bowel disease
- Inflammatory joint disease
- Intestinal infections
- Irritable bowel syndrome
- Malabsorption
- Malnutrition
- Anti-inflammatory drug damage to the gut lining
- Parasite infections
- Psoriasis
- Ulcerative colitis

The Intestinal Permeability Test

The Intestinal Permeability Test directly measures the ability of two non-metabolised sugar molecules, mannitol and lactulose, to permeate the intestinal mucosa (lining of the gut). Measuring the recovery of these sugars in the urine accurately reflects the extent of intestinal permeability or malabsorption.

A healthy test shows high levels of mannitol and low levels of lactulose. If high levels of both molecules are found, it indicates a leaky gut condition. If low levels of both molecules are found, it indicates general malabsorption of all nutrients.

The test is suitable for children from the age of 4 years. Although this is dependent on the ability to collect the child’s urine over a 6 hour period.

The Intestinal Permeability test can be used to guide to the effectiveness of treating intestinal permeability. Correcting altered intestinal permeability may have an immediate effect on the relief of symptoms and facilitate the gradual improvement in the underlying condition.