

## INTESTINAL PERMEABILITY

In this test, the amount of gut permeability is measured.

The intestine has the paradoxal dual function of being a digestive/absorptive organ as well as barrier to permeation of toxic compounds and macromolecules. Either of these functions may be disrupted resulting in local as well as systemic problems.

### THE TEST

The test measures the permeability of the small bowel using a sugar solution (lactulose and mannitol). The test consists of fasting, drinking a sugar solution and collecting all the urine for five hours. The sugars mannitol and lactulose are water-soluble molecules that are not metabolized by the body. Mannitol (a monosaccharide) is readily absorbed, whereas lactulose is only slightly absorbed. The test is a simple and non-invasive method for determining intestinal permeability.<sup>1</sup>

### TEST INDICATIONS

- Allergy and Intolerancies
- Autism, Hyperactivity and poor Concentration
- Schizophrenia
- Food allergy
- Coeliac disease
- Auto-immune diseases
- Disturbed Immunity
- Recurrent Infections
- Malabsorption and Deficiencies
- Malnutrition
- Chronic Skin problems
- Inflammatory bowel disease
- Inflammatory joint disease
- Tiredness

### COMPLEMENTARY TESTS

- Faeces test
- Food allergy IgG4/IgE panel
- Sulphate (free/total in blood) and/or Sulphur panel

### LITERATURE

1. Van Elburg RM et al. Repeatability of the sugar-absorption test using lactulose and mannitol, for measuring intestinal permeability for sugars. *J Pediatr Gastroenterol Nutr* 1995 febr; 20(2):184-8.

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