

## Vitalan Stool Diagnostics

### ***Pancreatic Elastase in stool: diagnosis of exocrine Pancreatic Insufficiency***

Many patients have **symptoms like abdominal pain and colic** 1-2 hours after their meal, food intolerance like **nausea and/or vomit**, varying stool habit like **diarrhea and constipation, gas, heartburn**, indistinct **weight loss** during the last 6 months.

Often these patients suffer under Functional Disorders of the Exocrine Pancreas with a strong need of clearing. Affected are not only Risk-Groups like Patients with **Diabetes** (50% of patients with Type 1 and Type 2 Diabetes), carriers of **Gallstones** (30%), patients with increased risk for **Osteoporosis** (20%) but also patients with „only“ **Indistinct Pain** in upper abdomen.

The main cause for Pancreatitis with Diabetes is **Inflammation with Stenosis of Papilla Vateri and Cholelithiasis**. Microlithes, small concretions of Cholesterol, settle in wall and lumen of Papilla and causes narrowing and tailback of pancreatic juice, leading to Pancreatitis and Cholecystitis. The Endocrine Pancreas suffers too with the result of Diabetes Type 2. Syndrome X (Metabolic Syndrome) is the main Risk-Factor for the Mikrolithiasis, especially supported by Overweight and Fat Nutrition.

The Parameter **Pancreas Elastase** is the new Gold-Standard of non-invasive, functional Pancreas-Stool-Diagnostics – a exceptionally exact, reliable and fast test.

There are clear **correlations** between the morphological gravity of chronic Pancreatitis and decreased Pancreatic Elastase in stool. Values under 300 ug/g stool indicates light, under 200 medium and under 100 severe **Exocrine Pancreatic Insufficiency** with need for Substitution of Digestive Enzymes. Light Insufficiency needs control every year, mild and severe Insufficiency every 3 month, because often there can be a regeneration of the damaged organ (specially under Substitution Therapy).

*Latest Findings* indicates that disorders and inflammation of Small Intestine (e.g. Food Intolerance and Allergy) are associated with low Pancreatic Elastase too, probably caused by low stimulation of Pancreas due to *inhibited Secretin and/or Cholecystokinin*.

IWDL proofs in about 10% of Stool-Specimens low values of Pancreatic Elastase, meaning that **every tenth Patient suffers from Exocrine Pancreatic Insufficiency**.

**Therapeutical Possibilities** are: avoid exogen causes (e.g. Alcohole, Overweight), substitute digestive enzymes (e.g.....) with individual dosage until symptoms stops - maximum 3 month than stool check, treat microlithiasis (e.g. Papillotomia).