

Pancreatic function tests

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Pancreatic exocrine function can be assessed by directly measuring pancreatic secretion in response to a standardised stimulus. The stimulus to secretion can be physiological, e.g. ingestion of a test meal, as in the Lundh test, or pharmacological, e.g. intravenous injection of a hormone such as secretin triple-lumen tube so that the gastric and duodenal juices can be aspirated, and a non-absorbable marker such as polyethylene glycol is used to assess the completeness of the aspiration. The nitroblue tetrazolium-para-aminobenzoic acid (NBT-PABA) test provides an indirect measure of pancreatic function. The substance is administered orally and degraded in the gut by a pancreatic enzyme, and the breakdown product (PABA) is absorbed by the intestine and excreted in the urine; its urinary level is measured. The pancreolauryl test works on a similar principle. These tests are cheap and easy to perform but are non-specific, especially following gastrectomy and in conditions that may alter gastrointestinal transit and intestinal absorptive capacity. They are rarely used now in the clinical setting. Measurement of the enzyme elastase in stool is simple, specific and now used widely. A low level of faecal elastase indicates exocrine insufficiency.

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