Amylase is produced in the Pancreas and most of the elevation in serum is due to increased rate of Amylase entry into the blood stream / decreased rate of clearance or both. Serum Amylase rises within 6 to 48 hours of onset of Acute pancreatitis in 80% of patients, but is not proportional to the severity of the disease. Activity usually returns to normal in 3-5 days in patients with milder edematous form of the disease. Values persisting longer than this period suggest continuing necrosis of pancreas or Pseudocyst formation. Approximately 20% of patients with Pancreatitis have normal or near normal activity. Hyperlipemic patients with Pancreatitis also show spuriously normal Amylase levels due to suppression of Amylase activity by triglyceride. Low Amylase levels are seen in Chronic Pancreatitis, Congestive Heart failure, 2nd & 3rd trimesters of pregnancy, Gastrointestinal cancer & bone fractures.