As a result of the many hormones produced by the pituitary gland and by the number of target organs for those hormones, many direct and indirect diagnostic tests are used to determine pituitary function. The diagnostic tests described in this chapter include those of growth hormone (GH), somatomedin C, causes of polyuria, and pituitary tumors.

Although a substantial number of diagnostic tests are used to identify and monitor thyroid function, the most accurate is TSH. Other tests of thyroid structure and function include thyroxine, triiodothyronine, thyroid antibodies, radioactive iodine uptake, and thyroid scan.

Diagnostic tests of the parathyroid hormone, which regulates serum calcium and phosphate levels, include PTH and serum calcium.

Diagnostic tests for the adrenal glands assess the glucocorticoids, mineralocorticoids, and androgens through both blood and 24-hour urine studies. The tests are of cortisol, aldosterone, ACTH, 17-ketosteroids, and CT of the abdomen to identify adrenal gland tumors.

Diagnostic tests of the pancreas are performed primarily to identify, confirm, and monitor glucose levels in clients with diabetes mellitus. Those described are oral glucose tolerance test (OGTT), fasting blood sugar (FBS), glycosylated hemoglobin (Hb A1C), and CT of the abdomen to identify pancreatic tumors or cysts.

Regardless of the type of diagnostic test, the nurse is responsible for explaining the procedure and any special preparation needed, for assessing for medication use that may affect the outcome of the tests, for supporting the client during the examination as necessary, for documenting the procedures as appropriate, and for monitoring the results of the tests.