TEST: VITAMIN B12

PRINCIPLE:
Reduced levels of vitamin B12 may indicate the presence of vitamin dependent anemia. Elevated levels of vitamin B12 have been associated with pregnancy, the use of oral contraceptives and multivitamins and in myeloproliferative diseases, such as chronic granulocytic leukemia and myelomonocytic leukemia. An elevated level of vitamin B12 is not known to cause clinical problems. Measurement of vitamin B12 is intended to identify and monitor vitamin B12 deficiency. This can arise from the following: defect in the secretion of Intrinsic Factor, resulting in inadequate absorption from food (pernicious anemia); gastrectomy and malabsorption due to surgical resection; and a variety of bacterial or inflammatory diseases affecting the small intestine.

SPECIMEN REQUIREMENTS:
2ml serum collected in a red top tube with no additive or in a serum separator tube (gel barrier). Serum should be separated from the clot as soon as possible to avoid hemolysis. Store samples tightly stopped at room temperature (15 to 30°C) no longer than 8 hours. If the assay will not be completed within 8 hours refrigerate the samples at 2 to 8°C. If the assay will not be completed within 24 hours, freeze at -20°C or colder. Thaw samples only once. Avoid assaying lipemic or hemolyzed samples.

METHOD:
Enhanced Chemiluminescence.

REFERENCES:

Normal range: 180–914 pg/ml

Turnaround time: One Week