

FASTING GLUCOSE/INSULIN

These two tests are used to determine elevated levels of glucose and insulin. Glucose and insulin are implicated in many age-related diseases, such as type 2 diabetes, hypertension, heart disease and stroke, and are a hallmark of mammalian aging.

Please Note: These tests requires a fasting blood level; therefore, a 12-hour fast is required before the collection of a blood sample

- **Glucose**

This test is used to detect diabetes mellitus. It is used to evaluate carbohydrate metabolism disorders including alcoholism. It is also used to evaluate acidosis, ketoacidosis; dehydration, coma, hypoglycemia, insulinoma, and neuroglycopenia.

- **Insulin**

This test is primarily used to measure insulin in the evaluation of individuals with fasting hypoglycemia. Insulin levels tend to be inappropriately elevated in individuals with insulin-secreting tumors. Fasting hypoglycemia in association with markedly elevated serum insulin levels is considered the determinate for insulinoma. Insulin is a protein hormone produced by the beta cells of the pancreas. Insulin is an anabolic hormone that stimulates the uptake of glucose into fat and muscle and promotes the formation of glycogen. Insulin stimulates protein synthesis and inhibits protein degradation. Glucose, amino acids, and certain pancreatic and gastrointestinal hormones (eg, glucagon, gastrin, secretin) stimulate the pancreas to secrete insulin. Insulin secretion is inhibited by hypoglycemia and somatostatin. In healthy individuals insulin is secreted in a pulsatile fashion that is closely controlled by glucose levels. Insulin levels can be useful predicting susceptibility to the development of type II diabetes, although C-peptide has largely supplanted insulin measurement for this role.

The blood test services are for informational purposes only. It is not the intention of National Diagnostics, Inc and Life Extension to provide specific medical advice but rather to provide users with information to better understand their health. Specific medical advice including diagnosis and treatment will not be provided. Always seek the advice of a trained health professional for medical advice, diagnosis or treatment.

Both the physician and the testing laboratory are independent contractors with whom National Diagnostics, Inc makes arrangements for your blood tests. Neither National Diagnostics, Inc nor Life Extension will be liable for any acts or commissions of the physician, the testing laboratory, or their agents or employees.

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease. The information provided on this site is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.