PATIENT HANDOUT

EZ MediCARE Test Kit
Blood Spot Testing

The EZ MediCARE specialized kit, using dried blood spot technology and offering testing in all standard analytes as well as a two-point Cortisol measurement, can help identify hormone imbalance, cardiometabolic risk, and Vitamin D deficiency. All analytes measured in dried blood spot are currently eligible for Medicare coverage.

The Science of Blood Spot Testing

Blood spot testing was originally developed in the 1960s to screen newborns for phenylketonuria (PKU), using a simple heelstick instead of a conventional blood draw. This was later broadened to include tests for congenital hypothyroidism. Today screening for thyroid deficiencies using blood spot testing is a routine procedure, and assays for a wide range of other analytes in blood spot have been successfully developed. The simplicity of sample collection, stability of samples in storage and transport, and excellent correlation of blood spot assays with serum tests, have made it an ideal method for epidemiological and field research studies for a variety of health conditions in both children and adults.

The Simple Test

Blood spot testing has distinct advantages over conventional serum testing for monitoring topical hormone supplementation. Levels of steroid hormones produced endogenously are remarkably similar in venipuncture serum and finger stick capillary blood spots. However, when hormones are delivered topically (transdermally, sublingually, or vaginally), capillary blood spot levels can be much higher than serum levels (ZRT internal data).

Blood Spot testing results correlate with serum test results but without the cost and inconvenience of conventional blood draws, making it beneficial for both patient and practitioner.

Key features include:

- No phlebotomist, special preparation such as centrifugation of the blood, or special packaging and shipment required
- Blood at home allows for flexibility of testing at the right time of day or month or following hormone therapy
- Hormones and other analytes are stable in dried blood spots at room temperature for weeks, allowing for greater latitude in collection and shipping
- Ranges for hormones in blood spots nearly identical to ranges for conventional serum tests

Blood spot collection is a simple and nearly painless procedure. A tiny nick of the finger followed by placing blood drops on a filter card is all that is needed. Test kits contain easy step-by-step instructions, skin cleansing wipes, two lancets, a filter paper on which the blood drops are collected, and a band-aid. The dry blood spot sample requires no special handling and is returned to the laboratory for analysis in a pre-paid return package, with a completed requisition form indicating any current therapies and symptoms.

Hormones

The ability to measure accurately levels of steroid hormones in blood spots has important implications for reproductive endocrinology, and also allows effective monitoring of hormone replacement therapy. This is of particular note for sublingual hormone users, for whom saliva testing is not optimal.

Blood spot cortisol levels have been found to correlate well with serum levels and the blood spot test for morning cortisol gives an excellent snapshot of adrenal function without the stress and inconvenience of venipuncture serum collection.

Vitamin D

Vitamin D deficiency is a real problem and does not have obvious symptoms, but increases your risk for more serious diseases. Researchers and experts say maintaining sufficient levels of Vitamin D are important in protecting the body from a wide range of illnesses, including flu, cardiovascular disease, osteoporosis, osteomalacia and autoimmune disorders such as multiple sclerosis.

Additionally, Vitamin D deficiency is closely linked to increase in risk for strokes, rheumatoid arthritis, diabetes (types 1 and 2), depression and several cancers, including breast and colon cancer. Using a simple blood spot test is one of the easiest ways for you to measure both Vitamin D3 and Vitamin D2.

CardioMetabolic Risk

Proper management of cardiometabolic risk factors can support the overall wellness picture and provide effective tools for improved lifestyle and longevity. ZRT's CardioMetabolic Profile now covers a complete list of markers for assessing risk, including:

- High-sensitivity C-Reactive Protein (hs-CRP is a marker of inflammation)
- Hemoglobin A1c (HbA1c)
- Fasting Insulin
- Fasting Triglycerides
- Cholesterol: Total, LDL, HDL, VLDL

Using this simple blood spot test is one of the easiest ways for you to understand your increased risk for cardiovascular disease and type 2 diabetes, and take control of your health and wellness.

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DISCLAIMER: ZRT Laboratory is a testing facility only, and does not diagnose, treat, or recommend treatment for medical conditions.