

Benefits of Dtect Metabolic

Metabolic disorders affect the body's ability to properly convert food into energy. These disorders can lead to other serious, or even fatal illnesses, such as cardiovascular diseases⁴ and cancers.

It is important to understand your genetic risk factors for common metabolic disorders⁵. If detected early, these diseases may be better controlled with appropriate changes to your lifestyle, and with timely medical advice and treatment.

Dtect Metabolic screens your DNA for genetic markers associated with the following metabolic disorders:

- Chronic Thyroiditis
- Diabetes – Type 1
- Diabetes – Type 2
- Gallstone Disease
- Gestational Diabetes (diabetes in pregnancy)
- Glucose-6-Phosphate Dehydrogenase (G6PD) Deficiency
- Gout
- Grave's Disease (excessive production of thyroid hormones)
- Hypercholesterolemia (higher than normal cholesterol levels)
- Hypertriglyceridemia (excess triglycerides in the blood)
- Hypothyroidism
- Lactose Intolerance
- Metabolic Syndrome (increases risk of heart disease, stroke and diabetes)

Dtect Metabolic helps you to have a clearer understanding of your risk factors for metabolic disorders. With access to this information, you can work together with your doctor to develop an effective plan to better manage your health.

⁴ National Diabetes Institute (NADI). Retrieved from: <http://www.nadidiabetes.com.my/article.php?aid=19>

⁵ American Diabetes Association. "Genetics of Diabetes". Retrieved from: <http://www.diabetes.org/diabetes-basics/genetics-of-diabetes.html>

Limitations

Genetic screening can indicate whether an individual has a predisposition, or is at increased likelihood of having an inherited disease or disorder. However, it cannot indicate if the individual will show symptoms, how severe the symptoms will be, or how fast the disease or disorder will progress over time.

A negative test result does not mean an individual will not get the inherited disease or disorder because Dtect Metabolic is designed to detect only highly significant genetic markers which have been documented during medical research. Environmental and lifestyle factors also play a role in the development of inherited diseases and disorders.

Available at:



Find out more at www.Dtect.com



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MET-PAT-04

DNA



Genetic Screening for Metabolic Disorders

**Your First Step
Towards Total Health**

PATIENT'S GUIDE



Manage Your Health With Dtect Metabolic

Dtect Metabolic is a genetic screening test. This test screens your DNA for markers that are linked to inherited risk factors for metabolic disorders such as diabetes¹ and gout².

With the information from these markers, you can be better prepared to make lifestyle and dietary changes to mitigate your health risks, if necessary.

Dtect Metabolic uses the latest research technologies available from Life Technologies Corporation, USA.

Ask your doctor for Dtect Metabolic today.



DID YOU KNOW?

More than 2 million Malaysians are unaware that they suffer from diabetes³.



¹Todd JA, Walker NM, Cooper JD, Smyth DJ, Downes K, et al. (2007) Robust associations of four new chromosome regions from genome-wide analyses of type 1 diabetes. Nat Genet 39: 857-864. doi:10.1038/ng2068.

²Tu H-P, Chen C-J, Tovossia S, Ko AM-S, Lee C-H, et al. (2010) Associations of a non-synonymous variant in SLC2A9 with gouty arthritis and uric acid levels in Han Chinese subjects and Solomon Islanders. Ann Rheum Dis 69: 887-890. doi:10.1136/ard.2009.113357.

³The Star Online. "Two million Malaysians unaware they are diabetic". 30 April 2012. Retrieved from: <http://thestar.com.my/news/story.asp?file=/2012/4/30/nation/11201523&sec=nation>

Understand Your Risk Factors With Dtect Metabolic

Dtect Metabolic is especially relevant for high risk individuals with a family history of metabolic diseases, and for those who carry increased health risks associated with environmental or behavioural factors.

Dtect Metabolic is designed to screen for genetic markers that are linked to metabolic diseases. These markers include those that are relevant to the Asian population.

There are many types of metabolic diseases, which include G6PD deficiency, lactose intolerance, thyroid problems and gallstone disease. The two most common metabolic disorders are highlighted below.

Common Risk Factors for Type 2 Diabetes^{6,7,8}

- Age >45 years
- Given birth to a baby weighing more than 9 pounds
- Diabetes during a previous pregnancy
- Impaired glucose tolerance
- Excess body weight (especially around the waist)
- Low physical activity level (exercising less than 3 times a week)
- HDL cholesterol <35 mg/dL
- High blood levels of triglycerides (250 mg/dL or more)
- High blood pressure (≥140/90 mmHg)
- Occurrence of diabetes in family members

Common Risk Factors for Gout^{9,10}

- Male
- Age >40
- Family history of gout
- Excessive alcohol consumption

⁶In the clinic. Type 2 diabetes. Ann Intern Med. 2007;146:1TC-14TC-15.

⁷American Diabetes Association. Standards of medical care in diabetes--2011. Diabetes Care. 2011 Jan;34 Suppl 1:S11-61.

⁸Eisenbarth GS, Polonsky KS, Buse JB. Type 1 Diabetes Mellitus, In: Kronenberg HM, Melmed S, Polonsky KS, Larsen PR. Kronenberg: Williams Textbook of Endocrinology. 11th ed. Philadelphia, Pa: Saunders Elsevier; 2008:chap 31.

⁹Arthritis Foundation Malaysia. Retrieved from <http://www.afm.org.my/info/gout.htm>

¹⁰Mayo Clinic. Retrieved from: <http://www.mayoclinic.com/health/gout/ds00090/dsection=risk-factors>

Process for Using Dtect Metabolic

- 1 Ask your doctor for Dtect Metabolic today.
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- 2 Your doctor will collect either a buccal swab sample from your inner cheek or a blood sample, and send it to our laboratory.
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- 3 We will extract DNA from the sample and screen for genetic markers.
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- 4 We will send the results to your doctor. If you require, we will also send you the results.
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- 5 Your doctor will explain the results to you and provide advice on the next course of action.

Manage Your Risks for Metabolic Disorders with Dtect Metabolic



DID YOU KNOW?

More than 17 million Malaysians suffer from 'lifestyle' diseases such as diabetes, obesity, and hypertension. This figure represents a worrying 60% of the country's population¹¹.

¹¹The Malay Mail "60.7% Malaysians Unhealthy". 12 June 2012. Retrieved from: <http://www.mmail.com.my/story/607-malaysians-unhealthy>