

A SINGLE MOUTH SWAB CAN REVEAL 47 DISEASE RISKS

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▷ GENETIC TRAIT AND DISEASE RISK

We inherited two copies of the genetic blueprint necessary to create a human. One copy from your mother (one chromosome from each pair) and one copy from your father (the other chromosome from each pair). Our entire genetic blueprint, or genome, is made up of 23 pairs of chromosomes and mitochondrial DNA that are found in the nuclei of cells throughout our body. The 46 chromosomes found in just one of our cells are made up of about six

Though the sequence of DNA nucleotides in our chromosomes is very similar, there are of course differences between our genome and that of any other member of our species. A comparison of the genomes of two randomly selected humans would be

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expected to reveal on average one difference every 1000 DNA nucleotides. It is these small genetic differences that account for the variation we find in human physical characteristics, such as appearance and disease risk. Thus the unique sequence of DNA nucleotides in our chromosomes constitutes our personal genome.

A SNP, pronounced 'snip', is a single variation in the nucleotide sequence of DNA and stands for Single Nucleotide Polymorphism that can affect our inherited risk and a multitude of other characteristics.

are determined or influenced in some way by such variations in our DNA, i.e. by SNPs. Each of us is different because we carry a unique combination of genetic variants, including SNPs.

Geneticists analyzed more than one million SNPs, so far, from an individual's DNA and still continuing. In recent years, researchers from deCODE Genetics, an Iceland-based company, and other institutions have used such information from large groups of individuals to discover SNPs that are associated with characteristics of medical relevance, such as the risk of developing cancer or heart disease. When a SNP is shown to be correlated with such a characteristic, this SNP is referred to as a genetic marker for the relevant condition. These SNPs are then being used in personal genome analysis.

▷ PERSONAL GENOME SCAN

Personal genome scan empowers and provides us with a road map to improve our health. deCODEme, a personal genetic scan by deCODE Genetics, can show how our genetic makeup affects our risk of developing specific conditions. In addition, it allows to virtually reconstructing the geographical distribution of one's ancestors back hundreds or even thousands of generations.

It is the world's first comprehensive genome scan and online analysis of one's unique DNA profile to identify 47 different disease conditions that he might be at risk. Simple mouth swab sample, collected at home, is all one needs to provide for the analysis and gets to learn how scientific knowledge about ancestry, disease risk and the inheritance of physical traits applies to him and his genome.

47 conditions that are covered by the deCODEme scan are as follows:

● Cancers

Basal cell carcinoma, bladder cancer, brain cancer, glioma breast cancer, chronic lymphocytic leukemia, colorectal cancer, lung cancer, ovarian cancer, pancreatic cancer, prostate cancer, testicular cancer, thyroid cancer

● Blood

Chronic lymphocytic leukemia, hemochromatosis, systemic lupus erythematosus, venous thromboembolism

● Bones, joints and muscles

Gout rheumatoid arthritis, Systemic Lupus

«The 46 chromosomes found in just one of our cells are made up of about six billion (6,000,000,000) DNA nucleotides»

● Brain and nerves

Alzheimer's disease, brain cancer-glioma essential tremor multiple sclerosis, nicotine dependence, Restless Legs Syndrome

● Eyes and vision

Age related macular degeneration, exfoliation glaucoma, eye colour

● Heart and circulation

Abdominal aortic aneurysm, atrial fibrillation, brain aneurysm, heart attack, hypertension, peripheral arterial disease, venous thromboembolism

● Digestive and metabolic system

Alcohol flush reaction, bitter taste perception, coeliac disease, colorectal cancer, Crohn's disease, gallstones, lactose intolerance, obesity, pancreatic cancer, systemic lupus erythematosus, type 1 diabetes, type 2 diabetes, ulcerative colitis

● Kidneys and urinary system

Chronic kidney disease, kidney stones

● Lungs and breathing


Asthma, chronic obstructive pulmonary disease, lung cancer, nicotine dependence

● Skin, hair and nails

Basal cell carcinoma, male pattern baldness, Psoriasis, systemic lupus erythematosus

▷ ADVANTAGE OF SCANNING

Results of the scan are securely updated on the customer's personal site with specific login name and password. One can view the health results by clicking on each conditions and can access a wealth of information about his results, what is being measured and what it all means for his health. The result gives the relative risk, lifetime risk and traits and characteristics that are affected by genetic information and descriptions.

After knowing the genetic profile, one can think about a new health strategy and can take necessary steps to reduce or delay the risk of the health conditions that were indicative in the analysis. In some cases, it may mean making some major changes in lifestyle, giving up various habits or omitting certain foods from the diet. In others, it may only entail making small but significant adjustments or taking regular tests to monitor a potential threat. 

▷ MORE INFO:

For more information please visit www.easternbiotech.com

LEARN MORE

MEDLAB is the main medical laboratory and technology event in the Middle East. It is an integral part of the Arab Health exhibition, and runs between 23-26th of January 2012. For more information about the event, to view the conference programmes and to pre-register as a visitor or delegate, please visit www.arabhealthonline.com

