

INFORMATIONAL MODEL ON HUMAN PREDICTIVE GENOMICS. FOLLOWING THE HUMAN GENE MAP!

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ABSTRACT

All human characteristics, from the color of the eyes, hair color and texture, height, shape of the face and body, to how a single cell formed an entire organism are encoded in the human genetic material, the DNA molecule! Particular segments of DNA, called genes control traits, characteristics, growth, development and overall good health.

keywords: DNA, human genetic, obesity management, athletic performance, elite lifestyle choice

PREDICTIVE GENOMICS

Predictive Genomics is the area of medicine that deals with the detection of specific common, low penetrance “changes” [mutations] in the DNA that determine desirable or undesirable traits & have been associated with increased risk to common polygenic – multifactorial diseases. These traits and risks can be modified by Medical, Pharmacological, Nutritional & Environmental intervention.

The philosophy of Predictive Genomics is based on the detection of increased risk to take appropriate early, individualized and personalized preventive measures and corrective actions to reduce the risk of diseases, to avoid obesity and exercise weight control, to stay healthier, look younger and to achieve peak athletic performance if so desired.

HEALTH & LIFE-STYLE PREDICTIVE GENOMICS DNA SCREENING

The Predictive Genomics DNA Screening analyses approximately 150 genes and mutations that display strong associations [all supported by medical references] to biological systems related to:

- Obesity Management
- NutriGenetics - NutriGenomics
- Health & Medical Care
- Athletic Performance
- Elite Lifestyle Choice – Anti-Aging

The Genes and Mutation variants analyzed for the Predictive Genomics DNA Screening have been, to every extent possible, specifically selected to fulfill the following criteria:

Relevant: The Gene Variant exerts direct influence over the biological system of interest and directly relates to traits, symptom clusters, or disease. The biological effect of the variant is clearly documented in the Scientific literature.

Prevalent: The Gene Variant is relatively common in the general population. Every attempt has been made to exclude variants with less than 1% population frequency.

Modifiable: The effect of the Gene Variant is modifiable by Medical, Pharmaceutical, Nutritional, Environmental or Life-Style modifications.

Measurable: The impact of interventions that modify expression of the variants is measurable by laboratory assays when possible.

Sampling Procedure

DNA sampling is painless and does not require a blood draw. It involves taking cells from the inside of the cheek with a specialised and sterilised buccal swab. The procedure takes no more than a minute and results are usually available within 15 working days.

OBESITY MANAGEMENT PREDICTIVE GENOMICS DNA SCREENING

Genetic Screening based on Prevention and Personalized Management of Obesity

DNA genetic screening analyzing genes and mutations related to obesity management, all of which are documented in the medical and scientific bibliography.

Obesity Management DNA Screening aids in weight control by identifying genes that relate to increased risk of obesity and determine the specific nutritional needs of the body. Thus, caloric restriction required for weight loss will be implemented for nutrients other than those identified as absolutely essential and will avoid long term health harm from common diseases such as Cardiovascular disorders, Osteoporosis, Type 2 Diabetes etc.

In avoiding and managing obesity, knowledge of your genetic profile, in order to implement preventive measures and perform appropriate corrective actions is of the utmost importance. Nutritional and dietary recommendations according to your genetic profile provide a balanced and controlled Body Mass Index [BMI] for an improved life quality and visible results in weight loss.

Based on the Genetic Profile, appropriate nutritional and dietary guidelines and lifestyle choices are recommended. These guidelines are individualized, personalized and more specific than the universal recommendations applicable to the general population.

DISCOVER YOUR GENES & CONTROL YOUR WEIGHT!

OBESITY MANAGEMENT GENES	
GENE	RELATED BIOLOGICAL FUNCTION
ACDC	Insulin sensitivity Anti-Inflammation & Anti-Atherogenesis effects Glucose homeostasis
ADRA2A	Lipolysis regulation
ADRB1	Energy Expenditure Lipolysis Regulation Blood Pressure Regulation
ADRB2	Lipolysis regulation Thermo genesis Drug Response
ADRB3	Lipolysis regulation Thermo genesis
AGRP	Feeding behavior
CAPN10	Glucose metabolism
FTO	Fat mass regulation & Body mass index
GNB3	Regulation of lipogenesis Blood pressure regulation
MCHR1	Feeding behavior Regulation of appetite
MC4R	Feeding behavior Regulation of appetite
NPY	Body weight regulation Energy balance
SCG3	Feeding behavior
TUB	Body mass index
BDNF	Neuron Growth Differentiation & Survival Synapse Formation Motivation to Exercise Energy balance
NEGR1	Body weight regulation Feeding behavior
KCTD15	Body weight regulation Feeding behavior

INFLAMMATORY RESPONSE	
SH2B1	Regulation of fat storage Energy balance Body weight regulation
GNPDA2	Body weight regulation Feeding behavior
MTCH2	Energy balance Body weight regulation
PPAR γ 2	Adipocyte differentiation Lipid metabolism Insulin sensitivity Adipose tissue regulator
FABP2	Intestinal absorption of fatty acids Lipid metabolism
IL-6	Inflammatory Response Bone Recycling Glucose usage
TNF-alpha	Inflammatory Response Insulin response
CRP	Inflammatory Response
LEPR	Feeding behavior
NUTRIGENOMICS	
LIPID METABOLISM	
APOA1	Lipid Metabolism
APOA5	Lipid Metabolism
APOB	Lipid Metabolism
APOC3	Triglyceride Metabolism
APOE	Cholesterol Level Regulation
CETP	Cholesterol Metabolism HDL Metabolism
GJA4 (CX37)	Lipid Metabolism
HMGCR	Lipid Metabolism
LIPC	Lipid Metabolism

LPL	Lipoprotein Metabolism Triglyceride Metabolism
PON1	HDL synthesis
HOMOCYSTEINE METABOLISM	
CBS	Homocysteine metabolism Vitamin B6 Metabolism
COMT	Homocysteine Metabolism
MTHFR	DNA Synthesis & Repair Folic Acid Metabolism Homocysteine Metabolism
MTR	Folic Acid Metabolism Homocysteine Metabolism
MTRR	Folic Acid Metabolism

	Vitamin B12 Metabolism
TCN2	Homocysteine concentration
IRON ABSORPTION & STORAGE	
HFE	Iron Absorption & Storage Hereditary Haemochromatosis
ANTIOXIDATION AND DETOXIFICATION	
CAT	Free radical removal Anti-oxidative ability
EPHX1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GPX1	Cellular Aging Detoxification Anti-oxidative ability
GSTM1	Detoxification Xenobiotics – Carcinogens Mutagens
GSTP1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GSTT1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
MnSOD	Free radical removal Anti-oxidative ability
SELS	Free radical removal Anti-oxidative ability
SOD3	Free radical removal Anti-oxidative ability
UCP2	Free radical removal Anti-oxidative ability

HYPERTENSION	
ACE	Blood Pressure regulation Muscle performance Lipids & Glucose levels
ADD1	Sodium Retention in Cells Blood Pressure regulation
AGTR1	Mediation of Angiotensin II effects - controlling blood pressure and volume
AGT	Regulation of blood pressure, electrolyte balance
CYP11B2	Renal Sodium Resorption Regulation of blood pressure

MEDICAL CARE PREDICTIVE GENOMICS DNA TESTING

The Medical Care Assessment will identify risk status for common chronic multi-factorial diseases as compared to the general population. Corrective action involves medical follow-up and intervention, pharmacogenomics, nutritional guidelines and supplementation as well lifestyle modifications.

Genes screened relate to the following biological processes:

- Pharmacogenomics
 - o Drug metabolizing ability
 - o Medication efficiency including antidepressants, pain relievers, anti-diabetics and anti-ulcer medication
 - o Asthma response sensitivity
 - o Personalized asthma treatment
- Neoplasia [Cancer]
 - o Programmed cell death
 - o Cell cycle & division regulation

- o Tumor suppression
 - Thrombosis – Embolism – Hemochromatosis
- o Blood clot formation
- o Blood clot breakdown
- o Iron storage
- o Warfarin dosage
 - Common Multi-factorial Diseases:
 - Osteoporosis
 - Cardiovascular Diseases
 - Hypertension
 - Insulin Resistance- Diabetes
 - Alzheimer's Disease
 - NutriGenetics – NutriGenomics
- o Nutritional guidance support and supplementation as it pertains to reducing the risk for common chronic diseases

HEALTH & MEDICAL CARE GENES	
GENE	RELATED BIOLOGICAL FUNCTION
NEOPLASIA	
AURKA	Cell Cycle Regulator
CASP8	Participation In Programmed Cell Death (Apoptosis)
CANCER	
BASAL CELL CARCINOMA	
TERT	Telomeres Length(protective regions at the end of chromosomes) Genomic integrity
BLADDER CANCER	
MYC	Regulation of Cell Differentiation, Proliferation, Apoptosis (Programmed Cell Death)
TERT	Telomeres Length(protective regions at the end of chromosomes) Genomic integrity
BREAST CANCER (PREDICTIVE)	
BRCA1	DNA repair Genomic integrity Tumor suppression
BRCA2	DNA repair Genomic integrity Tumor suppression
CHEK2	DNA repair activation Cell cycle check point regulation
FGFR2	Fibroblast Growth Factor Influences cell proliferation and differentiation
TNRC9 / TOX3	Chromatin (DNA form) Structure
TP53	DNA Damage Repair & Induction of Programmed Cell Death (Apoptosis)
COLORECTAL CANCER	
CHEK2	DNA repair activation Cell cycle check point regulation
GSTT1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
TP53	DNA Damage Repair & Induction of Programmed Cell Death (Apoptosis)
PROSTATE CANCER	
CHEK2	DNA repair activation Cell cycle check point regulation
CYP17	Testosterone Biosynthesis
ESR2	Inhibition of Cells' Proliferation In Prostate Tissue
GSTT1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
IGF1	Growth & development mediator
TERT	Telomeres Length(protective regions at the end of chromosomes) Genomic integrity
BREAST CANCER (PATHOGENIC MUTATIONS)	
BRCA1	DNA repair Genomic integrity Tumor suppression
BRCA2	DNA repair Genomic integrity Tumor suppression
VENOUS THROMBOEMBOLISM	
Factor II	Coagulation factor Thrombophilia
Factor V	Coagulation factor

	Hereditary resistance in Activated Protein C Thrombophilia
Factor VII	Coagulation Initiation Blood Pressure Regulator
FGB	Fibrin Precursor Platelet aggregation
MTHFR	DNA Synthesis & Repair Folic Acid Metabolism Homocysteine Metabolism
PAI-1	Inhibitor of blood clots degradation
HEMOCHROMATOSIS	
IRON ABSORPTION & STORAGE	
HFE	Iron Absorption & Storage Hereditary hemochromatosis
LUNGS AND BREATHING	
ASTHMA SUSCEPTIBILITY	
GSTM1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
GSTP1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
GSTT1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
IL6	Inflammatory Response Bone Recycling Glucose usage
ORMDL3	Immunological process Inflammation
PTGS2 (COX2)	Inflammatory Response
SPINK5	Hair&Skin morphogenesis Inflammatory Response
TNF-a	Inflammatory Response Insulin response
ASTHMA DRUG RESPONSE	
ADRB2	Drug Response

CLUSTER HEADACHES	
HCRTR2	Central Nervous Functions
CYSTIC FIBROSIS	
CFTR ΔF508	Channel in cells transporting Chloride Lungs and Pancreas function
TYPE 2 DIABETES	
ACE	Blood Pressure regulation Muscle performance Lipids & Glucose levels
CDKAL1	Insulin Response
HHEX	Insulin Response Decreased Insulin Secretion Lower Insulinogenic index
IGF2BP2	Regulates the IGF2: Growth & development mediator
MTNR1B	Regulation of blood glucose levels
PPAR-γ	Adipocyte differentiation Lipid metabolism Insulin sensitivity Adipose tissue regulator
TNF-a	Inflammatory Response Insulin response
IL6	Inflammatory Response Bone Recycling Glucose usage
VDR	Regulation of collagen formation

	Bone formation and replacement Connective tissue degradation
TCF7L2	Blood glucose homeostasis
SLC30A8	Insulin maturation-storage in pancreatic cells
LACTOSE INTOLERANCE	
MCM6	Lactose Metabolism
BONE HEALTH	
OSTEOPOROSIS	
ACE	Blood Pressure regulation Muscle performance Lipids & Glucose levels
TNF-a	Coagulation Endothelial Function Inflammatory Response Lipid Metabolism Insulin Resistance
IL6	Blood Pressure Regulator Inflammatory Response Osteoclast Synthesis
VDR	Regulation of collagen formation Bone formation and replacement Connective tissue degradation

COL1A1	Collagen formation in cartilage, bone, skin connective tissue
ESR1 PvuII	Cell proliferation & development Bone Mass Density
ESR1 XbaI	Cell proliferation & development Bone Mass Density
CTR	Calcium homeostasis Bone Mass Density
RHEUMATOID ARTHRITIS	
HLA-DRB1	Activation of Immune system Inflammatory response
PTPN22	Activation of Immune system Inflammatory response
STAT4	Mediator in immune response
TRAF1-C5	Inflammatory response
ANKYLOSING SPONDYLITIS	
HLA-B*27 B*2701/B*2725	Activation of Immune system Inflammatory response
ARTS1	Inflammatory response
IL23R	Regulation of Immune system's activity
ALZHEIMER'S DISEASE	
APO E	Cholesterol Level Regulation
GALP	Physiological functions in CNS Regulation of Homeostasis
PCK1	Regulation of blood glucose levels
TOMM40	Movement of proteins- A β (Amyloid beta) process
APOC1	Modulates interaction of APOE with lipids
PHARMACOGENOMICS	
TRIPTANS	
GNB3	Regulation of lipogenesis Blood pressure regulation
WARFARIN SENSITIVITY	
VKORC1	Vit K Metabolism

CYP2C9	Drug Metabolism
EFFICACY OF DRUGS	
<u>Aspirin and Coagulation</u>	
LPA	Lipoprotein-Risk factor for atherosclerosis
ITGB3	Platelet aggregation
<u>Beta Blockers and High Blood Pressure</u>	
ADRB1	Energy Expenditure Lipolysis Regulation Blood Pressure Regulation

<u>Beta Blockers and Heart Failure</u>	
ADRB1	Energy Expenditure Lipolysis Regulation Blood Pressure Regulation
<u>Statins and Cholesterol and Heart Disease</u>	
HMGCR	Lipid metabolism
<u>Antidepressants</u>	
ABCBI	Mediator of cells' resistance to drugs
NUTRIGENOMICS	
CARDIOVASCULAR HEALTH	
LIPID METABOLISM	
APOA1	Lipid Metabolism
APOA5	Lipid Metabolism
APOB	Lipid Metabolism
APOC3	Triglyceride Metabolism
APOE	Cholesterol Level Regulation
CETP	Cholesterol Metabolism HDL Metabolism
GJA4 (CX37)	Lipid Metabolism
HMGCR	Lipid Metabolism
LIPC	Lipid Metabolism
LPL	Lipoprotein Metabolism Triglyceride Metabolism
PON1	HDL synthesis
FABP2	Intestinal absorption of fatty acids Lipid metabolism
HOMOCYSTEINE METABOLISM	
CBS	Homocysteine Removal Vitamin B6 Metabolism
COMT	Homocysteine Metabolism
MTHFR	DNA Synthesis & Repair Folic Acid Metabolism Homocysteine Metabolism
MTR	Folic Acid Metabolism Homocysteine Metabolism
MTRR	Folic Acid Metabolism Vitamin B12 Metabolism

TCN2	Homocysteine concentration
INFLAMMATORY RESPONSE	
CRP	Inflammatory Response
TNFa	Coagulation Endothelial Function Inflammatory Response Lipid Metabolism Insulin Resistance
IL6	Inflammatory Response Bone Recycling Glucose usage
ANTIOXIDATION AND DETOXIFICATION	
CAT	Free radical removal Anti-oxidative ability
EPHX1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GPX1	Cellular Aging Detoxification Anti-oxidative ability
GSTM1	Detoxification Xenobiotics – Carcinogens Mutagens
GSTP1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GSTT1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
MnSOD	Free radical removal Anti-oxidative ability
SOD3	Free radical removal Anti-oxidative ability
UCP2	Free radical removal Anti-oxidative ability
SELS	Free radical removal Anti-oxidative ability
HYPERTENSION	
ACE	Blood Pressure regulation Muscle performance Lipids & Glucose levels
ADD1	Sodium Retention in Cells Blood Pressure regulation
AGTR1	Mediation of Angiotensin II effects - controlling blood pressure and volume
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CYP11B2	Renal Sodium Resorption Regulation of blood pressure

ATHLETIC PERFORMANCE PREDICTIVE GENOMICS DNA SCREENING

The Value of the Athletic Performance Genetic Testing

DNA genetic screening analyzing a large number of genes related to Sports and Athletic Performance all of which are documented in the medical and scientific bibliography.

This DNA testing is a powerful tool for the athletes helping them to identify their genetic advantages, to exceed their genetic barriers and to reach the peak of their athletic potential. Thus, the testing can identify individuals with optimal physiology, those with a greater capacity to respond / adapt to training and those with a lesser chance of suffering from sports-related injuries.

With the latest developments in the field of genetics, we can now analyze genes that determine specific nutritional requirements for optimal health and sports performance and optimization of personalized training programs for peak athletic performance.

Knowledge of your athletic genetic profile is a key tool for the appropriate choice of sport suited to your genotype for achieving the peak of your performance and for maximizing the athletic potential.

TEST YOUR GENES & BECOME A WINNER!

ATHLETIC PERFORMANCE GENES	
GENE	RELATED BIOLOGICAL FUNCTION
ENDURANCE CAPACITY	
BDKRB2	Skeletal Muscle Metabolic Efficiency
CHRM2	Heart Rate Recovery
EPOR	Erythroblast Proliferation & Differentiation O2 Supply to Tissues
HBB	Cardio-Respiratory Adaptation to Training
HIF-1 α	Angiogenesis & Erythropoiesis O2 Supply to Tissues Basal Metabolic Rate Rate of Recovery
NOS3	Vasodilation O2 Supply to Tissues
PPAR γ -C1	Energy Generation
PPARD	Lipid & Carbohydrate Metabolism
VEGF	Angiogenesis O2 Supply to Tissues
MUSCLE PERFORMANCE	
ACE	Blood Pressure regulation Muscle performance Lipids & Glucose levels
ACTN3	Rapid Muscle Contraction
AMPD1	Muscle Performance
CK-MM	Muscle Performance
DIO1	Thyroid Hormone Regulation Muscle Strength
MCT-1	Lactic Acid Clearance Muscle Fatigue
SUSCEPTIBILITY TO INJURIES (TENDONS, BONES)	
COL1A1	Collagen formation in cartilage, bone, skin connective tissue
COL5A1	Collagen formation in cartilage, bone, skin connective tissue
MMP3	Collagen –Connective tissue degradation Wound repair
VDR	Regulation of collagen formation Bone formation and replacement Connective tissue degradation
PSYCHOLOGICAL APTITUDE	

BDNF	Neuron Growth Differentiation & Survival Synapse Formation Motivation to Exercise Energy balance
SUBSTANCE ABUSE	
UGT2B17	Testosterone Metabolism
BODY MASS INDEX (BMI)	
ADRB2	Lipolysis Regulation Thermo genesis Drug Response
ADRA2A	Lipolysis Inhibition
ADRB1	Energy Expenditure Lipolysis Regulation Blood Pressure Regulation
NUTRIGENOMICS	
LIPID METABOLISM	
APOA1	Lipid Metabolism
APOA5	Lipid Metabolism
APOB	Lipid Metabolism
APOC3	Triglyceride Metabolism
APOE	Cholesterol Level Regulation
CETP	Cholesterol Metabolism HDL Metabolism
GJA4 (CX37)	Lipid Metabolism
HMGCR	Lipid Metabolism
LIPC	Lipid Metabolism
LPL	Lipoprotein Metabolism Triglyceride Metabolism
PON1	HDL synthesis
FABP2	Intestinal absorption of fatty acids Lipid metabolism
HOMOCYSTEINE METABOLISM	
CBS	Homocysteine Removal Vitamin B6 Metabolism
COMT	Homocysteine Metabolism
MTHFR	DNA Synthesis & Repair Folic Acid Metabolism Homocysteine Metabolism
MTR	Folic Acid Metabolism Homocysteine Metabolism
MTRR	Folic Acid Metabolism Vitamin B12 Metabolism
TCN2	Homocysteine concentration
IRON ABSORPTION & STORAGE	
HFE	Iron Absorption & Storage Hereditary Haemochromatosis

INFLAMMATORY RESPONSE	
CRP	Inflammatory Response
TNF-alpha	Inflammatory Response Insulin response
IL-6	Inflammatory Response Bone Recycling Glucose usage
ANTIOXIDATION -DETOXIFICATION	
CAT	Free radical removal Anti-oxidative ability
GPX1	Cellular Aging Detoxification Anti-oxidative ability
MnSOD	Free radical removal Anti-oxidative ability
SELS	Free radical removal Anti-oxidative ability
SOD3	Free radical removal Anti-oxidative ability
UCP2	Free radical removal Anti-oxidative ability

EPHX1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GSTM1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
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GSTT1	Detoxification Xenobiotics-carcinogens-mutagens environmental pollutants
HYPERTENSION	
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ELITE LIFESTYLE ANTI-AGING PREDICTIVE GENOMICS DNA SCREENING

Improve your Health and Appearance!

DNA Genetic screening and analyses genes and mutations that display a strong association to the biological systems investigated, all of which are supported by the medical bibliography. These mutations determine desirable or undesirable traits and have been associated with the healthy appearance of individuals.

Knowledge of your genetic profile is an absolute necessity. It is particularly important to take the necessary preventive measures and the appropriate corrective actions in the environment, lifestyle, nutrition and the use of the appropriate cosmetics for your skin. This will prevent or at the very least, delay the onset of the aging, providing longevity with significantly improved life quality.

Predictive genomics assesses variations in key skin-aging genes that are extremely important for your overall health, appearance and beauty. This Well-being Elite Lifestyle is a customized, individualized and personalized tool that makes the “fountain of youth” accessible to all. A range of Corrective Actions is offered in the form of a specialized nutritional guidance, customized and personalized variety of cosmetics and dietary supplementation.

HEALTH & ANTI-AGING

LIFESTYLE & ANTI-AGING GENES	
GENE	RELATED BIOLOGICAL FUNCTION
DERMAGENOMICS	
COLLAGEN SYNTHESIS	
COL1A1	Collagen formation in cartilage, bone, skin connective tissue
COL5A1	Collagen formation in cartilage, bone, skin connective tissue
MMP1	Cell growth regulation Collagen breakdown Photo aging
VDR	Regulation of collagen formation Bone formation and replacement Connective tissue degradation
ANTIOXIDATION – FREE RADICAL MANAGEMENT	
CAT	Free radical removal Anti-oxidative ability
GPX1	Cellular Aging Detoxification Anti-oxidative ability
MnSOD	Free radical removal Anti-oxidative ability
SELS	Free radical removal Anti-oxidative ability
SOD3	Free radical removal Anti-oxidative ability
UCP2	Free radical removal Anti-oxidative ability
SKIN IRRITABILITY	
TNF α	Inflammatory Response Insulin Response
CRP	Inflammatory Response
IL-6	Inflammatory Response Bone Recycling Glucose usage
ENVIRONMENTAL DAMAGE - DETOXIFICATION	
EPHX1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GSTM1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GSTP1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
GSTT1	Detoxification Xenobiotics-carcinogens-mutagens-environmental pollutants
NQO1	Cellular aging Detoxification
SKIN CANCER	
MC1R	Uv damage repair Sun sensitivity
SKIN REPLENISHMENT	

CBS	Homocysteine Removal Vitamin B6 Metabolism
MTHFR	DNA Synthesis & Repair Folic Acid Metabolism Homocysteine Metabolism
MTR	Folic Acid Metabolism Homocysteine Metabolism
MTRR	Folic Acid Metabolism Vitamin B12 Metabolism
METABOLOMICS	
ALCOHOL METABOLISM	
ADH1B/ ADH2 (ADH2*2)	Alcohol metabolism Acetaldehyde clearance levels
ADH1C /ADH3	Alcohol metabolism Acetaldehyde clearance levels HDL levels
ADH4	Alcohol metabolism Acetaldehyde clearance levels
ALDH2	Alcohol metabolism Acetaldehyde clearance levels
OPRM1	Alcohol cravings
CAFFEINE METABOLISM	
CYP1A2*1C	Caffeine metabolism
CYP1A2*1F	Caffeine metabolism
PERSONALITY TRAITS	
RISK TAKING PERSONALITY	
FAAH	Effects on Impulsiveness
DRD2	Effects on the Reward Centre of Brain Regulation of Impulsiveness Risk taking decisions
COGNITIVE ABILITY	
SNAP25	Effects on memory and learning abilities-Intelligence
MALE PATTERN BALDNESS	
AR	Male sexual development Hair growth (males & females) Sexual drive (males & females)
NUTRIGENOMICS	
LIPID METABOLISM	
APOA1	Lipid Metabolism
APOA5	Lipid Metabolism
APOB	Lipid Metabolism
APOC3	Triglyceride Metabolism
APOE	Cholesterol Level Regulation
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WHY PREDICTIVE GENOMICS DNA SCREENING?

- Be Healthier
 - o Assessment tool identifies susceptibility to disease
 - o Provide early warning years before disease onset
 - o Risk reduction by implementation of timely, targeted, & customized medical, pharmacological, nutritional & environmental intervention programs tailored to each individual's unique genetic make-up.
- Live Longer
 - o Prevention
 - o Extended Higher Quality Life
- Look Younger
- o Anti-aging
- Peak Performance – Overall sense of Well-being