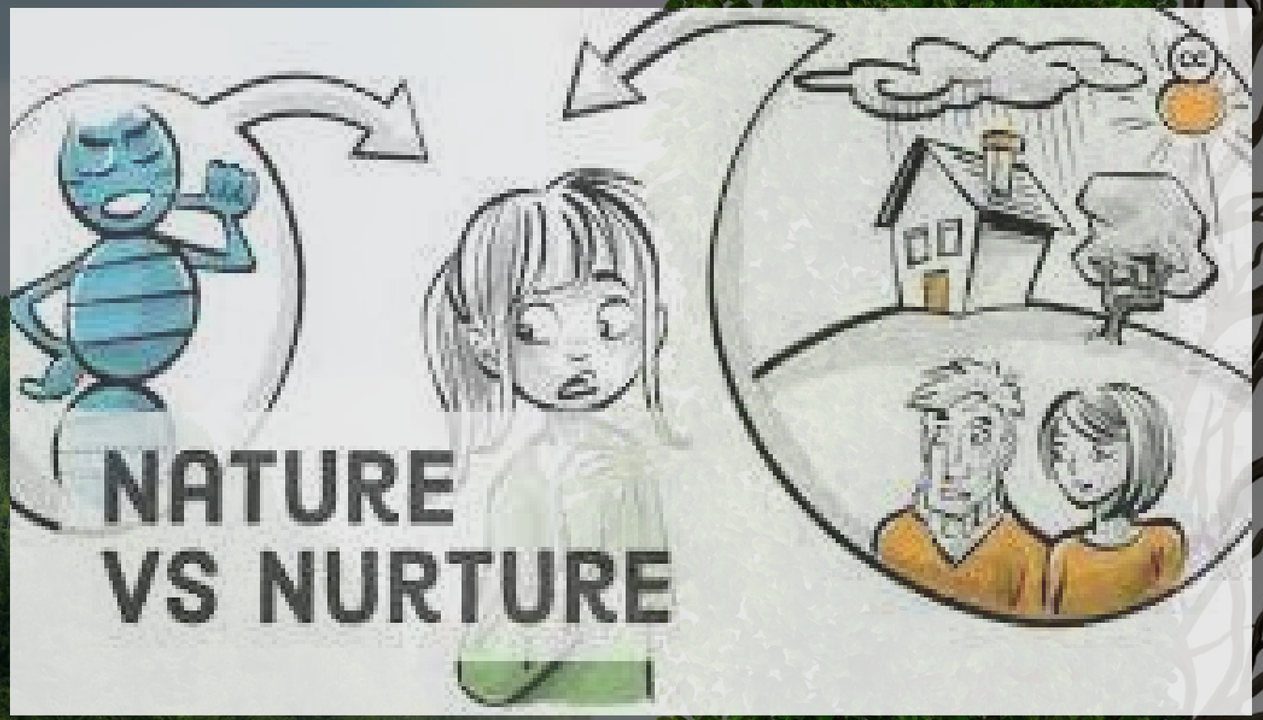
GeneScope.ai

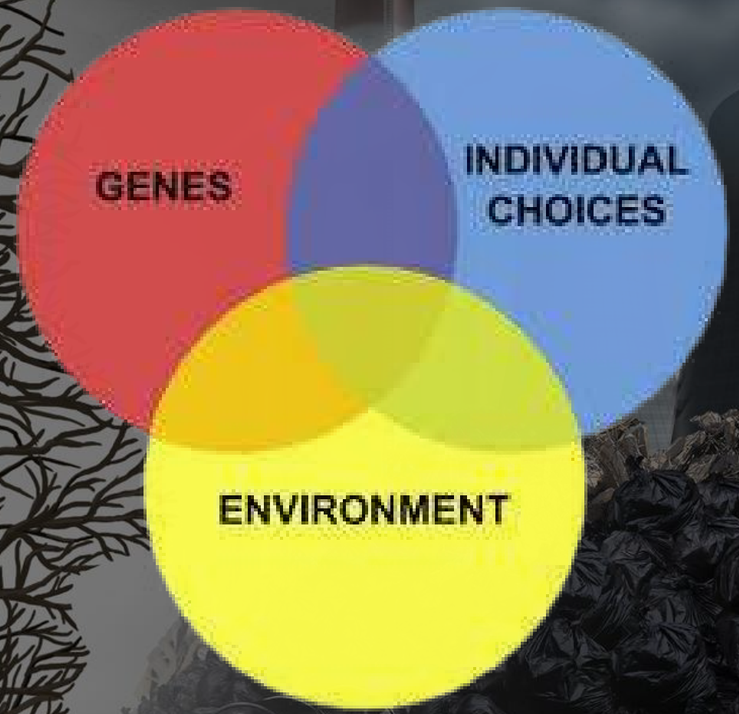
Genescope HealthTech Pvt. Ltd.

Nutrigenomic solutions for a healthy lifestyle

Many researchers today believe that health outcome is influenced by both **NATURE** (genetic make-up) and **NURTURE** (environment)



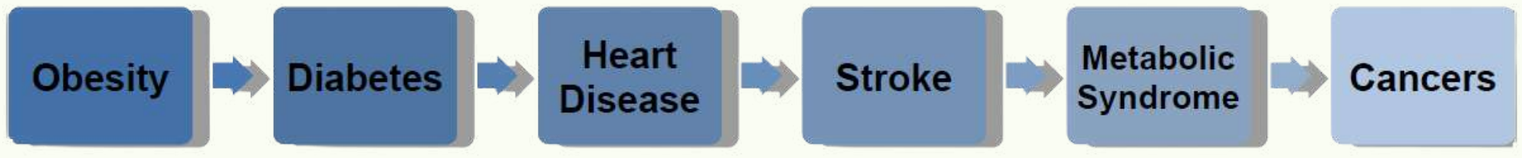
Health outcome is a complex interplay between your **GENES** and impact of **ENVIRONMENT** / **LIFESTYLE** on gene expression



True you can't change your genes, HOWEVER, you can compensate for genetic weaknesses, the influence of environment / lifestyle and changes in gene expression by making the right nutritional, exercise and lifestyle choices aligned to your genomic profile

Understanding genetic makeup helps target the root cause
Increase Healthy years and Reduce Disability years

Obesity is the main cause for many diseases or disorders

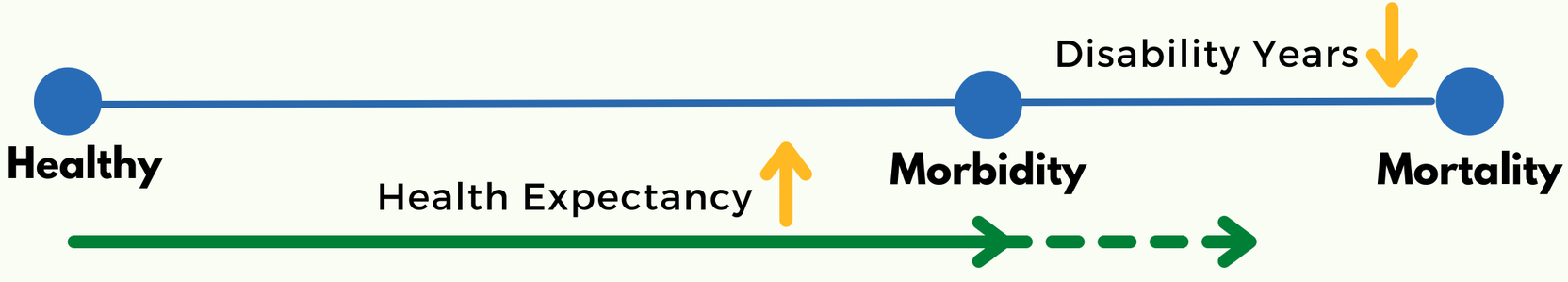


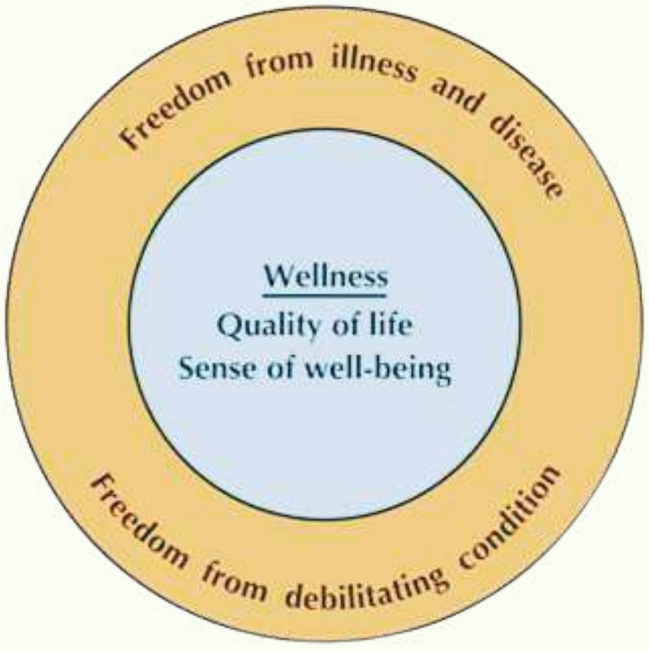
Genomic profiling helps maximise health potential:

- **Genetic make-up - Genotypes and variants**
- **Changes in Gene expression**
- **Disease propensity**
- **Fitness level**

Health Benefits

- **Avoiding illness**
- **Delaying disease onset**
- **Remaining Fit**
- **Lower Healthcare cost**
- **Reversal of metabolic disorders**





Improvements in lifestyle

- **Health, Fitness, Wellness and Immunity**

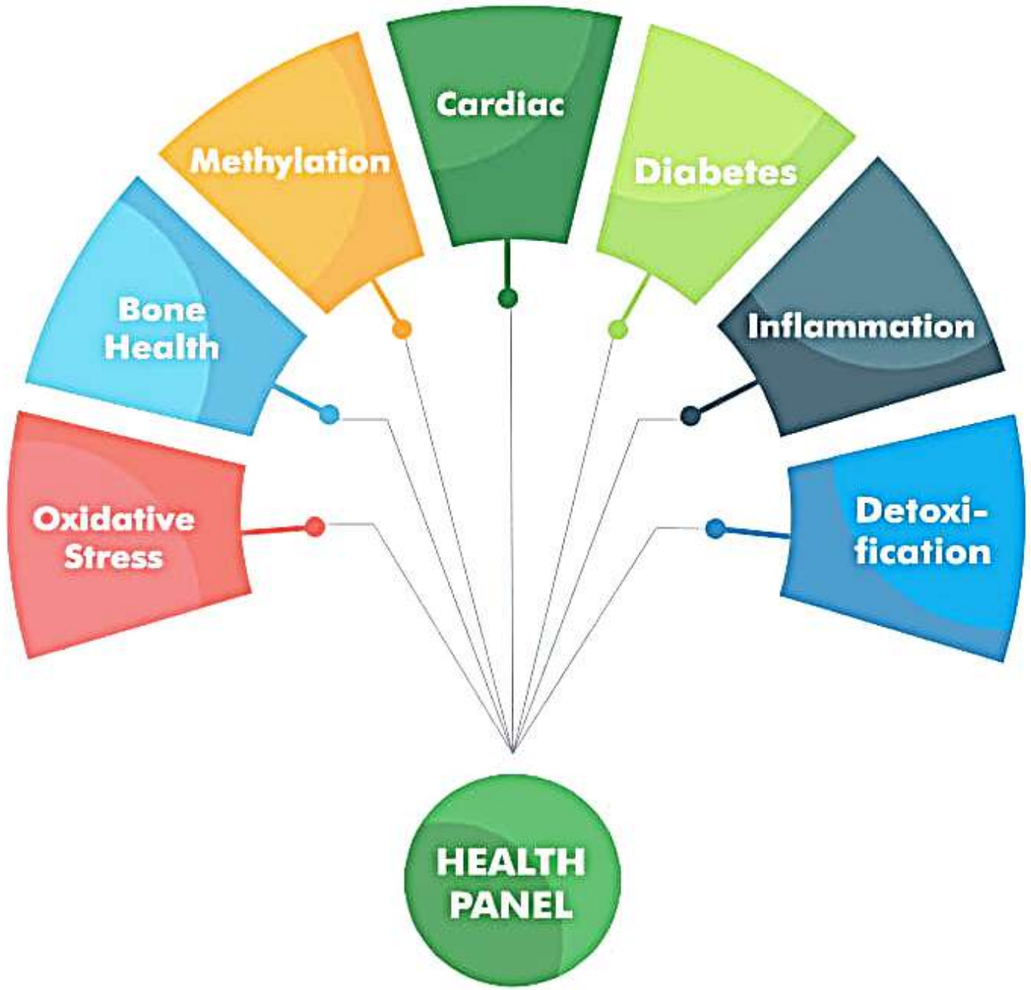
through Personalized interventions

- **Nutrition, Diet, Exercise and Medication**
- **Aligned with your Genomic profile**

Importance of genes in Lifestyle Healthcare Management

Genetic knowledge has the potential to shift healthcare from a disease focused model to prevention based model.

PREVENTION IS ALWAYS BETTER THAN CURE
PROACTIVE IS BETTER THAN REACTIVE



- Diseases are preventable, and can be managed much better if identified earlier on.
- By knowing What is Normal, one can stay away from abnormal to stay healthy
- Prevention is economic and easy as compared to Long term Treatments

UNVEIL THE FACTORS RESPONSIBLE FOR HEALTH MANAGEMENT

[HEALTH PANEL]

Suggested In

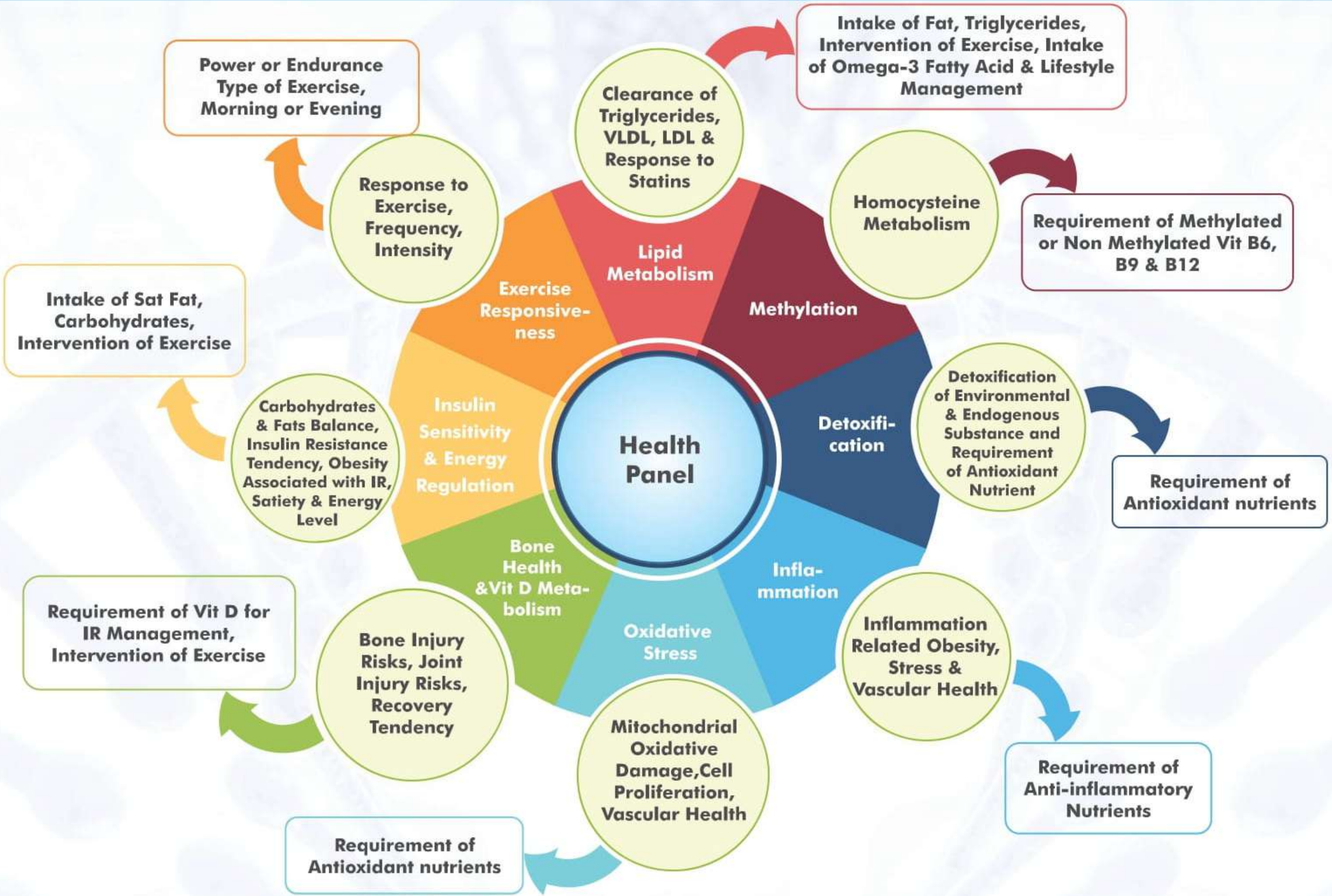
Individual Suffering From or Having Family History of Lifestyle Diseases

- Obesity
- Cardiovascular Diseases
- Hypertension
- Type 2 Diabetes
- PCOS
- Fatigue
- Depression
- Anxiety

Gene Based Recommendations:

- Diet Recommendations
- Exercise Recommendations
- Lifestyle Advice

For Prevention and Management of Lifestyle Diseases


Health Panel
Exercise Responsive-ness
Lipid Metabolism
Methylation
Detoxifi-cation
Inflam-mmation
Oxidative Stress
Bone Health &Vit D Meta-bolism
Insulin Sensitivity & Energy Regulation
Power or Endurance Type of Exercise, Morning or Evening
Response to Exercise, Frequency, Intensity
Clearance of Triglycerides, VLDL, LDL & Response to Statins
Intake of Fat, Triglycerides, Intervention of Exercise, Intake of Omega-3 Fatty Acid & Lifestyle Management
Homocysteine Metabolism
Requirement of Methylated or Non Methylated Vit B6, B9 & B12
Detoxification of Environmental & Endogenous Substance and Requirement of Antioxidant Nutrient
Requirement of Antioxidant nutrients
Intake of Sat Fat, Carbohydrates, Intervention of Exercise
Carbohydrates & Fats Balance, Insulin Resistance Tendency, Obesity Associated with IR, Satiety & Energy Level
Requirement of Vit D for IR Management, Intervention of Exercise
Bone Injury Risks, Joint Injury Risks, Recovery Tendency
Mitochondrial Oxidative Damage,Cell Proliferation, Vascular Health
Requirement of Antioxidant nutrients
Inflammation Related Obesity, Stress & Vascular Health
Requirement of Anti-inflammatory Nutrients

Importance of genes in Diet and Nutrition Management

Diet is not about eating less food, but all about eating the right food that makes your cells smile

THE ONLY REMEDY THAT CAN BRING FULL RECOVERY IS ...NUTRITION

What is required for me ?

- Carbs
- Fats
- Protein
- Vitamins
- Minerals
- Electrolytes

Genes Govern

- Trequirement of Carbs, Fats & Protein
- Requirement of Vitamins & Minerals
- Requirement of Anti-inflammatory Agents
- Requirement of Antioxidants
- Requirement of Electrolytes

UNVEIL THE FACTORS RESPONSIBLE FOR DEFICIENCIES

NUTRIGenomics

Personalized Diet and Exercise Plan

- Adequate, well balanced diet combined with regular physical activity
- Management of overall nutrition intake

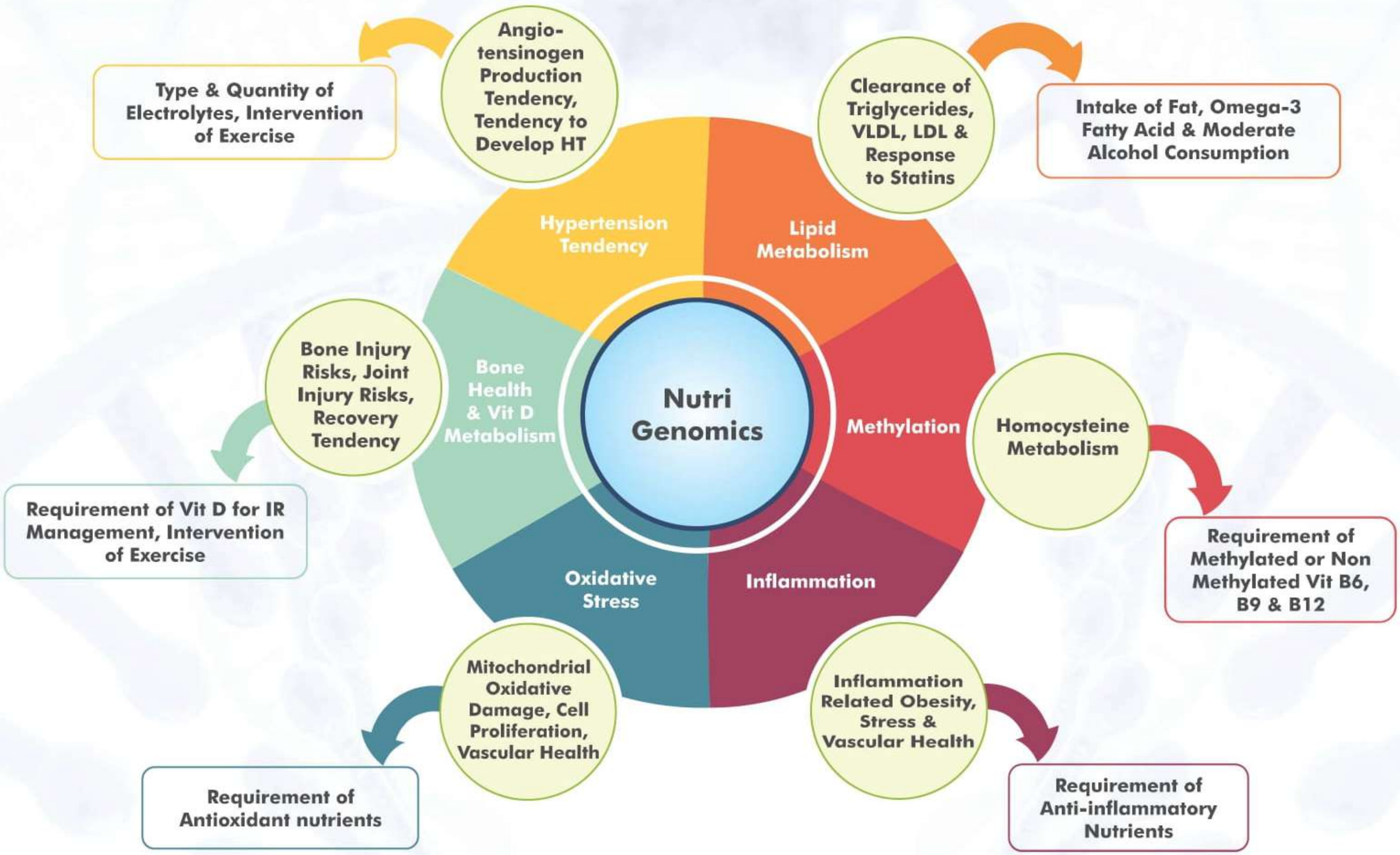
Suggested In

- **Optimizing Micronutrient & Macronutrient Balance**
- **Predicting Deficiency Tendencies**
- **Management of Vitamin/Nutrient Deficiency**
- **Preventive Health Management**

Gene Based Recommendations:

- Diet Recommendations
- Exercise Recommendations
- Lifestyle Advice

For Management of Nutrition


Nutri Genomics
Hypertension Tendency
Lipid Metabolism
Methylation
Inflammation
Oxidative Stress
Bone Health & Vit D Metabolism
Angio-tensinogen Production Tendency, Tendency to Develop HT
Type & Quantity of Electrolytes, Intervention of Exercise
Clearance of Triglycerides, VLDL, LDL & Response to Statins
Intake of Fat, Omega-3 Fatty Acid & Moderate Alcohol Consumption
Homocysteine Metabolism
Requirement of Methylated or Non Methylated Vit B6, B9 & B12
Inflammation Related Obesity, Stress & Vascular Health
Requirement of Anti-inflammatory Nutrients
Mitochondrial Oxidative Damage, Cell Proliferation, Vascular Health
Requirement of Antioxidant nutrients
Bone Injury Risks, Joint Injury Risks, Recovery Tendency
Requirement of Vit D for IR Management, Intervention of Exercise

Importance of genes in Optimizing Fitness

Replace some workload with a good workout. Feel free and Alive!!!

BEING FIT & HEALTHY IS A LIFESTYLE AND NOT A FASHION

How Can I Stay Fit ?

Type of Exercise

Time of Exercise

Type of Food

Genes Govern

- Type of Exercise – Power or Endurance
- Time of Exercise – Morning or Evening
- Type of Training & Warmup
- Requirement of Electrolyte
- Type of Food – Fat vs Carbs

UNVEIL THE FACTORS RESPONSIBLE FOR FITNESS

FITGenomics

Personalized Exercise & Diet Plan

- Choosing Right Sports for Kids
- Performance Optimization for Professional Sportsman
- Maximize Exercise Benefits

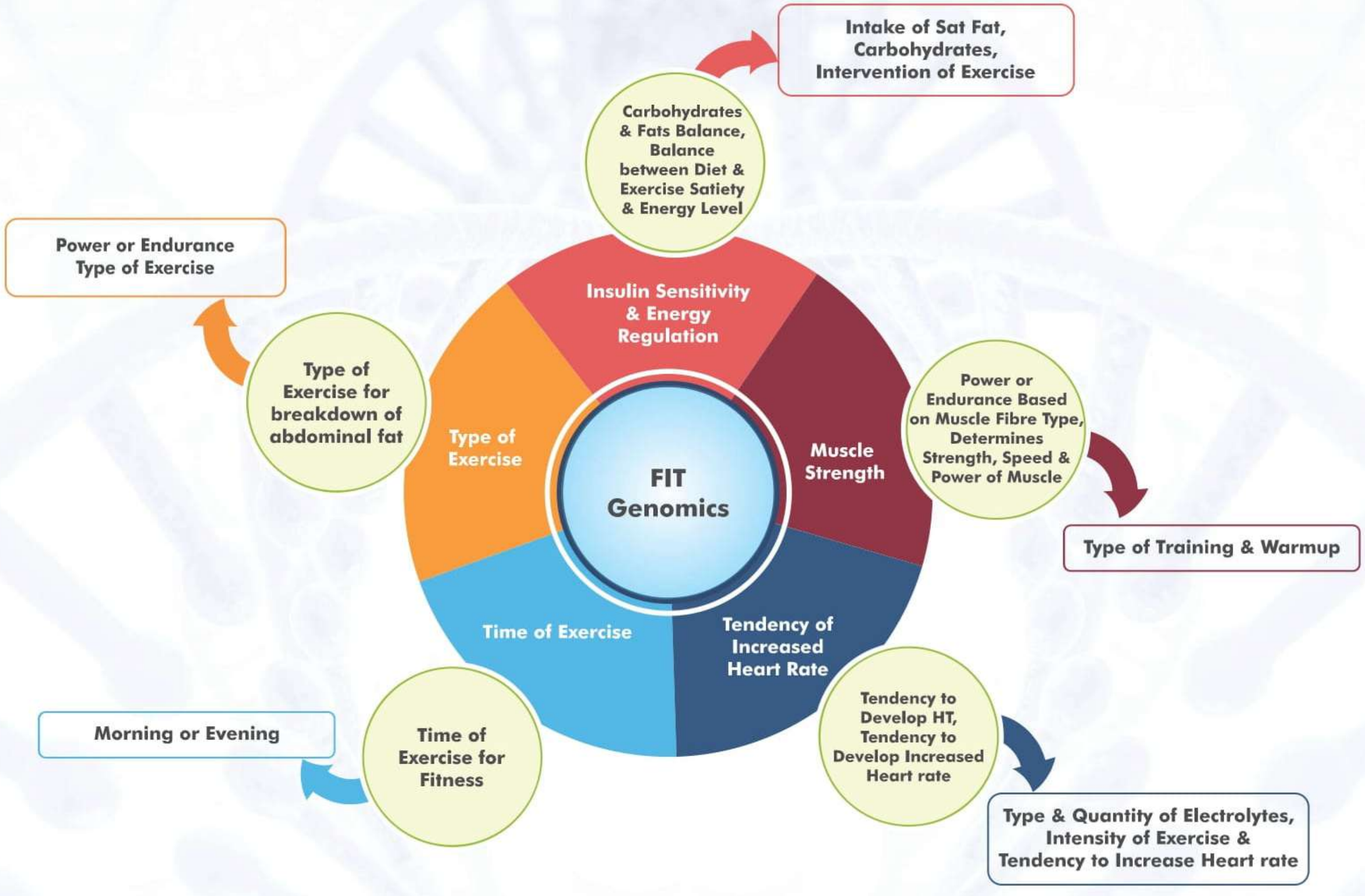
Suggested In

- **Sports Ambitious Kids**
- **Professional Sportsman**
- **Exercise Enthusiasts**

Gene Based Recommendations:

- Exercise Recommendations
- Diet Recommendations
- Lifestyle Advice

For Management Stay Fit & Healthy


Intake of Sat Fat, Carbohydrates, Intervention of Exercise
Carbohydrates & Fats Balance, Balance between Diet & Exercise Satiety & Energy Level
Power or Endurance Type of Exercise
Insulin Sensitivity & Energy Regulation
Type of Exercise for breakdown of abdominal fat
Type of Exercise
Muscle Strength
Power or Endurance Based on Muscle Fibre Type, Determines Strength, Speed & Power of Muscle
FIT Genomics
Type of Training & Warmup
Time of Exercise
Tendency of Increased Heart Rate
Morning or Evening
Time of Exercise for Fitness
Tendency to Develop HT, Tendency to Develop Increased Heart rate
Type & Quantity of Electrolytes, Intensity of Exercise & Tendency to Increase Heart rate

Listen to what your Genes Say, To be on your Way!!!
...to achieving 2.5 times more weight loss

Importance of genes in Weight Loss Management

RESCUE YOURSELF FROM OBESITY

Which diet suits me for Weight Loss ?

- Intermittent fasting
- Two Meal Diet
- Crash Diet
- Keto Diet
- Mediterrian Diet
- Meal Replacements

Genes Govern

- Type of Food : Carbs Vs Fats
- Time of Food Intake : Meal plan
- Type of Exercise : Power Vs Endurance
- Time of Exercise: CLOCK gene
- Snacking tendency management

UNVEIL THE FACTORS RESPONSIBLE FOR WEIGHT MANAGEMENT

SLIMGenomics

Personalized Diet and Exercise Plan

- Weight loss can be achieved 287% more effectively if followed by Genetics.
- People on Genetically Appropriate Diet lose Twice the Number of Waist Inches[1]

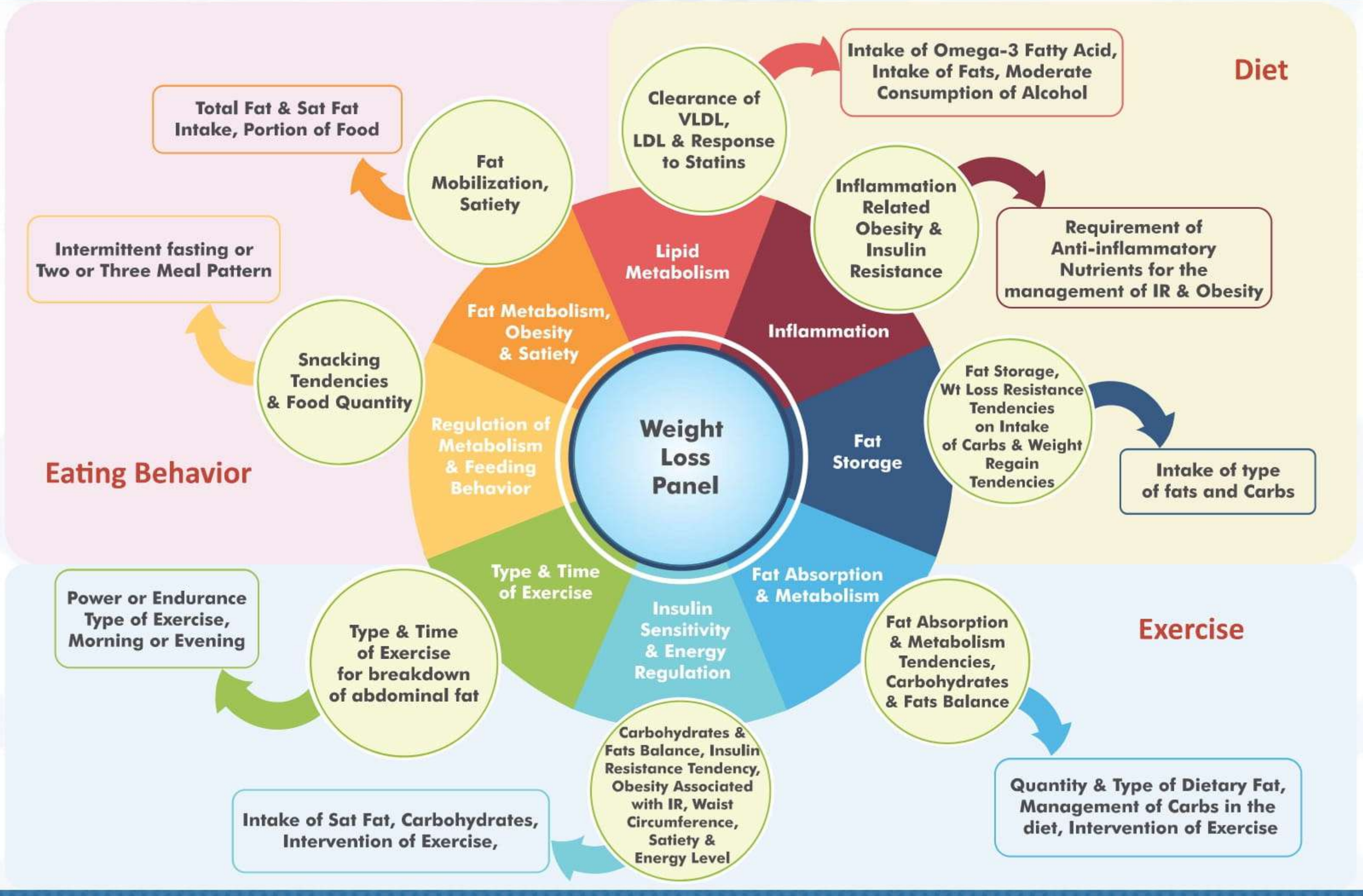
Suggested In

- **Overweight**
- **Type 2 Diabetes**
- **Obese & Non Obese PCOS Conditions**

Gene Based Recommendations:

- Diet Recommendations
- Exercise Recommendations
- Lifestyle Advice

For Accelerated Weight Loss


Weight Loss Panel
Lipid Metabolism
Inflammation
Fat Storage
Fat Absorption & Metabolism
Insulin Sensitivity & Energy Regulation
Type & Time of Exercise
Regulation of Metabolism & Feeding Behavior
Fat Metabolism, Obesity & Satiety
Diet
Clearance of VLDL, LDL & Response to Statins
Intake of Omega-3 Fatty Acid, Intake of Fats, Moderate Consumption of Alcohol
Inflammation Related Obesity & Insulin Resistance
Requirement of Anti-inflammatory Nutrients for the management of IR & Obesity
Fat Storage, Wt Loss Resistance Tendencies on Intake of Carbs & Weight Regain Tendencies
Intake of type of fats and Carbs
Fat Absorption & Metabolism Tendencies, Carbohydrates & Fats Balance
Quantity & Type of Dietary Fat, Management of Carbs in the diet, Intervention of Exercise
Exercise
Carbohydrates & Fats Balance, Insulin Resistance Tendency, Obesity Associated with IR, Waist Circumference, Satiety & Energy Level
Intake of Sat Fat, Carbohydrates, Intervention of Exercise,
Type & Time of Exercise for breakdown of abdominal fat
Power or Endurance Type of Exercise, Morning or Evening
Eating Behavior
Fat Mobilization, Satiety
Total Fat & Sat Fat Intake, Portion of Food
Snacking Tendencies & Food Quantity
Intermittent fasting or Two or Three Meal Pattern

Importance of genes in Cardiac Health Management

Waking up to the beats of a healthy Heart, is a great way for the day to Start!!!

UNVEIL THE FACTORS RESPONSIBLE FOR CARDIAC HEALTH MANAGEMENT

To Beat or ***Not To Beat,***
That **Should Not** Be The Question

HEART HEALTH PANEL

Personalized Diet and Exercise Plan for The Prevention and Management of Cardiovacular Diseses

Genes Govern

Impact of following on Cardiac and Vascular Health

- Homocysteine
- Cholesterol Balance - HDL:LDL:TG:vLDL
- Oxidative Stress & Vascular Health
- Inflammation Tendency & CRP
- Response to Dietary Saturated Fat

Suggested In

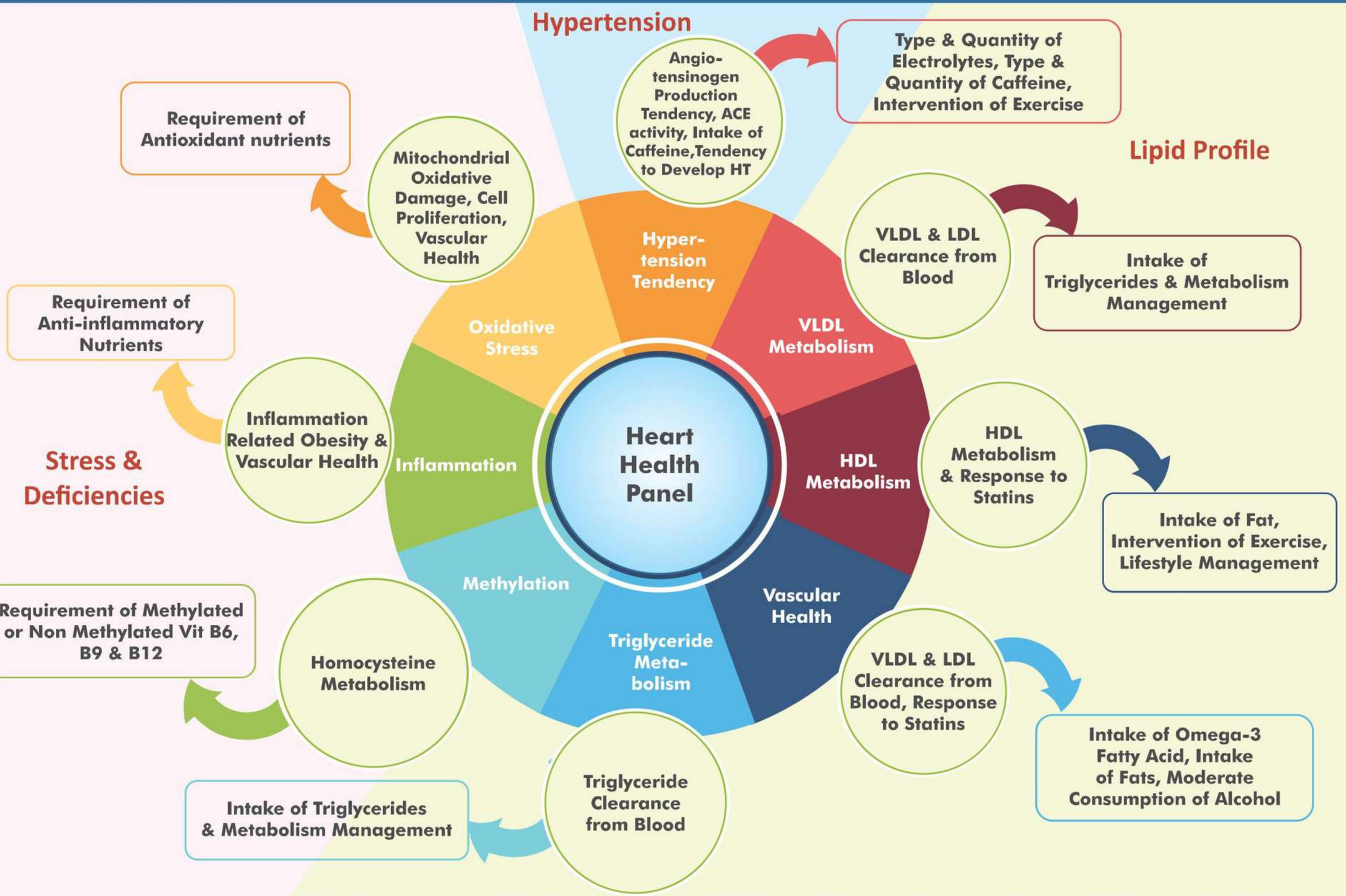
- **Cardiovascular Diseases**
- **Stubborn Obesity**
- **Family history of Cardiovascular Diseases**

For Prevention and Management

Gene Based Recommendations:

- Diet Recommendations
- Exercise Recommendations
- Lifestyle Advice

For Prevention & Management of CAD/CVDs


Heart Health Panel
Hypertension
Hyper-tension Tendency
Angio-tensinogen Production Tendency, ACE activity, Intake of Caffeine,Tendency to Develop HT
Type & Quantity of Electrolytes, Type & Quantity of Caffeine, Intervention of Exercise
Lipid Profile
VLDL Metabolism
VLDL & LDL Clearance from Blood
Intake of Triglycerides & Metabolism Management
HDL Metabolism
HDL Metabolism & Response to Statins
Intake of Fat, Intervention of Exercise, Lifestyle Management
Vascular Health
VLDL & LDL Clearance from Blood, Response to Statins
Intake of Omega-3 Fatty Acid, Intake of Fats, Moderate Consumption of Alcohol
Triglyceride Meta-bolism
Triglyceride Clearance from Blood
Intake of Triglycerides & Metabolism Management
Methylation
Homocysteine Metabolism
Requirement of Methylated or Non Methylated Vit B6, B9 & B12
Inflammation
Inflammation Related Obesity & Vascular Health
Requirement of Anti-inflammatory Nutrients
Oxidative Stress
Mitochondrial Oxidative Damage, Cell Proliferation, Vascular Health
Requirement of Antioxidant nutrients
Stress & Deficiencies

Importance of genes in Diabetic Health Management

Putting your Diabetes in Reverse gear, puts your Life in Foward gear

DONT LET THE SWEETNESS OF SUGAR DEPRIVE YOU

FROM ENJOYING THE SWEET MOMENTS IN LIFE

Genes Govern

- Impact of following on Insulin Resistance
  - Body fat
  - Dietary fat
  - Dietary Carbs
- Types of exercise needed
- Impact of Gluten
- Requirement of Vit D

UNVEIL THE FACTORS RESPONSIBLE FOR DIABETES MANAGEMENT

DIABETES PANEL

Personalized Diet and Exercise Plan for The Prevention and Management of CAD and CVD

Suggested In

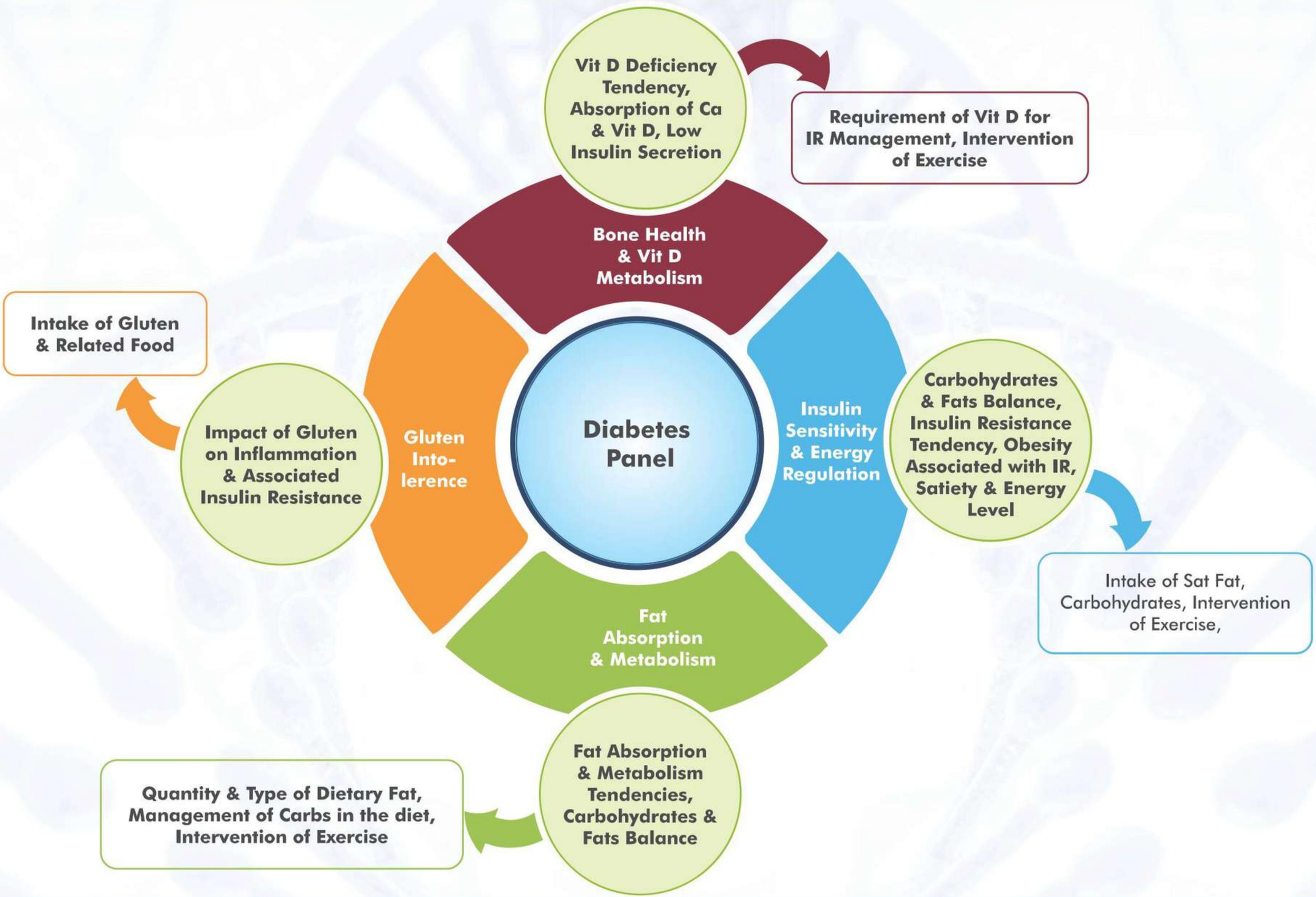
- **Morbid Obesity**
- **Type 2 Diabetes**
- **Stubborn Obesity**

For prevention and management

Gene Based Recommendations:

- Diet Recommendations
- Exercise Recommendations
- Lifestyle Advice

For Prevention & Management of Type 2 Diabetes


Vit D Deficiency Tendency, Absorption of Ca & Vit D, Low Insulin Secretion
Requirement of Vit D for IR Management, Intervention of Exercise
Bone Health & Vit D Metabolism
Intake of Gluten & Related Food
Impact of Gluten on Inflammation & Associated Insulin Resistance
Gluten Into-lerence
Diabetes Panel
Insulin Sensitivity & Energy Regulation
Carbohydrates & Fats Balance, Insulin Resistance Tendency, Obesity Associated with IR, Satiety & Energy Level
Intake of Sat Fat, Carbohydrates, Intervention of Exercise,
Fat Absorption & Metabolism
Fat Absorption & Metabolism Tendencies, Carbohydrates & Fats Balance
Quantity & Type of Dietary Fat, Management of Carbs in the diet, Intervention of Exercise

Importance of genes in Sport Performance

Understanding your inherent genetic strenghts helps boost sports performance

DIFFERENT SPORTS, DIFFERENT NEEDS

Which Sports Should I Choose ?

Power
Endurance
Mixed
Skill

Genes Govern

- Type of Exercise – Power or Endurance
- Type of Training & Warmup
- PCF Management
- Injury Management
- Inflammation Management
- Requirement of Antioxidant & Vit D

UNVEIL THE FACTORS RESPONSIBLE FOR BOOSTING SPORTS PERFORMANCE

SPORTS PANEL

Personalized Exercise Diet and Plan

- Choosing Right Sports for Kids
- Performance Optimization for Professional Sportsman
- Maximize Exercise Benefits

Suggested In

- **Sports Ambitious Kids**
- **Professional Sportsman**
- **Exercise Enthusiasts**

Gene Based Recommendations:

- Exercise Recommendations
- Diet Recommendations
- Lifestyle Advice

For Selection & Performance in Suitable Sports


Sports Panel
Power
Endurance
Power / Endurance
Muscle Fibre
Increased Tendency of Hypertension/ Heart Rate
Bone Health
Injury
Recovery
Tendency for Power Potential & Lean Body
Requirement of Protein, Power Exercise
Tendency for Endurance Potential and Oxygenation Tendency, VO2 Max, ATP Generation Ability, Electrolyte Balance, Thirst, Energy Homeostasis
Balanced Intake of Carbs & Fats, Water & Electrolyte Balance, Endurance Training
Tendency for Power or Endurance Potential, Carbohydrates & fats Metabolism
Balanced Intake of Carbs & Fats, Power or Endurance Training
Type of Muscle Fibre
Balanced Intake of Carbs & Fats, Protein, Endurance / Resistance Training
Increased Tendency of Hypertension / Heart Rate
Requirement of Protein, Balanced Intake of Carbs & Fats, Electrolyte Balance
Requirement of Vit D levels of Vit D in blood & Body
Supplement Requirement of Calcium & Vit D
Tendinopathy, Osteoarthritis, Ligament Injuries, Osteoporotic fractures, Muscular Range of Motion
Requirement of Tissue binding Nutritional Support, Calcium & Anti inflammatory Nutrient
Inflammation Tendency, CRP management, Inflammation Management, Oxidative Stress
Requirement of Anti inflammatory & Antioxidant Nutrient

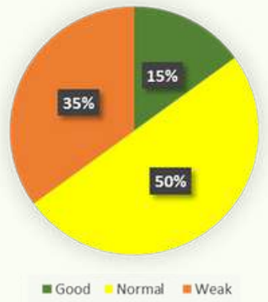
Sample summary report

GeneScope.ai

Vascular Diseases & CVD Management

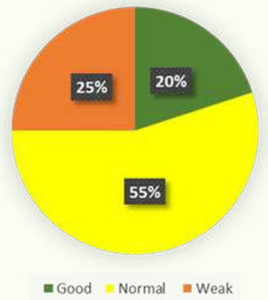
Traits	Propensity	Rating	Description
Cardiomyopathy	Elevated	8.0	As per your genotype, you have a elevated propensity of developing Cardiomyopathy.
Oxidative Stress in Heart Health	Elevated	8.0	As per your genotype, you have a elevated propensity to develop oxidative stress that affects cardiac health.
Atherosclerosis	Highly Elevated	8.4	As per your genotype, you have a highly elevated propensity of developing Atherosclerosis.
LDL Cholesterol Metabolism	Typical	6.0	As per your genotype, you have a normal propensity to develop high levels of Low Density Lipoprotein (LDL).
HDL Cholesterol Metabolism	Elevated	6.1	As per your genotype, you have a elevated propensity to develop low levels of high density lipoprotein.
Methylation	Elevated	6.6	As per your genotype, you have a elevated propensity to develop an imbalance in the methylation process affecting cardiac health.
Hypertension	Typical	5.7	As per your genotype, you have a nromal propensity of developing Hypertension.

Obesity Distribution



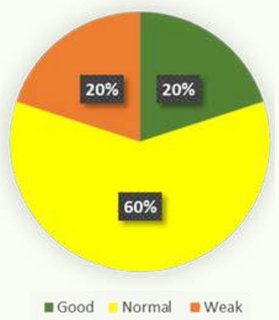
Almost 35% of the people show a genomic profile which increases susceptibility / propensity for developing Obesity.

Diabetes Distribution



Almost 25% of the people show a genomic profile which increases susceptibility / propensity for developing Diabetes.

CVD Distribution



Almost 20% of the people show a genomic profile which increases susceptibility / propensity for developing Cardiac problems.

Sample detailed report

Detailed genomic profile report gives an indepth analysis of the different parameters associated with traits and the genes involved impacting health outcomes.

Oxidative Stress In Heart Health

What is Oxidative Stress in Heart Health ?

Oxidative stress is the imbalance between the production of free radicals or reactive oxygen species (ROS) and antioxidants. ROS are generated as a by-product during normal cellular metabolism and tend to easily react with other molecules. Antioxidants help stabilize the ROS, making them less reactive. An excess of ROS is involved in many pathophysiology of cardiovascular diseases. It increases oxidation of biomolecules which causes damage to tissues and organs, endothelial dysfunction, calcium signaling abnormalities, thus affecting the cardiac health.

7.6

Oxidative Stress in Heart Health

Interpretation

As per your genotype, you have a slightly elevated risk of developing oxidative stress in cardiac health issues. Factors like number of free radicals or reactive oxygen species in the body can increase due to influences from environmental factors such as pollution, heavy metals, UV radiation, ionizing radiation, certain drugs, chemical solvents, lifestyle, aging, or underlying diseases, which may increase the risk of developing oxidative stress, thus causing cardiac health issues.

Gene Name: Near SOD3 **Your Genotype: TT**

SOD3 is found predominantly in the extracellular matrix of mammalian tissues. It scavenges the superoxide radical and reduce its toxicity by converting it to H_2O_2 which in turn is converted to oxygen and water by the action of other antioxidant enzymes.

Gene Name: SOD3 **Your Genotype: AA**

SOD3 is found predominantly in the extracellular matrix of mammalian tissues. It scavenges the superoxide radical and reduce its toxicity by converting it to H_2O_2 which in turn is converted to oxygen and water by the action of other antioxidant enzymes.It is the primary extracellular antioxidant enzyme in the lung and protects the extracellular matrix during lung injury.

Benefits of Genomic Profiling?

- Identify common dietary active ingredients altering gene expression
- Identify the circumstances under which in some individuals, diet can be a serious risk factor for a number of diseases.
- Identify gene variants likely to play a role in the onset, incidence, progression, and/or severity of chronic diseases.
- Determine the degree to which diet influences the balance between healthy and disease states based on Polygenic Propensity Score
- Make the RIGHT choices for YOUR health, based upon your genome, to achieve optimal health and well-being choosing the RIGHT food, supplements, exercise and lifestyle habits to prevent, mitigate or cure chronic disease.

GeneScope.ai

Unleash the Power of Your Genes

www.genescope.ai | info.gene@genescope.ai