



MYDNAPEDIA

# VO2 Max Test

## Summary report



## Welcome to your personal MyDNAPedia® Genotype report for Maximum Oxygen Uptake Potential test!

We are excited to present your unique and personal MyDNAPedia® genetic test report. Thank you for allowing us to peek into your genetic inheritance – the one you’ve born with. The genes and genetic markers reported in this report are carefully selected and based on latest scientific research on genetic influence on maximum oxygen uptake potential (VO2Max).

The report include your detailed test results – your genotype – as well as information on genetics and on the VO2max in general. You can also compare your genotype for each tested gene against the overall population of South Asia.

The report gives you personal understanding on your genetic characteristics to increase maximum oxygen uptake by exercising and the overall condition of your respiratory and circulatory system. The test include a panel of 21 genetic markers and is estimated to cover 50% of your potential to increase maximal oxygen uptake, which makes it the most accurate genetic method for this purpose.

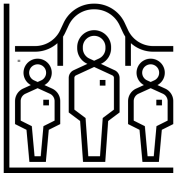
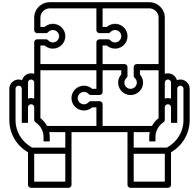
**MyDNAPedia® - Know Your DNA – Make Better Choices –  
Live Healthier!**



## Instructions on interpreting the Results

### 1. Combined Score

Genetic testing is mainly based on likelihoods and risk factors. In practice, it means that with your result you belong to a group of people who are more likely to have a certain trait, risk, condition, or feature. VO2max potential is affected by several genes and genetic markers, therefore the overall combined score is the meaningful result.

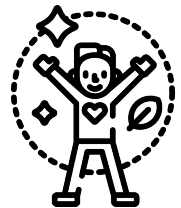


### 2. Reference groups and Population average

You can compare your genotype prevalence in general South Asian population for each tested gene and genetic marker, as well as your combined overall score against the average of the reference group.

### 3. Genetics and Physiological condition

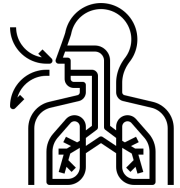
Please note, that these tests only analyse genetic factors. They do not tell about your actual physiological condition. Usually individual characteristics are affected also by different environmental factors like diet, physical exercising and general life habits.



## About Maximum Oxygen Uptake potential- VO<sub>2</sub> Max

Maximal oxygen uptake potential (VO<sub>2</sub>max) describes the ability of the respiratory and circulatory system to carry oxygen to the muscles. Muscles need and use oxygen for energy production for maximal exertion.

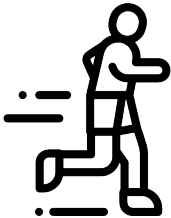
Both genetic characteristics and the right type of training affect oxygen uptake and its development. Athletes with good aerobic fitness and high VO<sub>2</sub>max can train more intensively than those with worse characteristics. In addition, a person in a good shape uses more fat than carbohydrates for energy production during exercise.



VO<sub>2</sub>max is one of the best indicators of aerobic fitness, and among high-level endurance athletes it is generally always clearly higher compared with a control group.

VO<sub>2</sub>max can be reported as absolute measure millilitres/minute (ml/min), or relative to persons weight millilitres/kilograms/minute (ml/kg/min).

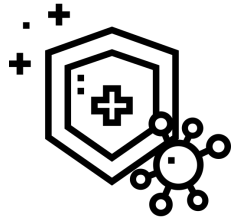
In a research referred, individuals with different VO<sub>2</sub>max scores could increase their absolute maximal oxygen uptake (represented in the form of a histogram). You can compare your own score with this data for your personal potential to increase VO<sub>2</sub>max.



## Aerobic capacity and its relation with Immunity and Pulmonary(respiratory) Health

Increasing the aerobic capacity can produce immediate effects on the immune system activity. It has been shown that aerobic exercises significantly increase the function of the immune system in short periods and sometimes this increase occurs after only one session.

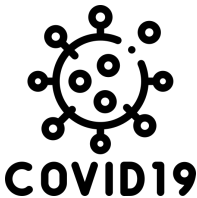
Also, increasing the aerobic capacity can produce a preventive and curable role against respiratory infections and disorders.



## VO2 Max and its relation with Covid19

COVID-19 is a self-limited infection, in which the strength of the host's immune strength plays a significant role against it.

Increasing the aerobic fitness can prevent or treat both pneumonia and acute respiratory distress syndrome (ARDS), which are the common disorders develop with COVID-19 and lead to a respiratory system failure.

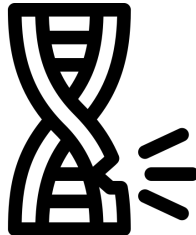


**COVID19**

## Researched Gene variants and your Genotype for Maximum Oxygen Uptake- VO2 Max test

Under this header we shall include the details of the genes which are studied in the risk testing, their location, the point mutations (variations) and the genotype found in your gene.

The same is compared with other South-Asian population in order to infer the risk factor or result.



Icon 1 made by Freepik from www.flaticon.com



## Your Result

This section basically concludes the result, after comparing your result to general population.

The genetic risk factors are calculated with applied GRS-RAC method, after which the results are proportioned to average result of the general population.

The results are presented using bar representation.



Icon 1 made by Freepress from www.flaticon.com

## What should you do next?

This section suggests the required changes to be done at your end as per the sample result to have a healthier and better lifestyle.

**Eg. High-intensity intervals/repeats. 4 x 3 min / recovery 3 min between intervals/repeats. Do proper warm up/downs before and after exercise.**

The sections following this would be giving a detail about the lab test procedure and the research papers supporting our findings and results.