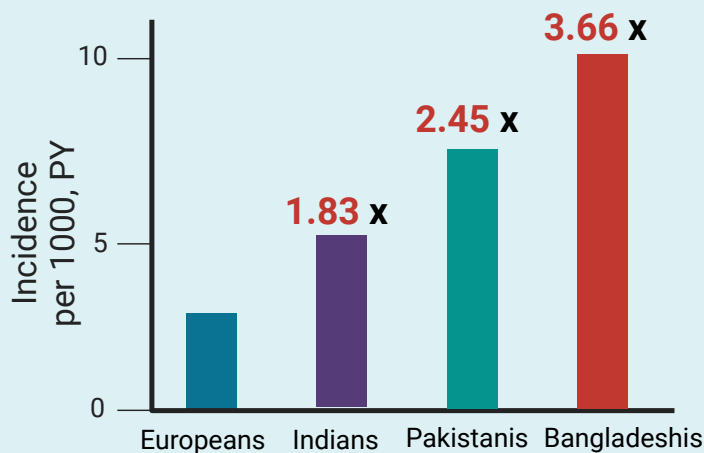


Fast Facts about South Asian Heart Health

We've all seen the impact of heart disease and diabetes on our communities. Now, let's look at some numbers.

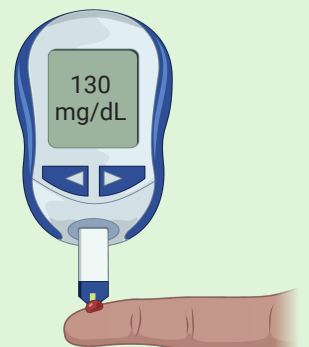
1 Established cardiovascular risk calculators estimate that South Asians are only 1.1 times more likely than Europeans to develop heart disease.

The truth? Our risk is **2-4 times greater**¹.



2 Insulin resistance and diabetes are primary risk factors for cardiovascular disease.

Diabetes accounts for 8% of heart disease risk in Europeans, but **23% of risk in South Asians**¹.

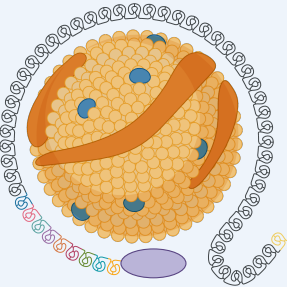


- 3 Plavix, a commonly prescribed antiplatelet drug, relies on an enzyme in the liver (CYP2C19) in order to be metabolized and made usable in your body.



57% of South Asians have a genetic variant that compromises the function of CYP2C19², reducing Plavix's efficacy.

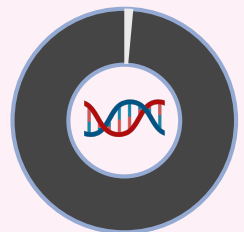
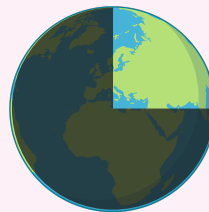
- 4 Lipoprotein(a) is a genetically controlled molecule in your blood that *causes* cardiovascular disease.



The proportion of heart attacks attributable to high Lp(a) is **higher in South Asians than in all other ethnicities**³.

- 5 South Asians make up approximately 25% of the world population.

Despite this, South Asians constitute only **1.3% of genetic study participants**.



6

Along with genetic risk, lifestyle is a critically important determinant of cardiovascular health.



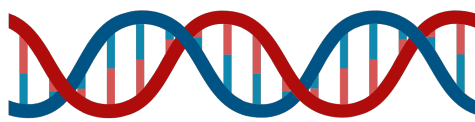
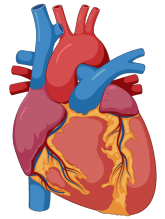
South Asian diets are often high in **saturated fats and simple carbohydrates**. Making heart-healthy dietary substitutions is an actionable and effective way to reduce your risk⁴.

References

1. Quantifying and Understanding the Higher Risk of Atherosclerotic Cardiovascular Disease Among South Asian Individuals: Results From the UK Biobank Prospective Cohort Study
a. shorturl.at/ghB35
2. *CYP2C19* Genotype Prevalence and Association With Recurrent Myocardial Infarction in British–South Asians Treated With Clopidogrel
a. shorturl.at/kmtW9
3. Lipoprotein(a) Levels and the Risk of Myocardial Infarction Among 7 Ethnic Groups
a. shorturl.at/qOPT2
4. Energy Metabolism in Relation to Diet and Physical Activity: A South Asian Perspective
a. shorturl.at/gitGQ

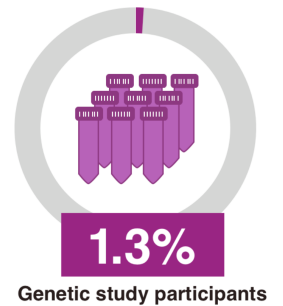
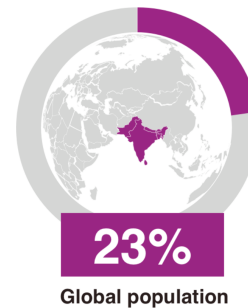


Compared to Europeans, South Asians are **2-4 times** more likely to have **heart disease**.



To understand why, we need to look closely at our DNA.

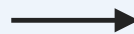
South Asians are severely underrepresented in genetic studies, but OurHealth hopes to change that— *with your help*.



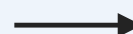
What does participation look like?



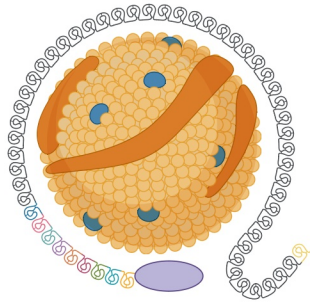
Scan the QR code to register, provide informed consent, and complete surveys online.



You may receive a saliva collection kit in the mail to send back. Your data will be encrypted and stored safely.



We'll stay in touch about scientific findings, educational events, and additional opportunities to participate.



This is **lipoprotein(a)**, a molecule that carries fats throughout your body and **causes cardiovascular disease** (1).



Some research shows that lipoprotein(a) is **elevated in South Asians** (2-5), while some shows **it is not** (6). Either way, there is evidence that the molecule has a **disproportionately large impact on heart health in South Asians** (7).



How can we lower it?

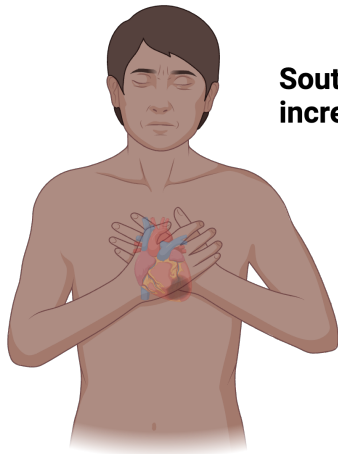
70-90% of variation in lipoprotein(a) levels is due to **genetics**. Diet and lifestyle have very little impact (8).



To create better treatments for South Asians, we need to better understand our DNA. Join **OurHeart** today!

Want to read more? Check out the studies below!

1. Thanassoulis G et al. Genetic associations with valvular calcification and aortic stenosis. *N Engl J Med*. 2013.
2. Anand SS et al. Differences in risk factors, atherosclerosis, and cardiovascular disease between ethnic groups in Canada: the Study of Health Assessment and Risk in Ethnic groups (SHARE). *Lancet*. 2000.
3. Anand SS et al. Elevated lipoprotein(a) levels in South Asians in North America. *Metabolism*. 1998.
4. Makshood M et al. Lipoprotein (a) and aortic valve calcium in South Asians compared to other race/ethnic groups. *Atherosclerosis*. 2020.
5. Isser HS et al. Lipoprotein (a) and lipid levels in young patients with myocardial infarction and their first-degree relatives. *Indian Heart J*. 2001.
6. Tavidou A et al. Predictors of lipoprotein(a) levels in a European and South Asian population in the Newcastle Heart Project. *Eur J Clin Invest*. 2003.
7. Paré G et al. Lipoprotein(a) Levels and the Risk of Myocardial Infarction Among 7 Ethnic Groups. *Circulation*. 2019.
8. Reyes-Soffer G et al. Lipoprotein(a): A Genetically Determined, Causal, and Prevalent Risk Factor for Atherosclerotic Cardiovascular Disease: A Scientific Statement From the American Heart Association. *Arterioscler Thromb Vasc Biol*. 2022.

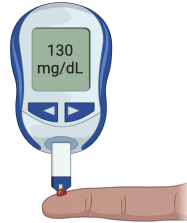


South Asians are at significantly increased risk for heart disease.

South Asian-Americans are more likely to **end up in the hospital (1)** and **die (2)** due to cardiovascular disease

Why?

Research suggests that diabetes and insulin resistance play a large role.



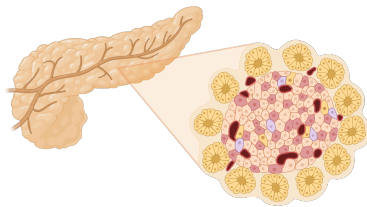
South Asians have at least **2-times more Type 2 Diabetes** than Non-Hispanic Whites (3)

Obesity is considered the strongest predictive factor for Type 2 Diabetes and related issues.



But despite having **lower rates of obesity**, South Asians have **higher rates of metabolic syndrome**, which increases risk for heart disease and diabetes (4)

Are there genetic factors that predispose South Asians to these conditions?



Researchers have suggested that South Asians may have **genetically lowered function of insulin-producing cells (5)**

Is this true?

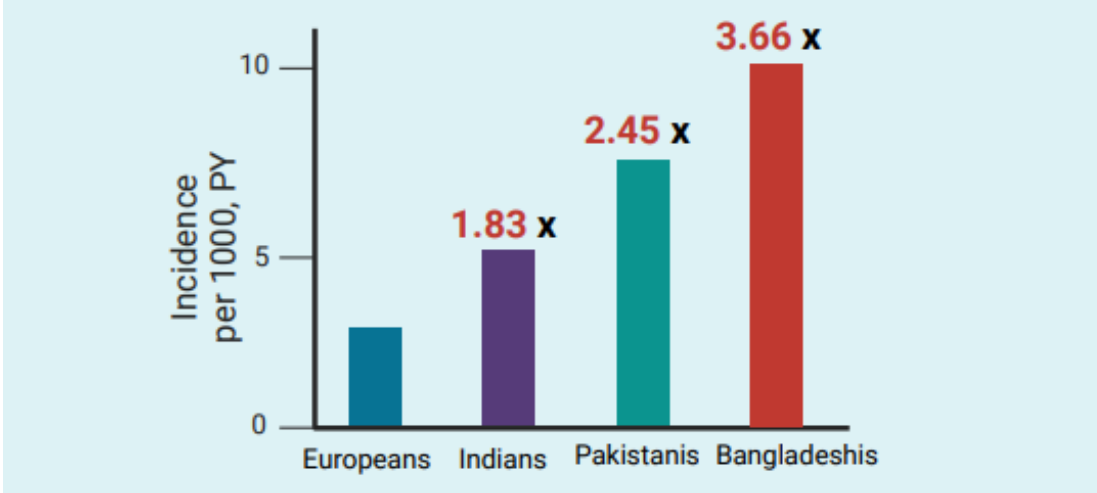
 **will help us find out. Sign up today!**

Want to read more? Check out the studies below!

1. Hajra A et al. Risk of coronary disease in the South Asian American population. *J Am Coll Cardiol*. 2013.
2. Jose PO et al. Cardiovascular disease mortality in Asian Americans. *J Am Coll Cardiol*. 2014.
3. Gujral UP et al. Type 2 diabetes in South Asians: similarities and differences with white Caucasian and other populations. *Ann N Y Acad Sci*. 2013.
4. Palaniappan LP et al. Asian Americans have greater prevalence of metabolic syndrome despite lower body mass index. *Int J Obes (Lond)*. 2011.
5. Gujral UP et al. The relative associations of β -cell function and insulin sensitivity with glycemic status and incident glycemic progression in migrant Asian Indians in the United States: the MASALA study. *J Diabetes Complications*. 2014.

DIL SE: SOUTH ASIAN CARDIOVASCULAR HEALTH

We're 2-4 times more at risk



Cardiovascular Risk

Established cardiovascular disease (CVD) risk calculators estimate that South Asians are at a 1.1-fold higher risk of developing heart disease compared to Europeans

Diabetes Risk

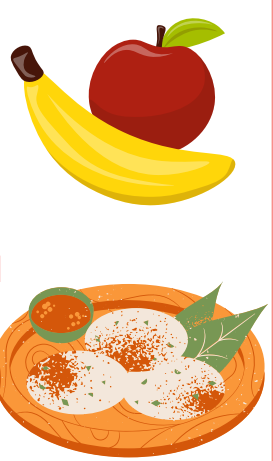
Insulin resistance and diabetes are primary risk factors for cardiovascular disease. Diabetes accounts for 8% of heart disease risk in Europeans, but 23% of risk in South Asians¹.

Prevention and Management Tools

Healthy Diet Tips



- Reduce intake of simple, refined carbohydrates
- Limit consumption of high-calorie and fried foods
- Opt for unsaturated fats
- Opt for smaller portions of fatty or carbohydrate-rich foods
- Incorporate a variety of fresh vegetables and fruits
- Decrease consumption of processed foods
- Monitor the salt levels in your diet

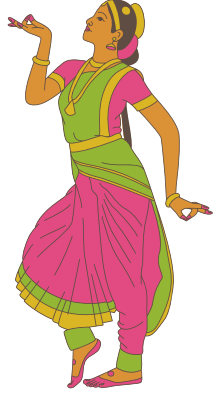


Education Videos



These videos are available in English and Hindi:

- <http://cch.northwestern.edu/edtools/wmv/southasian>
- [Punjabi fitness videos by Dilpreet Bhattal](#)



CVD Related Apps

- Hear Habit:
- HeartWatch:
- CardioVisual:

Physical Activity Apps

- SilverSneakers Go
- J&J 7 Minute Official
- Pilates Anytime

Diabetes Related Apps

- MySugr
- Glucose Buddy
- Diabetes M
- BG Monitor Diabetes
- Contour Diabetes App

