

**South Asians living in the United States (SAUS) have a higher prevalence of atherosclerotic cardiovascular disease (ASCVD) that begins earlier and is more aggressive than age-matched people of other ethnicities.**

The pathophysiology of this is not fully understood but may relate to insulin resistance, genetic and dietary factors, lack of physical exercise, visceral adiposity and other, yet undiscovered biologic mechanisms. The National Lipid Association has convened content matter experts to provide strategies for early screening and education of the community, and offer practical prevention strategies and culturally-tailored dietary advice to lower the rates of ASCVD in this cohort.

**Given the urgent need to curb the high prevalence of ASCVD in SAUS, the following call-to-action strategies are recommended:**



## AWARENESS

- Increase awareness and educate the medical community about the higher prevalence of ASCVD events in SAUS and encourage the widespread utilization of risk assessment tools, such as the QRISK-3 calculator, which is calibrated and validated in South Asians, as well as coronary artery calcium scoring when appropriate.



## CLINICAL MANAGEMENT

- Set goals for your patients as part of the shared decision-making process and in initiating preventive therapy, including lifestyle modification and statins.
- Deploy new digital communication technologies to empower lifestyle modifications, e.g., track eating habits and exercise as well as pertinent biomarkers.

Multiple factors account for the elevated ASCVD risk observed in SAUS as compared to other ethnic groups living in the US.

### ASCVD IN SAUS

Metabolic Syndrome	Atherogenic Dyslipidemia	<b>Classic Risk Factors:</b> Diabetes - Hypertension Physical Inactivity Overweight - Smoking Poor Diet	Visceral Adiposity
Lp(a)	Psychosocial Factors		Inflammatory Cytokines
Genetics/Family History	Other Unknown Factors		NAFLD
			Insulin Resistance



RISK FACTOR	DESIRABLE LEVEL
Waist Circumference	< 80 cm (31") for women; < 90 cm (35") for men
Body Mass Index	< 23 kg/m <sup>2</sup> for women and men
Total Cholesterol	< 160 mg/dL (high-risk)
LDL-C	< 70 mg/dL (high-risk); < 50 (very-high-risk); < 30 (extreme-risk)
Non-HDL-C	< 100 mg/dL (high-risk); < 80 (very-high-risk); < 60 (extreme-risk)

RISK FACTOR	DESIRABLE LEVEL
Triglycerides	< 150 mg/dL
HDL-C	> 50 mg/dL for women; > 40 mg/dL for men
HbA1c	< 6.0 %
Lp(a)	< 100 nmol/L

Abbreviations: Lp(a), lipoprotein(a); NAFLD, non-alcoholic fatty liver disease; HbA1c, glycated hemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; Non-HDL-C, non-high-density lipoprotein cholesterol



## PATIENT & COMMUNITY ENGAGEMENT

- Develop culturally competent materials for patients.
- Identify culturally appropriate interventions by conducting focus groups to identify the SAUS community's needs, develop training programs for patients and clinicians and deploy peer educators, and implement culturally-tailored community initiatives for weight management programs in community centers.
- Perform faith-based interventions including health fairs and free screening programs, and including biomarker testing in temples, churches, mosques, and community centers where South Asians congregate.



## POLICY & REPRESENTATION

- Strive for policy change through advocacy by developing partnerships with the cross-specialty professional societies to promulgate specific nutrition recommendations for SAUS.
- Encourage more participation of SAUS in clinical trials for new, as well as approved, therapies that have been shown to reduce ASCVD risk in largely White populations.