

## Cardiovascular Issues in Primary Care

### Cardiovascular Health in South Asian communities: Insights for primary care providers

Dr. Kevin Bainey MD FRCPC

#### Key Messages:

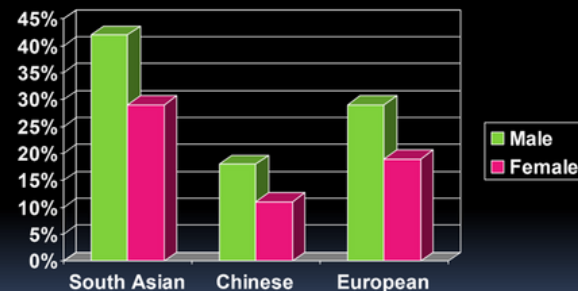
- South Asians (SA) are at high-risk for developing premature Coronary Artery Disease (CAD) and its adverse consequences, including myocardial infarction and death
- Metabolic syndrome and diabetes are more prevalent among SAs
- Type-2 diabetes is an especially acute problem among SAs, likely due to a combination of genetic predisposition, metabolic dysfunction, and adverse interaction with western high calorie/fat and low vegetable diets
- SAs are more prone to develop accelerated atherosclerosis and its adverse consequences due to several enhanced non-conventional risk factors
- SAs appear to have a supercharged cardiovascular risk continuum that underscores the importance of prevention with an aggressive risk reduction algorithm.
- Many people, especially in South Africa, believe herbal and botanical supplements are safe. However, research shows they can pose risks similar to other active drugs and may interact with prescription or over-the-counter medications. This chart highlights some common herb-drug interactions for your reference: [Herb-Drug Interaction Chart](#)

TABLE 2. Criteria for Clinical Diagnosis of Metabolic Syndrome (Table view)

Measure (any 3 of 5 constitute diagnosis of metabolic syndrome)	Categorical Cutpoints
Elevated waist circumference <sup>†</sup>	≥102 cm (≥40 inches) in men ≥88 cm (≥35 inches) in women
Elevated triglycerides	≥150 mg/dL (1.7 mmol/L) or On drug treatment for elevated triglycerides <sup>‡</sup>
Reduced HDL-C	<40 mg/dL (1.03 mmol/L) in men <50 mg/dL (1.3 mmol/L) in women or On drug treatment for reduced HDL-C <sup>‡</sup>
Elevated blood pressure	≥130 mm Hg systolic blood pressure or ≥85 mm Hg diastolic blood pressure or On antihypertensive drug treatment in a patient with a history of hypertension
Elevated fasting glucose	≥100 mg/dL or On drug treatment for elevated glucose
*To measure waist circumference, locate top of right iliac crest. Place a measuring tape in a horizontal plane around abdomen at level of iliac crest. Before reading tape measure, ensure that tape is snug but does not compress the skin and is parallel to floor. Measurement is made at the end of a normal expiration.	
†Some US adults of non-Asian origin (eg, white, black, Hispanic) with marginally increased waist circumference (eg, 94–101 cm [37–39 inches] in men and 80–87 cm [31–34 inches] in women) may have strong genetic contribution to insulin resistance and should benefit from changes in lifestyle habits, similar to men with categorical increases in waist circumference. Lower waist circumference cutpoint (eg, ≥90 cm [35 inches] in men and ≥80 cm [31 inches] in women) appears to be appropriate for Asian Americans.	
‡Fibrates and nicotinic acid are the most commonly used drugs for elevated TG and reduced HDL-C. Patients taking one of these drugs are presumed to have high TG and low HDL.	

Grundt SM, Cleeman JI, Daniels SR, et al. Diagnosis and management of the Metabolic syndrome. An American Heart Association/National Heart, Lung and Blood Institute Scientific Statement. Circulation 2005;112:2735-2752. DOI: [10.1161/CIRCULATIONAHA.105.169404](https://doi.org/10.1161/CIRCULATIONAHA.105.169404)

Proportional mortality from IHD in South Asian, Chinese and European Canadians



Sheth T, Nair C, Nargundkar M, et al. Cardiovascular and cancer Mortality among Canadians of European, South Asian and Chinese

#### A Prevention Strategy for physicians caring for SA patients

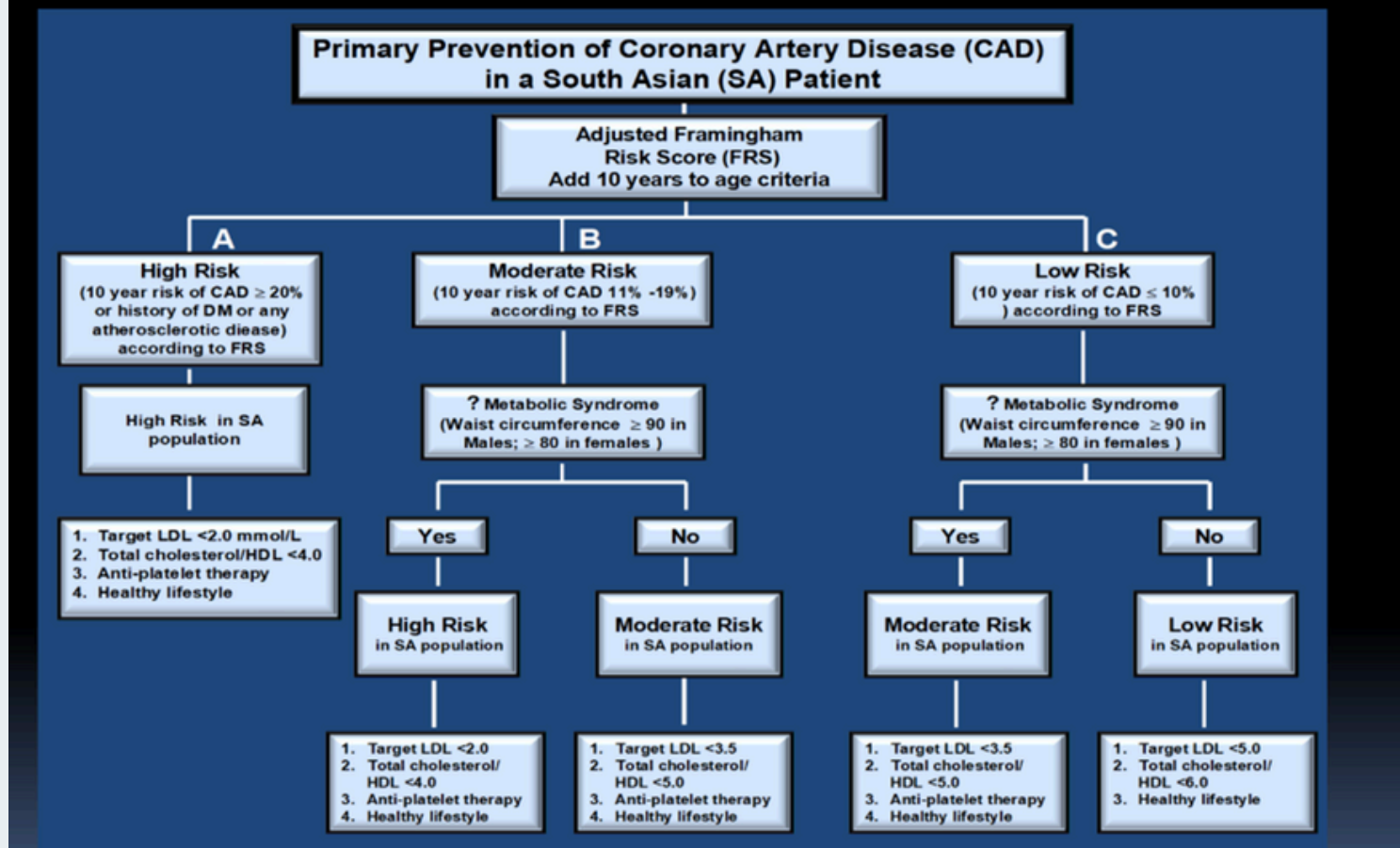
Strategy
Education
Dietary and lifestyle modification
Metabolic syndrome screen
Cardiovascular risk factor reduction
Close follow-up by primary care physician

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# Modified CV risk algorithm



Bailey K.R., Jugdutt B.I. Increased burden of coronary artery disease in South-Asians living in North America. Need for an aggressive management algorithm. Atherosclerosis. 2009;204:1-10. doi: 10.1016/j.atherosclerosis.2008.09.023. <https://doi.org/10.1016/j.atherosclerosis.2008.09.023>

## Resources

- **Diabetes Canada - Just The Basics: South Asian 7-Day South Asian Healthy Meal Plan**
- **Heart and Stroke Foundation: Healthy Eating for South Asians**
- **Herb- Drug interactions Chart**



Consider using [MyL3Plan](#), a free online tool developed by the Office of Lifelong Learning (L3) that can be used to meet and support the 3 activities/action plans required by the PPIP-CPSA and earn up to 36 Mainpro+ certified credits. by completing the following cycles:

- Practice-driven quality improvement using objective data (CQI)
- Personal Development (PD)
- Standards of Practice Quality Improvement (SOP)

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