

Heart Disease Update 2006

Heart Disease, an Equal Opportunity Epidemic in Indian Men and Women! Escalating Childhood Obesity, Cause for Concern!

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'Go Red'

AAPI takes on the Challenge!

AAPI's Consensus recommendations to curb the Epidemic and prevent Childhood Obesity.

Heart Disease is rising on an Epidemic scale in Indian men and women, vegetarians and non vegetarians, whether they are living in India or Abroad. Indian women have similar rates of heart attacks as Indian men although smoking is rare among Indian women! Childhood Obesity is rising at an alarming rate! Over thirty percent of children are obese. This trend is only going to get worse unless we address these problems seriously and offer and provide effective life style solutions and early medical attention.

Scope of the Problem of heart disease in Indians:

- The NIH program 'Healthy People 2010' designated the Asian Indian Immigrant Population in the United States as a "high risk group for heart disease."
- The World Health Report of 2002 projects Cardio Vascular Disease (**CVD=heart disease and stroke**) to be the largest cause of death and disability in India by 2020.
- The World Health Organization estimates that about 60% of the World's heart disease patients will be Indian by year 2010.
- The World Health Report of 2004 states that every year, more women than men die of CVD and that CVD leads to more deaths in women than cancer, HIV/AIDS and Malaria combined. CVD is the largest cause of death in women and the risk for CVD rises with age.

- More women than men died of cardiovascular disease (CVD- heart disease and stroke) in the United States since 1984. Women represent 53.1 percent of all deaths from CVD.
- Women are under investigated, under diagnosed, under treated for heart disease and they are also under represented in clinical research studies.

Indian women do worse compared to other ethnic groups!

Compared to Whites, Blacks and Latinos, Indian women suffered the highest all cause mortality and highest cardiovascular mortality in the U.S.

FACT: Women transmit heart disease related genes to their offspring more efficiently than men. ‘Like mother like son!’ Used to be ‘like father like son’.

What causes heart disease and heart attack: simply put **three things!**

- **Genes:** Every one inherits genes that regulate blood pressure, blood sugar and blood lipids (fats). You can pick the jeans you wear but you can not select your genes when you are conceived! Nor you can change your genetic code (chip of the old block!) at this time. However you can influence them favorably or unfavorably by either eating healthy foods or junk foods and by exercising or by being a couch potato! You can trigger these genes ‘on and off’ just like you switch a light ‘on or off’.
- **What you eat:** The genetic auto regulation is tripped when you abuse your body with consuming excess sugars (Carbs!), fats and salt leading to diabetes, heart disease, high blood pressure and stroke. And there are good sugars and bad sugars and good fats and bad fats! Salt that comes with the natural sources of food like fruits and vegetables should be sufficient! There is no need to add salt! See Nutrition below.
- **Your exercise habits:** exercising your body is by far the most effective way of regulating and controlling your blood sugar, blood fats and blood pressure which when elevated cause diabetes, heart disease and stroke. Exercise is physiological, has all benefits but no side effects. See Exercise below.

What can you do prevent heart disease and heart attacks?

Know your Risk Factor

Risk factors more common in Indians!

Sedentary life style.

Meager intake of fresh fruits and vegetables.

High consumption of simple sugars, dairy products, fried foods and desserts.

Central Obesity (Increased waist line)

High Insulin levels and high blood sugar levels. (Insulin Resistance)

Low HDL (good cholesterol)

High Triglycerides (bad fat)

High Blood pressure

Metabolic Syndrome: when three or more of the above conditions are present!

Diabetes= heart disease

Borderline high LDL (bad cholesterol)

High Lp(a), promotes plaque and blood clots in the arteries.

Results from an AAPI sponsored Indo-US study show a very high incidence of metabolic syndrome (35%) and type 2 diabetes (18%) in Indian men and women. Half of the people diagnosed to have diabetes in this study did not even know that they were walking around with untreated diabetes with increasing risk of heart attack, stroke, kidney failure, blindness and loss of limb! In fact, metabolic syndrome and diabetes are likely to account for most of the heart disease we see in our Indian Population.

FACT: Indian women have much higher prevalence of Diabetes and therefore diabetes related complications!

How can you prevent heart disease!

Pathobiological studies in the U.S confirmed that fatty streaks (the seedling of cardiovascular disease) appear as early as in the second trimester of pregnancy and progresses through child hood, adolescence, youth and adulthood. A strong correlation exists between the maternal cholesterol levels and rate of progression of plaque in the offspring... **Starts in the womb and ends in the tomb!**

Prevention should, therefore start very early and continue through out the life (primary or early vs. secondary or late prevention!). Promote healthy eating and daily exercise habits in childhood to **prevent childhood obesity** that ultimately leads to diabetes, high blood pressure and heart disease.

Exercise:

For **at least** 30 minutes everyday; children need to exercise 60 to 90 minutes a day!

Examples: brisk walking for two miles every day, swimming for 30 minutes, cycling for 45 minutes.

The benefits of exercise can not be overstated or overemphasized! Exercise lowers body weight, blood sugar, blood pressure, bad cholesterol (LDL), and triglycerides. Improves Insulin sensitivity, increases good cholesterol (HDL), Releases lipoprotein lipase, an enzyme that mobilizes fat from skeletal muscle. Vigorous daily exercise delays and may prevent metabolic syndrome and type 2 diabetes. Does not cost any thing!

Nutrition: Read food labels!

Bake and Boil!

Minimize frying
Stop deep frying
Stop re-heating the edible oils for cooking

Eat at least five servings (cups) each of fresh fruits and vegetables a day. Whole grains, legumes, lentils, variety of nuts(almonds, walnuts, pecans), low fat milk products, soy milk, and tofu provide your body with soluble and insoluble fiber, vitamins, antioxidants, isoflavins, good fats, vegetable protein and low glycemic index sugars and help lower the homocysteine levels, prevent heart disease, diabetes and certain forms of cancer.

Balance your Omega3 and Omega 6 oils (essential fatty acids) intake.

Olive oil, Canola oil, Nuts and Avocado are rich in Monounsaturated(good) fats.
Flax seed, oily fish like wild salmon, trout are rich in Omega 3 (heart protection).
Sun flower oil, safflower oil and soy bean oil are rich in healthy poly unsaturated fatty acids but when hydrogenated become Trans fats.

Avoid refined and simple sugars, white flour, polished rice, potatoes with high glycemic index. These raise your blood sugars rapidly and release excessive Insulin which in turn drops the blood sugar quickly causing false hunger and further excess consumption of calories in a vicious cycle leading to excess levels of bad fats, increase in abdominal girth, weight gain and elevated blood pressure. **(See metabolic syndrome).**

Avoid Trans-Fats crispy and crunchy, fried and fast foods/desserts; cookies, cakes, pastries!. Artificially hydrogenated oils remain solid at room temperatures but lose their heart protective unsaturated bonds, decrease good cholesterol and increase bad cholesterol and triglycerides. Body can not get rid of these artificial fats easily.

Lower Salt intake (pickles, chips, pretzels!).

Pracice Yoga, Meditation, Relaxation.

Know your numbers!

Maintain your:

Waist Line: below 35 inches for men and 31 inches for women.

Blood Pressure: below 130/ 80 mm; below 120/70 mm if you have diabetes.

Hemoglobin A1c: below 6 (this is an index of control of your blood sugar over last three months).

HDL (good cholesterol): greater than 45 mg/dl in men and greater than 55 mg/dl in women. HDL greater than 60 mg/dl is considered a negative risk factor for heart disease!

Non-HDL (bad) cholesterol: below 130 mg/dl, below 100 mg/dl if you have diabetes
(Total cholesterol- HDL cholesterol = Non HDL-C)

Triglycerides: less than 90 mg/dl

LDL (bad) Cholesterol: less than 100 mg/dl, less than 70 mg/dl if you have diabetes or heart disease.

Quit smoking.

Medications under your physician's supervision.

Estrogen hormone therapy is not indicated for prevention of heart disease and may even increase the risk of blood clots and strokes.



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Visit us at www.heartsmart.info for many related articles and to read about heart disease related research projects in Asian Indians.

E-mail your questions to pkotha@heartsmart.info

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