Cultural Competency
At PAMF

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CULTURAL COMPETENCY:
BECOMING A BETTER DOCTOR
Patients’ opinions on culturally competent care:

Cultural competency seen as:

• a marker of concern and care on the physician’s part for the patient

• Important! Ethnic minorities know they have unique medical and health concerns that are traditionally unaddressed by Western health providers.

Results from a recent focus group at PAMF.
Examples of cultural competence:

• Being familiar with cultural foods
• Aware of lifestyle choices (e.g. family and community dynamics) that affect health and behavior

Not necessary to be of same race/ethnicity as patient to deliver quality care
Cultural Competency and its effects

Patient Actions
- ↑ adherence to recommendations
- ↑ Health treatment preferences

Health care systems
- Address cultural & linguistic barriers
- ↑ preventive care

Clinical encounters
- Build rapport and trust

Cultural Competency at PAMF
PRANA: Prevention & Awareness for South Asians
South Asia

- India
- Nepal
- Pakistan
- Sri Lanka
- Bhutan
- Assam
- Bangladesh

Map of South Asia showing countries and regions.
Percent of Persons Who Are Asian Indian, by County

Data Classes

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<tr>
<th>Percent</th>
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Features

- Major Road
- Street
- Stream/Waterbody
- Stream/Waterbody

Items ingray text are not visible at this zoom level.

www.census.gov

Approx. 65 miles across.
Young Indian men have 3x CHD risk than total population

The Y-Y Paradox: Limitations of BMI as Measure of Adiposity Across Populations

Identical BMIs

BMI: 22.3 22.3

Big difference in body fat

Body fat: 9.1% 21.2%

Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies

WHO expert consultation*

A WHO expert consultation addressed the debate about interpretation of recommended body-mass index (BMI) cut-off points for determining overweight and obesity in Asian populations, and considered whether population-specific cut-off points for BMI are necessary. They reviewed scientific evidence that suggests that Asian populations have different associations between BMI, percentage of body fat, and health risks than do European populations. The consultation concluded that the proportion of Asian people with a high risk of type 2 diabetes and cardiovascular disease is substantial at BMIs lower than the existing WHO cut-off point for overweight (≥25 kg/m²). However, available data do not necessarily indicate a clear BMI cut-off point for all Asians for overweight or obesity. The cut-off point for observed risk varies from 22 kg/m² to 25 kg/m² in different Asian populations; for high risk it varies from 26 kg/m² to 31 kg/m².

No attempt was made, therefore, to redefine cut-off points for each population separately. The consultation also agreed that the WHO BMI cut-off points should be retained as international classifications. The consultation identified further potential public health action points (23·0, 27·5, 32·5, and 37·5 kg/m²) along the continuum of BMI, and proposed methods by which countries could make decisions about the definitions of increased risk for their population.
Metabolic Syndrome (MS):
Tg > 150 mg/dL, low HDL, glucose > 100 mg/dL, obesity, BP > 130/85

Asian Indians are more susceptible to metabolic syndrome at lower BMI.

Women:  
NHW MS risk @ BMI \(25\) ≈ Asian Indian MS risk @ BMI \(21\)

Men:  
NHW MS risk @ BMI \(25\) ≈ Asian Indian MS risk @ BMI \(23\)
Age-adjusted prevalence rates of BMI (kg/m²) categories

% population in at-risk BMI categories

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<tr>
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<th>Women</th>
<th>Men</th>
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<td>AI</td>
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<td>BMI:[25,30)</td>
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<td>BMI&gt;=30</td>
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48% for Women NHW, 64% for Women AI, 78% for Men NHW, 88% for Men AI

Age-adjusted prevalence of low HDL with 95% CI

Women

- NHW: 15%
- AI: 22%

77% higher prevalence

Men

- NHW: 18%
- AI: 26%

78% higher prevalence

Low HDL = < 50 mg/dL for women, < 40 mg/dL for men

Age-adjusted prevalence of high triglycerides with 95% CI

Women
- 61% higher prevalence
- NHW
- AI

Men
- 47% higher prevalence
- NHW
- AI

High triglycerides >= 150 mg/dL

### Risk Factors in the General Population v. South Asian Population

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<th>General Population (Framingham)</th>
<th>South Asian Population</th>
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<tr>
<td>Elevated Serum Total Cholesterol</td>
<td>Normal Serum Total Cholesterol</td>
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<tr>
<td>Smoking</td>
<td>Bidi, chewing tobacco</td>
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<tr>
<td>High LDL</td>
<td>Low HDL, high triglycerides</td>
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<tr>
<td>Obesity</td>
<td>Not by standard BMI criteria</td>
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<tr>
<td>Lp(a)</td>
<td>Higher</td>
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</table>
South Asians have higher AMI rates at younger ages than other ethnicities

- **Cause:** South Asians have higher risk factor levels at younger ages


  **Add 10 years to age for South Asian Adjusted Framingham Risk Score.**

HDL cholesterol was significantly ($P < 0.01$) higher in the lowest tertile of carbohydrate intake than in the highest tertile. High carbohydrate intake was associated with higher fasting triacylglycerols ($P = 0.04$).

Lipid changes and diet after 24 months

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<td>Total cholesterol/</td>
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<td>HDL ratio</td>
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**Lipid changes and diet after 12 months**

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<td><strong>Triglycerides, mg/dL</strong></td>
<td>-29.3</td>
<td>-4.2</td>
<td>-14.6</td>
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Lp(a) in South Asians

- Compared to Non-Hispanic Whites, South Asians were found to exhibit higher mean levels of Lp(a) in an analysis of three cross sectional studies
  
  Anand, S et al, Elevated Lipoprotein(a) levels in South Asians in North America. Metabolism, 1998;47;182-4

- South Asians with coronary heart disease exhibit higher mean Lp(a) levels than those without CHD


Slide Courtesy Dipanjee Banerjee, MD
Measuring Lp(a) in South Asians

• Consider when South Asian Adjusted Framingham Risk Score places them at intermediate 10 year risk (6-20%) for CHD
• As a risk stratification tool for CHD in South Asians with Type 2 diabetes
• In patients with a significant family history of premature coronary artery disease (males < 55, females < 65)
CAC and Framingham Score

Greenland et al., *JAMA* 2004; 291:210-15

Slide courtesy Stephen P. Fortmann, MD
Why do we need PRANA?

- South Asians are a high risk group
- 120,000+ South Asians in this area
- Different diagnosis and treatment strategies are recommended
- Provides patients a forum to get more detailed information, culturally specific information regarding their illness
- Allows focus on a specific goal (i.e. CHD prevention)
Objectives

• Unique cultural challenges in caring for South Asians

• Medically Managing Lipids in South Asians

• How to prescribe nutrition and lifestyle changes

• Using Epic to optimize nutrition

• PRANA consult service and website
Genetics Plays A Role
Evolution Of Workplace Obesity

Paleolithic Man:
Millions of yrs ago

Neolithic Man:
10,000 yrs ago

DNA

Computer Age:
Present day
Compliance

• Medication compliance is a problem

• Many South Asians automatically stop medication after their labs normalize

• Ayurvedic and naturopathic influences make prescription medications less appealing
Ayurvedic Medicines

• 20% of traditional Indian Ayurvedic medicines available on the Internet contain levels of lead, mercury, or arsenic that exceed regulatory limits

• Includes US and Indian manufactured brands

Communication

• Literacy and fluency are not equivalent.

• Be very clear with your recommendations

• Use handouts, refer to online resources and print an AVS on every visit.
Managing Lipids in South Asians:

(It’s more than just the LDL!)
Educate Patients to Improve Compliance

• Tell patients to ignore their TC level (usually < 200)

• Educate patients about TC/HDL goal of $\leq 4$

• Tell them to pay attention to TGs and HDL in addition to LDL

• Clearly outline risk/benefit ratio of medications
  (e.g. < 1% risk for liver or muscle damage on statins)
High Triglycerides and Low HDL

• Early sign of insulin resistance: “pre-prediabetes”

• If lifestyle changes fail to, have low threshold for medication management
Lipid Goals

- Weight loss is the best medicine: 10 percent of body weight or 10 lbs wt loss to start

- Aim for TC/HDL <4.0

- Prioritize getting LDL to goal first (<100 for most)

- TGs>200: Non-HDL<130 based on LDL goal<100
Non-HDL Cholesterol (NHC)

- NHC = TC - HDL
- Single index of all atherogenic lipoproteins
- Reliable measure in non-fasting state (unlike LDL)
- Goal NHC = LDL goal + 30
Lipid Management Scenarios

• High TGs, High LDL, low HDL: statin & fish oil first. Next add fibrate if TGs really high or niacin if HDL really low. Consider statin/niacin combo.

• High TGs only: fish oil and/or fibrates

• Low HDL only: consider getting LDL<70 to improve TC/HDL ratio and adding niacin if necessary. Statin/niacin combo may be needed.

• High TGs and low HDL: fibrate first if TGs are really high. Niacin first if HDL really low.
Raising HDL Levels with Niacin
Low HDL and CHD Risk

- Risk for myocardial infarction increases by about 25 percent for every 5 mg/dL decrease in HDL below median levels*

*Framingham data
Niacin and Insulin Resistance

- **ADMIT and ADVENT trials:** minimal glycemic effect of Niacin at doses up to 2g

- **Coronary Drug Project results:**
  - Reduced CHD events and mortality at all glucose levels, including diabetes and metabolic syndrome
  - Reductions comparable to modern statin trials
  - Benefit slightly greater in those with higher glucose levels
  - Average dose of niacin was 2,000mg daily
  - 15 yr f/u: Individuals randomized to niacin for 6yrs had lower mortality despite being off niacin for 9 years
Other Niacin Side Effects

• Reducing flushing:
  • Must take dose regularly. Avoid interrupted dosing
  • Take with low fat snack at bedtime
  • Avoid etoh, spicy foods and hot beverages after dose
  • ASA 325 mg or Ibuprofen 200 mg 30 min prior to Niacin (can try stopping ASA after 2-3 mo’s)

• Gout: baseline Uric Acid, 6-8 wks post and then annually

• Liver: baseline transaminase, q3mosx1yr, then q 6 mos

• GI (nausea, upset stomach, etc.): take with evening meal

*Niacin patient information handout available
Statin/Niacin Combination Therapy

• Significant reduction in CHD events and angiographic regression*

• Advicor (Lovastatin/Niaspan) and Simcor (Simvastatin/Niaspan)

• Be sure to use equivalent dosing to Niaspan

*NEJM 2001,345:1583-1592, Simvastatin and niacin...in prevention of CAD
**Statin/niacin combination therapy has lowest NNT**

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<th>Patient Type</th>
<th>Baseline Mean LDL-C, mg/dL</th>
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OTC Niacin Products

• Unregulated since Niacin is a vitamin

• Immediate-release (*Niacor*): cheapest and most effective, but higher rates of flushing and GI side effects

• Long-acting products:
  • *No-flush niacin*: contains no free nicotinic acid. Will not improve lipids.
  • *Slo-Niacin*: hepatotoxicity is a concern.

• If using OTC product, choose immediate-release and pick USP certified brand.

• 2 grams (2000 mg) is the effective dose
Lifestyle Changes and Nutritional Supplements
Omega-3 Principles

• Omega-3s in fish oil (DHA,EPA) have more data than plant based ALA

• Recommend brand with USP seal

• Most commercial brands have 1 g of fish oil/capsule, but only 300 mg of DHA/EPA

• Studies show 6 g of DHA/EPA needed to lower TGs and 1 g of DHA/EPA for cardioprotective effects
Video: Lowering Triglycerides (English)

Click on the play button below to watch this video - Flash player required.

Read The Label

Serving Size - 2 Capsules

Supplement Facts

- Serving Size: 2 Softgels (2 g)
- Servings Per Container:
  - Amount/Serving
  - Calories: 20
  - Calories from Fat: 20
  - Total Fat: 2g
  - Saturated Fat: 0.5g
  - Trans Fat: 0g
  - Polyunsaturated Fat: 1g
  - Monounsaturated Fat: 0.5g
  - Cholesterol: 10mg
  - Vitamin A: 200 IU
  - Omega-3: 800mg
  - EPA (eicosapentaenoic acid): 190mg
  - DHA (docosahexaenoic acid): 120mg
  - Other Omega-3: 200mg
  - Omega-6: 50mg
  - Omega-9 (oleic acid): 185mg

- 600mg total Omega-3s in 2 capsules
Benefits of Fish Oil (Omega-3s) for Heart Health

South Asians frequently have elevated triglycerides (a form of cholesterol) and a high rate of death from heart attacks. Fortunately, omega-3 fatty acids found in fish and used in fish oil supplements can help reduce triglycerides and decrease the risk of death from a heart attack. More recent evidence also suggests that omega-3s also lower blood pressure. Additional reported benefits, although unproven, are a reduction in arthritis pain and improvement in memory.

- What are Omega-3s?
- Which fish are rich in Omega-3s?
- How much fish should I eat?
- What about fish oil capsules?
- What dose of fish oil should I take?
- Are there side effects with fish oil capsules?
- Are there Omega 3 fatty acids for vegetarians?
Phytosterols

• Proven to lower LDL by 6-15%

• 2-3 g per day is usual effective dose

• Benecol smart chews: 0.85 g/chew

• Fortified foods are available, but may be less convenient and contribute excess calories
Push Fiber

• Aim for at least 30 g fiber daily

• 1 g soluble fiber reduces LDL by 1.1

• Promotes weight loss by increasing satiety

• Reduces insulin resistance
Take A Brief Fiber History

• What do you eat for breakfast?

• What type of bread products do you eat?

• What is your primary grain?

• How many servings of fruits and vegetables each day?
Breakfast Cereals

• Should have at least 8 g per serving

• South Asian Favorites
  • Rice Krispies: 0 g (per serving)
  • Corn Flakes: 1 g
  • Honey Bunches of Oats: 2 g
  • Cheerios: 3 g
  • Quaker Instant Oats: 4 g

• Recommend the following instead
  • Kashi Go Lean: 10 g
  • Fiber One Honey Clusters: 13 g
  • Steel Cut Oats

Cereal Add Ons: nuts, raisins, fruit, fiber or flaxseed powder
Breads

• 100 percent whole wheat should be in ingredients. Orowheat double fiber bread has 6 grams per slice

• Use 100 percent whole wheat flour to make rotis (Indian breads)

• Mix flaxseed or wheat powder into baked goods
Video: Introduction to Prana (English)

Click on the play button below to watch this video - Flash player required.

Carb Change #1
Refined Flour to Whole Wheat Flour
Grains

• Limit white rice intake

• Can switch to brown rice (brown jasmine and basmati rice are available)

• Suggest alternative grains: couscous, bulgur wheat, spelt, quinoa, etc.
Video: Grains (English)

Click on the play button below to watch this video - Flash player required.
Exercise

• Walking: Intensity (stroller or power walker)

• Pedometers: follow up on compliance

• Heart rate monitors: can be motivating

• Emphasize resistance in addition to aerobic exercise
Why Hit The Weights?

• Strength training increases Glut 4 expression.
Weight Loss Follow-Up

- Assess weight at every visit: Use \textit{.lastwt[3 smartphrase}
  
  10/21/2008  192 lb (87.091 kg)
  06/03/2008  176 lb (79.833 kg)
  02/26/2008  191 lb (86.637 kg)

- Aim for 10 lbs or 10\% of body wt loss

- Follow up weight check in 3-4 months

- Refer to nutrition if necessary
Epic Resources:
ZZtest, Egret
MRN#-16645350
Medication List (copy to your preference list)

FISH OIL 1000 MG PO CAPS
- You need a dose of 1,000 mg of Omega-3 (also known as DHA and EPA) daily. Read the ingredients on the back of the bottle and be sure you are getting 1,000 mg of DHA and/or EPA total. • Disp: 100, R-3 • starting 10/1/2008 • Auto

FISH OIL 1000 MG PO CAPS
- You need a dose of 3,000 mg of Omega-3 (also known as DHA and EPA) daily. Read the ingredients on the back of the bottle and be sure you are getting 3,000 mg of DHA and/or EPA total. • Disp: 100, R-3 • starting 10/1/2008 • Auto

NIASPAN 500 MG PO TAB
- 1 tablet at bedtime for 1 month with low-fat snack. If flushing occurs, take 325 mg aspirin 30 minutes before your dose. Confirm with your doctor and avoid hot showers, spicy foods, alcohol after taking. Increase dose by 1 tablet each month until you are taking 2,000 mg at bedtime. • Disp: 30, R-0 • starting 10/1/2008 • Auto

FLAXSEED MISC
- 2 tbsp of ground flaxseed twice daily such as Bob’s Red Mill brand (2g fiber in each tbsp). Can add to cereal, oatmeal or salads. Can substitute ground flaxseed for shortening or cooking oil at 3 to 1 ratio for baked goods. • Disp: 1, R-0 • starting 10/1/2008 • Auto

PLANT STEROLS AND STANOLS 450 MG PO TABS
- Aim for 2-3 grams of plant sterols daily. Consider products such as Take Control or Benecdol margarine, Minute Maid Heartwise Orange Juice, and/or Benecdol smart chews (can be bought online). • Disp: 30, R-5 • starting 10/1/2008 • Auto

PSYLLIUM HUSK POWD
- Take one serving of metamucil or citrucel three times daily with 8 oz glass of water. Take two hours before or two hours after your other medications. If diarrhea occurs, then start with one serving daily and gradually increase to three times daily as tolerated. • Disp: 1, R-0 • starting 10/1/2008 • Auto
Be Specific With Display Names
Pre-fill in Comments for Consults

Order defaults: Not using defaults

nutrition, int-hyperlipidemia/south asian

Referral: Location/POS: From: SINHA MD, RONESH

Expiration Date: Provider Search

Referral for individual counseling for hyperlipidemia and additional CAD risk factors. Patient is South Asian and requires counseling regarding South Asian diet. Please refer him to nutritionist with expertise in this area (Geetha Desai, Prerna Upal, Valerie Spier, etc.)

If risk factors present, CAP pts will be authorized to attend group class and one individual nutrition counseling.

Additional Order Details

Diagnoses

Auth Prov: SINHA MD, RONESH [3630]  Pharmacy: <none selected>  1 order selected
Use Specific Display Name for Consults

### Medications

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### Procedures

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- **Split View**
- **Medications**
- **Procedures**
- **Order Panels**

Medications: No items found. Procedures: 6 loaded. No more to load.
South Asian Consult:
Type “PRANA” or “South Asian” into Order Field

Reason for consult:
- Cholesterol abnormalities
- Insulin resistance (prediabetes / diabetes)
- Weight management
- Blood pressure management

Order Inst: Please be sure a fasting lipid panel and blood sugar have been ordered within the last 6 months. If there is a positive family history of heart disease, order a

Sched Inst: A member of the PRANA team will call you within one week to schedule your appointment. Arrive 15 minutes before your scheduled appointment time. If you

Additional Order Details
Smartphrases and Weblinks
Links for South Asians with high TGs:

The links below will give you South Asian friendly information on reducing triglycerides and improving your cholesterol:

*General Information on Improving Cholesterol (Please read this):
www.pamf.org/southasian/healthy/screening/cholesterol.html

*Short video on triglycerides:
www.pamf.org/southasian/video/tri.html

*Short video on understanding South Asian cholesterol results:
www.pamf.org/southasian/video/cholesterol.html

Refer to www.pamf.org/prana for more information on South Asian health.

Links for South Asians with low HDL:

The links below will give you South Asian friendly information on raising your HDL and improving your cholesterol:

*General Information on Improving Cholesterol (Please read this):
www.pamf.org/southasian/healthy/screening/cholesterol.html

*Short video on raising HDL:
www.pamf.org/southasian/video/hdl.html

*Short video on understanding South Asian cholesterol results:
www.pamf.org/southasian/video/cholesterol.html
PRANA Resources

PRANA stands for life force in Sanskrit.

The Palo Alto Medical Foundation's (PAMF) South Asian Wellness Task Force, a committee of physicians, dietitians and community members, created PRANA (Prevention and Awareness for South Asians) to provide health education and resources to the South Asian community.

If you would like to know more about the PRANA program please call us at 650-330-4523.

Audio / Visual Presentations (in English)
- Why South Asians Are At Risk
- Prediabetes
- Diabetes
- Lowering LDL Levels
- Lowering Triglycerides
- Raising HDL Levels
- Understanding Cholesterol
- Nutrition: Soy Protein
- Nutrition: Grains

Audio / Visual Presentations (in Hindi)
- Why South Asians Are At Risk
- Lowering LDL Levels
- Lowering Triglycerides
- Raising HDL Levels
- Understanding Cholesterol

Health Tools
- South Asian BMI Calculator
- Calculate your target heart rate
- Calculate cost of smoking
- Calculate your child's healthy weight
- Health Risk Assessment
- More interactive tools

Newsletter
Subscribe to our monthly South Asian Wellness newsletter.
- Add
- Remove
- Send As HTML

South Asian Health
Risk Factors
- Who's at Risk?
- Determine Your Risk
- Major Risk Factors
- Health Concerns
- Common Misconceptions
- Being Proactive

Health Topics
- Type 2 Diabetes
- Cholesterol
- Nutrition & Children
- Skin Disorders
- more topics...

Healthy Choices

Online Survey
We invite you to add to our Web site by sharing your ideas and...
Approach to South Asian (SA) Patient with Risk Factors

• **Step One:** provide SA specific health education materials (handouts, PRANA website link, etc.)

• **Step Two:** if risk persists, refer for SA consult and/or nutrition referral

• **Step Three:** ensure regular follow-up and labs
Consult Components

- Comprehensive Lipid Screening, referral for additional testing as necessary
- Assessment of diet and medications
- Assessment of acculturation and traditional beliefs
- Referral to nutrition/health education as necessary
- Telephone Visit follow up weekly to behavior change
What is the process?

- If you would like your patients to participate – send an internal referral - South Asian Consult Service
- Self referred patients can send an email to PRANA@PAMF.ORG or call 650-330-4523
- Baseline and follow up data are collected to assess the effectiveness of the consult