

# DIABETES

## among Minnesota South Asians

### An overview for Medical Professionals



AshaUSA (Asha means hope) is a non-profit organization focused on promoting health and harmony in the South Asian community.

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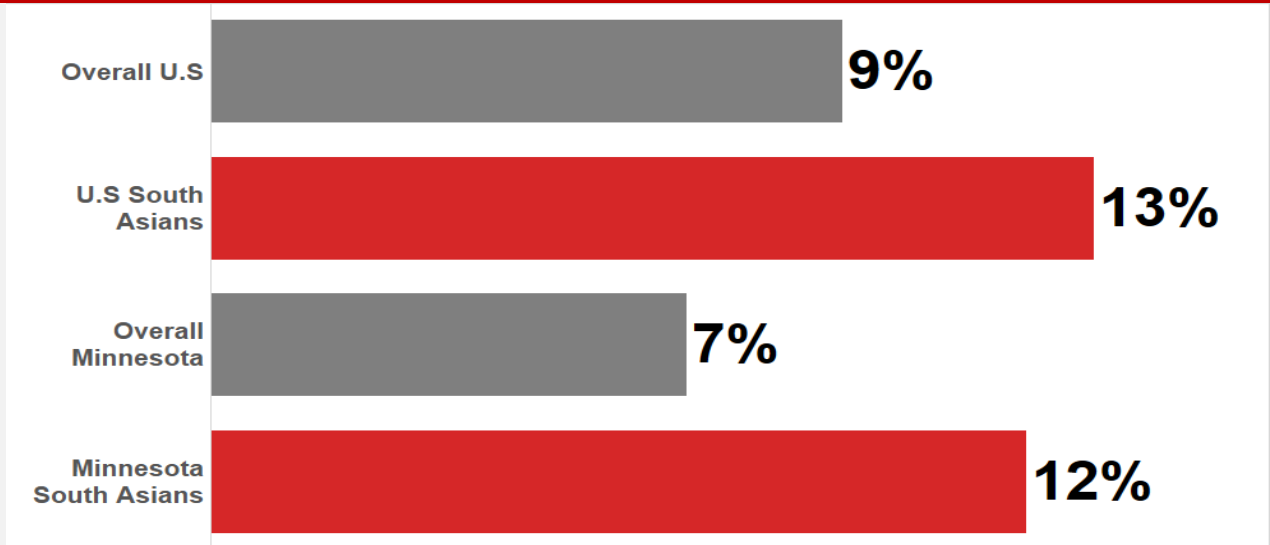
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# DIABETES among MN SOUTH ASIANS

**FACT: South Asians living in the U.S have higher prevalence of Type 2 Diabetes compared to the general U.S population**



Source: [www.diabetes.org/diabetes](http://www.diabetes.org/diabetes)

Project SAHAT (Puram, Kwon, Amarapurkar, Deka, 2013 )

MN data (BRFSS data for 2011)

## Potential Reasons:

South Asians are at higher risk for Type 2 diabetes, up to four times higher than other ethnic groups probably due to a combination of genetics and environment. Recent studies have shown that South Asian diets high in **refined ("bad") carbohydrates, abdominal obesity or "thick in the middle"** (which is measured by one's waist circumference) **and a sedentary lifestyle** are associated with diabetes risk factors.

# South Asians (SA)

## WHERE ARE THEY FROM?

### SA's in the USA

3.2 Million

Source: 2010 US Census



### SA's in MN

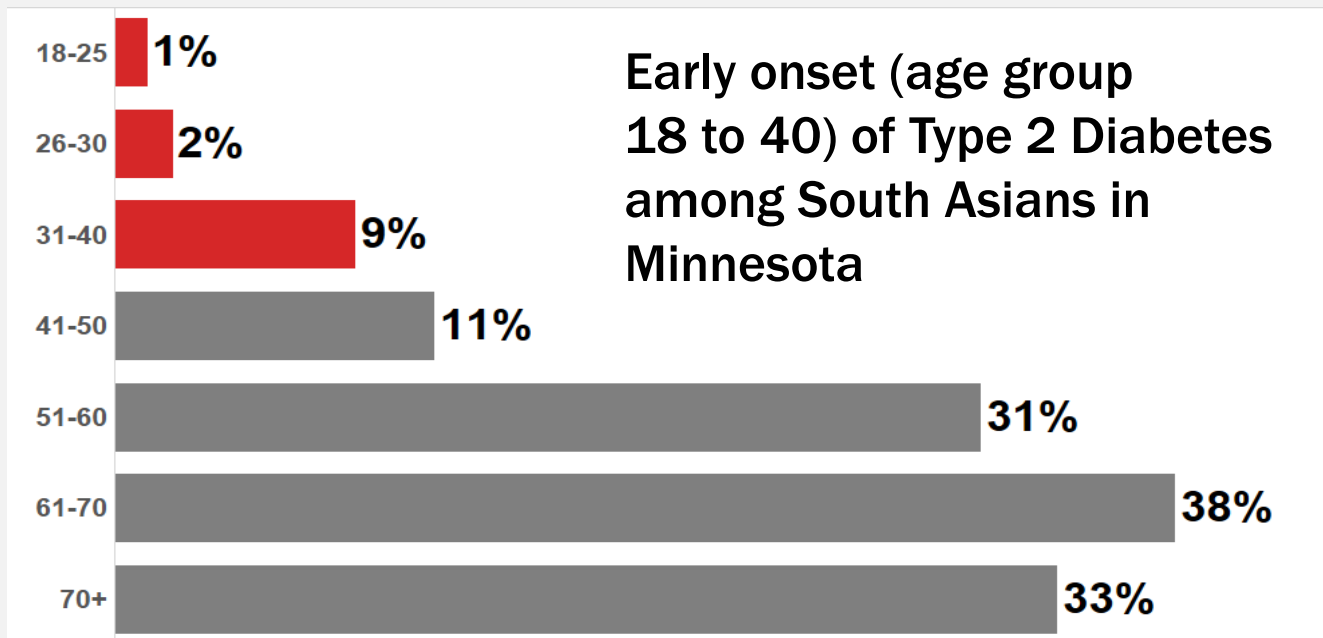
- 44,000 in MN
- 2<sup>nd</sup> largest Asian group in MN (Hmong at 66,000)
- 75% 1st Generation
- 89% from India
- 11% from Pakistan, Nepal, Bangladesh, Bhutan, & Sri Lanka

**Ethnic roots:**  
Indian subcontinent

**Major Religions:**  
Hinduism (majority),  
Islam,  
Buddhism,  
Christians,  
Sikhism, and  
Jainism

# Minnesota South Asians Health

## Diabetes Percent by Age Group



Project SAHAT (Puram, Kwon, Amrapurkar, Deka, 2013)

## Percent Tested for HBA1C

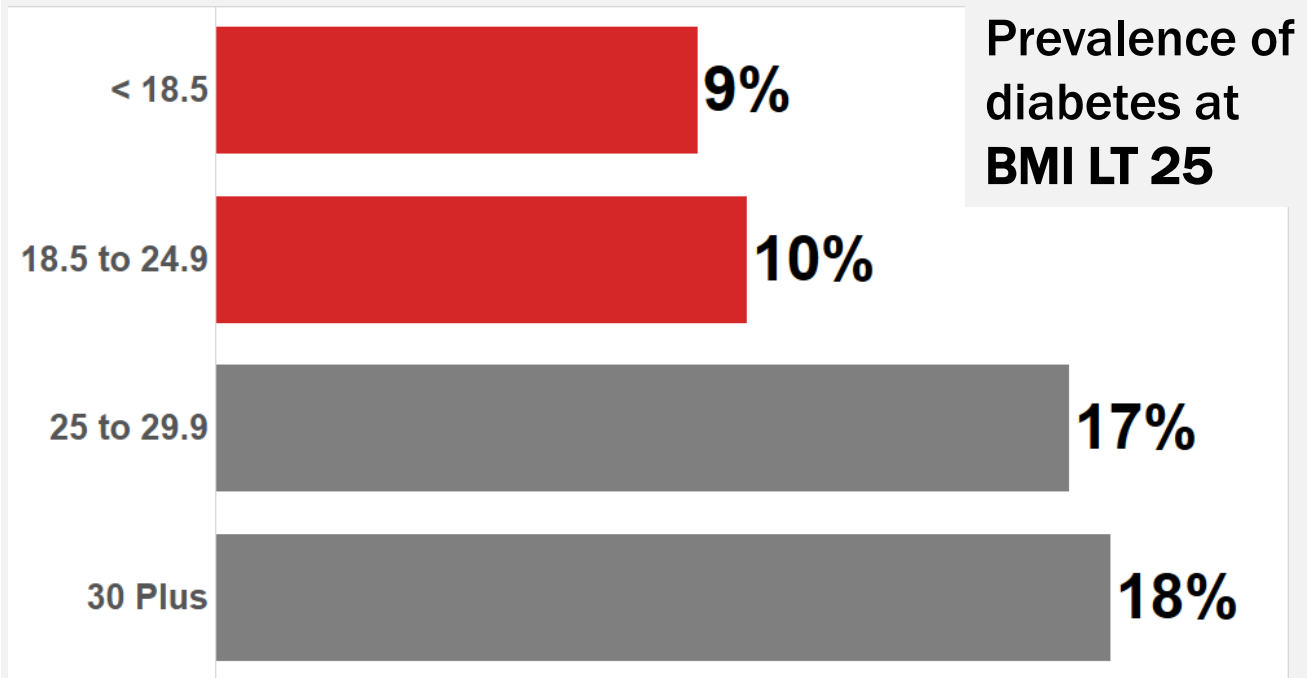


Compared to general Minnesotans a lower percentage of south Asians get their HBA1C tested for diabetes screening.

Project SAHAT (Puram, Kwon, Amrapurkar, Deka, 2013)

# Minnesota South Asians Health

## Diabetes Percent by BMI



Project SAHAT (Puram, Kwon, Amarpurkar, Deka, 2013)

## Understanding of South Asian Culture

18% of the survey participants indicated that **diet recommendations** are not culturally specific

19% of the survey participants said that **medical professionals** do not understand South Asian culture

# South Asian Diet

- *The South Asian diet includes rice, wheat, legumes in the form of dried beans, peas and lentils (daal or pulses), yogurt, clarified butter (ghee), and distinctive seasonings used to make masalas or curries.*
- *Non-vegetarian diet also includes chicken, goat, lamb, and fish*

## Typical Breakfast Items

Base ingredients are processed wheat flour and rice flour.

Some of these items are deep fried and cooked with oil.



- *Many South Asians have shifted to cereal for convenience, but they tend to eat these traditional breakfast items during holidays and weekends*
- *During weekdays, many may skip breakfast due to lack of time*

# South Asian Diet

## Lunch / Dinner Items

Main dish is either white rice or roti (naan).



- *Daal and vegetable dishes are used as side dishes*
- *Potato is commonly used in many vegetable dishes*
- *Lot of oil and spices are used in vegetable and meat dishes*
- *Sometimes vegetables are also deep fried*

## Evening Snack & After Dinner Desserts



- *Most of the snacks are deep fried.*
- *South Asian desserts are made with milk, lots of sugar, butter/oil/ghee and different types of flour.*



# South Asian Diet

## Special Meals



- *The festival meal includes many varieties of vegetables, daal (cooked pulses), deep fried snacks, and special desserts.*
- *Meals during social get-togethers are as elaborate as festival meals. South Asian families socialize and meet other families almost every weekend.*

## Expert's opinion on Immigrant Diet preferences

It has been found that Asian Indian immigrants place particularly high value on traditional diets and may feel more **comfortable modifying their traditional diets** while trying to manage certain chronic conditions, rather than adopting a new, more western diet altogether (Kalra, Srinivasan, Ivey, Greenlund, 2004).

# South Asian Culture

## South Asian Habits and Preferences

### Use of Fats and Oils

- *A common dietary custom is **adding extra fat or oil to food**, including addition of ghee (clarified butter) to rice, vegetables, naans and parathas (bread). Nuts are frequently added to foods as garnishes or as an ingredient.*

### Ingredient Measurement

- ***Measurement of ingredients** is not a common practice when cooking most foods. Many South Asians use their experience with cooking to determine how much of each ingredient to use.*

### Portion Size

- ***Overeating** is an issue at buffet style dinner parties or gatherings, which are common and frequent.*
- *Measuring portions is discouraged as it is viewed as **interfering with the enjoyment of food**.*

### Fasting

- ***Muslims and Hindus** both consider fasting as an important value.*
- *Fasting in Islam (with Muslims) takes place primarily during the month of Ramadan. Fasting is defined as refraining from food and drink, including water, from sunrise to sunset, or dawn to dusk.*
- *Fasting days for the Hindu community is varied. The food consumption during fasting also varied - some eat fruits or special meals, some drink only liquids, etc.*

# Recommendations

1. Order A1C or blood glucose tests for South Asian patients with a **BMI greater than 23** (not 25 as done for westerners).
2. Encourage South Asian clients to replace white rice and processed flour with whole grains such as **brown rice, millet, quinoa etc.** SA's are big consumers of coffee and tea and add sugar to these drinks which is another area where they can cut back. Baking practices should be encouraged for snack items and introduce the use of grilling versus deep frying vegetables, meat and specially fish
3. Develop **reference guides** that show carbohydrate content using examples from South Asian diet. Provide pamphlets that explain as to how to **read food labels** and highlight the areas they need to pay attention.
4. Provide guidance on nutritional factors based on the **SA patient's diet**. Many South Asians have limited knowledge of basic nutritional factors.
5. Health professionals should talk about **portion control** during holidays, festivities, and social gatherings.
6. Diabetes educators and dietitians should be aware of the procedure or process of fasting, as well as the difference between how Muslims and Hindus fast. They can benefit from education on how blood glucose can go low when fasting, advise on medication reduction, and education on volume and timing of food after breaking the fast.

# References

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