

Curry, Dal, and Ghee: Meeting the Needs of Indian Patients

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Learning Objectives

- Identify the traditional meal patterns, food practices, and holiday foods of Indian and South Asian individuals.
- Apply culturally competent counseling strategies when working with patients and clients of Indian and South Asian descent.
- Develop a medical nutrition therapy plan that is respectful of ayurvedic and traditional, natural treatments.

South Asians in U.S.A. (2018)

- Total South Asians: approx. 6.2 million (1.9%)
- Indian Americans, approx. 4.4 million (1.2%)
- Pakistanis, approx. 700,000
- Bangladeshis, Nepalese, Sri Lankans, approx. 420,000

(USA population: 330 mil)



Indians In America

- Migrated from India, or Africa, Fiji, Guyana...
- Religion: Hindu, Sikh, Muslim, Christian, and Jain
- Called Indian American
- Majority of the Indians live in large cities, primarily east and west coast. And in the mid-west large cities like Chicago, St. Louis, most large universities
- Physical Characteristics: short stature, medium built, medium weight, potbelly
- Brown complexion, brown eyes, black hair

Indians In America

- Land of opportunity: Brain drain, cream of the crop
- Occupation: Doctors, Professors, Engineers, Business owners (motel/restaurant owners), and the latest migration IT professionals...
- Approx. 75% have BA degree or higher
- Higher income level, although there are many who have moderate to low level of income



Cultural Characteristics

- Family Life is Primary
- Children = Pride and Joy
- Patriarchal Society
- Mom is the center of family; meals are sacred
- Take Care of Parents and Grandparents
- Social Network
- Dual Loyalties, Blending of Cultures



Health Concerns

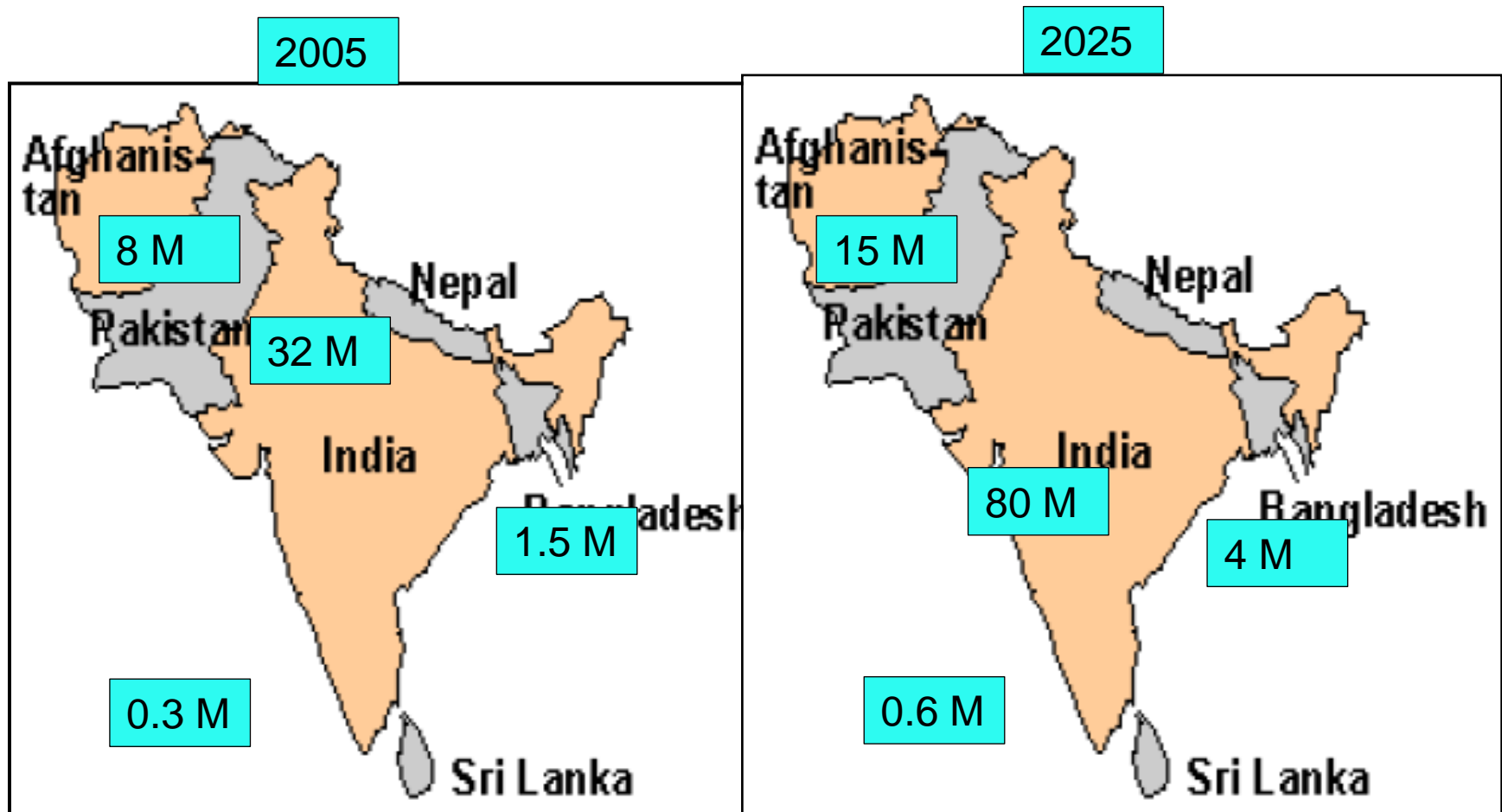
- Diabetes, Pre-Diabetes
- Coronary Artery Disease: Heart Disease, Hypertension, Stroke
- Metabolic Syndrome (central obesity, hyperinsulinemia, and hypertriglyceridemia)



Diabetes, Pre-Diabetes

- 3 - 5 times more likely to develop type 2 diabetes
- 10 years earlier
- Hyperinsulinemia
- Insulin resistant (approx. 66% of the population)
- Central Obesity
- Higher rate of Metabolic Syndrome (50% vs 25%)
- Children also have higher levels of insulin and insulin resistance

Diabetes Epidemic in South Asians



From: M. Raghuvanshi, MD, University of NJ, 2010

Coronary Artery Disease

- 3-5 times increased prevalence of coronary heart disease, hypertension, and stroke
- Heart disease manifests earlier than other ethnic groups
- Indian women have similar rates of heart disease as men
- CAD is the leading cause of death among South Asians in the U.S. (NIH “Healthy People 2010” designated Indian immigrants as a high risk group for Heart Disease)

Causes

Diabetes

- Heredity
- Age
- Weight
- Inactivity

Other Risk Factors

- Indian
- Heart Disease
- High LDL & TG
- High Blood Pressure
- Gestational Diabetes

Heart Disease

- High Blood Pressure
- Smoking
- High LDL, Low HDL Cholesterol, High TG
- Weight
- Inactivity

Other Risk Factors

- Indian
- Diabetes
- Age
- Excessive Alcohol Intake

Health Beliefs

- Allopathic (modern medicine)
- Homeopathy
- Ayurveda
- Unani
- Panchkarma
- Yoga
- Meditation



Healing the Body and Soul

Popularized in India by recent yogis, politicians and businessmen into a multimillion dollar company

- Baba Ramdev
- Prime Minister – Narendra Modi



Assumption or Misconception

- Indian diet is healthy or very rich?
- Vegetarian Indian diet is cardio-protective
- Vegetarians eat plenty of fruits and vegetables
- My weight is OK
- Diabetes is caused by sugar intake



REALITIES OF TODAY

- Sedentary jobs
- Multitasking
- Eating out
- Abandon meals
- Snacking
- Increased demand your time
- Increased stress



What Are They Willing To Do?

Are YOU ready to make the changes?

Blondie



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Typical Indian Thali Meal

- Meat (if non-veg)
- Dal (beans)
- Vegetable 1
- Vegetable 2
- Rice
- Roti (flatbread)
- Yogurt plain or buttermilk
- Salad/Crudite
- Chutney and/or Pickle
- Papad or papadam
- Dessert
- Water



Dietary Concerns

- High in carbohydrate, simple sugars, sweets
- High in fat
- High is sodium
- Low in protein
- Too many processed foods



Dietary Guidelines For Indians

- Eat 3 meals per day, plus 1-2 snacks if needed
- Do not skip meals – can cause large BS swings
- Balance meals – carb, protein and fat
- 3-5 servings of vegetables per day
- 2-3 fruits per day
- Reduce Total Fat and Saturated Fat
- Limit Sodium Intake



Dietary Guidelines Cont...

- Maintain Healthy Weight
- Reduce Alcohol Intake
- Smoking Cessation
- Exercise Regularly
- Stress Management



Prevent and/or Manage

- Healthy eating
- Increased activity
- Stress management
- Take medications, if necessary
- Blood glucose monitoring (diabetes)
- Know your numbers (heart disease)

Wellness—The Good Life

- Most people are OK about how they eat
- Curative power of food
- Strong belief in healthy eating
- Traditional and International meals
- Taste trumps nutrition





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Portions, Portions, Portions



Portions, Portions, Portions



Portions, Portions, Portions



Where's the Protein?

Protein: 1 ounce = 7 – 8 g protein

Dal (soupy) = 1½ cup (30 g carbs)

**Beans: Kidney, Chickpeas = ½ cup
(20 g carbs)**

Paneer = 1 oz (8 g fat)

Tofu = 1.5 oz (4 g fat)

**Milk/ home-made yogurt (skim or
1%) = 1 cup (12 g carbs)**

**Nuts: Almonds, Peanut = 3
tbsp/1 oz. (14 g fat)**

Meat/Chicken/Fish = 1 oz (3-5 g fat)

Egg = 1 each

Cheese = 1 oz (8 g fat)



Effect Of Alcohol

- Adds extra calories
7 calories per gram
- Impacts blood glucose
- Impacts triglycerides



EXERCISE – DPP

- Ideal: 30 minutes five days per week or total of 150 minutes per week.
- 10,000 steps per day-use pedometer
- Any activity is better than none. Fit 10 minutes of physical activity in to your routine 3 different times of the day.



BENEFITS OF EXERCISE

- Increases energy
- Decreases stress, anxiety
- Increases sense of well being
- Increases uptake of insulin
- Lowers blood pressure
- Lowers TG
- Increases HDL
- Decreases body fat
- Increases muscle tone



Personal Responsibility

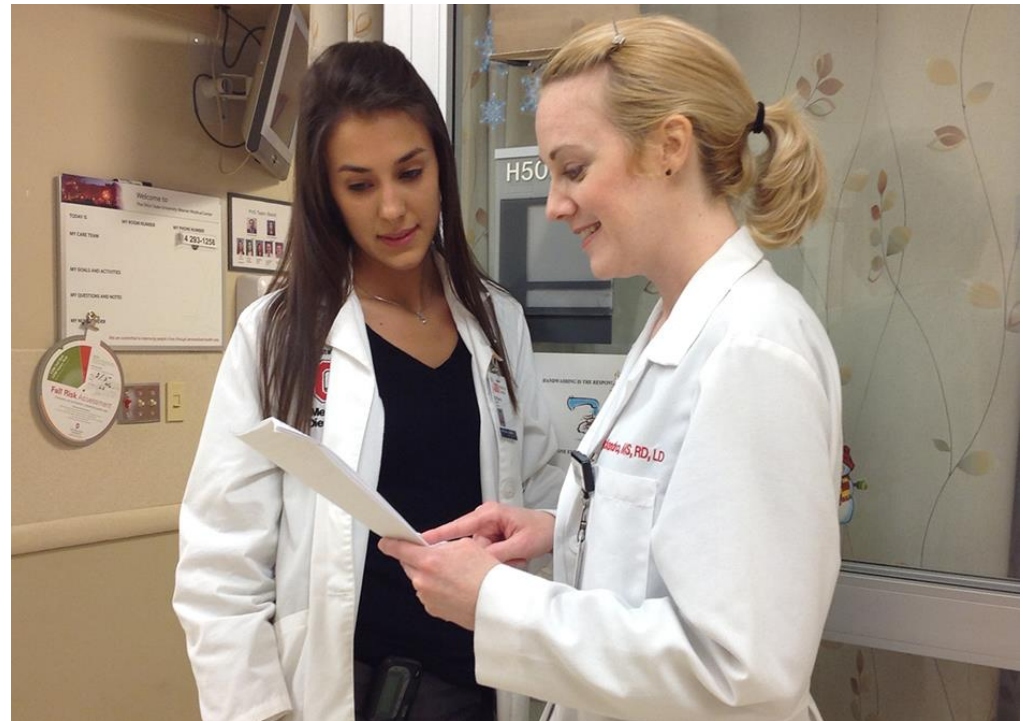
Who is their source of information? Doctor, Mom, Uncle...

Doctors- referral

Registered Dietitian

Diabetes Educator

Exercise Trainer



Sample Indian Meal Plan

Typical meal:

- High in carbohydrate
- High in fat.

Modified meal:

- Reduce oil and *ghee*
- Reduce carbohydrates
- Reduce sweets and fried snacks
- Reduce portions

SAMPLE INDIAN MEAL PLAN

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A sample menu of a typical north Indian vegetarian and non-vegetarian meal is given below. A typical meal is often high in carbohydrate and fat. The calculations are based on recipes from *New Indian Home Cooking* and *The Indian Vegan Kitchen*, for more information see note below.

Meal	Typical Meal	Modified Meal
	Calories: 2600 Carbohydrate: 350 grams (55%) Protein: 80 grams (12%) Fat: 100 grams (33%)	Calories: 1600 Carbohydrate: 220 grams (55%) Protein: 70 grams (17%) Fat: 50 grams (28%)
Breakfast	1 cup chai (tea) / whole milk 3 teaspoons sugar 1 potato paratha potato panfried flatbread 1 tsp pickle	1 cup chai / skim milk no calorie sweetener 2 whole wheat toast 1 teaspoon butter 1 cup skim milk
Lunch	2 roti with 1 teaspoon ghee (flatbread) 1 cup rajmah kidney beans (or chicken curry) 1/2 cup spinach and potato subji 1/2 cup onion and cucumber salad 1 roasted papad (bean wafer)	2 roti-no ghee 1 cup LF rajmah kidney beans (or LF chicken curry) 1/2 cup spinach vegetable 1/2 cup onion and cucumber salad 1 roasted papad (bean wafer)
Tea Time	1 cup chai / whole milk 3 teaspoons sugar 1/4 cup namkeen (fried snack) 1 laddu (sweet)	1 cup chai / skim milk no calorie sweetener 1 oz (30grams) mixed nuts 1 banana
Dinner	2 parathas pan fried flatbread 1 cup chole (1 cup kheema) 1 cup potato and pea vegetable 1/2 cup plain yogurt (whole milk)	2 roti-no ghee 1/2 cup chickpeas_chole (or 1/2 cup LF kheema-lamb) 1 cup cauliflower vegetable 1/2 cup FF plain yogurt
Snack	1 cup kheer pudding	1 orange 1 cup skim milk

Madhu Gadia, MS, RD, CDE, author of *New Indian Home Cooking* (Penguin Group 2000) and *The Indian Vegan Kitchen* (Penguin Group 2009). Both her books include nutritional analysis of the recipes. For more information and sample recipes from her book see www.cuisineofmadhu.com.



Cookbooks

Nutritional Analysis of each Recipes

The Indian Vegan Kitchen

More Than 150 Quick And Healthy Homestyle Recipes

New Indian Home Cooking

More Than 100 Delicious, Nutritional and Easy Low-Fat Recipes!



www.cuisineofindia.com

- **Sample Indian Meal Plan**

Modified vs Traditional

- **500 Calories Menus (2 weeks)**

Vegetarian and Vegan Meal Plans

- **Indian Recipes** – with NA

- **Blog - Cooking with Madhu**

Sign up for Blog

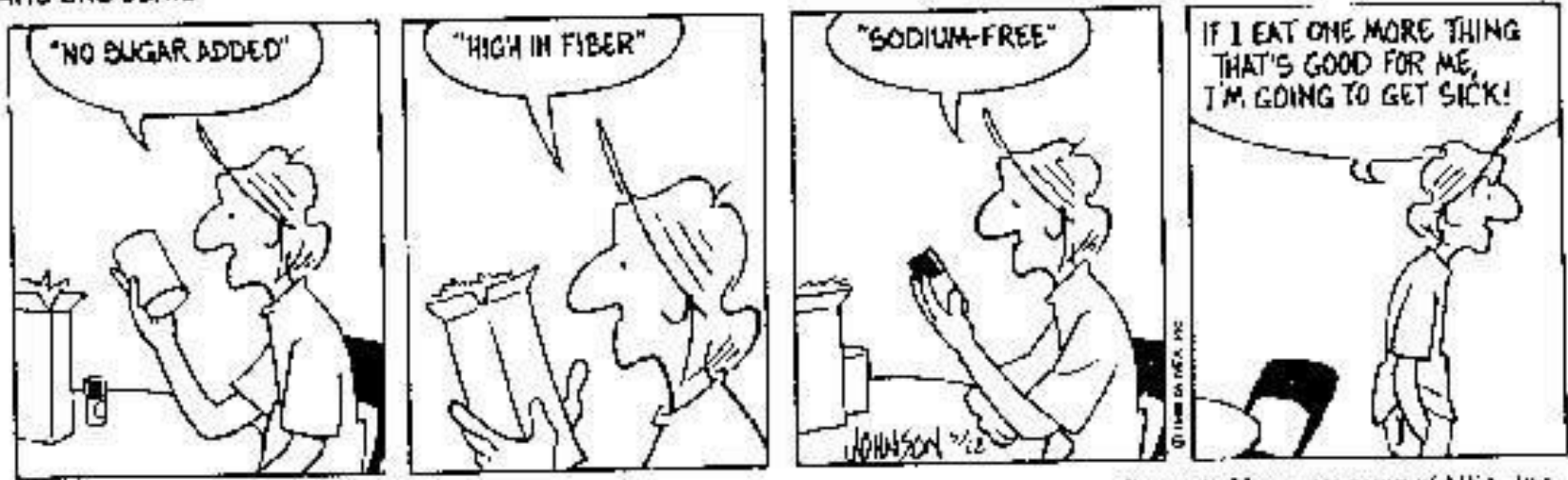


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Dietary rules – keep them simple

Arlo and Janis



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Eat in moderation and enjoy life!