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.

- 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 on your time
- Increased stress
What Are They Willing To Do?

Are YOU ready to make the changes?

Blondie

I haven't had a bite to eat in three days!

That's terrible!

You should have a bowl of hot soup, a glass of milk, and some buttered toast!

Lady, I'm looking for money...not a dietician!
Typical Indian Thaali 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
Choose MyPlate.gov
Portions, Portions, Portions
Portions, Portions, Portions
Portions, Portions, Portions
### Where’s the Protein?

Protein: 1 ounce = 7 – 8 g protein

<table>
<thead>
<tr>
<th>Food</th>
<th>Protein (g)</th>
<th>Fat (g)</th>
<th>Carbs (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dal (soupy)</td>
<td>1½ cup</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Beans: Kidney, Chickpeas</td>
<td>½ cup</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Paneer</td>
<td>1 oz</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Tofu</td>
<td>1.5 oz</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Milk/ home-made yogurt</td>
<td>1 cup</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Nuts: Almonds, Peanut</td>
<td>3 tbsp/1 oz</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

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 into 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

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### Table

<table>
<thead>
<tr>
<th>Meal</th>
<th>Typical Meal</th>
<th>Modified Meal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td>1 cup chai / whole milk, 3 teaspoons sugar, 1 potato paratha, potato panfried flatbread, 1 tsp pickle</td>
<td>1 cup chai / skim milk, no calorie sweetener, 2 whole wheat toast, 1 teaspoon butter, 1 cup skim milk</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td>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)</td>
<td>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)</td>
</tr>
<tr>
<td><strong>Tea Time</strong></td>
<td>1 cup chai / whole milk, 3 teaspoons sugar, 1/4 cup namkeen (fried snack), 1 laddu (sweet)</td>
<td>1 cup chai / skim milk, no calorie sweetener, 1 oz (30 grams) mixed nuts, 1 banana</td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td>2 parathas pan fried flatbread, 1 cup chole (1 cup kheema), 1 cup potato and pea vegetable, 1/2 cup plain yogurt (whole milk)</td>
<td>2 roti-no ghee, 1/2 cup chick peas chole (or 1/2 cup LF kheema-lamb), 1 cup cauliflower vegetable, 1/2 cup FF plain yogurt</td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td>1 cup kheer pudding</td>
<td>1 orange, 1 cup skim milk</td>
</tr>
</tbody>
</table>
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
Dietary rules – keep them simple

Eat in moderation and enjoy life!