Diabetes in Asian Americans

Asian Americans are more likely to develop diabetes at a lower body weight. 1 out of 10 Asian Americans has diabetes.

Common Myths about Diabetes Mellitus

**Myths**

1. People with diabetes can’t eat sweets or chocolate.
2. Eating too much sugar causes diabetes.
3. If you have diabetes, you can’t eat rice and noodles.
4. People can have a “touch of” diabetes.

**Truths**

1. Combined with exercise and a healthy meal plan, diabetics can enjoy sweets too.
2. Diabetes is caused by genetic and lifestyle factors. Being overweight can increase your risk for type 2 diabetes.
3. Rice and noodles should be included as part of a healthy diet. Work with your dietitian to learn the right amount.
4. Before people develop type 2 diabetes, they almost always have “pre-diabetes.” People with pre-diabetes can make lifestyle changes to prevent developing diabetes. Talk to your healthcare provider.
What is diabetes?

<table>
<thead>
<tr>
<th>Signs &amp; Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>People with uncontrolled diabetes usually experience the following symptoms:</td>
</tr>
<tr>
<td>- extreme weakness and fatigue</td>
</tr>
<tr>
<td>- increased hunger and thirst</td>
</tr>
<tr>
<td>- frequent urination</td>
</tr>
<tr>
<td>- unplanned weight loss</td>
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<tr>
<td>- blurry vision</td>
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</table>

Diabetes is a disease in which the body does not produce or properly use **insulin**, a hormone that is needed to convert sugar, starches, and other food into energy.

There are two types of diabetes:

- **Type 1 diabetes** occurs when the body does not produce insulin. It is usually diagnosed in children and young adults.

- **Type 2 diabetes** occurs when the body fails to properly use insulin or does not produce enough insulin. It is more common in people who are overweight.

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Who is at risk for diabetes?
- Asians, Pacific Islanders, African Americans, Native Americans, and Hispanics
- People who have close relatives with diabetes
- People who are over 45
- People who are overweight and do not exercise regularly

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Why are more Asians developing type 2 diabetes?

Despite having a lower body weight, Asian-Americans are more likely than Caucasians to have diabetes. Diabetes is a rapidly growing health challenge among Asians and Pacific Islanders who have immigrated to the United States, affecting about 10% of Asian-Americans; about 90-95% of Asians with diabetes have type 2 diabetes. The higher rate of type 2 diabetes in Asian descents results from a combination of genetic and environmental influences. Interestingly, the rate of diabetes in Chinese Americans is notably higher than the rate of the Chinese population living in rural China.

Although research is ongoing in this field, it is believed that consuming a western diet high in fat and calories, a decrease in physical activity, and genetic makeup, are all contributing factors to this serious epidemic in Asian-American populations. The Asian-American Diabetes Initiative is currently conducting a research study to determine the role of diet in the development of diabetes among Asians.
### Am I Overweight?

<table>
<thead>
<tr>
<th>BMI Cutoff for Asians</th>
<th>Weight Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18.5</td>
<td>Underweight</td>
<td>Being underweight also puts you at risk for developing many health problems.</td>
</tr>
<tr>
<td>18.5 - 22.9</td>
<td>Healthy weight range</td>
<td>Your weight is within normal range. Keep up with the good work!</td>
</tr>
<tr>
<td>23 - 26.9</td>
<td>Overweight</td>
<td>Being overweight can put you at risk for developing many chronic diseases.</td>
</tr>
<tr>
<td>&gt;27</td>
<td>Obese</td>
<td>Obesity increases risks for developing many chronic diseases such as heart disease and diabetes, and decreases overall quality of life.</td>
</tr>
</tbody>
</table>

BMI is a tool that measures your weight status by comparing your weight to height. Asians need to carefully guard their weight because their risk for developing diabetes rises sharply even with a small amount of weight gain above the target appropriate for their ethnicity. To determine if you are overweight, look at the chart below.

**How to use this chart:**

1. Look down the grey column to find your height.
2. Look across the row and find your weight.
3. If you are in the:
   - Green zone: you are at an ideal weight.
   - Purple zone: you are overweight.
   - Yellow zone: you are obese.

*Note: BMI may not apply to elderly people, pregnant women, children, and athletes who tend to have large muscle mass.*
How Can We Prevent Diabetes?

#1 Eating Right

The good news is that the development of type 2 diabetes can be prevented by making changes in your diet and increasing your level of physical activity.

Knowing what to eat can be confusing. There is not one perfect food so including a variety of different foods and watching portion sizes is the key to a healthy diet.

It is best to eat foods that are lower in fat and to be aware of the amount of carbohydrate in each portion of food. Here are some easy substitutions that taste great too!

**Instead of this...**
- Instant noodles
- White rice
- Sausage
- Condensed milk
- Soda

**Eat this!**
- Buckwheat noodles
- Brown rice
- Fish or chicken
- Skim or 1% milk
- Diet soda

What to put on your plate!

Portion control is an important part of maintaining a healthy meal plan. Sometimes it’s hard to know the correct portion size. Here are some easy tips to help get the right amount of food your body needs.

1/4 of your plate should be protein: meat, fish, poultry, tofu.
1/4 of your plate should be carbohydrates: rice, noodles, potatoes, corn.
1/2 of your plate should be non-starchy vegetables: broccoli, carrots, cucumbers, tomatoes, cauliflower.

For a 9 inch plate
Healthy Meal Ideas

Brown Rice Congee
Serves 4

Ingredients:
- 1/2 Cup Brown Rice
- 1/2 Cup White Rice
- 4-5 Pieces Shiitake Mushroom
- 1/2 Cup Corn Kernels
- 1 Small Piece White Fungus
- 8 Cups Water
- 1/2 tsp. Salt

Methods:
Soak brown rice for 3 hours. Soak white fungus.
Remove stalk of white fungus and shiitake mushroom and shred.

Boil water add rice and cook as congee. Add shiitake mushroom, corn, white fungus, salt.
Boil for another 10 minutes. Ready to serve!

Curried Chicken Salad with Pita Bread
Serves 2

Ingredients:
- 5 oz of skinless, boneless chicken
- 1 kiwi
- 1/2 apple
- 1/2 stalk of celery
- 1 tsp raisins
- 2 lettuce leaves
- 1 sliced whole wheat pita bread
- 1/4 tsp salt

Sauce: 3 tbsp lowfat plain yogurt,
3/4 tsp curry powder, 2 tsp brown sugar, 2 tsp lime juice

Methods:
Season chicken breast. Steam or pan-fry chicken on a nonstick pan and shred.
Dice apple, celery and kiwi.
Combine chicken, celery, kiwi, and raisins in a large bowl.
Combine sauce ingredients in a small bowl, and toss lightly.
Half the pita bread, and stuff the lettuce, chicken, and salad into it.

Nutrition Facts
Each serving provides:
Brown Rice Congee: 353 calories, 0.7 g of fat, 29.8 g of carbohydrates,
1.2 g of protein, 0 mg of cholesterol, 3.1 g of fiber

Curried Chicken Salad with Pita Bread: 235 calories, 2.2 g of fat, 34.1 g of carbohydrates,
21.7 g of protein, 45 mg of cholesterol, 4.6 g of dietary fiber.
How to read a food label

**Nutrition Facts**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount Per Serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>250</td>
<td>8%</td>
</tr>
<tr>
<td>Calories from Fat</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Total Fat</td>
<td>5g</td>
<td>8%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>1g</td>
<td>5%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>55mg</td>
<td>2%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>45g</td>
<td>15%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>8g</td>
<td>32%</td>
</tr>
<tr>
<td>Sugars</td>
<td>2g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>10g</td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td>50%</td>
<td>15%</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:
Calories: 2,000 = 2,500
Less Than 65g, 60g
Less Than 20g, 25g
Less Than 300mg, 300 mg
Less Than 2400mg, 2400mg
Less Than 300g, 375g
Less Than 25g, 30g

**Tip 1: Check serving size**
Nutrition information is based on this serving size.

**Tip 2: Check the fats**
1. Choose products with total fat 3g or less.
2. Choose 1g or less of saturated fat.
3. Choose products with monounsaturated fats.

**Tip 3: Check the total carbohydrates**
Total carbohydrates include:
1. Dietary fibers:
   Choose products with 3g or more fiber. You can subtract fiber grams from total carbs.
2. Sugars:
   Sugar grams are listed as part of total carbohydrates.

What to Ask about Diabetes

If your blood glucose levels remain high for many years, health problems may develop. However, if you work with your doctor to keep your blood glucose at target, you may be able to prevent or delay the long term complications of diabetes such as heart disease, strokes, loss of vision, kidney failure, nerve and blood vessel damage, and impotence in men. Here are some questions to ask your doctor on your next visit:

- What is my risk for type 2 diabetes?
- How often should I have my blood sugar checked for diabetes?
- What is my body mass index or BMI? What is my ideal weight?
- What is my blood pressure?
- What are my cholesterol levels and triglycerides?
- How much physical activity do I need to lower my diabetes risk?
- What type of exercise should I be doing to control my risk?
- What is a healthy eating plan for me?
#2 Be Physically Active!

Benefits of exercise
- Helps with weight control and reduces body fat
- Increases metabolism
- Improves blood glucose control/AtC
- Reduces stress and anxiety, and makes you feel better
- Helps with blood pressure/cholesterol
- Increases your muscle strength
- Improve quality of life and psychological well-being

3 types of exercise
1. **Aerobic Exercise**: walking, swimming, biking, dancing, arm bike and water exercise. Recumbent bike is a great option for people who have arthritis.

2. **Resistance Training**: free weights, weight machines, exercise bands, yoga, pilates.

3. **Flexibility**: stretching, yoga.

Duration and frequency of exercise

<table>
<thead>
<tr>
<th>Fitness &amp; Diabetes</th>
<th>Weight loss &amp; Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 days per week</td>
<td>6-7 days per week</td>
</tr>
<tr>
<td>30 minutes</td>
<td>60-90 minutes</td>
</tr>
</tbody>
</table>

Talk to your doctor before you start any exercise program!

Exercising safely

**Intensity of exercise:**
Follow the "Talk Test" or target HR (as recommended by your doctor)
- If you can sing or whistle while doing the activity, you are active at a light intensity
- If you are able to carry on a conversation comfortably during exercise, you are active at a moderate intensity
- If you are out of breath to carry on a conversation, you are active at vigorous intensity
- If you do not feel well or if you are having pain, STOP!

How to Exercise Using Everyday Activities

Your daily routine provides many opportunities to be active! 30 minutes of physical activity (moderate intensity) every day has many healthy benefits. You can do it all at one time or in short sessions, but try to do at least 10 minutes each time. Remember, every little thing you do counts!

- Park at the far end of the parking lot and walk to the store.
- Use the stairs whenever possible.
- Go for a brisk 10 minute walk during your lunch break.
- Walk around while talking on the phone.
- Avoid using the remote control when watching television and try standing up and stretching during commercial breaks.
- Play sports with your kids.
- Do some chores or garden work every day.

Resistance training can help:
1. Increase muscle size
2. Burn more calories when you are not exercising.
3. Increase metabolic rate for as long as 2 hours afterwards.
# How much do you know about diabetes mellitus?

Circle True or False.

1. Frequent urination, excessive thirst, and unusual weight loss are all symptoms of diabetes. (see page 2)   TRUE   FALSE

2. Being African American, Asian, or Latino decreases a person’s chance of developing type 2 diabetes. (see page 2)   TRUE   FALSE

3. Poorly controlled diabetes can lead to blindness and kidney failure. (see page 2)   TRUE   FALSE

4. Type 2 diabetes can be delayed or prevented. (see page 4)   TRUE   FALSE

5. Eating too much sugar causes diabetes. (see page 1)   TRUE   FALSE

6. Asian Americans are twice as likely as Caucasians to have diabetes.   TRUE   FALSE

7. Only the elderly and overweight have diabetes. (see page 2)   TRUE   FALSE

8. Every 10 seconds two people develop diabetes.   TRUE   FALSE

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### Resources for diabetes

- [http://aadi.joslin.org](http://aadi.joslin.org)
- [www.joslin.org](http://www.joslin.org)
- [www.diabetes.org](http://www.diabetes.org)
- [www.dlife.com](http://www.dlife.com)
- [www.spiral.tufts.edu/index.html](http://www.spiral.tufts.edu/index.html)

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