JOSLIN DIABETES CENTER

HEALTHY LIVING

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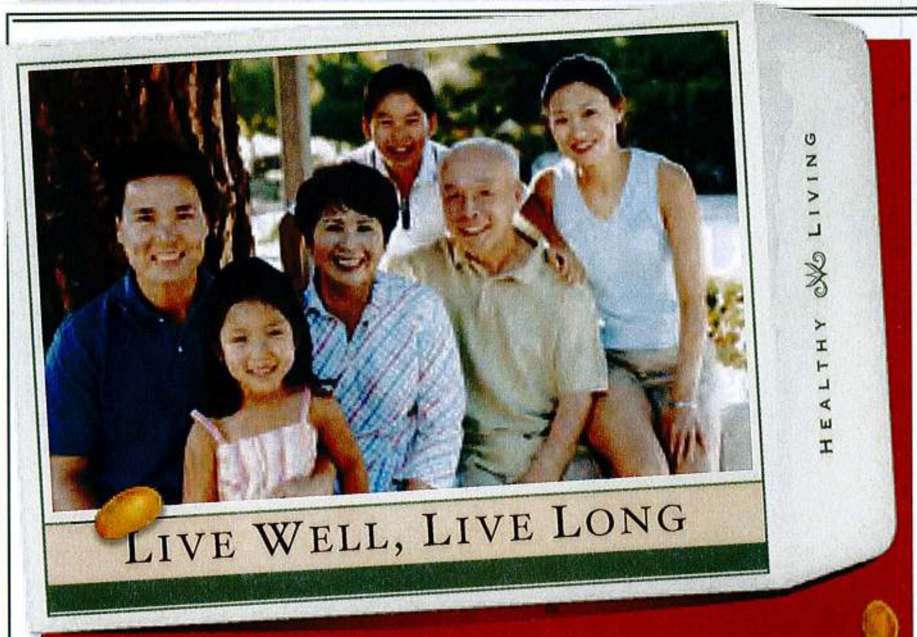

Diabetes in Asian Americans

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	**TRUTHS**
1. People with diabetes can't eat sweets or chocolate.	1. Combined with exercise and a healthy meal plan, diabetics can enjoy sweets too.
2. Eating too much sugar causes diabetes.	2. Diabetes is caused by genetic and lifestyle factors. Being overweight can increase your risk for type 2 diabetes.
3. If you have diabetes, you can't eat rice and noodles.	3. Rice and noodles should be included as part of a healthy diet. Work with your dietitian to learn the right amount.
4. People can have a "touch of" diabetes.	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.

Look inside for:

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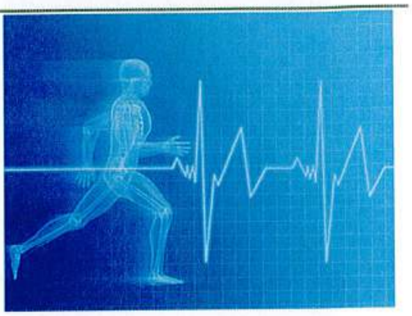
What is diabetes?

Signs & Symptoms

People with uncontrolled diabetes usually experience the following symptoms:

- extreme weakness and fatigue
- increased hunger and thirst
- frequent urination
- unplanned weight loss
- blurry vision

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.

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

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-Americas; 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?

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

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

WEIGHT HEIGHT	90 lbs(41kg	95 (43)	100 (45)	105 (48)	110 (50)	115 (52)	120 (54)	125 (57)	130 (59)	135 (61)	140 (64)	145 (66)	150 (68)	155 (70)	160 (73)	165 (75)	170 (77)	175 (80)	180 (82)	185 (84)	190 (86)	195 (89)	200 (91)	205 (93)	210 (95)	215 (98)	220 (100)	225 (102)	230 (104)	235 (107)	240 (109)	245 (111)	250 (114)	255 (116)	260 (118)	265 (120)	270 (123)	275 (125)	280 (127)	285 (130)	290 (132)	295 (134)	300 (136)
4'10" (147cm)	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	63
4'11" (150)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
5'0" (152)	18	19	20	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	56	57	58
5'1" (155)	17	18	19	20	21	22	23	24	25	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
5'2" (157)	16	17	18	19	20	21	22	23	24	25	26	26	27	28	29	30	31	32	33	34	35	36	36	37	38	39	40	41	42	43	44	45	46	47	47	48	49	50	51	52	53	54	55
5'3" (160)	16	17	18	19	19	20	21	22	23	24	25	26	27	27	28	29	30	31	32	33	34	34	35	36	37	38	39	40	41	42	42	43	44	45	46	47	48	49	49	50	51	52	53
5'4" (162)	15	16	17	18	19	20	21	21	22	23	24	25	26	27	27	28	29	30	31	32	33	33	34	35	36	37	38	39	39	40	41	42	43	44	45	45	46	47	48	49	50	51	51
5'5" (165)	15	16	17	17	18	19	20	21	22	22	23	24	25	26	27	27	28	29	30	31	32	32	33	34	35	36	37	37	38	39	40	41	42	42	43	44	45	46	46	47	48	49	50
5'6" (167)	15	15	16	17	18	19	19	20	21	22	23	23	24	25	26	27	27	28	29	30	31	31	32	33	34	35	35	36	37	38	39	39	40	41	42	43	43	44	45	46	47	47	48
5'7" (170)	14	15	16	16	17	18	19	20	20	21	22	23	23	24	25	26	27	27	28	29	30	30	31	32	33	34	34	35	36	37	38	38	39	40	41	41	42	43	44	45	45	46	47
5'8" (172)	14	14	15	16	17	17	18	19	20	21	21	22	23	24	24	25	26	27	27	28	29	30	30	31	32	33	33	34	35	36	36	37	38	39	39	40	41	42	42	43	44	45	46
5'9" (175)	13	14	15	16	16	17	18	18	19	20	21	21	22	23	24	24	25	26	27	27	28	29	29	30	31	32	32	33	34	35	35	36	37	38	38	39	40	41	41	42	43	43	44
5'10" (177)	13	14	14	15	16	16	17	18	19	19	20	21	21	22	23	24	24	25	26	26	27	28	29	29	30	31	32	32	33	34	34	35	36	37	37	38	39	39	40	41	42	42	43
5'11" (180)	13	13	14	15	15	16	17	17	18	19	20	20	21	22	22	23	24	24	25	26	26	27	28	29	29	30	31	31	32	33	33	34	35	35	36	37	38	38	39	40	40	41	42
6'0" (182)	12	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	26	26	27	28	28	29	30	30	31	32	32	33	34	35	35	36	37	37	38	39	39	40	41
6'1" (185)	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39
6'2" (187)	12	12	13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	22	23	24	24	25	26	26	27	28	28	29	29	30	31	31	32	33	33	34	35	35	36	37	37	38	38
6'3" (190)	11	12	13	13	14	14	15	16	16	17	17	18	19	19	20	21	21	22	22	23	24	24	25	26	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	37
6'4" (192)	11	12	12	13	13	14	15	15	16	16	17	18	19	19	19	20	21	21	22	22	23	24	24	25	26	26	27	27	28	29	29	30	30	31	32	32	33	33	34	35	35	36	36

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.

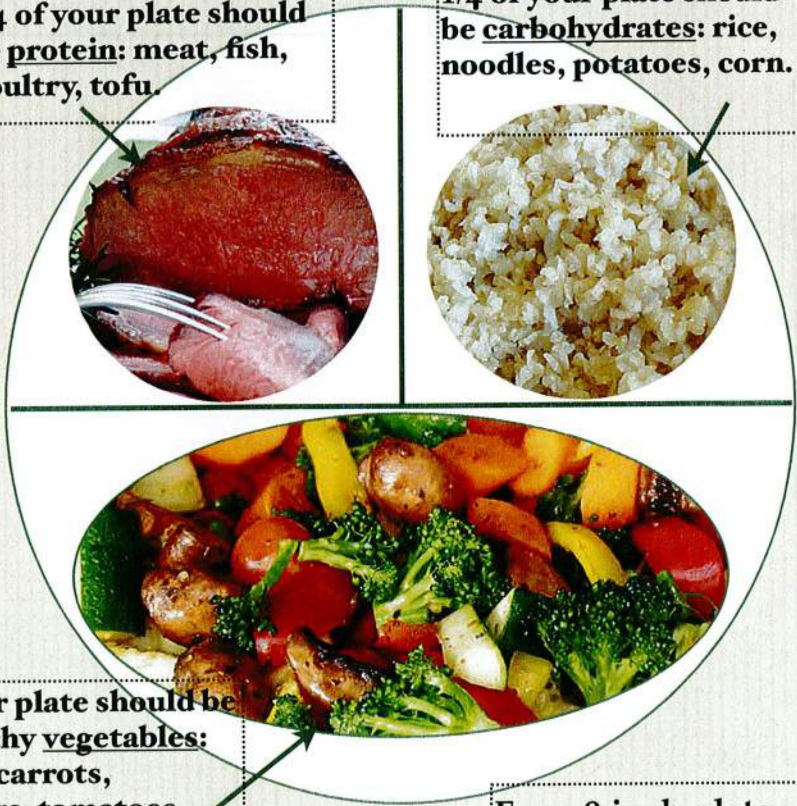
Knowing what to eat can be confusing. There is not one perfect food so including a variety of different foods and watching portion sizes is the key to a healthy diet.

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...	**Eat this!**	
	Instant noodles	Buckwheat noodles	
	White rice	Brown rice	
	Sausage	Fish or chicken	
	Condensed milk	Skim or 1% milk	
	Soda	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

Low in Cholesterol

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!

Nutrition Facts

Each serving provides:
135.3 calories, 0.7 g of fat, 29.8 g of carbohydrates, 3.2 g of protein, 0 mg of cholesterol, 3.1 g of fiber

Curried Chicken Salad with Pita Bread

High in Fiber

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:
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.

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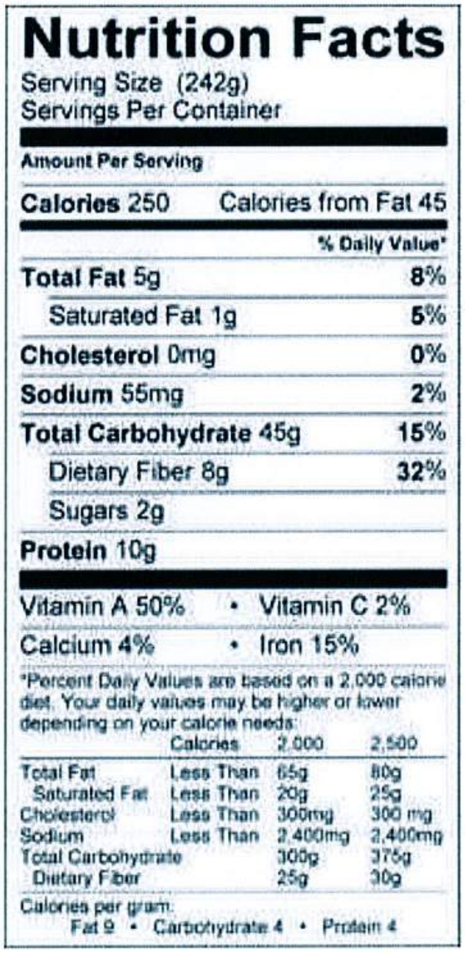
跨版生活圖書出版，Hong Kong ,2008

How to read a food label

1 Cup Brown Rice



Nutrition Facts

Serving Size (242g)
Servings Per Container

Amount Per Serving

Calories 250 Calories from Fat 45

	% Daily Value*
Total Fat 5g	8%
Saturated Fat 1g	5%
Cholesterol 0mg	0%
Sodium 55mg	2%
Total Carbohydrate 45g	15%
Dietary Fiber 8g	32%
Sugars 2g	
Protein 10g	

Vitamin A 50% • Vitamin C 2%
Calcium 4% • Iron 15%

*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
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300 mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

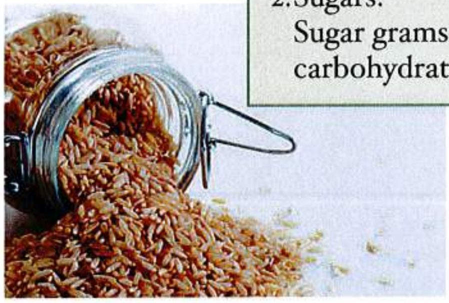
Tip 1: Check serving size
Nutrition information is based on this serving size.

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/ A1C
- 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.

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

Duration and frequency of exercise

Fitness & Diabetes	**Weight loss & Maintenance**
5 days per week	6-7 days per week
30 minutes	60-90 minutes

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 too 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.

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

Answers: 1. True, 2. False, 3. True, 4. True, 5. False, 6. True, 7. False, 8. True

Resources for diabetes

http://aadi.joslin.org

www.joslin.org

www.diabetes.org

www.dlife.com

www.spiral.tufts.edu/index.html

Joslin Diabetes Center

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This project is a joint effort between Joslin's Diabetes Center and Harvard Medical School AAHA. It is partly sponsored by an educational grant from Ronald McDonald House Charities.

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