DIABETES PREVENTION AND MANAGEMENT: A GUIDE FOR ASIAN AMERICANS





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And

CSOFT Health Sciences, leaders in medical translations



DIABETES FACTS IMPACTING ASIAN AMERICANS

- 1 in every 2 Asian American adults has diabetes or prediabetes.
- Over half of all Asian Americans with diabetes are undiagnosed.
- Type 2 diabetes is preventable. It is more common among Asian Americans, accounting for 90-95% of all diabetes cases.
- Studies show that Asians develop diabetes at lower body weight (or BMI) than White populations. Every Asian American with BMI at 23 kg/m² or above should be screened for type 2 diabetes.
- Joslin Diabetes Center, the world's largest diabetes research center, has a special team called the Asian American Diabetes Initiative (AADI). AADI focuses on diabetes care, research, education, and advocacy, specifically for Asian communities.
- Joslin's AADI successfully proved that a traditional Asian diet can help you lose weight to prevent diabetes. This applies not just for Asian Americans, but also for the general population.

PREFACE

This booklet was created with Asian Americans who have diabetes or live with someone with diabetes in mind, to serve as a practical guide on taking great care of themselves during the COVID-19 pandemic. Many of us might be feeling a sense of helplessness and uncertainty in the wake of the virus. It is more crucial than ever to ensure you are taking care of your health and body to the best of your ability.

Asian Americans are at an elevated risk for type 2 diabetes and gestational diabetes and can develop diabetes at lower body weights. 1 in every 2 Asian American adults has diabetes or prediabetes, but more than half of all cases are still undiagnosed – the highest undiagnosed rate among all ethnic and racial groups.

Approximately 90% of people who were hospitalized due to COVID-19 had underlying health conditions such as diabetes, with diabetes being one of the chronic diseases many people had.

Diabetes increases the risks for comorbidities such as heart disease, periodontitis, amputation, eye disease, and chronic kidney disease. Poorly managed diabetes also increases the mortality rate in COVID-19 cases. Although devastating, the good news is, diabetes can be prevented and managed through a combination of lifestyle changes and medications.

Although the rollout of vaccines gives us hope for better days to come, it remains a very stressful time, especially if you are living with multiple generations in your home. You may be worried about making sure your family members are staying safe at work or school. If you happen to be a busy mom who cares for your children and family's daily needs, it can be easy to put your family first and forget to take care of yourself. We especially want to empower women with the knowledge that health starts from yourself first, as that knowledge will be reflected in your care for your children, partner, parents, extended family, and friends.

This booklet covers many topics that are helpful for those with diabetes and those who live with or care for them. We hope this booklet will empower many health ambassadors like you, who are helping their family and friends in their community to navigate this challenging time.

Stay safe and be well,

The AADI team, Spring 2021

THE ASIAN AMERICAN DIABETES INITIATIVE (AADI)

Joslin Diabetes Center, affiliated with Harvard Medical School, is the world's largest diabetes research center and was founded in 1898 by Dr. Elliot P. Joslin. The Asian American Diabetes Initiative (AADI) was established in 2000 to enhance the quality of life and health outcomes for Asian Americans living with diabetes and its prevention through research, education, outreach, and culturally appropriate treatments.

AADI has been raising awareness and promoting diabetes screening for every Asian American adult with a lower BMI - BMI at 23 kg/m² or above*.

Traditionally, our community outreach and educational programs are held in-person. AADI's mission includes providing reliable information to communities that will support them in navigating their health and wellness. During this incredibly challenging time, with people of color disproportionately affected by COVID-19 and those with diabetes presenting higher risk groups, we are committed to providing the most relevant health information to empower them in best managing their health.



Free multilingual diabetes and healthy living resources are available at https://aadi.joslin.org/

Questions about diabetes among Asian Americans or our Asian Clinic?

Contact us at aadi@joslin.harvard.edu

One Joslin Place, Boston, MA 02215

*Our advocacy effort through AANHPI Diabetes Coalition resulted in updating the diabetes screening recommendation cut-off point for Asian Americans to BMI \ge 23 kg/m² instead of BMI \ge 25 kg/m².

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CHAPTER 1

WHAT IS DIABETES? TAKE THE RISK TEST!

Do you know anyone with diabetes?

If you are reading this, chances are you know someone close to you who has diabetes, or you are concerned about someone who may have diabetes and want to learn more.

From 2007 to 2017, the number of adults with diabetes around the world increased by 73% (from 246 million to 425 million). Every 8 seconds, a person dies from diabetes, making it a rising global epidemic. In Asia, its prevalence has increased 10-fold over the past decades.

Diabetes is a state in which your body cannot properly use and store the food you eat. This causes the blood glucose (or "blood sugar") to build up and rise too high, which leads to many health problems.

Diabetes is a costly disease. According to American Diabetes Association (ADA), people with diabetes have 2.3 times the medical expenses of those without diabetes, paying an average of \$16,752 per year (or \$1400 per month) in 2017.

Know the signs!

When you are diagnosed with diabetes, your blood glucose (blood sugar) levels may be extremely high. You may experience symptoms that include:

- · Extreme weakness and fatigue
- · Increased hunger and thirst
- · Frequent urination
- · Unplanned sudden weight loss
- · Blurry vision
- · Increase in infections
- · Slow recovery from wounds

It is also possible that you may have diabetes but have no symptoms for many years. We recommend every Asian American with a BMI of 23 kg/m² or above to be screened for type 2 diabetes. Talk to your doctor and ask to undergo a diabetes screening.

The 4 types of diabetes

[Type 1 diabetes (T1DM)]

Type 1 diabetes is an autoimmune disease, which means, a person's immune system attacks his or her pancreas, destroying the cells that produce insulin. It is often diagnosed in children and young adults. Asian Americans are at a lower risk for T1DM, consisting of about 5-10% of all diabetes cases. The factors that initiate the autoimmune attack that causes T1DM remain unknown.

Insulin: A hormone that the body produces naturally. This hormone brings glucose in from the bloodstream for our various organs and cells to use, hence lowering blood glucose levels.

Pancreas: The organ that produces insulin.

[Type 2 diabetes (T2DM)]

Type 2 diabetes is more common among Asian Americans, accounting for 90-95% of all diabetes cases. Although genetics play a role (such as having family history of diabetes), T2DM is preventable through lifestyle changes – specifically by reducing body weight, eating healthy, and staying active. T2DM often goes undiagnosed, in fact, Asian Americans have the highest undiagnosed rate. Many Asian Americans develop T2DM without being overweight.

T2DM used to be called adult-onset diabetes, as it mostly affected those 40 years or older. However, due to increased overweight and obesity rates, more children are also developing T2DM.

[Gestational diabetes (GDM)]

Asian Americans are at a higher risk for developing gestational diabetes, which occurs during pregnancy. Although GDM usually goes away after the baby is delivered, it increases the risk of developing T2DM in the future for both mother and child. The good news is, GDM is preventable and manageable.

[Prediabetes]

When the blood glucose is elevated but not high enough to be classified as the state of diabetes, it is called prediabetes. Many Asian Americans do not know that they have prediabetes. Prediabetes increases the risk for heart disease and progresses into T2DM. Making lifestyle changes is highly effective in reversing the development of T2DM.

The diabetes lifestyle risk test

If either or both of your parents have diabetes, your risk is elevated, and it is important to screen yourself for diabetes. Talk with family to become familiar with your diabetes history and ask your doctor about diabetes screening.

T2DM, GDM, and prediabetes all share similar risk factors. If your answer is YES to any of the following questions, this booklet will help you and your loved ones stay healthy and lower your chances of developing diabetes, as well as helping those already living with diabetes manage their health.

- 1. Are you of Asian descent?
- 2. Do you have an immediate family member with diabetes?
- 3. Do you walk less than 10,000 steps every day?
- 4. Do you sleep less than 7-8 hours each night?
- 5. Do you smoke?
- 6. Have you felt stressed recently?
- 7. Have you been diagnosed with gestational diabetes or given birth to a child who was 9 pounds (4 kg) or heavier at birth?

If you are planning your pregnancy, see Chapter 5, "What to Know at Each Stage of Your Life".

"Skinny Asian = Healthy": Why are Asians at higher risk?

The Asian American population is a diverse group, tracing roots to over 20 countries in East Asia (e.g., China, Japan, Korea), Southeast Asia (e.g., Cambodia, Myanmar, Thailand, Vietnam), and South Asia (e.g., India, Pakistan). Asian Americans are the fastest growing racial group in the United States. Between 2000 and 2015 there was an increase of 70% in Asian Americans living in the U.S., with nearly 60% of those adults born in another country.

1 in every 2 Asian American adults has diabetes or prediabetes. More than 50% Asian Americans with diabetes are undiagnosed.

Despite having a leaner body weight, Asian Americans are 2 times more likely than White Americans to have diabetes. Why? The reason is still being researched, but it is related to changes in lifestyle such as consuming a more Westernized diet (high in processed food, fat and calories, while low in fiber) and decreased physical activity.

Bottom line is that Asians can develop diabetes at lower body weight and need to be screened for diabetes even if they do not think they are overweight. That is the reason why Asian Americans have a different BMI (Body Mass Index) cut-off point to screen for diabetes. Every Asian American with BMI at 23 kg/m² or above should be screened for T2DM.

Preventing complications

Having diabetes or prediabetes increases your risk of developing complications such as:

- \cdot Blindness
- · Heart disease
- · Kidney disease leading to dialysis
- \cdot Tooth loss
- · Erectile dysfunction
- · Miscarriages
- · Amputations
- · Early death

The risk of diabetes for your children will also be higher. Having diabetes can increase your healthcare costs by more than double.

The good news is if you work with healthcare professionals, this may be avoidable through lifestyle adjustment.

See Chapter 6, "Living with Diabetes", to learn what can happen when diabetes is not well managed.

CHAPTER 2

FOOD AND NUTRITION

What can I eat?

Knowing what to eat is very important to stay healthy. Making smart food choices can help prevent diabetes or its complications. You have more control over what you eat if you cook at home, but if you do takeout or dine at restaurants, pick your food carefully. Start by limiting the amount of the following foods:

[Sugar (it comes in various forms!)]

Sugar has lots of calories, but it does not have much nutrition. "Sugar" is not limited to white, brown or cane sugar in powder form. Honey, syrup and molasses are all considered sugars, and they increase your blood glucose level very quickly. Most food we eat contains sugar. Some foods, like fruits, are high in sugar that cannot be removed as it is in the food naturally. What we should try avoid is the "added sugar" used in drinks and during cooking. Check the ingredients lists on food labels and choose products that do not list sugar in the top 3 ingredients. See "Check these two spots on food labels!" below for tips.

[Refined grain products]

White rice and other refined grain products (e.g., white bread, regular noodles) increase blood glucose rapidly. They are lower in nutrition (such as fiber) than whole grain ingredients. Try to have a few meals with only whole grains, or replace a portion of the usual refined grains with whole grains as you get used to their flavor, gradually incorporating more into your daily meals.

[Alcoholic beverages]

Calories from alcohol do not give you many nutrients and may contribute to weight gain. See our website for the Alcoholic Beverage Calories Chart.

[Fruit juice]

Fruits contain natural sugar, but fruit juice spikes your blood glucose to a greater degree than eating a whole piece of fruit. Fruit juice is processed, so it gets absorbed into your body quickly, even if you choose a juice variety with pulp.

[Flavored yogurt and milk]

Most flavored yogurts and milk contain a lot of added sugar. A cup of low-fat chocolate milk has 12g of added sugar. Whereas plain yogurt and milk give you protein and calcium, added flavors and sugars do not have extra nutritional value. Be mindful when choosing dairy products for your children.

[Cereals]

Most cereals have added sugar. They tend to spike blood glucose levels, even if they are made with whole grains. A good alternative is old-fashioned or steel-cut oatmeal, as they raise your blood glucose slower. If your morning is busy, you can try soaking oatmeal overnight with your (unflavored) milk of choice so it is ready for the morning with less prep time!

[Coconut oil and lard]

Both coconut oil and lard are high in saturated fat, which increases your risk of heart disease. Choose olive oil or canola oil, which can be easily found in grocery stores, as they are high in heart-healthy fat.

Check these two spots on food labels!

Use the food label on the package to make smart choices!

	Nutrition F	acts	
Serving Size	8 servings per container Serving size 2/3 c	up (55g)	
Amount of Calories	Amount per serving Calories	230	
	9	6 Daily Value*	
	Total Fat 8g	10%	Percent Daily Value
	Saturated Fat 1g	5%	
	Trans Fat 0g		
	Cholesterol Omg	0%	
	Sodium 160mg	7%	
Nutrients	Total Carbohydrate 37g	13%	
	Dietary Fiber 4g	14%	
	Total Sugars 12g		
	Includes 10g Added Suga	rs 20%	
	Protein 3g		
	Vitamin D 2mcg	10%	
	Calcium 260mg	20%	
	Iron 8mg	45%	
	Potassium 240mg	6%	
Footnote	* The % Daily Value (DV) tells you how min a serving of food contributes to a daily dir a day is used for general nutrition advice	uch a nutrient in et. 2,000 calories	

(For educational purposes only. These labels do not meet the labeling requirements described in 21 CFR 101.9.)

https://www.fda.gov/food/food-labeling-nutrition/nutrition-facts-label-images-download

[Serving size]

Food labels indicate a serving size that tells you the portion of a food that the nutrition information is based on. That means the nutrition facts are not an indication of the total nutritional content inside a package. For example, if you have a box of cookies with 2 cookies in it, and the food label says 100 calorie per serving, be sure to check the serving size. If you see it says, "Serving size 1 cookie", which means if you eat the whole box you will be eating 200 instead of 100 calories.

INGREDIENTS: Water, Whole Wheat Flour, Wheat Gluten, Yeast, Cultured Wheat Flour, Contains Less than 2% of the Following: Yellow Cornmeal, Yellow Corn Flour, Cane Sugar, Salt, Molasses, Organic Distilled White Vinegar, Expeller Pressed Canola Oil, Wheat Starch.

Distributed Exclusively By: Joslin Bakery One Joslin Place, Boston, MA 02215

[Ingredients list]

Ingredients are listed in the order of the amount (from high to low) used to make that product. The more there is in the food product, the higher up they will be listed on the ingredient list. For example, we learned to avoid "sugar", and especially added sugar, so be sure to choose one that does not list sugar as one of the top 3 ingredients. For ingredients that we prefer, such as whole grains, non-starchy vegetables, and nuts, they should be higher on the list.

On food label ingredients lists, if you see the word "enriched" or "refined" with the grain ingredient, that means these are not whole grains but rather processed grains.

More fiber, less fat: Follow a traditional Asian diet to prevent diabetes.

AADI conducted a clinical study to see the effect a traditional Asian diet has on our body. We learned that **when study participants followed the traditional Asian diet, their body was more efficient in lowering blood glucose and they lost excess body weight**. It also works not just for Asians and Asian Americans, but for everyone interested in eating healthier!

For details on the AADI's traditional Asian diet study, see National Center for Biotechnology Information (NCBI) - Improvement of Insulin Sensitivity by Isoenergy High Carbohydrate Traditional Asian Diet: A Randomized Controlled Pilot Feasibility Study <u>https://www.ncbi.nlm.</u> <u>nih.gov/pmc/articles/PMC4167335/</u>

To follow this traditional Asian diet, start by choosing foods that are high in fiber:

- · Non-starchy vegetables of all colors (e.g., red onions, carrots, spinach, broccoli, mushrooms, bitter melon, bamboo shoots)
- · Fruits of all colors (e.g., oranges, dragon fruit, star fruit, apples, berries, avocado)
- · Whole grains and whole grain products (e.g., brown rice, buckwheat noodles)
- · Fibrous starchy vegetables (e.g., pumpkin, sweet potato)
- · Legumes (e.g., edamame, lentils, chickpeas, adzuki beans)

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*If you are not used to having much fiber in your meals, increase gradually for an easier transition.

Also **reduce your fat intake**. Here are some tips you can start with–try one or two and then more as you get use to them:

- Remove visible animal fat (e.g., remove skin from chicken)–this one simple change can make a huge difference. By removing the skin from a chicken thigh, for instance, you are removing 90% of the fat and reducing the calories by 80%!
- Choose leaner animal proteins, or replace animal proteins (e.g. beef, pork) with plant-based proteins (e.g., tofu)*. If you are not a vegetarian, try having a meatless meal once a week.
- \cdot Use non-stick cooking utensils so you can cook with less oil.
- · Try low-fat cooking methods, such as steaming, boiling, poaching, and grilling.

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*A plant-based eating pattern is helpful in preventing T2DM and is also helpful in protecting your heart and kidneys. Start by having a "meatless meal" and gradually increase the frequency!

Recipes we used for the traditional Asian diet study can be found here: Joslin Diabetes Center's Asian American Diabetes Initiative (AADI) - Drag 'n Cook® <u>http://aadi.joslin.org/en/drag-n-cook</u>

What should I eat and how much can I eat?

Eat a wide variety of foods from different food groups each day. Try to limit the foods listed on pages 12 and 13, and keep your mealtimes consistent. Many restaurant choices are high in fat and served in excessive portions. Be mindful when eating out or getting takeout, as portions tends to be bigger than a standard serving. You don't need to eat it all in one sitting, so save some for later!

Your hand can be a great guide for sizing out your portions! For each meal, aim for:

- · 2 fistfuls of non-starchy vegetables
- · 1 fistful of whole grains or starchy vegetables
- · 1 palm's worth of lean protein

You can also use a 9" (22cm) plate as a guide to portion sizes. A typical dinner plate in the U.S. is 12" (30cm) across, so using smaller plates is a good start:



If you are hungry between meals, try having a piece of fruit (about a fistful) or a glass of unsweetened milk (8 fl. oz of cow's, soy, or any nut milk of your choice) to tide you over.

A "bento"* box is a compartmentalized container for carrying a home prepared meal (usually lunch) for a single person, making it a very effective tool for meal planning. Choose a bento box that has 4-5 compartments. Fill the largest compartments with vegetables. Put whole grains, protein, fruits and dairy into other compartments. That way, you know your meal is balanced and includes all food groups.



*Bento is a Japanese word.

Carbohydrates ("carbs") come mostly from foods made from products grown in the ground such as rice, flour, potato, pumpkin, corn, and sugar. An exception to this is milk and yogurt, which are also carbohydrates.

Being aware of what you have eaten is the first step toward weight loss. If you have an Asian recipe you want to know the nutrition of, you can find it out on Drag 'n Cook®.

[Healthy eating during the pandemic]

Healthy eating at home begins with the planning process. Always prepare a shopping list with a healthy variety of foods in advance, and remember to eat something before you start to prevent impulsive choices. It's just as true online as in a store!

During the pandemic, try buying in larger quantities and reduce your trips to grocery stores. Here are a few tips:

- Frozen vegetables and fruits keep longer and are more nutritious than fresh produce you keep in the fridge for days.
- Certain fruits and vegetables have fairly long shelf lives. Try to buy onions, carrots, celery, cabbage, squash, apples, oranges, grapefruits, grapes, melons if you need food to last.
- Canned chicken or fish comes in low salt options. If these are not available, pour the liquid off the can and rinse the contents under clear water before using to help reduce their salt content.
- Unprocessed frozen seafood (e.g., fish, scallops) and skinless chicken are good protein options. Tofu is also a great protein choice. Keep these in the freezer if you cannot finish them all at once.
- · Legumes and beans (canned or dried) are a great source of protein, fiber, and carbohydrates!
- Milk powder is a good alternative to typical bottled milk. You can also try freezing extra milk you have bought. Make sure to freeze milk in an air-tight and freezer-safe container and to thaw it in the fridge before drinking.

Everyone has different nutritional needs. Meet with a dietitian and develop a personalized meal plan that fits your health conditions, preferences, and schedule. Keeping a one-week food diary of what you have eaten before your appointment will help the dietitian to better understand your needs. You can always take a picture of what you eat and drink throughout the day, if that makes tracking easier for you.

To find a dietitian near you, visit the Academy of Nutrition and Dietetics (http://www.eatright.org/).

You can find diabetes-friendly Asian recipes from AADI on our website under Free Resources - Pan-Asian Recipes (also available in Chinese) at <u>http://aadi.joslin.org/en/educational-materials/pan-asian-recipes</u>.

CHAPTER 3

PHYSICAL ACTIVITY / INACTIVITY - HOW TO LOSE WEIGHT AND KEEP IT OFF

Losing weight and maintaining healthy weight

Did you know that more people die from physical inactivity than die from smoking? Being active can help remove 6-10% of chronic diseases, including T2DM, and it can increase life expectancy.

- Excess body weight (BMI \ge 23 kg/m² for Asian Americans, and \ge 25 kg/m² for others) is a major risk of chronic diseases such as diabetes and heart disease. It may also increase your risk for dementia and Alzheimer's Disease. It is critical to stay active. Obesity and diabetes can increase the mortality rate of COVID-19.
- If your body weight is above healthy level (BMI ≥ 23 kg/m² for Asian Americans, and ≥ 25 kg/m² for other people), you will start seeing improvements such as a decrease in blood pressure or blood glucose upon losing 5% of your body weight. 7-10% weight loss may help prevent developing T2DM from prediabetes. If you can manage even more weight loss (15% or more), you will find even greater benefits potentially diabetes remission.
- You will lose weight if you burn more energy than you take in. You can achieve this by reducing the amount you eat while increasing your activity level.

Physical activity vs. exercise

You don't have to get a gym membership or exercise equipment to stay active. There are differences between activity and exercise, and any physical activity has its benefits!

- Physical activity involves any movement of your muscles that uses energy, including cleaning your home or walking to a station.
- Exercise consists of repeating body movements designed to improve specific kinds of fitness, and is one kind of physical activity.

During the pandemic, many of us are spending more time at home. Unavoidably, you may be sitting down more. For every hour you spend sitting down, spend 5-10 minutes moving your body by stretching and walking around.

Stay active at home by incorporating physical activities into your daily routine. Be creative and add extra movement into your daily routine!

Home activities:

- · Cleaning your home
- · Mowing the lawn
- · Gardening
- · Shoveling snow
- · Washing the car
- \cdot Practicing dance steps as you sweep the floor
- · Squatting while you wash dishes or brush your teeth
- · Grabbing a full can or bottle and curling your arms as if lifting a dumbbell
- · Pacing in your house while on the phone
- \cdot Move your limbs while watching TV
- \cdot Dancing with your spouse, children, or grandchildren

When you are out and about:

- \cdot Take the stairs rather than an elevator
- · Park your car a little further away to add extra steps
- \cdot Get off/on the bus or train a stop away from your destination
- Use the basket instead of the cart when doing grocery shopping and use the basket as a dumbbell to train your arm muscles

When taking care of your children/grandchildren:

- · Play hide-and-seek or run around the backyard
- \cdot Carry a small child and walk around
- · Play activity-based video games with your children or grandchildren

Exercise:

- · Brisk walking, jogging or running in a park or on a treadmill
- · Biking around or with a stationary bike at home
- Chair exercises; a tutorial in Chinese is available on the AADI website at <u>http://aadi.joslin.org/tw/Education%20Materials/14.PhysicalActivity-Exercise%20Resources-%20CT.pdf</u>
 *Exercise videos available in Cantonese
- · Fan or sword dances
- · Jump roping
- · Taichi
- · Qi Gong

The benefits of walking - the AADI Walking Club

Walking is a great activity whether outdoors or indoors, alone or with friends and family. AADI has been leading the Walking Club every summer at Boston Common, where a group of us get together to enjoy morning strolls and socialize. Here are some tips we go over at the Walking Club to get people walking!

- · Put on comfortable socks and sneakers to prevent blisters and just start walking.
- Find company to make it more fun. Catch up with your friends and family members, or enjoy some alone time to relax and reflect.
- \cdot Wear clothes that keep you at the right temperature.
- Start at a pace you are comfortable with. If you find it too easy, gradually increase your step count (adding 500 steps at a time) or your walk time (5 minutes at a time).
- · You can walk in the park or around your home (even in your own backyard), it still counts as activity!
- \cdot While exercising, if you can still comfortably speak a complete phrase or sentence out loud, you know that you are within the right intensity.
- If you have diabetes, check your blood glucose before exercising. See Chapter 6, "Living with Diabetes", for more about low blood glucose (hypoglycemia).

If you are short on time, choose activities with higher intensity levels. You will get similar benefits to an activity with lower intensity over a longer period.

Below is a list of activities ranked by their different intensity levels. Choose one that you are interested in and start fitting it in as your comfort level and schedule allow:



Lower intensity activities requires you to do these activities for longer time to achieve similar results as higher intensity activities

AADI resistance activity

Walking is a type of cardio (or aerobic) exercise, which means it improves your heart and lung health. It is also important to train your muscles since people lose muscle tone as we age.

Make sure to include exercises that train your muscles like the ones below. Exercise bands* (or resistance bands) are light and easy to carry!



*If you do not have an exercise band, fill a bottle with water or rice and use it like a dumbbell, and you can do similar exercise like above.

CHAPTER 4

SLEEP, STRESS, AND SICKNESS MANAGEMENT

Getting a good night's sleep and avoiding stress are two things you do to stay healthy. If you get sick, there are steps you can take to manage the situation. This chapter introduces tips you can incorporate into caring for yourself and your loved ones.

A good night's sleep

Sleeping 7-9 hours a day is recommended for adults, as studies show a lack of quality sleep can contribute to insulin resistance, putting you at higher risk for developing prediabetes and T2DM. Here are some natural approaches to getting a better night's sleep:

- · Wake up at the same time each day
- · Expose your eyes to direct sunlight during the daytime
- · Keep your sleeping environment as dark as possible
- · Keep your bedroom comfortably cool
- · Avoid all caffeine after lunch
- · Don't drink alcohol around bedtime
- \cdot Take a hot bath two hours before bed
- · Avoid napping
- · Try a sleep-promoting natural supplement

Stress

With the COVID-19 pandemic, everyone is going through some levels of stress, anxiety, and depression. These also contribute to insulin resistance and even though it is a challenge to avoid all of it, there are various steps you can take to manage or relieve it.

- · Take time for yourself, even if it's just a nice long shower.
- · Enjoy your favorite pastime, or whatever favorite activities make you feel at peace with your environment.
- Doing your physical activity of choice has a powerful stress-reducing effect on your brain and improves the quality of your sleep!
- · Identify support from friends, family, coworkers, spiritual groups, community organizations, support groups, and so on. It is important to express your feelings and receive positive, encouraging feedback.

Alcohol

Learn what is considered a "drink" and how alcohol affects your body!



- Even with moderate consumption, alcohol suppresses your liver from producing glucose. If you are on glucose-lowering medications, you may run into the risk of having low blood glucose.
- Beer and other sugar-added alcoholic beverages contain carbs, the nutrients that may spike blood glucose. When having these drinks, you may see glucose spiking, and later, low blood glucose.
- Moderate drinking may have protective effects on diabetes or cardiovascular health; however, it may increase the risk for diseases such as cancers. If you do not have the habit of drinking, you do not need to start drinking.
- · If you drink, drink moderately limit it to 1 drink per day for women or 2 drinks per day for men.
- · If you are on glucose-lowering medications, monitor your blood glucose more frequently after you drink.

Having "low blood glucose" or "hypoglycemia" means that your glucose is too low to function properly. A blood glucose level of below 70 mg/dL is considered low.

See Chapter 6, "Living with Diabetes", for detailed symptoms.

Smoking

Here are some facts about the effects smoking has on your body:

- Smokers are 30-40% more likely to develop T2DM than nonsmokers. The more you smoke, the higher your risk.
- Smoking increases the risk for serious complications such as heart and kidney disease, amputations, eye disease, and damage to the nervous system.
- Smokers who are infected with COVID-19 may have a higher risk for more severe cases and higher death rates.

Nearly 20% of deaths are caused by smoking, and it increases risk for cancers and deaths from all causes. You can add a decade to your lifespan by quitting smoking. 3 out of 5 adults have successfully quit smoking.

- To stop smoking successfully, you may benefit from behavioral interventions by professionals, and using smoking-cessation products that are approved by the U.S. Food and Drug Administration (FDA). These programs may help you to manage your triggers and cravings.
- Smoking-cessation products include products that use Nicotine Replacement Therapy (NRT), such as transdermal nicotine patches, nicotine gum and nicotine lozenges. There are also prescription cessation medications without nicotine available. Talk to your doctor and see what may work for you.
- · Join a support group to help you through the process. Online apps (such as quitSTART), hotlines, and support groups allow you to start anytime from your home. More information can be found here:

https://www.cdc.gov/tobacco/campaign/tips/quit-smoking/index.html https://www.asiansmokersquitline.org/

Sickness management

[COVID-19]

If you have diabetes and develop COVID-19, you are at risk of developing more severe symptoms and higher risk of death. The good news is, if you manage your diabetes well, the death rate is significantly lowered. Contact your Primary Care Provider (PCP) if you have any of the symptoms. If you don't have a PCP, contact your local clinic, hospital, or community health center.

· Fever or chills	· New loss of taste or smell
· Cough	· Sore throat
· Shortness of breath or difficulty breathing	· Congestion or running nose
· Fatigue	· Nausea or vomiting
· Muscle or body aches	· Diarrhea
TT 1 1	

· Headache

Scientifics and doctors are still learning about this new disease. Visit the CDC's website for the up-to-date list of symptoms:

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

If you have symptoms or if you have come in contact with someone who has COVID-19, get tested. Check your state website or contact department of public health in your area to see where you can get tested. Antibody testing (to see if you were previously infected) is not for diagnosing current COVID-19 infection. Massachusetts testing sites can be found at: <u>https://www.mass.gov/covid-19-testing</u>

If someone in your family has regular or frequent contact outside your home (work, school, errands, etc.) the person needs to wear a mask and keep physical distance as much as possible within the household, especially when approaching other family members such as seniors or those with underlying medical conditions. If you live in close quarters, here are some tips for preventing COVID-19 in your household:

https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/living-in-close-quarters.html

If you do need to go out, wear a mask. Wash your hands frequently with soap and warm water for at least 20 seconds and maintain 6-feet (180cm) of distance from those who do not live with you. Practice general health recommendations to help you stay strong: sleep well, eat healthy and stay active.

[Other sickness and routine health visits]

- Contact your healthcare provider or hospital/clinic and determine if you need to go to the clinic to be seen. If the provider thinks it's best for you to stay at home, then stay at home until your symptoms have subsided.
- Take care of yourself by resting more, drinking plenty of water, and having a variety of fruits and vegetables. Choose foods that are lower in fat when you are recovering. Choose fish, shrimp, skinless chicken or tofu as protein sources.
- · Do not cancel your routine check-ups. Reschedule them if they have been cancelled.
- \cdot Get your annual flu shots and other routine vaccinations.

[Oral health]

Severe periodontitis is associated with increased A1C (a measurement of average blood glucose), both for people with diabetes and those without.

For those with diabetes, having moderate-to-severe periodontitis increases the risk for diabetes-related complications, such as kidney disease and heart disease. Poorly managed diabetes may worsen your oral health, as it may cause dry mouth, increasing your risk for cavities.

Things you can do to keep your teeth and gums healthy:

- \cdot Floss at least once a day
- · Brush your teeth at least twice a day
- · Brush, or at least rinse, after eating
- \cdot Do not smoke. Quit smoking if you smoke
- · Use toothpaste and/or mouthwash with added fluoride
- \cdot Drink fluoridated water
- \cdot Visit your dentist at least once a year
- \cdot If you have diabetes, manage your blood glucose
- Choose vegetables, whole grains, and avoid sugarsweetened beverages or juice

CHAPTER 5

WHAT TO KNOW AT EACH STAGE OF YOUR LIFE

Children

If you have babies or children, make sure they get the needed immunization throughout their childhood and adolescent stages. You can find the CDC's recommended timetable for immunization here:

https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html

To protect your children from future diabetes, pay attention to these three important things:

[1. Nutrition]

Make sure to include foods from each of the various food groups – vegetables, whole grains, protein food, fruits, and dairy or dairy alternatives.

[2. Physical activity]

Reduce kids' sedentary time by:

- \cdot Limiting screen time to no more than 1 hour or less each day
- · Walking to your destination whenever possible
- \cdot Moving around after sitting for a period of an hour or more
- · Inviting them to do some physical housework, such as sweeping or vacuuming

[3. Good sleep]

Adequate sleep is important for healthy development, weight management and preventing diabetes in children. The CDC has provided guidelines on the hours of sleep for different age groups.

Age Group		Recommended Hours of Sleep Per Day	
Newborn	0–3 months	14–17 hours (National Sleep Foundation) ¹ No recommendation (American Academy of Sleep Medicine) ²	
Infant	4-12 months	12–16 hours per 24 hours (including naps) ²	
Toddler	1–2 years	11–14 hours per 24 hours (including naps) ²	
Preschool	3–5 years	10–13 hours per 24 hours (including naps) ²	
School Age	6–12 years	9–12 hours per 24 hours ²	
Teen	13–18 years	8–10 hours per 24 hours ²	
Adult	18–60 years	7 or more hours per night ³	
	61–64 years	7–9 hours ¹	
	65 years and older	7–8 hours ¹	

https://www.cdc.gov/sleep/about_sleep/how_much_sleep.html

Young adults

Choose healthy food options and follow the tips below to incorporate healthy eating habits into your busy schedule:

- \cdot Plan and prepare meals ahead of time. Freeze foods that will not be consumed in the next 3 days. When reheating food, make sure it reaches 165°F (75°C).
- Keep frozen vegetables, low-sodium canned tuna or chicken, and whole wheat pasta or frozen brown rice in your home at all times. With these ingredients, you can put together a balanced meal in just a few minutes!

Women of reproductive age

Asian Americans are at a higher risk of developing gestational diabetes (GDM) during pregnancy.

[Planning your pregnancy]

- · Maintain healthy weight if your BMI is over 23 kg/m², losing weight may help you conceive
- Stay physically active you will find it easier to keep up with the recommended activity level during your pregnancy
- Have a balanced meal plan choose whole grains, more vegetables, and lean protein to provide you with the nutrients you need. (See Chapter 2 on healthy eating.)
- \cdot Take a prenatal multivitamin daily

If you have diabetes, talk with your doctor about your wish to become pregnant. Tighter glucose management can help you with a successful pregnancy. At Joslin Diabetes Center, we recommend that you:

- · Get your eyes examined before pregnancy
- · Check your glucose at least 4 times a day
- · Aim for fasting and pre-meal glucose levels at 80-110 mg/dL
- · Aim for 1-hour post-meal glucose levels at 100-155 mg/dL
- \cdot Aim for A1C <7%, and as close to 6% as possible without causing severe low blood glucose
- \cdot Discuss your glucose goals and management plan with your provider

[Pregnancy]

Pregnancy increases your risk of being hospitalized if you have COVID-19.

Avoid gaining excess weight during your pregnancy. Discuss your goals for limiting weight gain with your healthcare provider.

- If your pre-pregnancy weight is within a healthy range (BMI 18.5-22.9 kg/m²), aim for 1-4.5 lb. weight gain during the first trimester. During the second and third trimester, the ideal weight gain is about 1-2 lb. per week.
- For singleton pregnancy, your calorie needs during the first trimester are no different than your usual pre-pregnancy intake. During the second trimester, you will need an additional 340 kcal/day, while during the third trimester, you will need an extra 450 kcal/day.
- Take in at least 175g of carbohydrates each day, spreading your consumption throughout the day. For example:

- \cdot Breakfast: 2 slices of whole wheat bread with 1 egg
- · Morning snack: 1 glass of milk
- · Lunch: 1 bowl brown rice with vegetables and meat
- · Afternoon snack: 1 orange with some nuts
- · Dinner: 1 bowl brown rice with vegetables and fish
- · Bedtime snack: 1 glass of milk
- Stay active, as permitted by your provider. It may be easier to break off for activity a few times a day, e.g., walking 20 minutes after each meal. Aim for at least 150 minutes' moderate activity per week (e.g., brisk walking).
- · Stop all smoking, drinking, or use of recreational drugs.
- \cdot Be sure to have your blood pressure checked at every visit.
- · Have your eyes examined at least once every trimester if you have diabetes.

If you have had GDM before, your provider may conduct a glucose screening test earlier in your pregnancy. If you have diabetes during your current pregnancy (GDM or pre-existing diabetes), keep your glucose within a healthy range. Discuss your goals with your provider.

At Joslin Diabetes Center, we recommend that you:

- · Check your glucose 4-7 times a day
- \cdot Aim for pre-meal glucose levels of 60-95 mg/dL
- \cdot Aim for 1-hour post-meal glucose levels of 100-129 mg/dL
- \cdot Aim for A1C <6% while avoiding severe low blood glucose
- \cdot Aim for negative urine ketones

[Post-pregnancy]

Women who had GDM during their pregnancy should have a glucose screening test 6 weeks after giving birth.

Here are a few tips for staying healthy during the first month after childbirth:

- Speak with your parents or other senior members in your household about any traditions that they would like you to keep.
- If you are eating certain traditional postpartum foods (e.g., chicken soup, chicken wine, pork feet), use these foods as one of the dishes of your main meal, rather than additional food for the day.
- Stay active indoors for every 30 minutes to 1 hour that you are inside, walk around the home for a few minutes. You can also cradle your baby as you walk around, creating more bonding time.
- · Follow-up with an eye doctor after giving birth according to the severity of retinopathy.

Middle-aged

It is important to stay fit and healthy – it also helps you to have a healthy and more active life as you get older. For example:

- · Stay active at least 150 min/week of physical activity (See Chapter 3 on types of activities)
- · Get adequate sleep (about 7-8 hours each day)
- · Stop all smoking, and drink moderately (See Chapter 4)
- Follow healthy eating tips (See Chapter 2)
- Have routine checkups, including an annual visit at your PCP and dentist's office. See the Appendix for more on lab results that you should pay attention to

Older adults

Older adults with COVID-19 typically experience more severe outcomes.

• Oral health problems are common among older adults. See Chapter 6 for more tips on maintaining oral health.

• It is natural that the aging brain is not as sharp as at younger ages, but there are many ways to slow down the decline. We recommend that you:

- · Stay active
- Eat healthy (see Chapter 2)
- · Quit all smoking
- · Limit alcohol use (see Chapter 4)
- Manage your blood glucose, blood pressure, and cholesterol (see Chapter 6 for "ABC" and Appendix for your lab results)
- · Keep your brain stimulated (e.g., play mahjong or Chinese chess, read, or learn something new)
- · Stay connected with family, friends and neighbors
- · Sleep 7-8 hours nightly (see Chapter 4 on strategies)
- Seek professional help if you feel anxious, unmotivated, down, lonely, or depressed for more than 2 consecutive weeks
- · If you are on certain medications:
 - · Follow the instructions provided by your provider
 - Use a pillbox to help you organize and remember when to take all of your medications. Some pharmacies provide pre-organized pill packets ("bubble pack prescriptions")

How to access the support you need in your area

[Doctor's offices / hospitals]

If you don't have a PCP, be sure to find one. If you don't have health insurance, check your state's website and search for the keywords "health insurance". For Massachusetts residents, check <u>https://www.mahealthconnector.org</u>, or contact Massachusetts Health Connector: 1-877-623-6765.

[Community centers / Cultural centers]

Many community-based centers provide services to help you navigate day-to-day life. You can start by contacting your city or town to ask for a list of these centers and find out more!

The multilingual AADI website provides more information on Asian American Resources in your area: https://aadi.joslin.org/en/diabetes-mellitus-in-asian-americans/asian-american-resources-in-your-area

CHAPTER 6

LIVING WITH DIABETES - WHO SHOULD I ASK FOR HELP? BUILDING YOUR OWN TEAM AND ROUTINE

COVID-19

More severe cases of COVID-19 are reported for patients with diabetes. Better diabetes management can lower your risk.

If you have frequent contact with others outside your household, consider taking these precautions:

- Stay in a separate rooms from your partner if either or both of you have diabetes, if possible. If not, sleep head-to-toe with each other.
- · Stay 6-feet (180cm) apart at the dining table, or eat at different times.
- \cdot Wear a mask if you cannot stay more than 6-feet (180cm) apart in shared spaces like the living room, even when the person with diabetes is not around.

Everyone needs to practice good hygiene!

- \cdot Wash your hands as soon as you get home. Use soap and scrub for at least 30 seconds.
- \cdot Wear a mask whenever you go out.
- · Clean and disinfect frequently touched surfaces.
- Monitor your health and be alert for any symptoms of COVID-19. Refer to the CDC webpage for the updated list of symptoms and guidelines:

· Symptoms:

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

- COVID-19 Prevention: <u>https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html</u>
- Guidance for dealing with COVID-19 if you have contracted the disease: https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html

For better diabetes care outcomes:

- Keep a glucose log. If you see your glucose is high or low, mark down what was different at the time (e.g., food intake, activity level, stress level, sleep schedule).
- \cdot Eat healthy (see Chapter 2).
- Stay active (see Chapter 3).
- · Take all medications prescribed by your doctor and schedule regular visits with your health care provider.

You are at higher risk for serious flu complications. Make sure to have your annual flu shot. Consult with your PCP to find out what vaccinations you need.

Treating low blood glucose

Having low blood glucose (or "hypoglycemia") means that your glucose is too low to function properly. Older adults are at a higher risk for low glucose.

Symptoms include:

- · Feeling shaky, tingling, anxious, nervous, or irritable
- · Hunger or nausea
- · Sweating, chills
- · Dizziness
- · Fast or pounding heartbeat
- · Turning pale
- · Confusion, difficulty concentrating, or feeling sleepy or weak
- · Seizures, or in severe cases fainting

You are more likely to experience low blood sugar for a second time within the first 24 hours of a low blood sugar episode. Follow these steps to using the "15-15 rule" when treating low blood glucose:

- \cdot Check your glucose. If it is <70 mg/dL with or without symptoms, you will need to treat your low blood glucose.
- Treat low blood glucose with 15g of fast-acting carbohydrates. Do NOT use foods that contain fat (see Appendix for the types of foods to avoid) as this will slow down the rate of glucose increase.
- · Check your glucose again after 15 minutes. If your glucose is still <70 mg/dL, repeat the previous steps.
- Once your glucose is >70 mg/dL, you can have a small snack containing some carbohydrates, fat and protein as long as your next meal is still several hours away (see the Appendix for a list of suitable snacks). If it is near mealtime, continue to take your medication as usual, including insulin, and then eat at the time of the meal.

Understanding and managing high blood pressure

If your blood pressure is >120/80 mmHg, it is considered higher than normal.

Here are some lifestyle changes to help lower your blood pressure:

- · If your BMI > 23 kg/m², try to lose weight.
- Stay active (see Chapter 3)
- Limit your sodium intake to <2,300 mg/day (~1 teaspoon of salt). Here are some high-sodium foods which should be consumed in limited amounts:
 - \cdot Processed food such as ham, salted eggs, or salted fish
 - · Fermented vegetables
 - · Most canned food
 - Salty condiments and cooking sauces such as soy sauce, oyster sauce, fish sauce, chili sauce, miso, fermented black beans, or fermented tofu
 - · Most restaurant/take-out food
- \cdot Choose more of these foods to help lower your blood pressure:
 - \cdot Fresh or unflavored frozen vegetables
 - · Fresh fruits (at least 2 servings each day)
 - Herbs and spices (such as ginger, scallion, and garlic) to bring out the flavor of your food, rather than salt
 - · Home cooked meals
 - · Reduced sodium soy sauce (use in moderation!)
 - · Limit your alcohol intake

Often, if your blood pressure is \geq 140/90 mmHg, your provider may recommend starting medication to help manage blood pressure.

Understanding and managing your lipid profile

Goals for lipids:

- · Triglycerides: <150 mg/dL
- \cdot HDL: >50 mg/dL for men, or >60 mg/dL for women
- · LDL: <100 mg/dL

A poor lipid profile increases your risk for heart disease. Lifestyle modification is the key to managing your lipids. Follow these tips:

- · Manage your glucose well.
- \cdot Target weight loss if your BMI $> 23 \text{ kg}/\text{m}^2$
- Stay active (see Chapter 3)
- \cdot Eat healthy (see Chapter 2), and in particular:
 - \cdot Choose whole grains to replace processed grains/grain products
 - · Increase your vegetable intake aim for at least half of your meal to consist of vegetables of various colors
 - \cdot Try to incorporate legumes or beans into your meal plan
 - · Replace animal meat with seafood (fish, shrimp) or plant-based proteins such as tofu, beans, or nuts
 - Try eating more fatty fish (e.g., salmon, tuna, sardine, cod), aiming for roughly 1 palms' worth of fish twice per week

Medications

Whenever you are prescribed a new medication or an adjustment to the dosage of a current medication, make sure to ask these questions:

- · How much should I take?
- How often should I take it?
- · What times should I take it?
- · Should I take it before, with, or after a meal?
- \cdot What should I do if I accidentally forget to take my medication?

Sick day rules (on top of regular daily management)

When you get sick, it is important not to omit or reduce your diabetes medications. Always take your insulin or your diabetes pill, even if you are too sick to eat.

- · Drink plenty of fluids (about 6-8 oz for every hour you are awake to prevent dehydration).
- · If you lose your appetite, try palatable and easy-to-digest food such as congee, milk, or fruit juice.
- · Rest and keep warm. Do not exercise.

Avoiding long-term diabetes complications

Diabetes can increase your risk for complications, including:

· More severe cases and higher mortality	· Kidney failure
rates from COVID-19	· Blindness
· Heart disease	· Teeth loss
· Alzheimer's disease	· Erectile dysfunction

It is possible to reduce the risk for these complications by working closely with your diabetes care team. Follow these guidelines:

- · Your Primary Care Provider (PCP) is the first provider you should contact if you have any health concerns
- · An Endocrinologist or Diabetologist can help manage your diabetes
- A Certified Diabetes Care and Education Specialist (CDCES) can make lifestyle recommendations for healthy eating, physical activity, and other strategies (see <u>www.diabeteseducator.org</u>)
- · A Registered Dietitian can design an individualized meal plan (see www.eatright.org)
- \cdot An Exercise Physiologist can design an individualized exercise program
- (see https://www.acsm.org/get-stay-certified/find-a-pro)
- A Pharmacist ensures that your medications are safe (whenever you have been prescribed multiple simultaneous treatments) and that you are adhering to them

Living with diabetes can be hard sometimes, but knowing who you can ask questions, seek for help, and count on in trouble really helps. Take a moment to think about your diabetes care team and who is a part of it right now. If you think you may need to expand your care team, use the resources above to identify where to reach out and start from there!

Appendix

We have put together a list of information you may find helpful. If you have any other questions regarding diabetes prevention and management among Asian American communities, please check our website at <u>www.aadi.joslin.org</u> or email us at <u>aadi@joslin.harvard.edu</u>.

Multilingual downloadable handouts available on the AADI website (<u>https://aadi.joslin.org/en/</u>educational-materials)

- · COVID-19 Related Info for Asian People with Diabetes
- \cdot COVID-19 Care Tips for Asians with with Diabetes
- \cdot BMI for Asian Adults in the United States
- · Are You at Risk for Prediabetes or Type 2 Diabetes?
- · Prediabetes and Type 2 Diabetes Risk Factors for Asian Americans
- What is diabetes?
- \cdot Low Blood Glucose
- · Recommended Grocery Shopping List
- · Traditional Asian Diet 10-day Menu
- · Alcoholic Beverage Calories Chart
- \cdot Foot Care for People with Diabetes
- · Your Diabetes Care Team Diabetes Educator

References

All the references for this booklet can be found on the AADI website under "References for Diabetes Management and Prevention Guide":

https://aadi.joslin.org/en/Education%20Materials/13.ReferencesForAADI2020Booklet.pdf

Appendix 1: Recommended Snacks List for Chinese Americans

There is a widespread misconception that someone with diabetes needs to snack between meals. This is not true, and snacks are not always required. Only eat if you are hungry.

The snacks listed below are not intended for bringing up your blood glucose when it is too low. If you have low blood glucose (hypoglycemia), see Chapter 6, "Living with Diabetes", for treatment options.

If you are pregnant, try to eat something at least once every 4 hours. If it is not yet meal time, pick a snack that delivers 15 grams of carbohydrates.

Snacks with Minimal Carbohydrates

- 1. Fresh vegetable juice or low sodium vegetable juice
- 2. Boiled string beans and carrots
- 3. Sliced cucumber with low-sodium miso dip
- 4. Sugar-free gelatin or jelly grass with 1/4 cup skim evaporated milk
- 5. Mixed vegetable soup
- 6. Sugar-free popsicle
- 7. Seaweed
- 8. Unsalted nuts
- 9. Hard boiled eggs
- 10. String cheese

Snacks with 10-15 Grams of Carbohydrates

- 1. ³/₄ cup edamame (cooked)
- 2.1 cup plain soy milk
- 3.1 cup plain milk
- 4. 1 cup Greek yogurt with $\frac{1}{2}$ cup berries
- 5. 1 slice whole wheat toast with 1 tablespoon peanut butter
- 6.1 slice whole wheat toast with egg or cheese
- 7. 1 small piece of fruit with nuts
- 8. 1/4 cup unsalted nuts with 2 tablespoon raisins
- 9. 4-5 whole grain crackers with cheese or peanut butter
- 10. Granola bars or snack bars*

*Remember to check the label to determine the serving size of snack bars.

Also note:

- · "Sugar-free" does NOT mean "carbohydrate-free"! Many sugar-free foods still contain carbohydrates.
- · Packaged snacks usually contain more sodium; choose options with less than 140 mg per serving.
- \cdot Work towards your target fiber goals for the day by choosing high fiber snacks.

Appendix 2: Diabetes Care Schedule & Goals for Asian Americans

Tests/Exams	Usual Goal	How Often	My result	Date
A1C test	<7%	Every 3-6 months		
Blood glucose (Self-check)	<130 mg/dL fasting <180 mg/dL 1-2 hours after eating	Daily		
Total cholesterol	<200 mg/dL (5.2 mmol/L)	Once a year		
LDL cholesterol	<100 mg/dL (2.6 mmol/L)	Once a year		
HDL cholesterol	Male: >40 mg/dL (1.0 mmol/L) Female: >50 mg/dL (1.3 mmol/L)	Once a year		
Triglycerides (TG)	<150 mg/dL (1.7 mmol/L)	Once a year		
Urine microalbumin	<30 mcg/mg (mcg/mg creatinine)	Once a year		
eGFR	> 60 mL/min/1.73m ²	Once a year		
Blood pressure	<140/90 mmHg	Every medical visit		
Waist circumference	Male: <90 cm (35.5 inches) Female: <80 cm (31.5 inches)			
BMI	<23 kg/m ²	Every medical visit		
Dilated eye exam	Early detection	Once a year		
Foot exam	Early detection	Every 3-6 months		
Foot exam (Self-check)	Early detection	Every day		
Dental check-up	Early detection	Every 6 months		
Flu shot	Early prevention	Once a year		
Pneumonia shot (≥65 years old)	Early prevention	Once for life		
Hepatitis B (≤60 years old)	Early prevention	Once for life		

Try using the following table to track and record your diabetes care regimen:

