

# TEACHER'S GUIDE Middle school module for diabetes prevention education

# Hello.

Thank you for choosing to teach your students about the importance of health and wellness.

We hope that with this guide, you will feel supported in educating your students about preventing diabetes.

As you may know, type 2 diabetes continues to threaten the health and well-being of our community. Approximately 45 percent of adults in Monterey County have diabetes or prediabetes, and type 2 diabetes is rising in children at alarming rates.

Our mission is to change the beliefs and behaviors about type 2 diabetes by educating your students on how small changes to diet and physical activity can make a significant difference.

# Ultimately, our goal is to:

- decrease the number of children receiving diabetes diagnoses
- reduce the overall risk of diabetes
- build a stronger and healthier community

In response, the Monterey County Office of Education has partnered with the Healthy Youth Task Force and Aspire Health to provide diabetes prevention education in our schools through the Don't Feed the Diabetes campaign.

Below are notes and resources for a web-based curriculum for your students. The lesson plan promotes healthy lifestyle habits and health literacy related to type 2 diabetes, and addresses why choosing water over sugary drinks is healthier.

At the end of the lesson plan, there is a slide with an attestation link. This is to help us track the schools and number of students who participated, and also helps with Blue Zones Project accreditation.

If you have any questions, please contact diabetes@aspirehealth.org

Thank you for providing this diabetes education to your students and helping to create a healthier generation for Monterey County, together.



### SLIDE 2 — DON'T FEED THE DIABETES

Today we are going to talk about diabetes. Who has heard of diabetes before? Whether or not you've heard of diabetes before, you may have a friend, a family member, or even a classmate that has diabetes without even knowing. One of the first things to know is there are different types of diabetes that have different causes. We are going to learn about type 2 diabetes today because it is a type of diabetes that can sometimes be prevented by making healthy lifestyle choices.



# **SLIDE 3 — CLASS QUESTION**

Before we jump in, by show of hands, how many of you feel that you are confident to make healthy choices? There is no right or wrong answer. **ASK YOUR STUDENTS TO RAISE THEIR HAND FOR EACH ANSWER.** 



### SLIDE 4 — WELCOME CLASS

By the end of our class, you will not only learn what type 2 diabetes is, but you will also learn what makes it more likely for us to get diabetes and what we can do every day to help keep us from getting diabetes. At the end of class, I'll show you a website you can visit with your friends and family so you all can defeat The (type 2 diabetes) Beast together.



### SLIDE 5 — CLASS QUESTION

Before we get our lesson started, by show of hands, how many of you know what type 2 diabetes is? There is no right or wrong answer. ASK YOUR STUDENTS TO RAISE THEIR HAND FOR EACH ANSWER.

Whether or not you said yes or no, we're going to learn more together today.



### SLIDE 6 — INTRODUCING THE BEAST

Before we get our lesson started, let's watch this video to learn more about The (type 2 diabetes) Beast. PLAY VIDEO.

- What did you learn about The Beast by watching the video?
- What do the people in the video do that makes The Beast happy?
   Answer options: going to a fast-food restaurant, eating donuts, drinking soda, watching TV, playing video games
- What do the people in the video start doing that makes The Beast leave town?
   Answers options: exercise, play sports, play in the park, drink water, choose a healthy snack, learn more about type 2 diabetes

Great work. Now you know a little more about The (type 2 diabetes) Beast and you know that the way we eat and how much we move our bodies matters. We'll talk more about this later in the lesson.



# SLIDE 7 — HOW DOES YOUR BODY TURN FOOD INTO ENERGY?

We just met and learned about The Beast. Now let's learn more about how the food we eat gives us the energy we need to jump, learn, and play and what we can do to keep The Beast away. **PLAY VIDEO** 

- What did you learn from the video?
- What helps glucose enter our cells and give us energy? (Insulin)
- And when glucose can't enter our cells and we have too much glucose in our blood, it is called what? (Diabetes)
- What risk factors can put you at risk for type 2 diabetes? (Weight, family history, age, too much sitting, food we eat)

Great job. Now you've learned more about how our body turns the food we eat into energy and what type 2 diabetes is. Remember, the healthy choice is your choice. And we'll learn how to make healthy choices today.



### SLIDE 8 — HOW CAN WE PREVENT DIABETES?

Move more and make healthy food choices.

Fruits and vegetables are foods we want to eat more of to be healthy. Which are some of your favorites? Some examples are on the slide. **ALLOW FOR STUDENTS TO ANSWER**.

Another thing we can do is move more. What could you do to move your body more? Some hints are on the slide. ALLOW FOR STUDENTS TO ANSWER.



### SLIDE 9 — LET'S PRACTICE

(2-3 MINUTE ACTIVITY) Let's move our bodies a little bit right now. I'll ask everyone to stand up to run through a few stretches and exercises:

- **Arm circles.** (10 forward, 10 backward)
- Standing sit-ups. Alternate touching your left elbow to your right knee, and your right elbow to your left knee. (20 total)
- **Squats.** Keep your chest up and your back straight. Aim to make a 90-degree angle with your legs. (5 total)
- Jumping Jacks. (5 total)
- Quad stretch. Grab your foot toward your bottom and stand on one leg. (15 seconds on each leg)

How did that make you feel? ALLOW FOR STUDENTS TO ANSWER.



### SLIDE 10 — WHAT CAN WE DO EVERY DAY TO PREVENT DIABETES?

Thanks for sharing, everyone. You have great ideas on how to move more and eat healthfully. I'm going to share with you a special tool you can use to help you make healthy choices EVERY DAY to defeat The (type 2 diabetes) Beast.



# **SLIDE 11 — PREVENTING DIABETES EVERY DAY**

The 5210 tool is like a checklist you can use every day to help you make healthy choices. Has anyone heard of the 5210 tool before? We'll go through what each number means:

- Everyone hold up five fingers in the air. You should try to eat five or more servings of fruits and vegetables per day. So when you see me hold up a "5", you think fruits and veggies
- Everyone hold up two fingers in the air. You should try to spend no more than 2 hours using screens for recreational use per day, i.e. TV, tablets, phones. So when you see me hold up a "2", you think screentime
- Everyone hold up your pointer finger in the air. You should try to get 1 hour or more of physical activity per day. So when you see me hold up a "1", you think physical activity
- Everyone make a "0" with your hands. You should have zero sugary drinks per day. Water is best. So when you see me make a "0" with my hands, you think zero sugary drinks.

I'm going to hold up my hand with different numbers and you all shout out what the number stands for. Ready?

HOLD UP 5,2,1, OR 0 FINGERS, IN A RANDOM ORDER, SEVERAL TIMES, FOR THE STUDENTS TO SHOUT THE CORRECT ANSWERS.



### SLIDE 12 — 5 OR MORE FRUITS AND VEGETABLES EVERY DAY

Alright. Now that you all know what 5210 stands for, let's learn more about each number. We'll start with "5", which stands for? **ALLOW STUDENTS TO ANSWER** — 5 servings of fruits and vegetables per day. One serving of vegetables can look like a half cup of fresh or frozen vegetables, and one serving of fruit looks like a half cup of fresh or frozen fruit.

This is a picture of how to create a balanced plate or meal. How much of the plate are fruits and vegetables in this picture? **ALLOW STUDENTS TO ANSWER** 

At each meal about half of our plate or meal should be fruits and vegetables. And when it comes to filling half our plate with fruits and vegetables, eat the rainbow. Our bodies need fruits and vegetables because they help us to keep moving, thinking, and growing. Fruits and vegetables of different colors have different vitamins and minerals that work together to help our body be strong. Each color represents a nutrient that supports different parts of your body:

- Red can contain vitamin C. Red food gives you a strong heart
- Orange can contain vitamin A. Orange food helps you see in the dark
- Yellow can contain vitamin c. Yellow foods help your body heal
- Green can contain prebiotics or vitamin K. Green food helps you fight off sickness
- Blue/Purple are antioxidants. Blue/purple foods give you a strong brain



### SLIDE 13 — WHOLE GRAINS AND PROTEIN

What food groups are on the other half of the plate? ALLOW STUDENTS TO ANSWER.

ANSWER: Grains and protein. What types of grains do you all like? ALLOW STUDENTS TO ANSWER.

• Examples: bread, rice, tortillas, pasta, bagels, mac and cheese. When it comes to grains we want to try to replace white, processed grain with whole grains. For example, think about foods that have a white or brown variety. Think tortillas, bagels, pasta, cereal, muffins, pancakes/waffles, pizza, and rice. Choosing whole wheat bread instead of white bread or brown rice instead of white rice. Whole grains are the way to go

Notice that protein is only a small portion of the plate. A balanced meal has one quarter of the plate with a source of protein. Protein builds our muscles, bones, and tissues ,and helps us grow. It also helps keep us feeling full. What types of proteins do you all like? **ALLOW STUDENTS TO ANSWER**.

• Examples: chicken, pork, beef, tofu, eggs, nuts/nut butters, beans. It's important to try to choose lean proteins most of the time, meaning protein that does not contain a lot of fat. For example, choosing to have grilled chicken instead of fried chicken, or ham instead of bacon.

Fruit, vegetables, whole grains, and lean protein are foods we often want to EAT MORE of and foods we get to enjoy EVERY DAY.



# **SLIDE 14 - CLASS QUESTION**

After reviewing a balanced meal and what a healthy plate should look like, let's answer this question. True or false: You should eat chips, candy, cookies, and ice cream every day. FALSE.

Remember the types of foods The Beast enjoyed in the video?

Answer options: French fries, pizza, donuts, soda, cookies, etc.



### SLIDE 15 — KNOW YOUR SOMETIMES FOODS

There are some foods that are best to limit. Remember the types of foods The (type 2 diabetes) Beast enjoyed in the video? Hint: French fries, pizza, donuts, soda, cookies, etc.

We can call these foods, SOMETIMES foods, because while it's OK to eat them sometimes or once in a while, it would be unhealthy to eat them every day. These foods tend to have a lot of fat and sugar, two things The Beast loves.



# SLIDE 16 — CATEGORIZING FOODS INTO "EAT MORE" AND "ENJOY THESE SOMETIMES"

Let's practice deciding whether a food is an "Eat more" food or an "Enjoy sometimes" food. AS A GROUP, DECIDE WHICH FOOD ITEM GOES INTO WHICH CATEGORY.

What are some of your favorite snacks that would go into the "Eat more" category?

And what about some snacks you enjoy, but only sometimes?



### SLIDE 17 — LESS SCREEN TIME, MORE PHYSICAL ACTIVITY

To defeat The (type 2 diabetes) Beast, it's also important to move our bodies and make sure we're not sitting still for long periods of time. Let's all stand up again and march for 1 minute.

### START MARCHING.

While we march tell me what kinds of activities do you enjoy that keep you sitting for long periods of time? ALLOW STUDENTS TO ANSWER (EXAMPLES: TV, VIDEO GAMES, READING, DRAWING).

These activities can be a lot of fun, and you can absolutely still do them. You will just want to make sure you are getting up and moving your body every once in a while, like during commercial breaks, in-between game levels, or at every chapter.

Alright everyone can sit down now. What kinds of activities do you enjoy that get your body moving? ALLOW STUDENTS TO ANSWER (EXAMPLES: SPORTS, DANCING, SCOOTER, BIKING, WALKING, RUNNING). Remember, to reach 1 hour of physical activity per day, you can be active in short periods that add up to one hour. That minute of marching you just did counts. Does anyone know how many minutes are in 1 hour?

60 minutes in an hour, correct. So in one day you might play basketball for 30 minutes at school, scooter for 15 minutes when you get home from school, march for 5 minutes during commercial breaks while watching TV, and then walk for 10 minutes after dinner with your family. 30 + 15 + 5 + 10 = 60 minutes.



### **SLIDE 18 - CLASS QUESTION**

By show of hands, During the past 7 days, how many times did you drink a can, bottle, or cup of soda, such as Coke, Pepsi, Sprite, Fanta, etc.? Let's not count diet soda for this question.

ASK YOUR STUDENTS TO RAISE THEIR HAND FOR EACH ANSWER.



# SLIDE 19 - WHAT DRINKS HAVE SUGAR?

Last, but not least — one of the things The (type 2 diabetes) Beast loves the MOST is sugary drinks. What drinks do you think have sugar in them? **ALLOW STUDENTS TO ANSWER**.

• Examples: Soda, juice, Starbucks drinks, Gatorade, sweetened teas like Arizona Iced Tea, and energy drinks.

ANSWER: All of them.

Some of these drinks can have as much sugar in them as eating one or two candy bars. And remember, we said eating candy is a sometimes food. Its better to drink other beverages instead to keep The Beast away. It's important that we know which drinks have sugar in them so we can do our best to avoid them.



# SLIDE 20 - 0 SUGARY DRINKS

So, instead of making those drink choices, what drink choices can you make that are healthier? Hint: there are some examples on the slide.

Examples: WATER, low-fat milk, unsweetened iced tea, unsweetened carbonated water

Drinking water is very important to staying healthy and is the beverage we should choose most of the time.



# **SLIDE 21 – DID YOU KNOW?**

Can you guess which drink has zero sugars in it?

• ANSWER: WATER. You can drink as much water as you want and it won't make the amount of glucose in your blood rise, making it the healthiest choice.

Water is extremely important for us to drink because it helps our body function properly. Many people don't drink enough water. If you don't like plain water you can try adding fruit to your water, or you can try carbonated water.

Did you know... REFER TO THE SLIDE.

True or False? FALSE. You can hydrate by drinking water, and you can also "eat your water". What are some fruits with water? **ALLOW STUDENTS TO ANSWER:** 

Answer options: Watermelon, apples, peaches

What are some vegetables with water? ALLOW STUDENTS TO ANSWER:

Answer options: Cucumbers, celery, lettuce, tomatoes



### **SLIDE 22 – SMART GOALS**

We've learned a lot today and today you're a lot smarter about healthy activities. How will we defeat The Beast? By setting a SMART goal. The (type 2 diabetes) Beast hates healthy goals.

Do you remember what the 5210 tool stands for? ALLOW STUDENTS TO ANSWER

- 5 servings or more of fruits and veggies per day
- 2 hours or less of recreational screen time per day
- 1 hour or more of physical activity per day
- O sugary drinks per day

Great job. Remember, the goal is to use the 5210 tool EVERY DAY to help you live a healthy life and prevent type 2 diabetes. Now, one of the four activities, whether eating more fruits and veggies, shortening your screen time, getting physical activity, or zero sugary drinks, pick ONE of these to be your goal for the next month.

Which of the four do you want to pick? Let's pick one goal that you want to focus on.



# SLIDE 23 – GOAL SETTING ACTIVITY: CLICK HERE FOR SMART GOAL WORKSHEET

Let's go through this together. To be successful in reaching your goal, it should be SMART. Let's go through what that means together. Maybe you want to learn how to play a sport or try a new fruit. Your goal should be specific. Next, how will you know if you reach your goal? Think about how you'll track your progress. Next, ask yourself if your goal is action-based? Make sure it is a specific action you can take. Next, think about if this goal is realistic to you? How will it benefit you? Last, how long will it take you to accomplish this goal? You want your goal to be bound by a specific time frame to complete it.

Pick one of the goals on the back of your worksheet that you want to accomplish. Write it down on the front side of your worksheet. You did it. You created a smart goal. Keep this close to you so you can refer to it and check on your progress. Great job.



# **SLIDE 24 — CLASS QUESTION**

Now, how many of you feel that you are confident to make healthy choices? There is no right or wrong answer. ASK YOUR STUDENTS TO RAISE THEIR HAND FOR EACH ANSWER.



### **SLIDE 25 – CLASS QUESTION**

And lastly, do you know what type 2 diabetes is?

ASK YOUR STUDENTS TO RAISE THEIR HAND FOR EACH ANSWER.



### **SLIDE 26 – THANK YOU**

Great job everybody. Thank you for being such a great class today. Visit **dontfeedthediabetes.com** with your friends and family so they can learn how they can defeat The Beast, too.

# Resources

### DIABETES INFORMATION

- Don't Feed the Diabetes dontfeedthediabetes.com
- CDC website cdc.gov/diabetes
- American Diabetes Association diabetes.org

# FOOD GROUPS/MYPLATE

If you are interested in more educational materials, we encourage using these engaging MyPlate lesson plans that are a part of the CalFresh Healthy Living Nutrition program that focuses on the 5 food groups and eating healthier.

- Fruit Bitmoji lesson
- Vegetable Bitmoji lesson
- Dairy Bitmoji lesson
- Protein Bitmoji lesson
- Grains Bitmoji lesson

These can be used as a lesson in several settings. The students can click on the links and follow along with the audio recordings during asynchronous learning or you can teach virtually during synchronous learning or in-class sessions. If you would prefer, the CalFresh team can connect with you to complete the lesson virtually during one of your class sessions. Embedded in the lesson plans are audiobooks, cooking demos, and physical activity sessions. Some of the lessons have worksheets attached as well.

There is also a <u>teacher survey linked here</u>. It would be helpful if you fill this out after completing the lesson and return to the contact information provided below. As an incentive, prizes can be provided for your students to all teachers who complete a lesson and return the survey.

For questions regarding the CalFresh Healthy Living Nutrition program, please contact:

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