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Having blood sugar that is too high or low can lead to complications. Managing blood sugar levels so they stay in the target range can help prevent or delay the effects of diabetes. Most people with diabetes are aware of how certain foods—particularly those with carbohydrates—can impact blood sugar levels. But what many people may not realize is that meal timing also plays a vital role in blood sugar control in diabetes. Eating regular meals and snacks with a consistent amount of carbohydrates at the same time every day is essential for maintaining steady energy levels and blood sugar control among people with diabetes. Eating regular meals is especially important for people with type 1 diabetes and for people with type 2 who are treated with traditional insulin therapy or oral glucose-lowering medications like meglitinides and sulfonylureas. Skipping meals or snacks while on these regimens places a person at risk for low blood sugar, a condition known as hypoglycemia. Not only will you feel unwell when your blood sugar is low—shaking, sweating, dizziness, hunger—but if it happens frequently, the extra calories required to correct it may eventually cause weight gain. Research has shown an association between hypoglycemia and weight gain in people with type 1 diabetes. Skipping meals can also lead to overeating later in the day, which can cause blood sugar spikes. Low blood sugar can occur at any time during the day. However, people who don't consume regular meals and snacks throughout the day are particularly susceptible to experiencing low blood sugar at night. This is known as nocturnal hypoglycemia. Low blood sugar overnight can be potentially dangerous since you might not realize it's happening, which can increase your risk of further episodes and make you fatigued during the day. In some cases, you may not have any noticeable symptoms—known as hypoglycemia unawareness. This is more likely to happen when you have hypoglycemia frequently, diabetes for more than five years, or taken certain medications for high blood pressure. Having low blood sugar during the day without realizing can also be potentially dangerous—especially when exercising or driving. People who use insulin pumps; take certain oral diabetes medications, such as metformin; or take multiple insulin injections tend to have more flexibility with meal timing and are less likely to experience low blood sugar when skipping or delaying meals. While the timing of meals and snacks in diabetes is important, there is no one-size-fits-all meal-timing recommendation. That's because everyone has different lifestyles, nutritional needs, and health concerns. Here is what the latest research says about meal timing for diabetes. Most experts agree that eating a healthful breakfast after waking up benefits people with diabetes. Not only does a balanced breakfast help you feel full throughout the day, but it also can help control blood sugar. Eating a larger breakfast followed by smaller meals for lunch and dinner has been linked to weight loss, lower blood sugar, and decreased insulin requirements in people with type 2 diabetes. Skipping breakfast, on the other hand, has been linked to higher blood sugar levels and weight gain. For example, one study of adults with type 1 diabetes found that skipping breakfast increased blood sugar levels during the afternoon and overnight, resulting in an overall higher 24-hour blood sugar concentration. Interestingly, there was no significant difference in calorie intake between those eating and skipping breakfast. This suggests that those who skipped breakfast overconsumed calories later in the day to compensate for missing breakfast, causing blood sugar spikes. Another study linked skipping breakfast to obesity among people with type 2 diabetes. Being overweight or having obesity increases your risk for other chronic health conditions, such as heart disease and stroke. While the study did not establish a relationship between skipping breakfast and poor blood sugar control, it is understood that blood sugar can be better managed if you are not overweight or have obesity. Consuming a balanced lunch and dinner with the same amount of carbs each day is generally advised to keep your blood sugar and energy levels stable. This is especially important if you take insulin or oral diabetes medications because your blood sugar can drop when you skip or delay a meal. While there are no set recommendations on exact meal timing, eating an early dinner may be helpful. One study in patients with type 2 diabetes found that eating dinner within two hours of bedtime is associated with obesity and poor blood sugar control. When it comes to snacking, let your blood sugar levels and hunger cues guide you. Traditionally, most meal plans for diabetes include two snacks in addition to three regular meals to stabilize blood sugars. While snacks can prevent and treat hypoglycemia in people with diabetes, not everyone with diabetes—especially type 2 diabetes—may need to snack. Drinking alcohol can increase your risk of low blood sugar, so you may want to consider having a snack (or keeping one on hand) during these times. If you're at risk for having nocturnal hypoglycemia, having a bedtime snack may help prevent your blood sugar from dropping too low overnight. Exercising after meals may be an effective way to lower blood sugar levels. Research has shown that people with type 2 diabetes who exercise 30 minutes after a meal can help better regulate their blood sugar. Some people with diabetes—especially those who take mealtime insulin or certain other diabetes medications like sulfonylureas—may actually need to eat something before they work out to prevent blood sugar from dropping too low. Your blood sugar can drop low during exercise because your muscles use more glucose, the sugar in your bloodstream, during physical activity. If you plan to exercise immediately after eating, your healthcare provider may recommend decreasing your insulin dose. You can also eat a small carbohydrate-containing snack before, during, or after exercising. Alternatively, you can exercise before you eat and take your mealtime insulin to lower your risk of low blood sugar and avoid consuming additional carbs during exercise. Intermittent fasting is a dietary pattern that involves cycling between periods of fasting and eating. While there are different variations of intermittent fasting, it most commonly refers to a practice where individuals fast for 16 hours each day while consuming all calories during the remaining eight hours. It may also involve fasting for 24 hours every other day. Research shows that intermittent fasting is considered a safe and viable option to improve blood sugar control and reduce total daily insulin requirements and weight in people with type 2 diabetes. Several small studies suggest those with type 1 diabetes may also experience similar benefits. That said, intermittent fasting isn't for everyone and may have negative side effects in some people with diabetes. In particular, intermittent fasting is generally advised against in people with type 1 diabetes because it can increase the risk of high and low blood sugar. However, new studies have demonstrated that intermittent fasting may be safe for those with uncomplicated type 1 diabetes as long as they receive structured diabetes education and use advanced glucose monitoring, such as insulin pump therapy. Individuals with type 2 diabetes who take insulin or sulfonylureas are also at risk for low blood sugar while on an intermittent fasting plan. In addition to low blood sugar, other potential risks of intermittent fasting include dehydration, insufficient nutrient intake, excessive hunger, headaches, and weakness. Certain populations should not engage in intermittent fasting, especially if they have diabetes. These include people who are pregnant or lactating, older adults, young children, people with a history of an eating disorder, and individuals who are immunocompromised. If you have diabetes and are considering intermittent fasting, be sure to discuss the diet with your healthcare provider to make sure it fits your specific health needs. Because everyone has different nutrient needs and responds differently to food and medications, it may take trial and error to find a meal timing plan that works best for you. Here are a few things to consider when developing a meal-timing plan: Plan regular meals that include a balance of vegetables, protein, and carbohydrates to keep your blood sugar and energy levels stable throughout the day. Balance your carbohydrate intake with exercise as well as the use of insulin and other diabetes medications. Keep a record of when and what you eat. Also, note your blood sugar levels before and two hours after meals to see how the foods you eat and meal timing affects your blood sugar. Talk to your healthcare provider about using a continuous glucose monitoring (CGM) device or a blood glucose meter (BGM)—these devices can help measure glucose levels. Include healthy snacks, as needed, based on hunger cues and blood sugar levels. Check your blood sugar levels before and after exercise to learn how different types of activity impact your blood sugar. It's also important to consider work schedules, sleep, and other medications you are taking when creating a meal timing plan. Working with your healthcare team can help you develop an eating pattern and meal timing plan that best suits your needs. Thanks for your feedback! Hi all, Quick q: do you find your overall blood sugars better if you eat, say, every two hrs or so - or if you stick to set breakfast, dinner, lunch? I was doing breakfast, snack at 11, lunch, snack at three etc but in the last few days have just been sticking to main meals and my sugars are much lower then before each meal... Obviously I understand that's cos I've gone longer without eating, but which style of eating is better for us? I initially read that little & often best but given my better pre-meal readings am now less sure... Thanks! SK Diagnosed Type 2, 22nd Feb 2013 Hba1c 7.5 Three month trial of managing through diet & exercise. Low carb, pescatarian Trying various supplements! Re: Better to eat little & often or three square meals? I always thought sticking to 3 meals was best. It will depend on your treatment though, if you're mixed insulin, certainly 3 meals are best. Not so important if you inject as you eat. Someone cleverer will be along soon hopefully ! Re: Better to eat little & often or three square meals? Thanks Mo! I'm not on any meds at the mo; trying to manage through diet... The last couple of days seem to show three meals are better (for me) - but just need to check it doesn't cause bigger 'spikes' after - and curious to know what others find best too Diagnosed Type 2, 22nd Feb 2013 Hba1c 7.5 Three month trial of managing through diet & exercise. Low carb, pescatarian Trying various supplements! Re: Better to eat little & often or three square meals? I think as with most things diabetes related, what works for one may not work for someone else. Keep monitoring but if it suits you and you getter better control, stick to the 3 meal routine. Good luck ! Re: Better to eat little & often or three square meals? My sugars are far better if I graze all day, I have 5 or 6 small meals/snacks and that works fab for me. Not on insulin yet though so when it progresses to injection - I'll probably go back to 3 meals just to make life easier. Sent from the Diabetes Forum App Re: Better to eat little & often or three square meals? Interesting - thank you... I suspect (like loads of things) each body is different... Mine defo seems to be preferring bigger gaps between eating - even if my brain is less impressed! ;-) Now I think about it, when I was slimmer I always ate three meals a day too... My belly fat only really came after I stopped smoking and replaced cigarettes with snacks... And as its the belly I'm trying to shift, maybe I need to go back to what used to work? Its all about testing and measuring I guess! Diagnosed Type 2, 22nd Feb 2013 Hba1c 7.5 Three month trial of managing through diet & exercise. Low carb, pescatarian Trying various supplements! Re: Better to eat little & often or three square meals? 3 meals a day works best for me. I try (with varying degrees of success!)to limit snacks because they cause havoc with my bs. Sent from the Diabetes Forum App Re: Better to eat little & often or three square meals? Interesting! I was kinda 'forcing' myself to eat little and often (every two hrs!) cos I'd read that it helps keeps your blood sugars stable to - but am also only having three main meals a day at the mo, and although I initially felt famished, the last couple of days I've found I'm much less hungry - and my blood sugar readings are coming in more stable... All good stuff! Diagnosed Type 2, 22nd Feb 2013 Hba1c 7.5 Three month trial of managing through diet & exercise. Low carb, pescatarian Trying various supplements! Dear Doctors: I've been hearing that eating six small meals per day instead of three large ones is better for your health and even helps with weight loss. When I try it, though, I wind up feeling hungry all day. Are six meals really better than three? Your question arises from recent news reports, but it has been debated for centuries in one form or another. From the ancient Romans, who believed that a single meal per day was the path to good health, to a Canadian study in the 1980s that touted the benefits of a "nibbling diet" of 17 snacks per day, the question of meal frequency has long been a topic of great fascination. The premise behind eating smaller and more frequent meals is the control of blood sugar, also called blood glucose. This refers to the glucose, a type of sugar that is extracted from the food we eat. When digestion is complete, glucose is carried by the bloodstream and throughout the body to supply our cells and organs with energy. When blood glucose levels drop, hunger and cravings spike. By eating six small meals per day, the thinking goes, you're ensuring that blood glucose is available at all times. By controlling the trigger for cravings, you'll eat less and won't be as likely to give in to the siren song of that bag of chips or chocolate bar. But does it work? While the logic is solid, results have been mixed. Participants in a study who ate six small meals showed no metabolic advantage over those who ate three large meals. What did separate them from the three-meal group was that they reported higher levels of hunger and an increased desire to eat. Another study found that eating smaller meals more frequently throughout the day had little effect on fasting glucose levels. However, it did conclude that waiting until the end of the day to eat the majority of calories had a detrimental effect on blood glucose control. In fact, intriguing data from recent studies supports the idea that intermittent fasting is beneficial. The shift in the way the body metabolizes food after a weekly fast as brief as 16 hours was found to have measurable health benefits. As research continues and we add to the body of knowledge regarding meal frequency, we can fall back on what we know for sure -- that what you eat can play a significant role in maintaining good health. It's the total calories consumed and the nutritional quality of those calories that matter. However many meals per day you decide to eat, be sure to limit your calories to a healthy level. Processed foods, refined sugars and sugary soft drinks are empty and even dangerous calories, so steer clear. Lean proteins, vegetables (specifically, leafy greens) and fresh fruit are the building blocks of a healthful diet. And we know you've heard it before, but we'll say it again: For the best chance at ongoing good health, remember to exercise. Eve Glazier, M.D., MBA, and Elizabeth Ko, MD., are internists and assistant professors of medicine at UCLA Health. Ask the Doctors is a syndicated column first published by UExpress syndicate. Timing your meals and eating on a consistent schedule can help improve your blood sugar management. What you eat has a dramatic effect on your health when it comes to managing type 2 diabetes. But so does when you eat it. "Eating regular, balanced meals is critical on multiple levels," says Vandana Sheth, RDN, CDCES, a Los Angeles-based dietitian who specializes in the management of prediabetes and diabetes. Eating on a regular schedule helps keep your blood sugar levels stable, regulates your body's internal clock, helps you feel full and hungry at the right times, and more. Here's why meal timing matters with type 2 diabetes — and how to create a schedule that works for you. Join the free T2D community!Connect with thousands of members and find support through daily live chats, curated resources, and one-to-one messaging.Meal timing helps regulate blood sugar Have you ever felt "off" after not eating when you usually would? Eating on a consistent meal schedule helps keep your blood sugar stable and energy levels up throughout the day. Certain meal timing patterns seem to be particularly beneficial for blood sugar regulation in people with type 2 diabetes, regardless of whether they take insulin or other medications. About two to three meals a day, which should include a consistent amount of carbs, plus one to two snacks at least 3 to 4 hours in between meals if needed, seems to work best. This meal timing helps keep your blood sugar levels lower at fasting times and after meals throughout the day. On the other hand, the same research suggests eating at irregular times from one day to the next can cause decreased insulin sensitivity and a greater risk of blood sugar spikes after meals — both of which can make your diabetes worse. If you're testing your blood sugar after eating, you may find it useful to know that glucose levels in people with type 2 diabetes can hit their peak within about 30 to 120 minutes of eating a meal. The amount of time it takes to return to pre-meal levels also varies from person to person and can depend on how advanced your type 2 diabetes is. If you're taking medication to lower your blood sugar, including insulin The recommendation of two to three meals a day, including breakfast and snacks, also applies to you if you take one or more blood-sugar-lowering medications, like insulin. Your medication will help keep your blood sugar levels within a moderate range after meals. However, it's a good idea to monitor your blood sugar levels throughout the day. You might notice signs of low blood sugar if you go too long between meals. A vast system of 24-hour cycles called circadian rhythms runs in the background of every cell in the human body. They drive constant changes in hormone levels, metabolism, and everything you do. They even affect how your body responds to medications and the food you eat. The times at which you eat your meals are a powerful signal to every cell throughout your body, whether or not you have diabetes. Meal timing influences your levels of inflammation, the health of your gut microbiome, your sleep-wake cycle, and how quickly your body can replace old, dying cells with new, stronger ones, to name just a few examples. Regular mealtimes support your circadian clock, explained Dr. Anis Rehman, founder of District Endocrine, an endocrine practice in northern Virginia. Circadian rhythms in people with type 2 diabetes Circadian rhythms are disrupted in people with type 2 diabetes compared with people who don't have the condition, though researchers don't fully know why. These daily rhythm differences make themselves known in many different ways in diabetes. Trouble sleeping is one way they show up. Another is the "dawn phenomenon," which happens when blood glucose levels get higher in the early morning hours. When your circadian rhythms are disrupted for external reasons, like working the night shift or low levels of light in your bedroom at night, it can also have unwanted consequences for your type 2 diabetes. Rehman explained that your meal timing may also affect the genes involved in setting your circadian rhythms and metabolism. Researchers have found that throwing off your circadian rhythm by eating or sleeping irregularly can have unfavorable consequences on the way your body processes blood sugar, including: higher A1C levels — a major indicator of long-term blood sugar levelsincreased blood sugar levels after mealslower levels of insulin production in your bodyincreased insulin resistance A growing body of research shows that our bodies are optimized for eating earlier in the day, while later in the day they're more optimized for fasting and rest. Meal timing and your gut microbiome Even your microbiota have circadian rhythms. These are the good bacteria in your gut and are essential to your health. Emerging research shows that meal timing can affect the human gut microbiota — and influence us in turn. For example, the length of time you fast overnight is thought to affect how much of a chemical called propionate your gut bacteria make. Propionate tells the liver to dial down its production of glucose, so controlling it with fasting has interesting potential for people with diabetes, though more research is needed. Your best meal-timing plan for type 2 diabetes While it would be handy to give everyone a detailed schedule of when to eat, meal timing isn't that simple. "Everyone is unique, and it's important to identify what works best for each person in terms of meal timing and blood sugar management," Sheth said. Here are some meal-timing guidelines to consider. How should a person with diabetes start the day? Eat breakfast: Experts say breakfast could even be used as a therapy for diabetes, and studies have shown that eating breakfast has a powerful positive effect on blood sugar levels people experience after lunch and dinner the same day. On the other hand, try to avoid skipping breakfast: One study in people with type 2 diabetes showed that eating breakfast led to better glucose metabolism during the day compared with skipping breakfast. The participants who ate breakfast had closer to optimal levels of insulin and GLP-1 after lunch. GLP-1 is a hormone that helps you feel full and stop eating. In other words, those who ate breakfast felt fuller after lunch and used blood sugar more effectively. In contrast, those who skipped breakfast and didn't eat until lunchtime had suppressed levels of GLP-1 and higher blood sugar levels after they ate lunch. They also had dysregulated gene expression related to their circadian rhythms. What kind of breakfast is best? Eating a lower carb meal in the morning may promote better blood glucose control throughout the day in people with type 2 diabetes and obesity, according to a 2022 review. For the best results, consider breakfast a substantial meal rich in blood sugar-balancing protein, fiber, and heart-healthy fats. They're especially effective if you eat them at the beginning of your meal before you eat the carbs. An example of this would be if you ate your eggs and avocado before your toast. Eating a lower-carbohydrate breakfast can help reduce blood sugar spikes after your meal compared with a higher-carbohydrate breakfast. Research shows that it can also help your blood sugar levels go back to baseline faster in people with prediabetes. Blood glucose levels tend to rise in the morning along with cortisol levels, so a lower carb breakfast won't exacerbate the shift, said registered dietitian Aubrey Phelps. Does breakfast size matter? The jury is still out as to whether size matters when it comes to breakfast. What you eat may matter more than how much. Some research has found that people with type 2 diabetes who ate high calorie breakfasts and lower-calorie lunches and dinners had lower levels of blood glucose after their meals, as well as favorable levels of insulin and GLP-1. To try this meal pattern, you could have a higher-calorie breakfast with moderate or low carbs, followed by lunch and dinner that contain fewer calories. How often should a person with diabetes eat? Here's the meal frequency that appears to help people with type 2 diabetes manage their blood sugar best: Eat two to three meals per day.Space your snacks 3 to 4 hours after your meals.Avoid bedtime snacks.Eat within a 10-hour window during the day, and avoid eating the rest of the day. However, some researchers have found that more, smaller meals can be beneficial under certain circumstances, too, so there may be some wiggle room, especially if you moderate your carb intake and choose nutrient-dense foods high in protein, fiber, and heart-healthy fats. As a general rule, try to minimize any long gaps during the day without fuel, Sheth said, suggesting that 5 to 6 hours between meals is the max most people with diabetes should push it. Phelps added that some, but not all, people may even need to eat every 3 to 4 hours for optimal blood sugar management. How does fasting relate to meal timing? Eating within a certain time window each day — like a 10-hour window — is one form of time-restricted feeding or intermittent fasting. This meal timing method has positive short-term health effects in people with type 2 diabetes, including helping reduce fasting glucose and A1C levels. If you're taking medications to lower your blood glucose levels, like insulin, fasting can make it more likely you'll experience hypoglycemia. You can still practice fasting, but it's important to speak with your doctor before you start. They can help plan the right insulin dosing schedule to help you avoid your blood sugar dropping dangerously low. How should a person with diabetes snack? Research shows that people with type 2 diabetes get blood sugar-lowering benefits from snacking or 3 to 4 hours after meals, but bedtime snacks don't have the same benefits. Sheth said she recommends her clients eat one to two snacks per day, but only if needed, depending on their lifestyle, activity levels, and how they feel. While some people really benefit from the snacks for blood sugar maintenance, energy levels, and overall feelings of fullness, she said, others do better leaving things at three meals per day. In the end, the most important part of snacking might be the intention behind it. Are you snacking at 3 p.m. because you're hungry and your blood sugar levels are getting low? Or just because you're bored at work? Paying attention to blood sugar levels, such as with a continuous blood sugar monitor, can help examine what's going on for you, Phelps said. How late in the day should a person with diabetes eat? The one thing most experts can agree on is that fasting at night (when your body is meant to be sleeping) is beneficial. Sheth said to try to go 10 to 12 hours each night without eating. For instance, if you eat breakfast at 8:30 a.m. every morning, that means capping your nighttime meals and snacks between 8:30 and 10:30 p.m. each night. If you want to try the research-based 10-hour eating window, you could start breakfast at 8 a.m. and dinner at 5:30 p.m. (to end at 6 p.m.). Play around with the timing, test your blood sugar after meals to compare different meal timings, and see what works well for you. But here's one thing to consider: Eating dinner earlier rather than later may be easier for you to manage your blood sugar. One Japanese study of 409 people with type 2 diabetes found that people who ate dinner at or after 8 p.m. had higher levels of hemoglobin A1C. Other research has found that eating at night resulted in higher levels of blood glucose and insulin compared with eating during the day in people with and without type 2 diabetes. In other words, eating at night appears to result in less favorable blood sugar regulation/management. When it comes to diabetes management, it's not just about what you eat. When you eat matters, too. And while there's no one-size-fits-all approach, a little trial and error can help you find a meal schedule that works best for your health. Remember to always talk with your endocrinologist before making any big changes to your meal routine. 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How should a person with diabetes snack? Research shows that people with type 2 diabetes get blood sugar-lowering benefits from snacking or 3 to 4 hours after meals, but bedtime snacks don't have the same benefits. Sheth said she recommends her clients eat one to two snacks per day, but only if needed, depending on their lifestyle, activity levels, and how they feel. While some people really benefit from the snacks for blood sugar maintenance, energy levels, and overall feelings of fullness, she said, others do better leaving things at three meals per day. In the end, the most important part of snacking might be the intention behind it. Are you snacking at 3 p.m. because you're hungry and your blood sugar levels are getting low? Or just because you're bored at work? Paying attention to blood sugar levels, such as with a continuous blood sugar monitor, can help examine what's going on for you, Phelps said. How late in the day should a person with diabetes eat? The one thing most experts can agree on is that fasting at night (when your body is meant to be sleeping) is beneficial. Sheth said to try to go 10 to 12 hours each night without eating. For instance, if you eat breakfast at 8:30 a.m. every morning, that means capping your nighttime meals and snacks between 8:30 and 10:30 p.m. each night. If you want to try the research-based 10-hour eating window, you could start breakfast at 8 a.m. and dinner at 5:30 p.m. (to end at 6 p.m.). Play around with the timing, test your blood sugar after meals to compare different meal timings, and see what works well for you. But here's one thing to consider: Eating dinner earlier rather than later may be easier for you to manage your blood sugar. One Japanese study of 409 people with type 2 diabetes found that people who ate dinner at or after 8 p.m. had higher levels of hemoglobin A1C. Other research has found that eating at night resulted in higher levels of blood glucose and insulin compared with eating during the day in people with and without type 2 diabetes. In other words, eating at night appears to result in less favorable blood sugar regulation/management. When it comes to diabetes management, it's not just about what you eat. When you eat matters, too. And while there's no one-size-fits-all approach, a little trial and error can help you find a meal schedule that works best for your health. Remember to always talk with your endocrinologist before making any big changes to your meal routine. Changing your eating schedule may require adjusting your medications and other aspects of your blood sugar management. Originally written August 27, 2020Medically reviewed on March 12, 202520 Sources Meal frequency is a popular topic of debate in the health and wellness field right now. And intermittent fasting (IF) is quickly becoming a buzzword for weight loss, managing weight, improving insulin sensitivity, controlling blood glucose, and reducing the risk of developing chronic conditions. In a nutshell: when we eat may be just as important as what we eat. This idea is even more important for people who already have signs of insulin resistance, such as those with type 2 diabetes or prediabetes. But there are no one-size-fits-all diabetes diet plans, so it's not surprising that recommendations for how often to eat are also still wide-ranging. Some health professionals suggest eating small, frequent meals four to six times a day. In contrast, others suggest larger, limited meals two to three times a day. It can be challenging to think about meal timing and what to eat, but we're here to help. Here are some tips and tricks to help you learn more. How Diabetes and Prediabetes Impacts How Often You Should EatMost people need to maintain a somewhat consistent eating schedule to curb hunger cravings and keep energy levels up. And people with diabetes should be even more vigilant about this. Long intervals between meals can lead to potentially dangerous low blood sugar levels. Having one overly large meal on an empty stomach can cause a spike in blood sugar levels. There's no one 'perfect' meal plan or schedule for people with blood sugar issues, and there will be some variations from person to person. Working with your healthcare providers and monitoring your blood sugar responses with the help of a registered dietitian can help you learn what works best for you.Your diabetes medication management is also going to affect this. Some medications, like Metformin, are generally best when taken with food, and being on insulin requires some additional considerations. Typically, insulin needs to be dosed based on the carbohydrate amount in your meals, but talk with your diabetes management team if you have questions. Best Way to Space Out Eating if You Have DiabetesThe standard recommendation of three healthy meals and two snacks for people with diabetes has been around for some time. But we're finding that this may not necessarily be the best advice for everyone.One study compared two larger meals with six smaller meals for people with type 2 diabetes. It found that two larger meals reduced body weight and fasting blood sugar than six small meals a day, even when daily calories were the same. Intermittent fasting may also have some benefits for blood sugar control. A 2019 study compared intermittent fasting with a nine-hour eating window compared to no time restrictions on eating in men with type 2 diabetes. They found that fasting improved blood sugar values after meals. Putting a balanced diet together can be one of the most challenging parts of diabetes care. What's the right amount of carbohydrates? Should you add dairy products, brown rice, saturated fat? What fruits and food groups are part of the best eating plan? And most challenging of all—when should you eat any of it?When it comes to food choices, it's best to consult a registered dietitian who will help create the perfect diabetes meal plan for your individual needs. Here's a sample diet plan to help make it easier to figure out when to eat the healthy foods you decide to add to your diet.BreakfastThat same study we mentioned above also compared an earlier eating window of 8 a.m. to 5 p.m. with a later eating window of 12 p.m. to 9 p.m. They found that while both schedules helped control blood sugar levels after meals, only the earlier timeframe improved fasting blood sugar.The reason behind this is likely linked to our natural circadian rhythm. Time of day affects insulin secretion and insulin sensitivity, so front-loading more of your food earlier in the day can be helpful. To maximize the benefits of intermittent fasting, consider an earlier eating window where you get most of your calories during breakfast and lunch while also fitting in an earlier dinner. One bonus tip for breakfast—try not to break your overnight fast with a meal that includes only carbs. You're more sensitive to carbs on an empty stomach. So starting your day with a balanced meal of protein and healthy fats and then eating carbs is a good idea for most people. Consider foods like eggs, avocado, and berries. LunchDon't discount the power of a healthy lunch to get you through the day! While it can be commonplace to skip lunch to cut calories or just because you're too busy to eat, lunch is a pretty important meal.For people with diabetes, in particular, going too long between meals can lead to a potentially dangerous drop in blood glucose levels. When you have a drop like that, your body typically goes into overdrive to compensate. It pumps out glucose (sugar) from storage to help bring your blood sugar levels back to normal. It can lead to feeling like we're "riding the blood sugar roller coaster" where it's challenging to get your sugars to level out. It can also be common to overeat at dinner if you skip lunch. When you're busy (at work, for example), you suppress internal hunger cues and don't realize how hungry you are. Once you slow down at the end of the day, the neglected hunger comes on with a vengeance and can cause overeating at dinner. It can also lead to the urge to snack on unhealthy foods. It can then lead to weight gain and put you at risk of heart disease, high blood pressure, blood sugar level spikes, and higher fasting values the following day.Planning your lunch ahead of time can help to avoid this. One quick, easy lunch idea is to prep a protein box of hard-boiled eggs or shredded chicken, nuts, berries, and whatever chopped veggies you like. SnacksFor many, limiting snacks between meals can help to combat insulin resistance. Every time you eat, your 'eating hormones' are stimulated. When you give your body a break between meals, you allow your body to 're-set.'You may see some benefits to glucose control by focusing on filling meals with adequate fiber, protein, and healthy fats to avoid needing snacks between meals. If you need to snack between meals, choose snacks with a combination of protein and fiber, like apple and cheese, hummus and veggies, or unsweetened yogurt and berries. This will vary based on your medications and individual responses, though. Those on insulin will need to discuss this with their diabetes management team to ensure insulin dosage matches carb intake.Some people with blood sugar control issues may also need snacks to prevent low blood sugars between meals. Again, discuss this with your primary provider to determine what's best for you. DinnerAs mentioned above, some studies suggest that an earlier eating window can help to improve insulin sensitivity and optimize fasting blood sugar. To get the most value out of this, consider aiming for an earlier eating window, such as 8 a.m. to 5 p.m.From our data at Nutrisense, most people do best when eating their last bite of food at least 3 hours before bed.. If you typically eat much later than this, consider moving your eating window up even 30 minutes at a time to work towards better blood sugar control. Since insulin sensitivity is lower in the evenings, one helpful strategy is to keep your dinner on the lower-carb side and focus on a meal with protein, non-starchy veggies, and healthy fats. Consider something like a salmon filet topping a bed of spinach, tomatoes, green beans, or other veggies! Another idea is a quick veggie stir fry with peppers, onions, cabbage, asparagus, and thinly sliced beef. Other Healthy Eating Tips for People with DiabetesPaying attention to when you're eating isn't the only strategy to keep in mind to improve your blood sugar levels. Here are some more ideas to improve your blood sugar response: 1) Regulate Your CarbohydratesSince the body breaks carbs down into energy relatively quickly, more carbs mean higher blood sugar levels or a blood sugar spike. Being thoughtful about how many carbs you include in a meal and the types of carbs makes a big difference in your blood sugar levels. How many carbs someone with diabetes or prediabetes should eat is still up for debate. Recent research suggests that this recommendation likely needs to be individualized from person to person for best results. Monitoring your blood sugar response to different meals using a continuous glucose monitor (CGM) and working with a registered dietitian can help you pinpoint the right amount of carbs for you. In general, choosing whole food carbs like whole grains, fruit, or starches (starchy vegetables like sweet potatoes, beans, corn, etc.) will lead to better blood sugar values compared to more refined options like processed cereal, white bread, granola bars, fast food, or sugary drinks.Part of the reason behind this is that whole food carbs contain fiber and other nutrients that take longer for your body to break down. In contrast, processed carbs (especially sugary drinks like fruit juice with added sugars) are easy for your body to convert to energy, contributing to a rapid, intense blood sugar spike.Along with paying attention to the amount and types of carbs we're eating, switching up the order that we eat foods can