
When sugar is NOT so sweet!
Soda
FRUIT FLAVORED SODA
100% Natural
SWEETENED TEA
Sports Drink
ENERGY DRINK
JUICE DRINK
VITAMIN-ADDED WATER

Letter to Providers

This guide was originally developed by the State of Alaska, and with permission, has been revised by the California Department of Public Health (CDPH), the Office of Oral Health (OOH) to meet California needs.

"When Sugar is Not So Sweet" is a brief guide that includes simple visuals and messages dental providers can use to talk with patients about reducing and eliminating sugar-sweetened beverage (SSB) consumption to reduce dental decay and other associated chronic diseases. The guide also helps patients come up with a plan to help reduce and/or eliminate SSB consumption.

SSBs are the leading source of added sugar in American's daily diets. Added sugars contribute about 13% of total daily calories.[1] About 47% of calories from added sugars come from sugary drinks.[1]

SSB consumption has been shown to be correlated to tooth decay in children.[2,3] In California, 54 percent of kindergartners and 70 percent of third graders have experienced dental caries (tooth decay), and nearly one-third of California children have untreated tooth decay.[4] Two out of five California children (42%) consume one or more SSBs per day.[5]

This guide integrates motivational interviewing techniques and adapts the effective tobacco cessation intervention known as the "5A's"[6] (Ask, Advise, Assess, Assist, and Arrange) to address SSBs.

CDPH is focused on reducing oral health risks by providing resources and education to decrease the consumption of SSBs. The Overall goal of these programs is to educate Californians about health drink options, help identify drinks with added sugars, and to make the link between consumption of SSBs and associated health risks.

The Centers for Disease Control and Prevention Division of Oral Health supported this effort as dental providers are uniquely positioned to promote healthy behaviors to prevent chronic disease. Dental health and obesity prevention professionals are working together to help reduce sugary drink consumption and prevent serious health outcomes for California families.

When Sugar Is Not So Sweet: A brief guide to explain how sugary drinks can harm your health

Adapted for use by:

The California Department of Public Health

Office of Oral Health

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Obesity Prevention and Control Program
Women's, Children's and Family Health
Oral Health Program

2017

For more information, please contact the California Department of Public Health, Office of Oral Health at DentalDirector@cdph.ca.gov

1. US Department of Health and Human Services and US Department of Agriculture. 2015-2020 Dietary Guidelines for Americans. 8th Edition. December 2015.
2. T.Marshall et al, Dental Caries and Beverage Consumption in Young Children. Pediatrics, 2003
3. J.Wilder et al, The association between sugar-sweetened beverages a dental caries among third-grade students in Georgia, Journal of Public Health Dentistry, 2015.
4. California Department of Public Health, Oral Disease Burden, 2017.
5. UCLA Center for Health Policy Research, California Health Interview Survey (CHIS), 2015-2017
6. Centers for Disease Control and Prevention. Best Practices for Comprehensive Tobacco Control Programs — 2014. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

How to use this guide

This guide will help dental providers talk through the 5A's of a brief office intervention to help patients reduce their sugary drink consumption:

- Ask about sugary drinks
- Advise to reduce consumption of sugary drinks
- Assess readiness for making a change
- Assist with developing a plan of action
- Arrange for follow-up and support

The philosophy: This guide uses the Motivational Interviewing (MI) method, a technique that shows promising results in helping people make positive behavior changes for obesity prevention. This conversation technique is recommended by the American Academy of Pediatrics.[15]

Motivational Interviewing allows patients to voice their concerns and ideas for behavior change, rather than having the provider tell patients what changes to make, and why. The basic conversation techniques follow: open questions, affirmation, reflective listening and summary reflections. The goal is helping patients determine a behavior change to promote healthy lifestyles. The youth or parent determines what they want to focus on and the healthcare provider uses reflective listening to guide them toward change.

The paper: This guide is printed using Synaps waterproof paper that can be sanitized and wiped as needed.

This guide is designed as a flip book with two types of pages:

1. The patient view has mainly pictures, graphs and few words.
2. The provider view shows a thumbnail picture of the patient view and gives instructions, messages, tips and example responses that you can use during your discussion with patients.

On the provider view pages, you'll find common design elements to help you talk with your patients.



Patient view: A small thumbnail of the patient view allows you to remember what the patient is looking at as you guide the discussion.

These shaded green boxes provide the purpose of the patient view and some general instruction. They are not to be read aloud.

These are key messages to be shared out loud with your patients. They aren't meant to be read word-for-word, but certain phrases are in **bold, larger font** to help you quickly scan the page for the most important, key messages. The guide lists "Other ways to say this or ask this" to give alternatives if the sample text doesn't meet your conversation style.

The example responses in the blue boxes share a potential discussion with a patient. You will vary your response based on your professional clinical judgment. Some example responses include bolded statements, such as **"Did I get that right?"**. These bolded statements are recommended for you to say out loud as you respond to your patient.

These tips provide background information, frequently asked questions, or other helpful explanations.



A progress bar in the lower right-hand corner of the provider view pages identifies where you stand in the 5A's progression. This bar helps you track progress, skip ahead or go backward as necessary in the discussion with patients.

What do you drink?



SODA



ENERGY DRINK



SPORTS DRINK



MILK



SWEETENED COFFEES & TEAS



FRUIT FLAVORED DRINKS



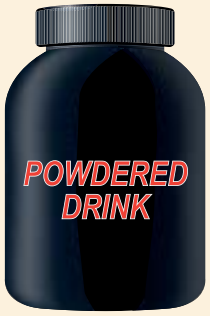
VITAMIN DRINK



FLAVORED MILK



WATER



POWDERED DRINK

PATIENT VIEW



DISCUSS

Use this visual of various beverages to start a discussion about what your patient drinks.

"Let's look at these images together. Tell me which of these drinks you have on a typical day?"

Other ways you could ask:

"So, when you're thirsty, what do you like to drink?"
"How many of these drinks do you have each day?"
"Which of these are your favorite drinks?"
"Which of these drinks do you give your child when they're thirsty?"
"What does your family drink during meals/snacks/as a treat?"

Ask the child first, then confirm with the caregiver. Ask more about amounts or timing. If needed, use brand names to clarify images.

REFLECT

Reflect back the patient's response to confirm understanding. Ask about the pros and cons of the drinks they picked.

"So, your family drinks mostly water, fruit-flavored drinks, and milk every day. **What do think are good things and bad things about these drinks?"**

Asking the patient to start the conversation about the good things and bad things about sugary drinks helps them be in charge, rather than just passively receiving advice.

SUMMARIZE

Summarize the good and bad responses they give you. Start with the good and end with the bad. Do not add your own bad examples.

"Your kids really see juice pouches as a treat, and they're easy to pack in a lunch box. These pouches can be expensive, though, and you're concerned they have too much sugar for your children's teeth. **Did I get that right?"**

INSTRUCTIONS KEY MESSAGE EXAMPLE RESPONSE TIPS

ASK ADVISE ASSESS ASSIST ARRANGE

Sugar Hurts Your Teeth





Take this opportunity to advise your patient to cut back on sugary drinks. Use this image to help describe the process of tooth decay when teeth are exposed to sugar.

PATIENT VIEW



"I'm concerned about how sugary drinks are affecting your child's teeth and overall health."

"I know you want your child's teeth to be healthy, and one way to do that is to cut back on sugary drinks. Is it OK if I spend just a minute showing you a bit more information?"



"This image is showing us a simple way to understand how sugar and sugary drinks hurt your teeth.



When you drink or eat sugar, the bacteria that are naturally in your mouth start eating that sugar.



That creates acid in your mouth. That acid starts attacking the teeth and dissolves the enamel of your teeth.



The enamel is really important because it covers your teeth to protect them.



When you lose enamel, your teeth start decaying and painful cavities can form.

Cutting back on sugary drinks can make you much healthier and prevent you from feeling the pain of cavities."

If the patient reports drinking few sugary drinks, compliment them, but also take a minute to encourage them to continue limiting sugary drinks.

"I realize your family rarely has sugary drinks. That is great, and I encourage you to continue limiting them. **Is it OK if I spend just a minute showing you a bit more information to help you protect your child's teeth and overall health?"**

INSTRUCTIONS KEY MESSAGE EXAMPLE RESPONSE TIPS

ASK | ADVISE | ASSESS | ASSIST | ARRANGE

Tooth Decay
from Sugary Drinks

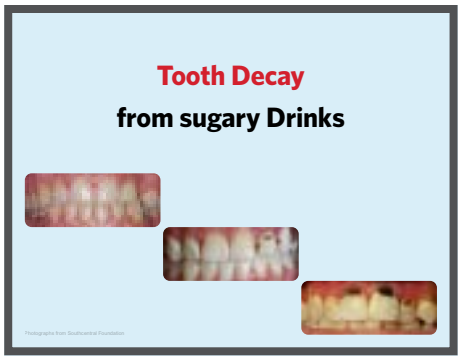






Photographs from Southcentral Foundation

PATIENT VIEW



Use this image to improve your patient's knowledge and understanding of how sugary drinks can hurt their teeth, and the importance of caring for baby teeth.

"Over time, sugary drinks can lead to tooth decay.

The first stage of decay may be difficult to notice on teeth.

As enamel starts to dissolve, you may notice some changes to the teeth.

More advanced dental decay can appear brown or black.[16] At times, untreated advanced decay cannot be fixed, and the tooth may need to be removed."

Share more information to help the patient understand the importance of healthy baby teeth.

Taking care of teeth — even baby teeth — is important. Baby teeth hold the space in the mouth needed for permanent teeth that come in later. Cavities that develop in teeth can be painful. Cavities can cause problems with:

- eating.
- sleeping.
- speaking.
- learning.

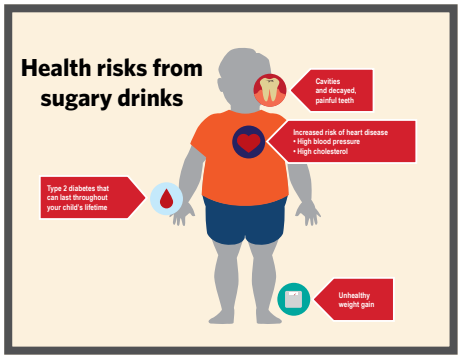
Fixing baby teeth by filling them, pulling them out, or putting crowns on them can:

- be expensive.
- cause pain.
- change the appearance of a child's smile as they grow up.

Health Risks from Sugary Drinks



PATIENT VIEW



Use this image to improve your patient's knowledge and understanding of how sugary drinks can hurt their health.

"Sugary drinks and added sugar harm more than just teeth. These drinks can lead to a number of serious health problems that can last throughout your child's lifetime."

Unhealthy weight gain[1,2,3]

- "Being overweight or obese is a serious health concern."
- "That's in part because excess weight is linked to other serious health problems, like type 2 diabetes."

Type 2 diabetes[4]

- "Type 2 diabetes used to be considered a health problem that only adults could get. That's not the case anymore."
- "Type 2 diabetes happens when too much sugar builds up in your blood, and that puts stress on your body."
- "For some children, type 2 diabetes can be a health struggle for the rest of their lives and require medication and other changes to diet and physical activity."

Heart disease[5,6]

- "Some people are surprised to learn that sugary drinks can lead to heart disease over time."
- "Sugary drinks can increase your child's risk of high blood pressure and high cholesterol."
- "If those health problems aren't treated and managed, they can lead to serious heart problems as your children get older."

The statements below can help you respond to additional questions from patients. You DO NOT have to read each one out loud.

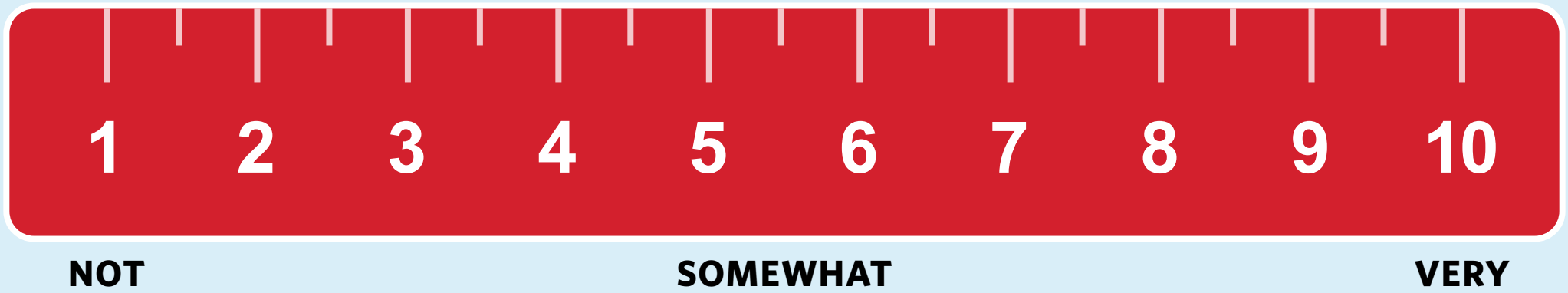
Obesity during childhood can harm the body in a variety of ways.

Children who have obesity are more likely to have:[17-27]

- high blood pressure and high cholesterol, which are risk factors for heart disease.
- increased risk of type 2 diabetes.
- sleep problems, such as sleep apnea.
- breathing problems, such as asthma.
- gastrointestinal problems, such as reflux disease or constipation.
- hip and knee joint problems and pain.
- fatty liver disease or gallstones.
- a skin condition called acanthosis nigricans.
- psychosocial disorders, such as anxiety, fatigue, depression, low self-esteem, eating disorders, as well as social problems, such as bullying and stigma.

References on page 19

Are you ready?



PATIENT VIEW



Use this readiness ruler to assess your patient's interest in making a change. Match the appropriate brief intervention with their score for readiness for change.

"Look at this scale of 1 to 10, where 1 is not ready and 10 is very ready. How ready are you to make a change about serving fewer sugary drinks to your family?"

Use your clinical judgment on which actions to take. If a patient is already making plans to reduce sugary drinks, you may decide to skip one or more of the pages that "Assist" with making a plan and move to page 18, "Arrange" for follow up.

SCORE 1-3: NOT READY FOR CHANGE

"I understand you aren't ready to make a change right now and that's OK. Is it OK if I make a note of our discussion today and we talk about it a bit more at your next appointment?"

End your conversation about sugary drinks and make a note in the patient record.

SCORE 4-10: SOMEWHAT OR VERY READY FOR CHANGE

For scores 4-7 (contemplation) and 8-10 (preparation/action), ask what makes them ready to change.

You gave yourself a score of [#] for being ready to change the types of drinks you serve your family. Why did you pick this score and not a 2?"

Letting the patient describe why they scored themselves a 4-10 instead of a 1-3 affirms their ability or desire to change and is more effective than trying to convince them to move into a higher score. Use their words to talk about their motivation to change.

"That is great you would like to make a change. I have a few tools that will help you decide which changes will work best for you and your family."

INSTRUCTIONS KEY MESSAGE EXAMPLE RESPONSE TIPS

Which drinks are hiding the most added sugar?



20 oz

SODA



16 oz

ENERGY DRINK



20 oz

VITAMIN DRINK



20 oz

SPORTS DRINK

16 oz



POWDERED DRINK

14 oz



SWEETENED COFFEE

8 oz



FLAVORED MILK

8 oz



MILK

16 oz



WATER

Which drinks are hiding the most added sugar?



20 oz

SODA



16 oz

ENERGY DRINK



20 oz

VITAMIN DRINK



20 oz

SPORTS DRINK

16 oz



POWDERED DRINK

14 oz



SWEETENED COFFEE

8 oz



FLAVORED MILK

8 oz



MILK

16 oz



WATER

16 TEASPOONS



16 TEASPOONS



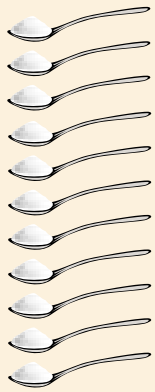
8 TEASPOONS



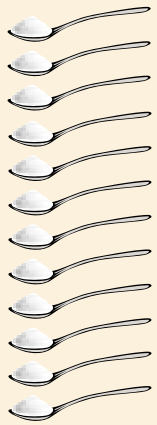
9 TEASPOONS



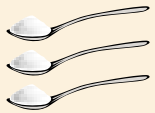
11 TEASPOONS



12 TEASPOONS



3 TEASPOONS



NO ADDED SUGAR

NO ADDED SUGAR

Water and low-fat milk have NO added sugar.

1 TEASPOON = 4 GRAMS OF SUGAR

Use this image to improve your patient's knowledge and understanding of how much added sugar is hiding in common drinks so they can make a plan to choose healthier drinks.

"Let's look at these drinks. Tell me which drinks you think have the most added sugar and the least."

PATIENT VIEW



Summarize their responses, and then reveal the hidden sugar by flipping the plastic cover sheet over the pictures of drinks.

"You can see how much sugar is hiding in each drink. What do you notice when you look at these drinks? Is there anything that surprises you?"

Summarize the patient's responses and affirm what the patient says.

"Yes, it is surprising that vitamin and sports drinks have so much sugar, even though they are marketed to families as healthier options."

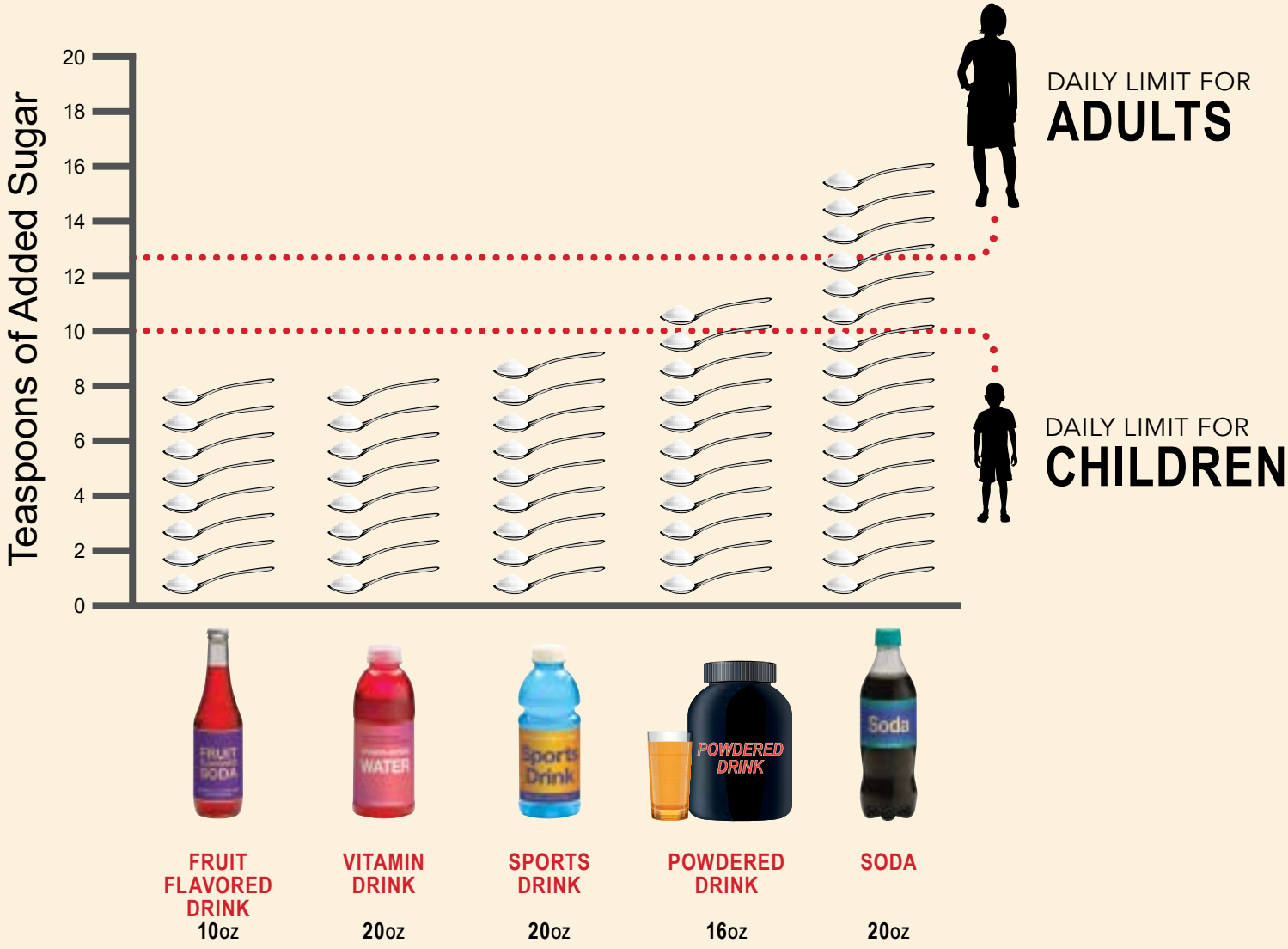
"As you said, water and milk don't have any added sugar so they are the healthiest choices."

"Does any of this information bring up changes you'd like to make for your family?"

"That's great you want to serve fewer powdered drinks. Many of my patients are surprised by how much added sugar is in powdered drinks."

INSTRUCTIONS KEY MESSAGE EXAMPLE RESPONSE TIPS

ASK ADVISE ASSESS ASSIST ARRANGE

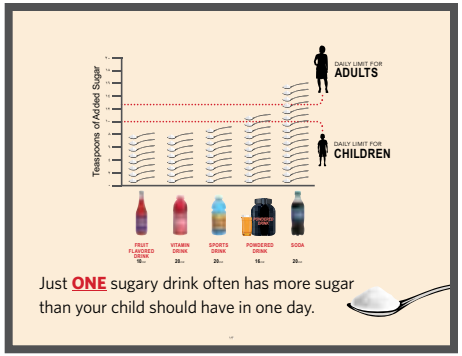


Just **ONE** sugary drink often has more sugar than your child should have in one day.



Use this image to improve your patient's knowledge and understanding of the U.S. Dietary Guidelines, so they can make a plan to choose healthier drinks.

PATIENT VIEW



"Now that we know how much sugar is hiding in these drinks, let's review the health advice."

The U.S. Dietary Guidelines for Americans say to limit added sugar to less than 10 percent of the calories you eat and drink every day for good health.[18]

- For a moderately active child, that's only about 10 teaspoons.
- For a typical 2,000 calorie diet for an adult, that is no more than 12 ½ teaspoons."

Other ways to say this:

"It might sound complicated to figure out your limit of added sugar each day. Here's a simpler way to think about it. Added sugar — whether it's in your foods or your drinks — should be a really small amount of what you consume each day. Cutting out these sugary drinks avoids a lot of sugar and protects your child's teeth."

"As you can see from this image, even a 16-ounce powdered drink has more added sugar than a child should have all day. A child can go over the daily limit of added sugar with just that one drink at breakfast — without considering added sugar from sweetened cereals, snacks, or other drinks during the day."

"What do you think about this health advice? Does any of this information help you think of changes you'd like to make for your family?"

Summarize the patient's responses, affirming what the patient says.

Reinforce your patient's discussion of desires, abilities or reasons to change behavior. Reinforcing statements by repeating them or summarizing them to patients can help empower them and support their success in making a change.

"You're right. Most of the drinks we just looked at have too much added sugar for good health."

"You're right. These drinks do have too much added sugar for good health. Cutting back on these drinks can make a big difference."

INSTRUCTIONS KEY MESSAGE EXAMPLE RESPONSE TIPS

ASK ADVISE ASSESS ASSIST ARRANGE

Pick a plan



Limit sugary drinks to only special occasions, like birthday parties or holidays.



Serve smaller servings of sugary drinks.



Be a role model at home. Reduce the number of sugary drinks YOU consume each week.



Send children to school, day care or camp with a refillable bottle of water.



Drink water when you get out and play.

Keep water chilled in bottles or pitchers in the refrigerator.





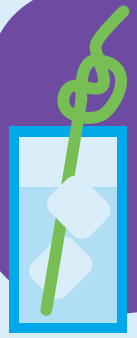
Drink water when you are thirsty.



Don't sip sugary drinks during the day. Limit to meal times.



Do not keep sugary drinks in your home.



Make water fun. Add slices of fruit or sprigs of mint, or give your child a fun straw to use.

Use this image to assist your patient in choosing a step in their plan to choose healthier drinks.

"Sometimes it helps to make a plan if you think through some options. Do you see anything on this page that would be a way your family could make a change? Do you want to pick a change or two that you think will work for your family?"

Other ways to ask:

"How well do you think this option would work for you and your family to start cutting back on sugary drinks? Why or why not?"

"What else might work best for your family?"

"Who can support you in making this change?"

These steps are not the only options. If a patient already described a step earlier in the conversation, you can move directly to the next page.

PATIENT VIEW



If a patient has gone through this tool before, refer to your patient notes and try some of these example responses.

"Last time, you chose this step to cut back on sugary drinks. **How has that been working for your family?** Would you like to keep taking that step?"

"What about these other options? Could you add any of them to cut back even more on serving sugary drinks to your family?"











Choose healthy drinks for healthy teeth.

Drink water and low-fat milk.

AFFIRM

Offer support and affirm your patient's ability to make a positive change.

"The ideas you have to make a change [list ideas back to patient] are great. They're going to improve your child's health and help protect their teeth from cavities."

ARRANGE

Provide your patient with a reminder, and make a note in their record to follow up at a future appointment. For the reminder, you can use the card that came with this guide or use your handout.

"This is a card to help remind you of the change you would like to make at home. I'll put it in your bag with your toothbrush to take with you today. "

"I would like to check in with you again at our next appointment. Is that OK? I'm going to make a note on my chart so we can talk about it next time."

PATIENT VIEW



INSTRUCTIONS KEY MESSAGE EXAMPLE RESPONSE TIPS

References

1. Daniels S, Hassink S. The Role of the Pediatrician in Primary Prevention of Obesity. Pediatrics. 2015; 136;1:e275-e292.
2. Shivakumar KM, Prasad S, and Chandu GN. International Caries Detection and Assessment System: A new paradigm in detection of dental caries. J Conservative Dentistry 2009 Jan-Mar; 12(1): 10–16. doi: 10.4103/0972-0707.53335 accessed 10/2/2017 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2848805/
3. Cote AT, Harris KC, Panagiotopoulos C, et al. Childhood obesity and cardiovascular dysfunction. J Am Coll Cardiol. 2013;62(15):1309–1319.
4. Lloyd LJ, Langley-Evans SC, McMullen S. Childhood obesity and risk of the adult metabolic syndrome: a systematic review. Int J Obes (Lond). 2012;36(1):1–11
5. Bacha F, Gidding SS. Cardiac abnormalities in youth with obesity and type 2 diabetes. Curr Diab Rep. 2016;16(7):62. doi: 10.1007/s11892-016-0750-6.
6. Mohanan S, Tapp H, McWilliams A, Dulin M. Obesity and asthma: pathophysiology and implications for diagnosis and management in primary care. Exp Biol Med (Maywood). 2014;239(11):1531–40.
7. Narang I, Mathew JL. Childhood obesity and obstructive sleep apnea. J Nutr Metab. 2012; doi: 10.1155/2012/134202.
8. Pollock NK. Childhood obesity, bone development, and cardiometabolic risk factors. Mol Cell Endocrinol. 2015;410:52-63. doi: 10.1016/j.mce.2015.03.016.
9. Africa JA, Newton KP, Schwimmer JB. Lifestyle interventions including nutrition, exercise, and supplements for nonalcoholic fatty liver disease in children. Dig Dis Sci. 2016;61(5):1375–1386.
10. Risk factors of Acanthosis nigricans, Mayo Clinic website http://www.mayoclinic.org/diseases-conditions/acanthosis-nigricans/basics/risk-factors/con-20025600 accessed September 2017
11. Morrison KM, Shin S, Tarnopolsky M, et al. Association of depression and health related quality of life with body composition in children and youth with obesity. Journal of Affective Disorders 2015;172:18–23.
12. Halfon N, Kandyce L, Slusser W. Associations between obesity and comorbid mental health, developmental, and physical health conditions in a nationally representative sample of US children aged 10 to 17. Academic Pediatrics. 2013;13.1:6–13.
13. Beck AR. Psychosocial aspects of obesity. NASN Sch Nurse. 2016;31(1):23–27.

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