

RESOURCES

TOOLKIT FOR TEACHERS GRADES K - 2

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WHERE IN THE U.S. DOES
SUGAR COME FROM?

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WHERE IN THE U.S. does sugar come from?

6 Quick Facts

1

Sugar is grown and/or refined in **17 states** across the U.S.

2

Sugar beets grow best in places where the **temperatures are generally cooler.**

5

Sugar beet factories are located near the farms to **shorten the distance farmers need to travel** with their beets.

6

Some raw **cane sugar** is also imported to the U.S. for refining.



3



At sugar beet factories and sugar cane refineries across the country, the sugar from the plants is **purified into the sugar** shipped to grocery stores and food manufacturers.

4

Sugar cane is grown in **warmer, tropical climates.**



 sugar beet factory
 sugar beet growth

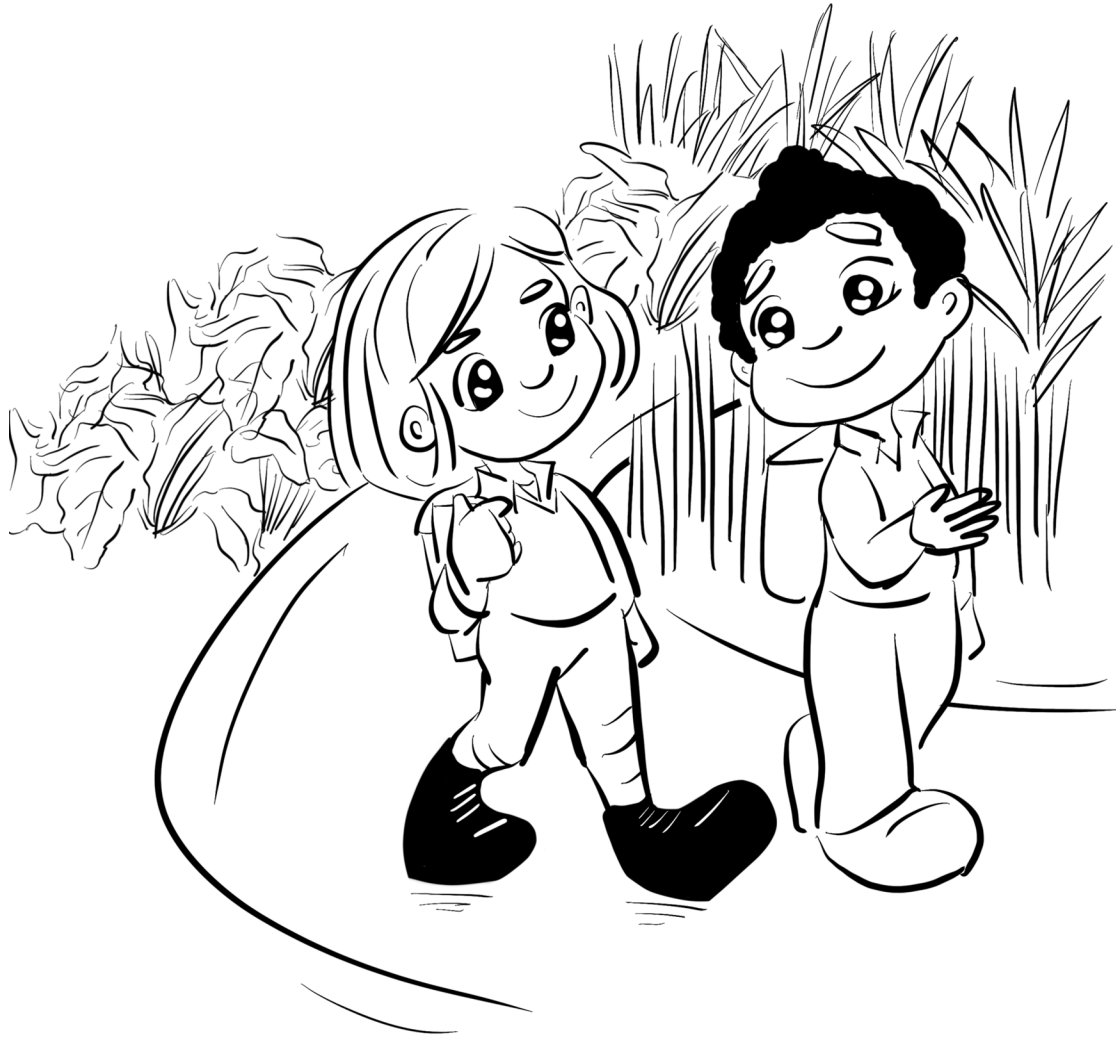
 sugar cane refinery
 sugar cane growth

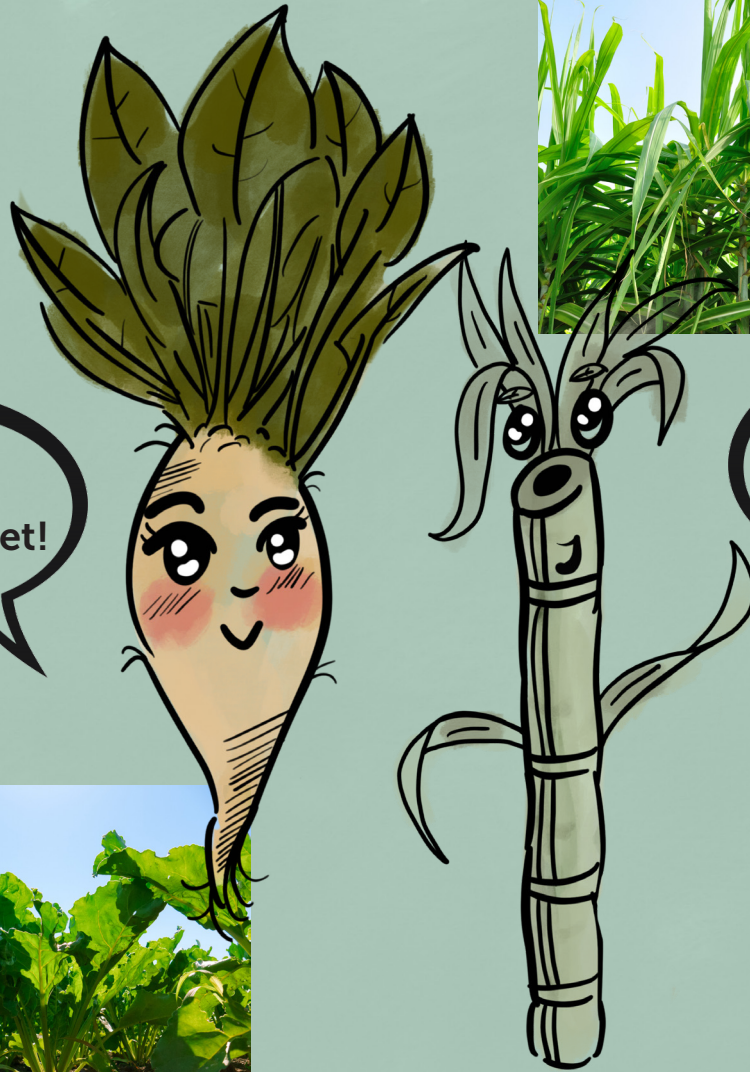
FARM to table

The Adventures of Sugar Beet
And Sugar Cane



**Follow the remarkable story that starts in
the field.**



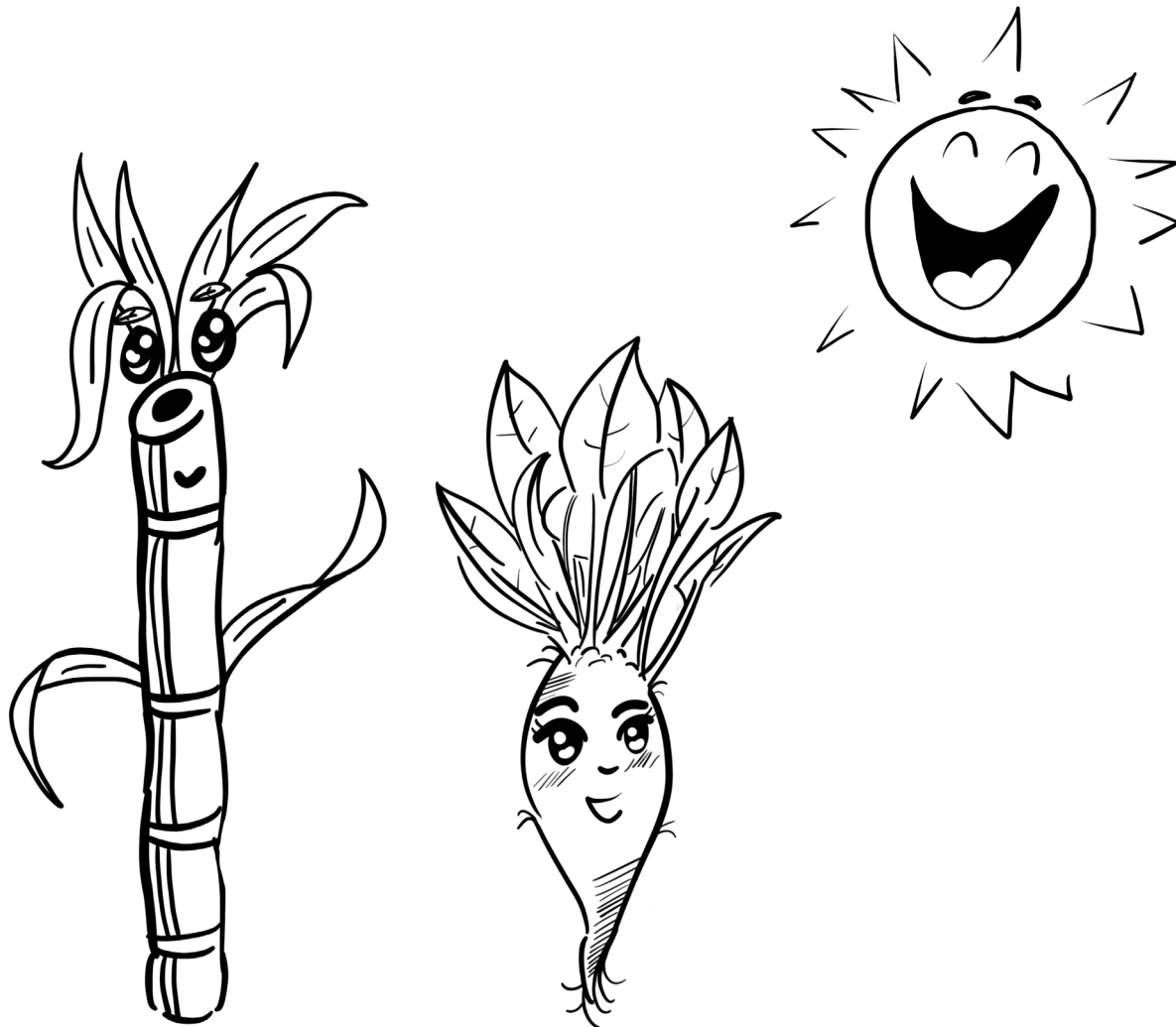


Hi, I'm Beet!

Hi, I'm Cane!



We grow up on a farm!



**Sunshine helps make sugar and
starch in plants.**

**Plants use sugar for food to help
them grow.**

**The same sugar in sugar beet and
sugar cane can be found in
almost every fruit and vegetable!**



Think about all of the
foods you eat that
come from a farm.





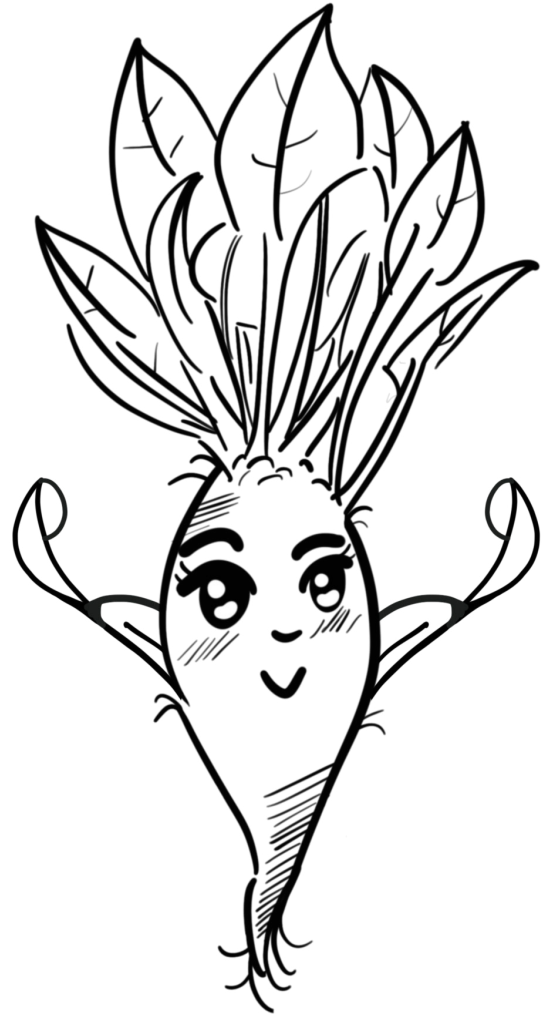
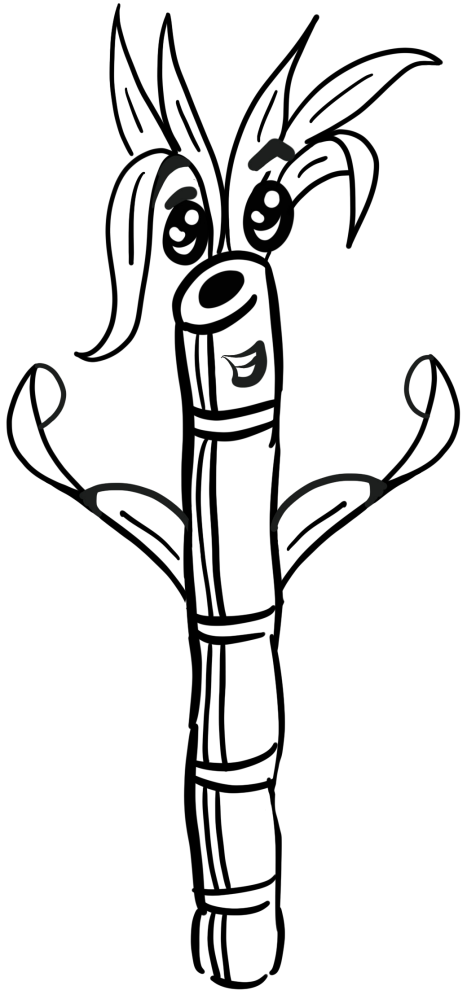


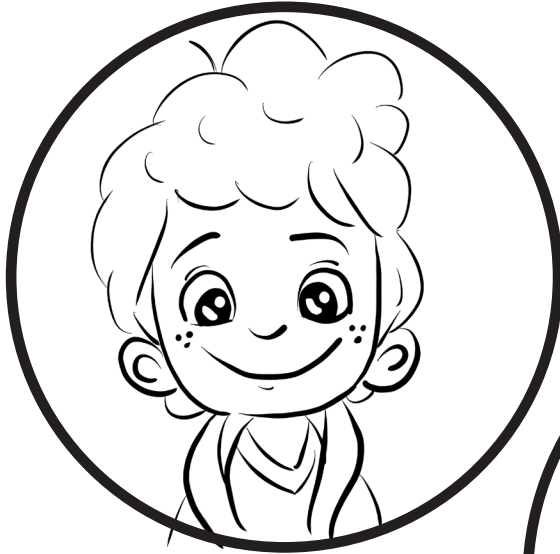
**These everyday foods come
from farms.**

**These are important
foods with lots of
vitamins and minerals
that you need
everyday.**

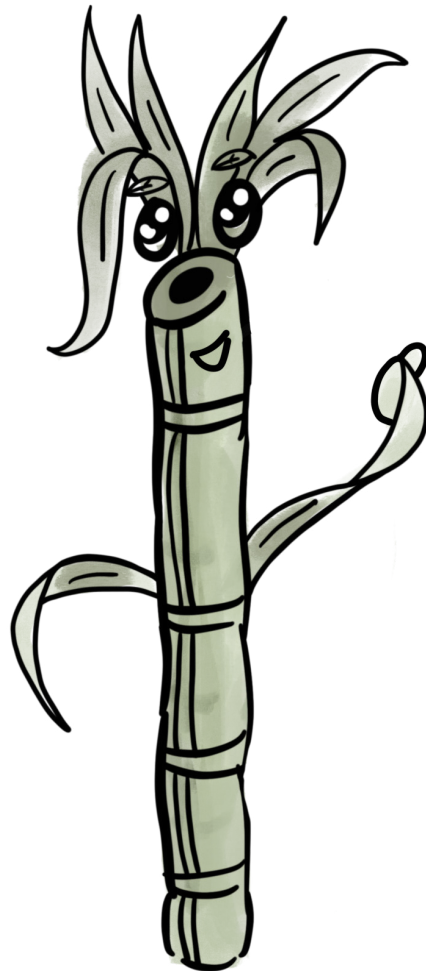


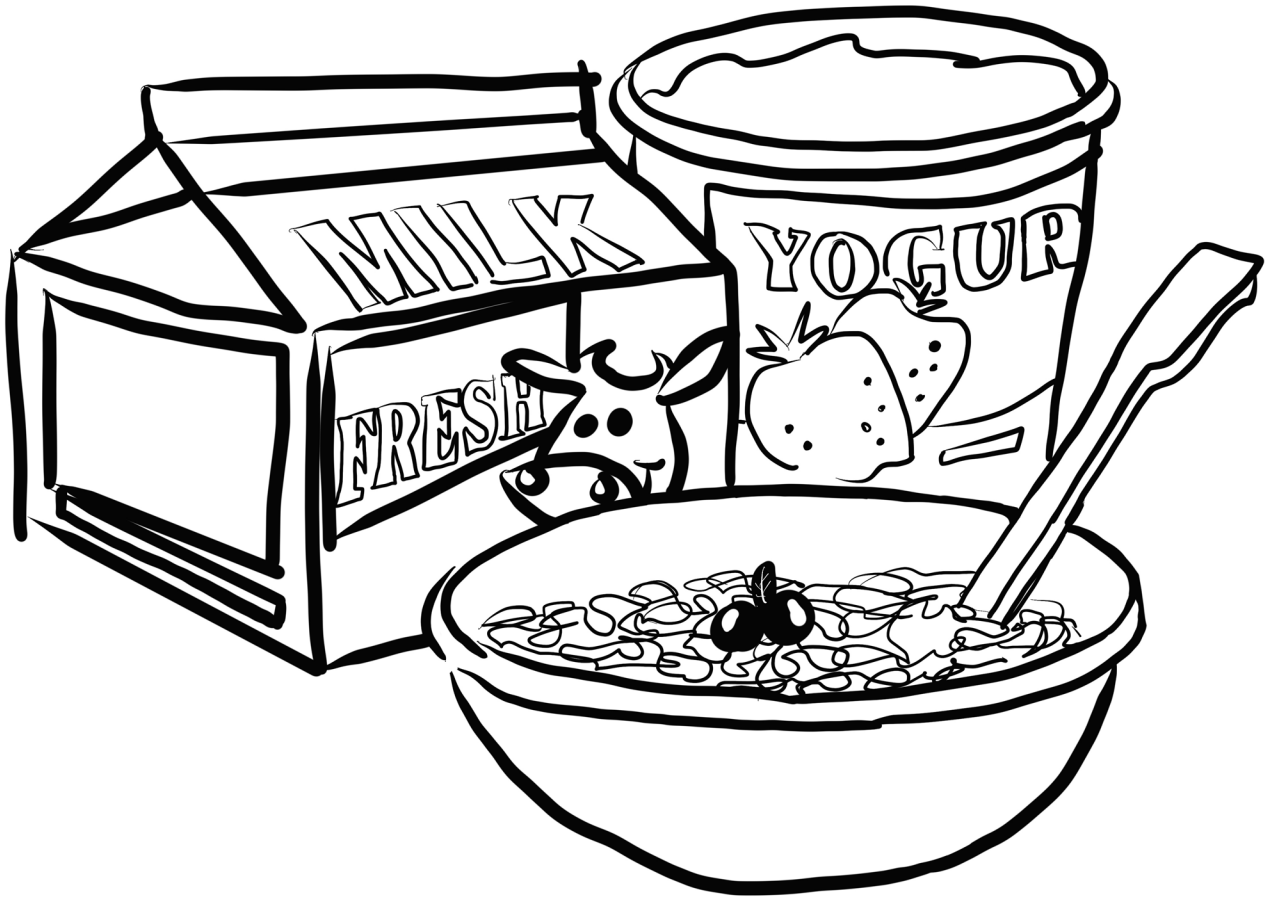
**Eating healthy food helps
you grow!**





**We help make food with
lots of vitamins and
minerals taste good!**





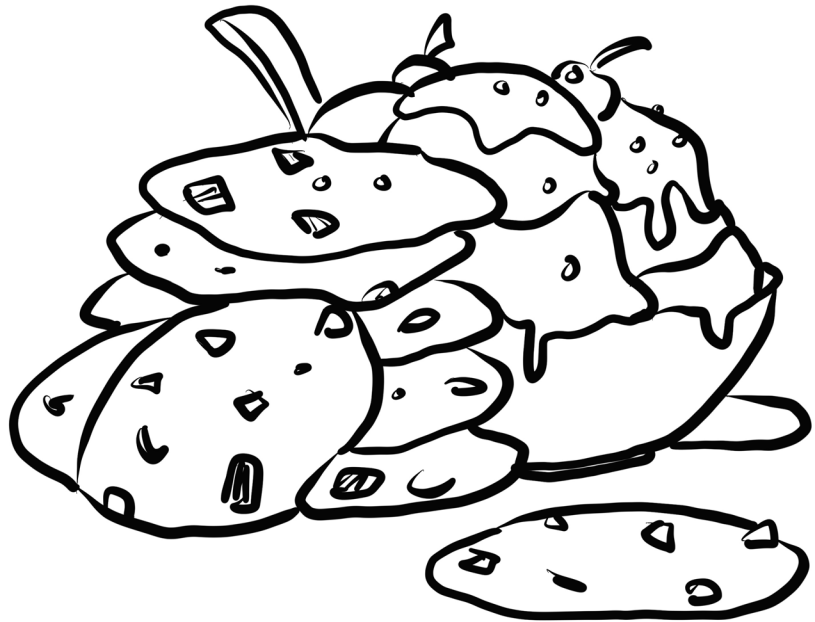
**It's important to have a
balanced diet. When you
have treats, don't eat too
much!**



Eat this



Not that



**Healthy food gives
you fuel to play!**







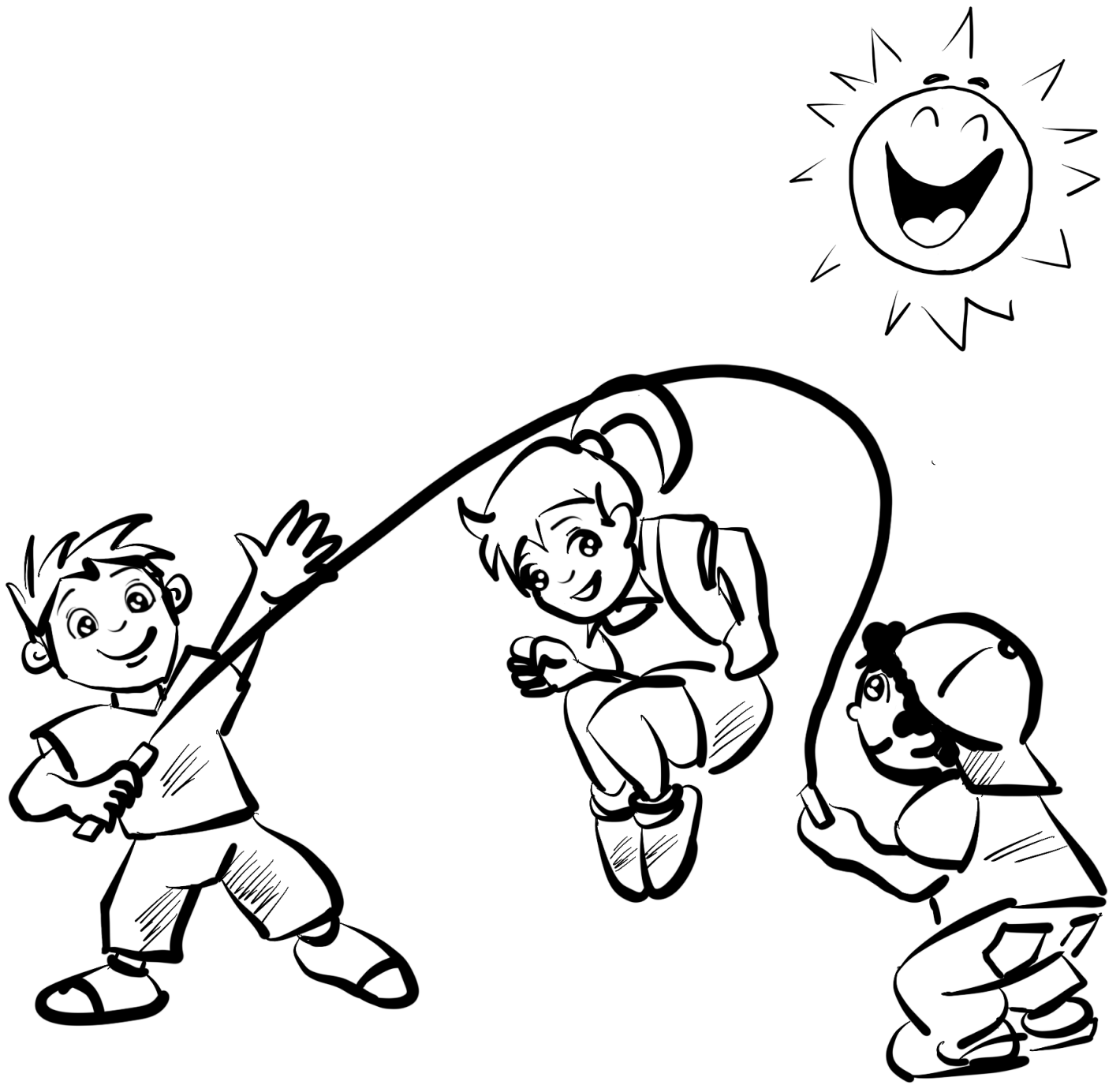
**Running and playing with friends is
fun and good for you!**

PLAY

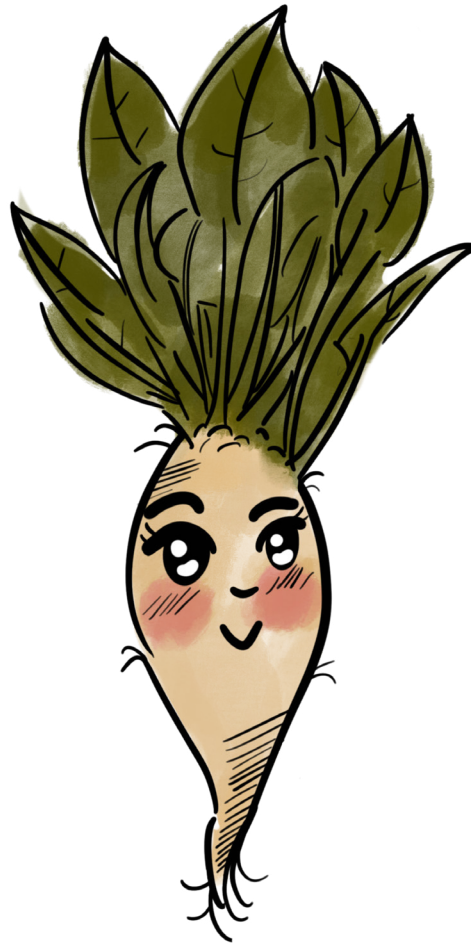
Everyday!

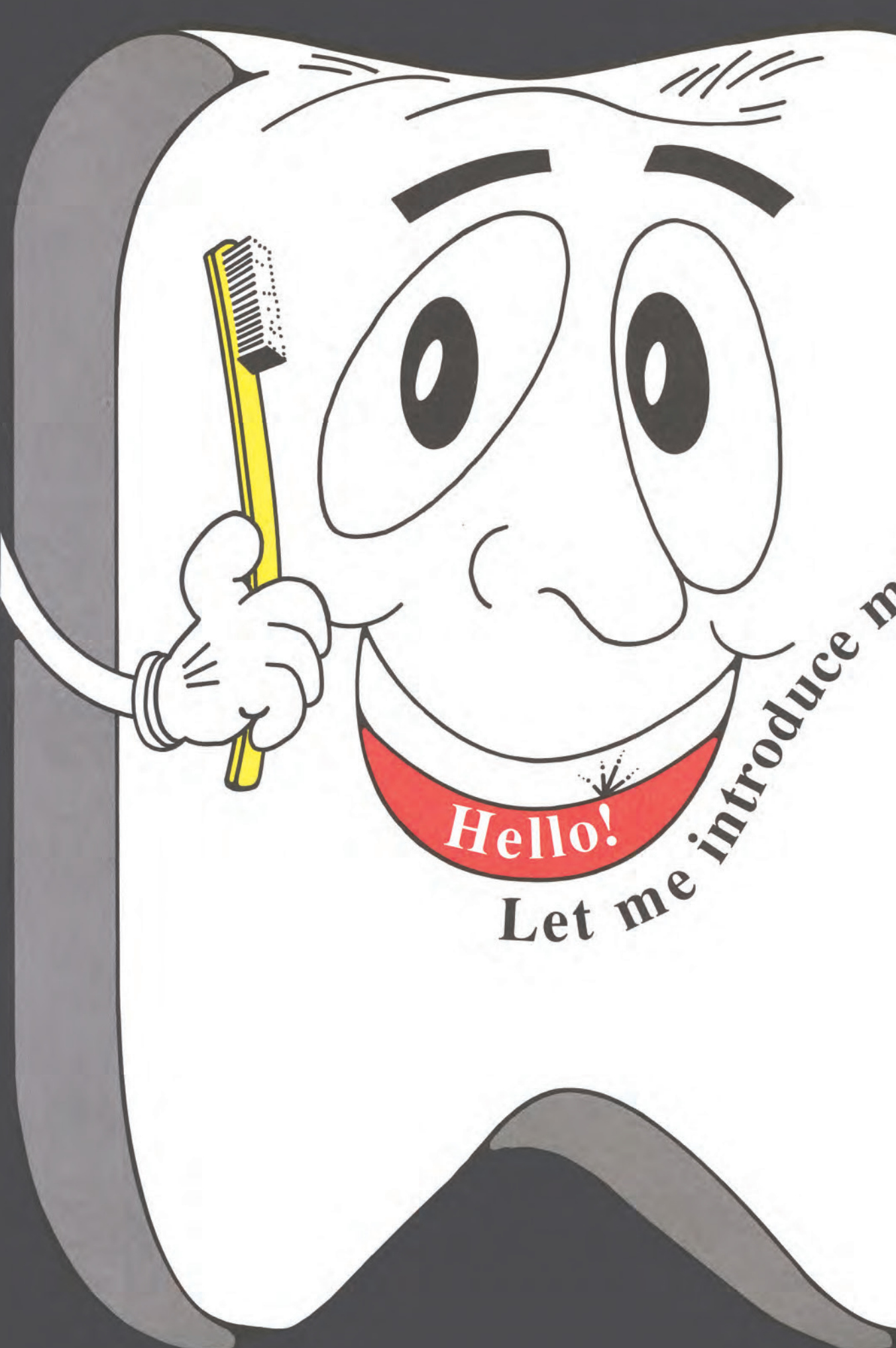


**We are made from sunshine.
Playing outside in the sunshine
helps you grow fit and healthy.**



**Thanks for learning
with us!**





One Tooth, Two Teeth, Clean Teeth, Good Teeth... join the cavity free generation!

My name is ONE-TOOTH, and I want to talk to you about your teeth.

Do you know why you have them? It's because they help you chew food easily, speak clearly, and they improve the way you look.

You were only about six months old when your **FIRST** teeth started appearing. Taking care of these first teeth is important because your **SECOND** teeth are copycats—if your first teeth aren't healthy, your second teeth might follow the leader. So, now that you're old enough, you can help care for that great smile of yours. And it's not hard at all.

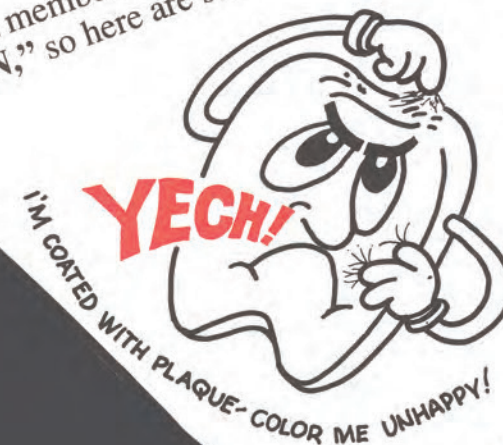
I bet you've been told to brush and floss your teeth after eating. If you don't, the cavity making machine goes to work.

Every single day, a sticky, colorless film forms in your mouth. It's called **PLAQUE**, and it's made of bacteria or germs. Ugh! After you eat, tiny bits of food are left clinging to your teeth. The **BACTERIA** in the plaque use this food to make **ACIDS**, and these acids attack the enamel or shiny, white covering of your teeth. The next thing you know, you have a **CAVITY**. **O-U-C-H!!!**

Now, I know you want to become a member of the **"CAVITY FREE GENERATION,"** so here are some pointers.

The first one is your very own

- "MOUTH FITNESS PROGRAM"**
- YOU WILL NEED:**
- 1 new toothbrush with soft bristles (which you should change after 6 months)
 - Fluoride toothpaste —approved by the American Dental Association
 - Dental floss
 - Mirror
 - An adult to supervise



Are you ready? Well then, let's begin.



1. Squeeze a pea-sized amount of toothpaste onto your toothbrush.
2. Hold the brush bristles at about a 45-degree angle and move the brush back and forth with short, gentle strokes. Brush all surfaces of your teeth—outer, inner, and chewing.
3. Next, clean the inside surfaces of your front teeth by tilting your toothbrush and making several short up-and-down strokes.
4. Gently brush the inside of your cheeks and the top of your tongue.
5. Rinse your mouth with water.

Now it's time to **FLOSS** and catch the bits of food and plaque your brush missed between your teeth and under your gums.

1. Take about 16 inches of **DENTAL FLOSS**, and using your thumbs and forefingers, slide the floss between your teeth until it reaches your gumline... gently now. (You also can tie the floss in a circle to make it easier to handle.)
2. For each tooth, move the floss so it forms the letter "C" around each tooth, and gently, scrape up and down.

Good job!
Give yourself a smile as a reward.



Sometimes

after brushing, ask your parents to give you a "DISCLOSING TABLET." Chew it and wait a minute. Then look at the areas that are stained the color of the tablet. These are places you missed in your workout. Brush and floss again to remove the color, and remember to pay special attention to these areas of your teeth during your next workout.

Question: Do you know what special person helps you to avoid cavities?

Answer: One of my best friends who should be one of yours as well. The person with a special interest in caring for children's teeth—your dentist!

Your dentist examines your teeth and gums, cleans and polishes your teeth, fills cavities when you get them, and cheers you on to becoming cavity-free.

Your dentist also helps protect your teeth with FLUORIDE TREATMENTS and SEALANTS. Fluoride also is put in water and toothpaste to help prevent cavities and make your teeth stronger. And sealants... hmmm... how can I describe them? I've got it! They're like a raincoat for teeth and keep those cavity-making acids from getting through your tooth enamel.

Ask your dentist questions. Remember, dentists who work often with children help keep teeth like me and like yours clean and healthy.

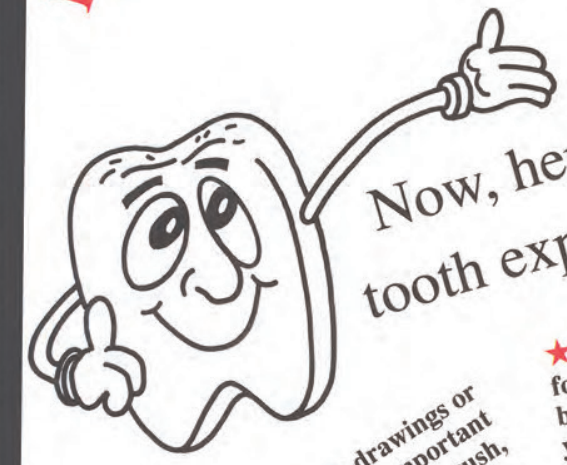
The way you eat also affects your teeth. If you snack a lot and don't brush afterward, there always will be fuel for the cavity-making machine. Foods that are sticky or gummy really hang onto your teeth. Starchy foods, like crackers, chips and cereal, and foods with sugars in them, like dried fruits, candy and cookies, also can be a problem. One solution is to brush after *every time* you eat. Another is not to snack often.



BUT I'M NOT TELLING YOU THAT YOU CAN'T EAT THESE FOODS AT ALL.

Absolutely not! Why I bet these are some of your favorite foods! And I also know that many of these foods are good for you.

I am telling you to eat those foods as part of your meals each day more often than as snacks. Why? Because after meals you brush and floss your teeth. Another reason is there's more saliva in your mouth during meals, and saliva helps fight cavities as well.



Let's have a quick review. ✓ Good dental hygiene and regular visits to your dentist are important to keeping your teeth healthy.
 ✓ Eat a variety of foods at mealtime, and brush and floss after eating.

Now, here are **TEETH ACTIVITIES** from the tooth expert—**ME**

- ★ Make a collage from drawings or cutouts of all of the things important to having healthy teeth: toothbrush, dental floss, toothpaste, dentist, etc.
- ★ Plan a healthy meal, including food from all four food groups, either by yourself, with a friend or with your parents. You can draw a picture of a healthy dinner or cut out pictures of food from magazines and paste them on paper.
- ★ Write or draw a story of your visit to the dentist. After each visit, do one picture or page. Soon, you'll have your own book. Do this with friends so you can compare visits to the dentist.
- ★ Make your own workout chart to hang on the bathroom wall. Draw pictures to go with each step. Share this chart with your sisters, brothers, friends and parents.
- ★ Practice brushing and flossing on dolls or stuffed animals.
- ★ How do sealants work? Cover a toy or plate with plastic wrap and hold under or dip into water or other substances such as flour or pancake mix.

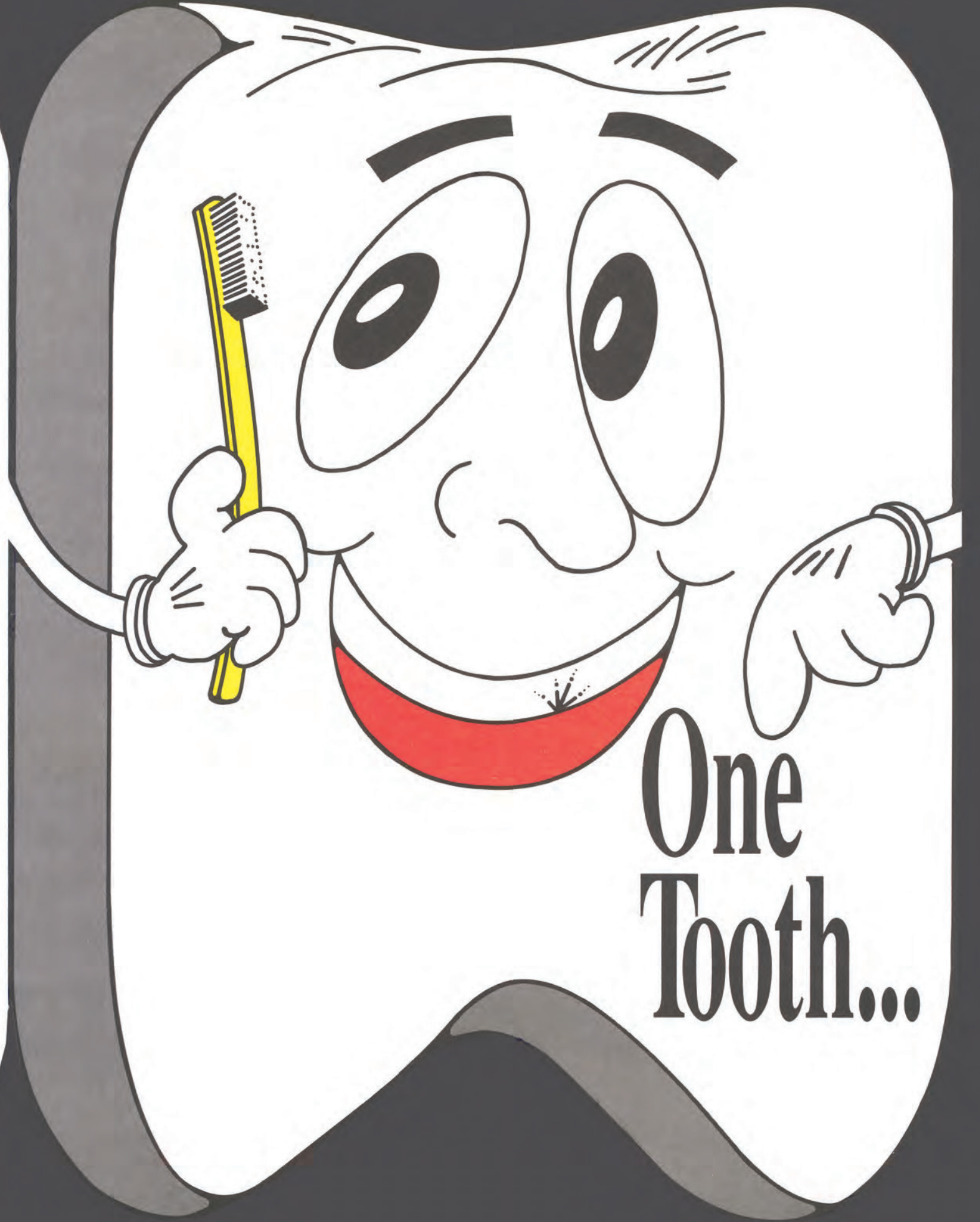
That's all for now. Good luck, and remember, clean teeth are healthy teeth.

Smile!



Reviewed by Charles D. Klass, D.D.S., Diplomate of the American Board of Pediatric Dentistry and Member of the American Academy of Pediatric Dentistry, American Dental Association, California Society of Pediatric Dentistry and The California Dental Association.

Produced by The Sugar Association, Inc. a non-profit organization which funds scientific research and disseminates educational and informational materials on sugar's role in diet and health.

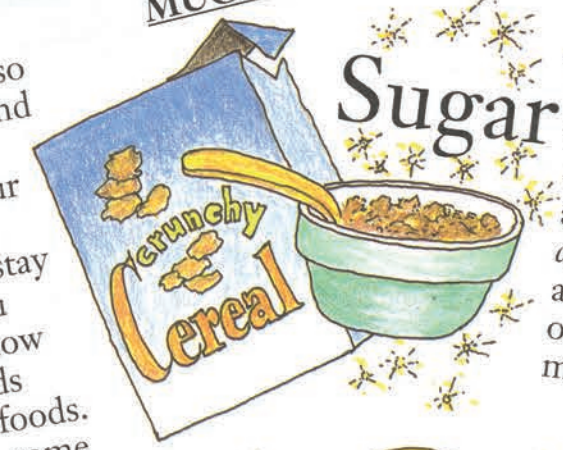


One Tooth...

Moderation Meadow.

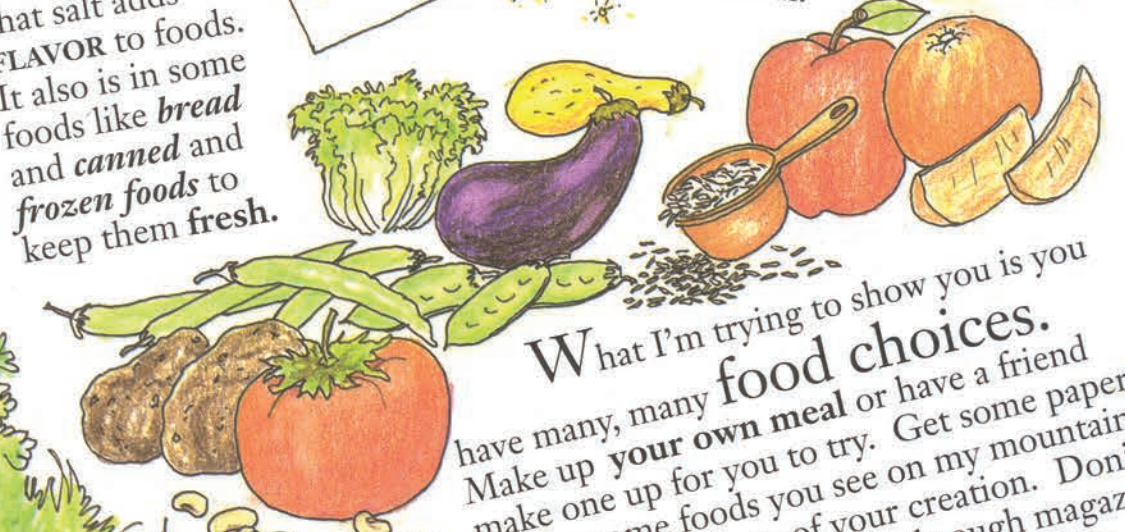
Look!

Some salt is also scattered around Moderation Meadow. Your body needs a little salt to stay healthy. You probably know that salt adds FLAVOR to foods. It also is in some foods like bread and canned and frozen foods to keep them fresh.



Sugar

in moderation can be part of a healthy diet. Remember, it's a carbohydrate. It's great company for foods like cereals and grains. Try a little on your oatmeal, and here, have a muffin.



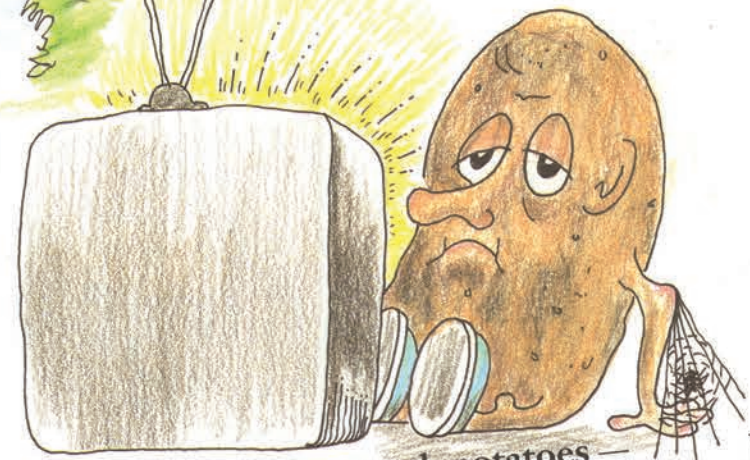
What I'm trying to show you is you have many, many food choices. Make up your own meal or have a friend make one up for you to try. Get some paper, choose some foods you see on my mountain, and draw a picture of your creation. Don't forget to color it. Or, look through magazines at home, cut out different foods and glue them on paper to make a meal.

Remember to include fruits, vegetables and grains!

See... there's a little bit of sugar sprinkled all around. Hey, that got a smile out of you!

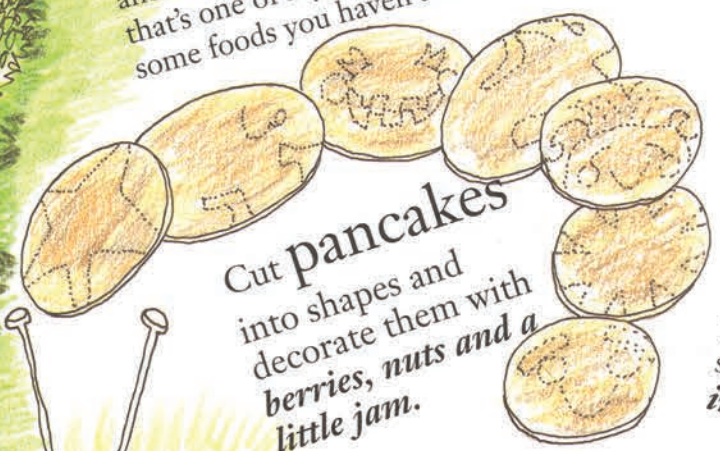
What is moderation, you ask? Why don't you look it up in the dictionary while I have a glass of water — climbing my mountain always makes me thirsty. Here's a hint: not too MUCH and not too LITTLE. Got it?

You don't know this, but

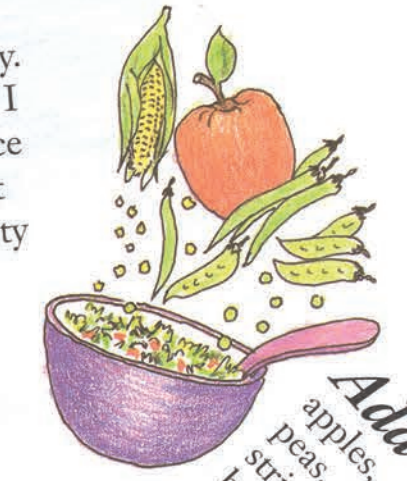


Do you know any kids who are couch potatoes? There are so many kids who would rather watch TV than play! When you get home, get your friends together and play ball, skate, swim, take a walk, ride your bicycle — invent new games or a new dance. Not only will you have a great time — you'll feel great too!

Build a character from vegetables and then eat it. Invent your own characters — that's one of my favorite things to do. Include some foods you haven't tasted while you're at it.



Cut pancakes into shapes and decorate them with berries, nuts and a little jam.



Add apples, peas, string beans or corn to salad.



Discover new foods by helping your parents shop for groceries. Play a game by choosing one new fruit or vegetable to try each week. Your parents will be happy to get them for you to taste. Try new breads and different shapes of noodles — use your imagination.



Now, let's cross this stream....

Here's my kitchen.



Well, here we are ... almost back to where I met you earlier. I'm going to take a little rest since before I know it, someone else will come along for me to show around.



Goodbye!

Have fun and stay healthy!

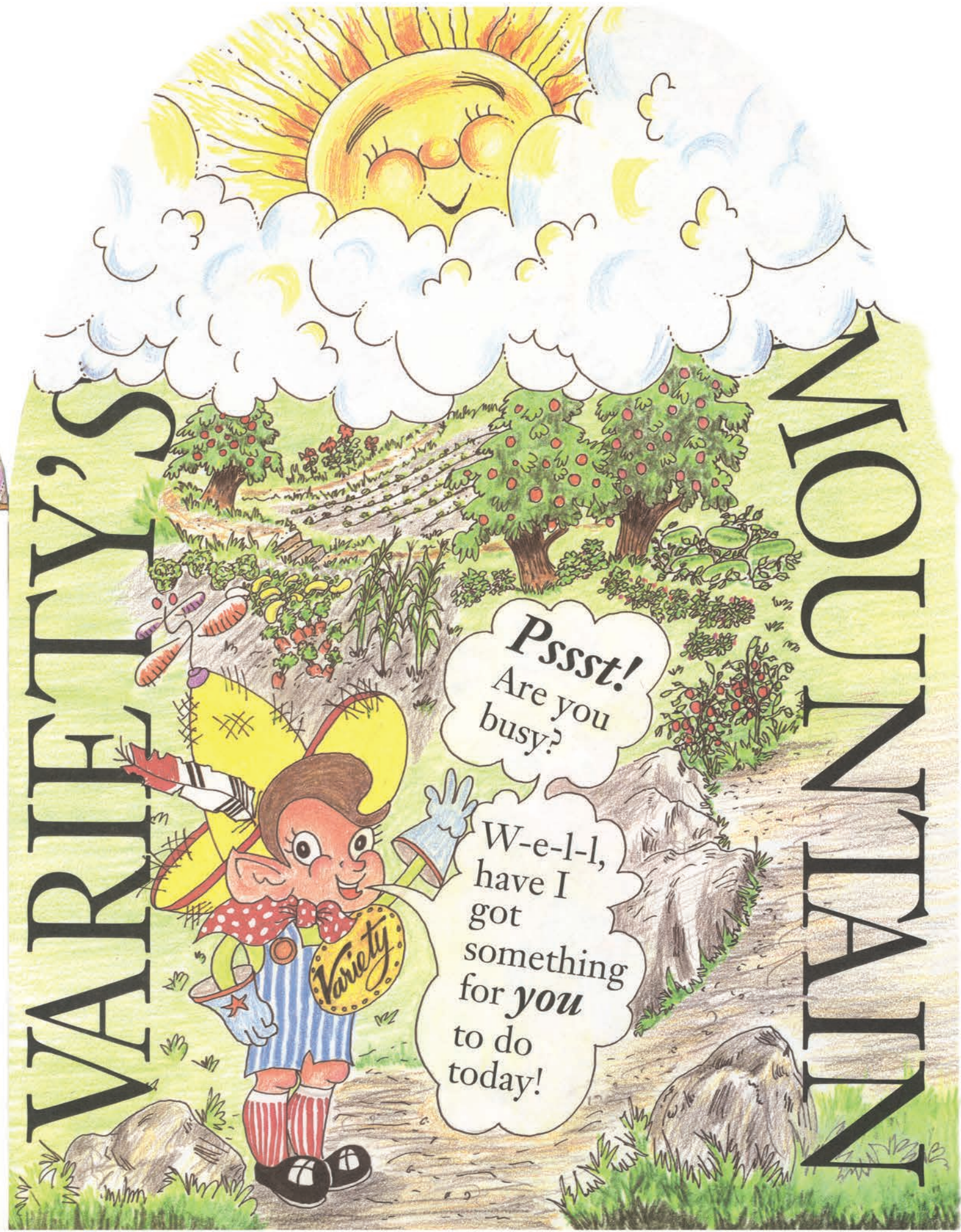
Of course, it's not exactly like the one you have at home because it's on a mountain, but it's just fine for me. I make my meals and snacks here, and you can help your parents make your meals at home by washing fruits and vegetables, adding ingredients to dips and pizza, stirring muffin mix and helping to clean up afterward. One thing though — don't forget to wash your hands before helping with food.

Think of me when you're eating and playing. Remember all of the food and fitness choices we talked about. Variety is the key and Variety's Mountain is where you heard it first!

Reviewed by: Ann Grandjean, Ed.D. Director, International Center for Sports Nutrition; Chief Nutrition Consultant, United States Olympic Committee

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Produced by: The Sugar Association, Inc. a non-profit organization which funds scientific research and disseminates educational and informational materials on sugar's role in diet and health.



VARIETY'S MOUNTAIN

Pssst! Are you busy?

W-e-l-l, have I got something for you to do today!

My name is **Variety!**... and I'm going to take you on an adventure you will never forget. We're going to explore **my home** — **Variety's Mountain.**

Before we begin, I need **your name.** Write it here, please.

I really enjoy meeting and working with kids. And since I meet so many, I like to make sure I remember everyone's name. After we're through traveling around my mountain, you can surprise your parents or your teacher with what you've learned today.

Ready? **Let's go!**

I have a question for you. Do you like **feeling great?** Do you like to have the **energy** to do all the things you want to do? Circle **YES** or **NO.**

First stop...

Yes?

Well, then it's important that you eat lots of **different** foods and **exercise** often. Those two things will help you feel your best now and as you grow up. That's why my name is Variety — I eat many different foods and like all kinds of fitness activities. Let's start off by jumping rope. Do you know how to Double Dutch?

Carbohydrate Cliff!

Definition: Carbohydrates are one of your body's main sources of energy. They give you the energy to jump rope, to dance, and to run. They even give you the energy to think.)

Have you ever seen so many kinds of food?

Look, there are **fruits, vegetables** and all sorts of **grains** — you know, like **cereal** and **bread.** Yum! You need to eat plenty of these foods. They have **carbohydrates** in them. Turn this page upside down to find out why carbohydrates are important.

Vitamins

minerals and fiber — other healthy things — also are in **fruits, vegetables** and **grains.** And best of all, these foods taste **reecaaally good!** Let's race to the next stop — it's right around that bend.

Ready? **Set?**

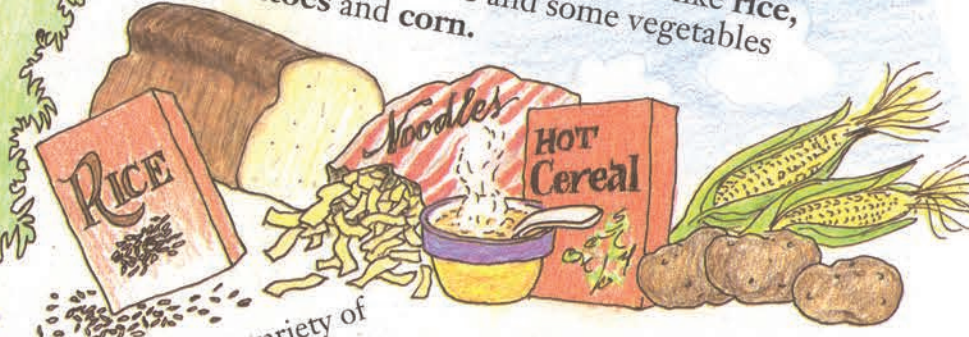
Go ... to —

Energy

sure is something we kids need to do all the stuff we do in just one day. Between playing and school and helping our parents... *whew!* There are two types of carbohydrates — **complex** and **simple.** Complex carbohydrates also are called **starches.** *Starches* are found in foods like **rice, bread, cereal, noodles** and some vegetables like **potatoes** and **corn.**

Mix and match a variety of carbohydrate foods in your meals and snacks. They'll taste great, and it's a lot of fun to invent new food combinations! Try **mixing turkey and cranberry sauce for a sandwich** or **have some cottage cheese and jam on a cracker.**

Sugars are simple carbohydrates. The kind that's in your *sugar bowl* at home comes from *sugar cane* and *sugar beet* plants. There are other kinds of sugars as well — they're in **fruits** and **dairy products** like **milk** and other foods like **honey.**

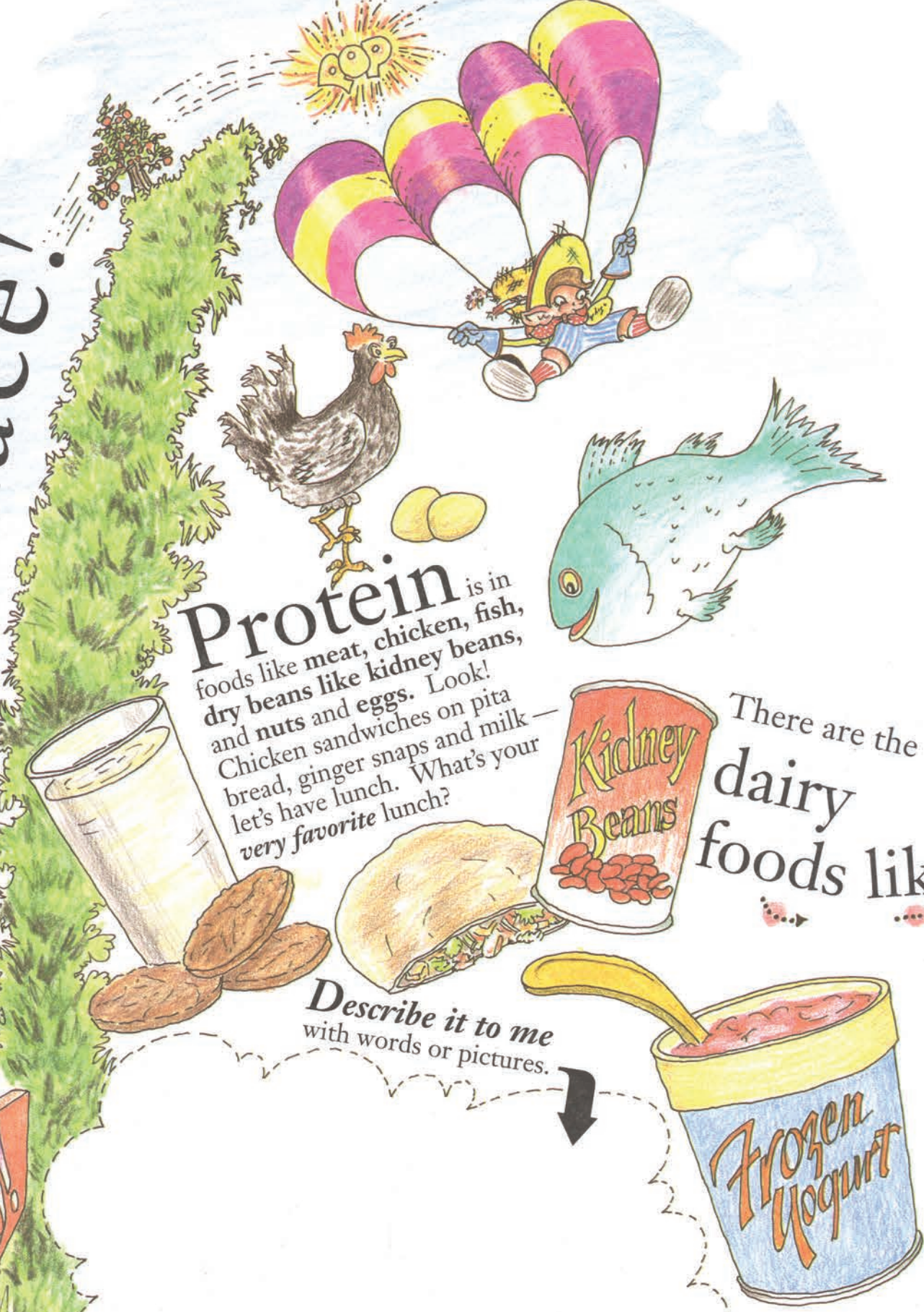


Protein Place!

Protein is in foods like **meat, chicken, fish, dry beans** like **kidney beans,** and **nuts** and **eggs.** Look! Chicken sandwiches on pita bread, ginger snaps and milk — let's have lunch. What's your **very favorite** lunch?

There are the **dairy** foods like **low fat milk, cheese** and **yogurt.**

Describe it to me with words or pictures.



One thing to remember... don't eat too much **fat.** Your body needs some — it gives you energy among other things. You just don't need a whole bunch.

While we're talking about **healthy bodies,** let's put on some music and do some **Jumping Jacks!** **Exercise** also keeps the parts of your body, including your heart, **fit** and **strong.**

Hey, all of this exploring is making me hungry. How 'bout you? Let's go over here and make a snack.

(snack recipe: GINGER SOY DIP
1/2 CUP NON-FAT PLAIN YOGURT, 1-1/2 TSP. SUGAR, 1/2 TSP. LEMON JUICE, 1/2 TSP. GROUND GINGER, 1 TSP. SOY SAUCE — FRUITS AND VEGETABLES FOR DIPPING).

Ready to move on? On the other side of these trees is...

Mmmmmmm, I love frozen yogurt! Dairy foods also have protein in them. Do you know why all these foods with protein are important? Well, you know your **teeth** help you chew. Your **bones** help you stand up. Your **skin** protects you, and your **muscles** help you bend and stretch, ride your bicycle, dance, run, and play your favorite sports. The protein and the other **vitamins** and **minerals** like **calcium** in these foods help to build those parts of your body and help to keep them strong.

