Video Manual

Supplement to the Nutrition Detectives™ Teacher Manual

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Overview of the Nutrition Detectives™ Video

Nutrition Detectives™ is an entertaining, innovative 90-minute elementary school nutrition program that teaches children to be nutrition-savvy. It teaches 5 simple clues to examine food products and decide whether they are healthful choices based on the Nutrition Facts labels and ingredient lists.

Traditionally, *Nutrition Detectives™* has been taught by using a PowerPoint slide show, processed food demonstration, and hands-on activity to convey its messages. The video provides an alternative option for teachers or facilitators to present the program to students or other audiences. It can be used in lieu of the PowerPoint slide show and demonstration, and takes the same amount of time (50 minutes) to offer. As with the slide show, it is meant to be followed by a hands-on activity that allows the audience to practice the "detective" skills they learned during the presentation.

Adding the video option gives the program a whole new dimension, since it includes creative special effects that enhance the program's messages and shows Drs. David and Catherine Katz teaching the program to a student audience. The video can be used in one of two ways: it can be shown directly to audiences, or used as a teacher training tool that demonstrates how the program is taught to audiences.

Regardless of which teaching strategy (slide show or video) you use, please refer to the teacher manual for overall instructions. When combined with the hands-on activity, the total length of the program is typically about 90 minutes (or 120 minutes if you extend the time for the discussion or hands-on activity).

If you have any questions, contact the Yale-Griffin Prevention Research Center at 203-732-1265.




Comparison of the Video and PowerPoint Slide Presentations

Nutrition Detectives can be taught in a single 90-minute session. It can also be taught in two 45-minute sessions, or three 30-minute sessions. If you plan to offer it in multiple sessions, you can use the table below as a planning tool to determine the length of each session.

The first 5 chapters can be taught with *either* the video *or* the PowerPoint slide show. See Sections 1 and 2 of the Teacher Manual for an overview and the "5 Clues." If you decide to use the narration, refer to the chapter previews and video narration on the following pages. If you decide to use the slide show, refer to Section 3 of the Teacher Manual for a copy of the slide show script. Instructions for the hands-on activity (Let's Play with Our Food) are found in Section 4 of the Teacher Manual.

Chapter	Source of Materials	Content	Estimated Time
INTRODUCTION	Video Chapter 1 or PowerPoint Slides 1-16	• Why it's important to eat right • How eating well can be hard to do without the right skills	11 minutes
SUPERMARKET SPY KIDS	Video Chapter 2 or PowerPoint Slides 17-33	• How food packaging can be deceptive	13 minutes
THE 5 CLUES	Video Chapter 3 or PowerPoint Slides 34-74 *(optional Deception Demo after slide 58)*	• 5 clues for Nutrition Detectives	17 minutes
OUR NUTRITION SAFARI	Video Chapter 4 or PowerPoint Slides 75-90	• Demo of how to use the 5 clues	6 minutes
INTRO TO "LET'S PLAY WITH OUR FOOD"	Video Chapter 5 or PowerPoint Slide 91 *(show slides 92-96 after hands-on activity)*	• Speeded-up demo of hands-on activity (video) OR • Group instructions (PowerPoint version)	5 minutes
GROUP DISCUSSION	Use your own judgment depending on what happens when you teach the program to your own audience.s.	• Discuss what the group learned from the program. • Sum up the 5 clues. • Distribute copies of 5 clues.	10-30 minutes, depending on whether done by chapter or at the end
LET'S PLAY WITH OUR FOOD *(Hands-on activity)*	Section 4 of the Nutrition Detectives Teacher Manual *(Please read carefully for full set of instructions)*	• Distribute copies of 5 clues. • Divide the group into teams. • Give each team a bag of "clued-in" & "clueless" foods. • Give instructions to teams. • Teams decide whether foods are "clued-in" or "clueless." • Group discussion of foods. • Summarize for class/audience.	30-40 minutes
TOTAL TIME			**90-120 minutes (1½ -2 hours)**

Nutrition Detectives™ Video Chapter Previews

Video Chapter	Title of Chapter	Content of Chapter	Length of Time
Chapter 1	Introduction	• Why it's important to eat in a healthful way • Why it's challenging to eat well in the modern food environment, unless we have the right skills	10 min., 30 sec
Chapter 2	Supermarket Spy Kids	• How food packaging can be deceptive	12 min., 30 sec.
Chapter 3	The 5 Nutrition Clues	• 5 clues for Nutrition Detectives	16 min., 30 sec.
Chapter 4	Our Nutrition Safari	• Demo of how the student audience practices the 5 clues in a "jungle" of giant food products	5 min., 25 sec.
Chapter 5	Playing with Our Food	• Speeded-up demo of hands-on activity	5 min., 5 sec.
TOTAL			**50 minutes**

Nutrition Detectives™ Video Transcript

Chapter 1: Introduction *(10 minutes, 30 seconds)*

DR. KATZ: Hello everyone, I'm Dr. David Katz. Thanks so much for joining me in my classroom today. As you'll soon see, this is no ordinary classroom. This is a magical classroom designed to turn you into Nutrition Detectives. And joining me in the classroom today, I have some assistants. I have Brianna, Austin, Coco, Dominic, Ryan and Angela. You guys ready to become Nutrition Detectives?

KIDS: Yes.

DR. KATZ: All right, well, here's what we are going to cover today. First, we are going to talk about "Why food matters." Then, we are going to talk about "If you are what you eat, what the heck are you?" That eating well can be hard to do, and in some ways we are as out of place, when we try to eat well, as polar bears in the Sahara desert. We'll then learn the clues we need to be supermarket spy kids, to be Nutrition Detectives, and find healthy food. Then, you know how your parents tell you not to play with your food?

CLASS: Yes.

DR. KATZ: In this classroom we are going to play with our food.

CLASS: *(giggles)*

DR. KATZ: But we are going to do it in a special way. So, let's get started. Dominic, why does what we eat matter?

DOMINIC: Well, because like, when you are young – what you eat, may like, affect you when you're older.

DR. KATZ: It isn't necessarily about "if I don't eat something that's good for me today, I'll fall down tomorrow." But you're building your health for later on. On the other hand, I think kids tend to be focused on something a little bit different. So Austin, what do you like to do? What are your hobbies?

AUSTIN: Soccer, kickball, football.

DR. KATZ: Soccer, kickball, football. Pretty good list. Coco, what do you like to do?

COCO: I play basketball, tennis and swim.

DR. KATZ: OK, so as kids, you do these activities. Angela, when you do an activity that you like to do, why do you do it?

ANGELA: Because it's fun.

DR. KATZ: Because it's fun. You like to do it and you do it and that's fun I think one of the things that kids are really experts in - more expert than grownups - is having fun. Right? And when you do these activities you like to do you need energy to do them, right? I mean, when you run, you probably want to run really fast, and not like this, *(he demonstrates slow motion) (kids laugh)* right? And if you are playing basketball Coco, when you are jumping, you probably want to jump pretty high as opposed to… *(he demonstrates a hop)* like that right? *(kids laugh)*

DR. KATZ: So, where does the energy come from? Brianna, what do you think?

BRIANNA: The food that you eat.

DR. KATZ: The food that you eat. Everybody agree?

CLASS: Yes.

DR. KATZ: Good answer. Food is the fuel that runs our bodies. It's the source of energy to do the things you love to do right now. Why should kids worry about health? Because taking good care of yourself now, you will have more fun. Now there is one more very important thing – Angela would you come up here for just a second and help me out please? Stand right, here my dear. Now Angela would you agree that in this particular moment in time, you are approximately, say, this tall? *(He gestures to the top of her head)*

ANGELA: Yes.

DR. KATZ: Yes, just about right there? And would you also agree that some point in the future you may be taller?

ANGELA Yes, that sounds reasonable.

DR. KATZ: Is your Mom about this tall?

ANGELA: A little taller.

DR. KATZ: A little taller? OK, so you've got some growing to do. So you're going to grow maybe that much *(gestures)*? Right? Maybe more, something like that. What are you going to grow that out of?

ANGELA: Food.

DR. KATZ: Food. OK now, you are going to grow more Angela out of food that you eat And I want you to make a choice. I'm going to give you a multiple-choice question. OK? You could grow it out of A: Junk, Junk Food or B: Good Stuff. Take your time – don't rush – What's your choice?

ANGELA: B.

DR. KATZ: Excellent answer. OK, Angela, thanks for the answer, and you can go have a seat. You've all heard the expression "You are what you eat."

CLASS: Yes.

DR. KATZ: And that doesn't mean that we turn right into the food we eat. Brianna, if you would, come right over here. All right now, let's just see what you had for breakfast this morning – looks pretty good.

All right – have you ever had cheese doodles?

BRIANNA – No, I've never had cheese doodles.

DR. KATZ: Has anyone ever had cheese doodles?

DOMINIC: I have.

DR. KATZ: Dominic when you had cheese doodles did you sprout cheese doodle antennae out of your head anywhere? And if you have a donut – would you develop a big donut hole in the middle of your body?

CLASS: No. *(laughing)*

DR. KATZ: OK, no big donut hole…Thanks, sit down. So, we say we are what we eat, but that doesn't mean that we turn into the food. It means we take the nutrients out of the food, just like we take the wood out of the trees

and we use the wood to build our houses and we use the food to build ourselves. So we all agree now that choosing food well is important. It affects how much fun we have and affects how healthy we are. Why don't we just automatically choose the food that's best for us? How about you, Austin? How come sometimes you may not eat something that may not be the most nutritious?

AUSTIN: I usually eat non-nutritious food because it is very yummy in my tummy.

DR. KATZ: It's yummy in your tummy – It tastes good. Right?
I couldn't agree more. Some of that stuff that we are really not supposed to eat if we want to stay healthy and strong; we eat because it's fun to eat. It tastes pretty good, right? So candy and ice cream and cookies. How come we just don't automatically like those foods that are the very best for us? I think the answer to that is that the world has changed an awful lot from the kind of world people used to know. So, if you would - Dominic, Ryan, Angela, come on up here. We're going to go back in time to see why choosing good food, or for that matter choosing to be physically active, getting exercise every day, can be tough for lots of people in the world today. You ready? ... Hold on tight. Here we go. *(Dr. Katz uses magnifier to shrink all into Diorama)*

Wow, I'm the one with the magical zapper, but even I can't get used to this. It's so incredible huh? We had that classroom diorama sitting on the table, and here we are. And of course, the point of this trip is to see that the way people got food throughout most of history was very different from today. They didn't have fast food restaurants back then. They didn't have supermarkets, either. They had to get their food the hard way, and in fact, they didn't even need Nutrition Detectives skills because there were no bags, boxes, bottles, jars or cans. We need them today, though – but we should take a closer look at how people got their food back then, huh? All right, let's go see.

Now look around here, guys. This is how people used to get their food back in the old days. Ryan do you see any fast food restaurants around here?

RYAN: Not in here.

DR. KATZ: Dominic, any supermarkets here?

DOMINIC: Not that I can see.

DR. KATZ: And Angela, any confusing food labels around here to figure out?

ANGELA: Not really.

DR. KATZ: See this is the way things used to be. Food used to come from nature. Right from fields like these, people grew their own food. They didn't have to try to get exercise back then because everything was based on muscle power. They didn't really have any machines so just living took a lot of physical work. Growing food took a lot of physical work. *(Dr. Katz uses magnifier to get back to classroom)*

ALL: Wow!

DR. KATZ: I told you this is no ordinary classroom. Ok, have a seat now…. So we've all just seen that things used to be really different. And it may be tough for us to stay healthy, to eat right, living in a world so different from the one our bodies are used to. One way to understand that – is to think about a different creature and how all creatures really are designed to live in a particular kind of world. So, let's think for a minute about polar bears. And I'd like to know your opinion, Austin, about what's wrong with this picture of a polar bear?

AUSTIN: Well, I'm not a whiz on where polar bears live, but I am pretty sure that they live in the Arctic.

DR. KATZ: So you don't think they belong in the desert?

AUSTIN: Not really.

DR. KATZ: Dominic, do you agree that there is something wrong with this picture?

DOMINIC: Yes, that looks like the Sahara Desert.

DR. KATZ: Yes, you are absolutely right; polar bears are designed for the cold. Everybody knew that, right? Everybody knows that polar bears and ice and snow go together. Well, that's really important, because what it means is the polar bear does well if it stays where it belongs, and may not do so well if it goes someplace else.

So, for example, what keeps a polar bear warm in the cold? It's got a double layered coat, the inner layer is like insulation, prevents any heat from getting out from the bear's body, and the outer layer of the polar bear's coat that we all see, is actually made up of hollow hairs. Every one is like a tiny straw and sunlight travels through those straws to the skin of the polar bear to warm the bear up. And so the very things that make polar bears do well in the cold, cook the polar bear's goose if the polar bear winds up in the Sahara Desert, so they don't go there.

So, what does this have to do with us? Throughout most of human history, food came from nature, and physical activity was just a part of life. We've changed that, haven't we? We've changed where food comes from and we have a lot of things now that do what our muscles used to do. The trouble is, now we have too much food, too much sugar, too much salt, too much fat, just like the polar bear's problem if you move the polar bear to the desert. You understand how we are kind of like polar bears in the Sahara? But here's the difference, have you heard that we are smarter than the average bear? With the skills of a Nutrition Detective, we can make those good food choices that are so good for our bodies. …When we come back, we'll start to get those skills.

Chapter 2: Supermarket Spy Kids *(12minutes, 30 seconds)*

DR. KATZ: Welcome back. We now know a lot about WHY choosing good food is so important. Time to learn a little bit about HOW. Have you all heard you shouldn't judge a book by its cover? Angela, what does that mean to you?

ANGELA: Like you know a person, like when you see a person and he looks a little weird, but then he's nice on the inside.

DR. KATZ: You can't always tell what's on the inside from what's on the outside. Right? OK, that's really what that means. It's not just about books, it's about people, it's also about food, particularly the foods that we have to choose that come in bags, boxes, bottles, jars and cans. That's the cover. Now, this is orange juice. Ryan, I want you to take your time here and concentrate. What do you think orange juice should be made out of?

RYAN: Oranges?

DR. KATZ: Oranges? All right, is this made out of oranges? There is a picture of an orange on the cover? Right?

RYAN: Yeah.

DR. KATZ: That must mean that it's made out of oranges, right?

RYAN: Yeah.

DR. KATZ: OK, well, in fact it is made out of oranges. Orange in a glass, that's it. Just the juice from oranges, that makes good sense. But you were able to tell that just by looking at the cover, right, because there was a picture of an orange? OK, that may be the case. Dominic, is there a picture of an orange on here?

DOMINIC: Yes.

DR. KATZ: This is a drink on the cover; there is a picture of an orange. Austin, take your time, what would you guess this is made out of? If you had to guess.

AUSTIN: I am going to have to say oranges.

DR. KATZ: Excellent, very good. Coco, if you would take a look at that. Let us know, is that made out of oranges?

COCO: No.

DR. KATZ: It's not? How do you know?

COCO: 'Cause it has nothing to do with oranges on the ingredient list.

DR. KATZ: What? There are no oranges in the ingredients? OK, good. You knew where to go to get the right information, and in fact there is a statement on the package "Contains zero percent juice". There is no juice in this juice. It's something completely different from juice. Now this is why you need to be a Nutrition Detective, because you can't judge a food by its cover…..And by the way, when we are talking about drinks, here's the best

drink choice most of the time. If you drink water, your body gets the hydration that it needs, and you are not getting calories, and you are not getting sugar that you don't need…. OK, so on the cover of food, there's a lot of information from the people who want you to buy the food, but hidden there - sometimes we put stuff in there that isn't so great for us, and Nutrition Detectives know what that stuff is so repeat after me. Partially….

CLASS: Partially….

DR. KATZ: Hydrogenated…

CLASS: Hydrogenated…

DR. KATZ: Oil...

CLASS: Oil...

DR. KATZ: OK. Partially hydrogenated oil. Brianna, do you know what that is?

BRIANNA: No.

DR. KATZ: Angela?

ANGELA: No.

DR. KATZ: Dominic, do you know?

DOMINIC: Junk.

DR. KATZ: It's junk. It is junk. It's called "trans fat." It's a kind of fat that's put into food that's not good for us. Now, when you eat fats that aren't good for your body, what do they do? How can they harm you? Coco, what do you think?

COCO: They can make you sick, slow.

DR. KATZ: OK, they can slow you down. But trans fat and fats that are harmful specifically – they gum up your blood vessels. Ryan, what do you need blood vessels for?

RYAN: To live?

DR. KATZ: Yeah, you do need them to live. Right, they carry your blood, and your blood carries oxygen, and that oxygen goes to all the cells in your body, and absolutely you need that to live. So, if you gum up the blood vessels and the blood can't get through very well – Angela, how does that sound to you?... Not so great, right?

ANGELA: Not very good.

DR. KATZ: Yes, not very good. So, as Coco says, that can slow you down, but even more importantly, later on in life, that can cause heart disease. So trans fat is really bad, but it's not going to say "trans fat" on the package, it's going to say "partially hydrogenated oil." Trans fat, high fructose corn syrup (a long complicated name for added sugar), artificial flavorings, artificial colorings. But how can we tell looking at a package where these things are in the food, or whether they are there at all? We need to know something about the anatomy of a food package. We're going to learn about the anatomy of a box.

There you go – take these boxes. Have a look. Austin and Brianna. All right. So, everybody, if you would take a look at the front of the boxes here. Does that tell you much about what's in the food? Is there a list of ingredients there? It kind of looks fun, right? Ryan, you look at the front of your package, you've got a big white bear on the front. I think that's a bear.

RYAN: Polar bear.

AUSTIN: I have talking berries.

DR. KATZ: Talking berries? So the front of the package is like a TV commercial, right? It's basically there to make you want to eat the food.. It doesn't tell you an awful lot about whether or not eating the food is a good idea or not. Now, if you flip the package around, for the most part what you see there also doesn't tell you what's in the food, right? It's some kind of a story, maybe pictures, right? And if you look at one of the sides of the package, there's more information from the people who want you to buy this….. There is one particular place you have to

look to get just the facts, and it's called the Nutrition Facts panel. Everybody see if you can find that. It's usually on the side of the package, and usually somewhere near that is the ingredient list. Everybody find it?

So we have the front of the package, that's the fantasy – if you eat this food you are going to be a sports star. You're going to make the Olympics, do all sorts of wonderful things. Right? And then there is a lot information on a package about how terrific it is for you and that can be, sometimes it's food for kids, sometimes it can be food for your parents, too. .But you don't really get the truth on the front. It's a commercial. You don't really get the truth on the back. You get a commercial. And sometimes on the side you get another commercial, something telling you why you should buy this food. If you want the facts though – a Nutrition Detective knows you have to go to where the truth is on the package, and that is in the Nutrition Facts panel and the ingredient list.

So here we have the ingredient list for a kind of food that on the front looked like it was really terrific, but we've learned that there can be junk hidden in food. So we've got here sugar and more added sugar, and we've got added salt and artificial ingredients and all of a sudden this doesn't look like it's such a great choice after all.

Now Coco, you have a package that on the front says something about apples. So, if you had to guess what this product, this breakfast cereal, was mostly made out of, if you just had to pick one thing, what would you pick?

COCO: Apples.

DR. KATZ: Apples, right. OK, now if you look at the ingredient list what's the first ingredient?

COCO: Sugar.

DR. KATZ: Sugar. If your breakfast cereal is made mostly out of sugar, isn't that kind of like eating candy for breakfast?

COCO: Yeah.

DR. KATZ: Did you find apples in this apple breakfast cereal somewhere in the ingredient list?

COCO: Well, I found dried apples and apple juice.

DR. KATZ: OK, so at least there is some apple. Remember we had an orange drink that had no orange juice in it at all, so we are doing a little better here. Right? But it's not mostly made out of apples; it's mostly made out of sugar. A Nutrition Detective knows that a lot of the information on the package is just a sales pitch. But you can find the truth it's always there in the ingredient list, that's what the food is made out of, and the Nutrition Facts panel. From now on, you know that's where you are going to look, right?

CLASS: (*Everyone agrees)*

DR. KATZ: All right, now some of the tricky things about food are not just on the food packaging. They might be on a TV commercial. They might be in an advertisement that you would see in a magazine. So you might see in a magazine, for example, something about peanut butter. Maybe it's the kind of peanut butter that only choosy Moms would want to choose. And that might make you think that that peanut butter is the best choice. Maybe you would see peanut butter coming out of a peanut shell, and that would tell you this peanut butter is just about peanuts, right? Isn't that what it would mean? What comes out of peanut shells? Angela what usually comes out of a peanut shell?

ANGELA: Peanuts?

DR. KATZ: Anything else come out of peanut shells? Usually not, OK. So that's what that would mean. Let's now take a closer look. Ready? On three – One, Two, three. How about that?

CLASS: Wow *(together)* that's so cool!

DR. KATZ: All right, everybody come on up. So we've seen that we may get an advertisement or commercial that suggests that we've got peanut butter coming out of a peanut shell, and we would agree that if that's the case, what should come out of peanut shells is peanuts, right? I mean, here we've got peanuts in peanut shells. All right, so let's see what's really going on with the peanut butter here. Austin, if you would, could you read the ingredients of this particular peanut butter? This is a natural peanut butter.

AUSTIN: Organic dry roasted peanuts.

DR. KATZ: That's it? End of the line? All right, Coco, if you would, into this bowl, pour the ingredients of this peanut butter – pour some peanuts. OK, good. That's it. Here we have peanut butter, and here we have peanuts. So, so far, so good. Peanut butter made out of peanuts. Everybody's happy with that, right? All right, Angela, here we have another peanut butter, and would you mind reading the ingredients – can you hold this? It's kind of heavy. Got it?

ANGELA: Sure. Got it.

DR. KATZ: All right, and read them slowly we're going to pause after each one.

ANGELA: OK. Peanuts.

DR. KATZ: There are peanuts in it. OK good. Ah, let's let Ryan pour some peanuts in this bowl. Ryan if you would, reach over. OK. Good! All right, peanuts. What's next? Does it end there? Is it just peanuts?

ANGELA: No.

DR. KATZ: It's not just peanuts. What's next?

ANGELA: Sugar.

DR. KATZ: Sugar. All right, Brianna, if you would, pour in some sugar. All right, just get some sugar out of there and try not to make too big a mess. I'll help you out. All right, some sugar. Put a little more in there. I bet there is more than that. Yeah, OK, now we've got some sugar. All right, Angela, what's next?

ANGELA: Hydrogenated vegetable oil.

DR. KATZ: Ah. Hydrogenated vegetable oil. OK. Ryan, take that spoon, and let's scoop some of that in there.

KIDS: Wow. Looks like glue. Looks like ice cream. *(laughter)*

DR. KATZ: Well, when you see how this sticks to a spoon, what's the idea of having that stick to your blood vessels? Not so great, huh? Put a little more in there.

KIDS: It looks so artificial. It is. Put more in.

DR. KATZ: OK, that's good. That's enough. Angela, are we done yet?

ANGELA: Ah, no.

DR. KATZ: We're still not done.

ANGELA: Dextrose.

DR. KATZ: That's more sugar. All right, Brianna, you are in charge of the sugar, pour in a little more. Just pour it from the bag. A little more sugar in there. Just reach over, just a little more sugar, not too much. Ok, Good, good. We got that.

ANGELA: Salt.

DR. KATZ: Salt. Dominic, if you would, we'll let Dominic –whoops, we've got peanuts going everywhere – *(laughter)* All right, good. Good. Are we done yet?

ANGELA: No.

DR. KATZ: No? There's more?

ANGELA: Yeah, molasses.

DR. KATZ: Molasses. Ryan, would you do the honors?

RYAN: Yes.

DR. KATZ: Pour a little molasses in there. Not too much. Good. Good. Stop. *(laughter)* That's some sticky stuff. I'm not touching that. You put that down. OK, Angela, are we done yet?

ANGELA: No! Mono gli siere dudes. I don't know what this is…

DR. KATZ: Monogli siere dudes? – OK those are monoglycerides. We'll skip those. Close enough.

All right, who would like some peanut butter? Are you hungry? Do you want to dig right in there?

KIDS: Ooh, disgusting!

DR. KATZ: You get the idea now. You can't trust every food commercial. And not all peanut butter is created equal. But to know the difference between foods that you should choose and foods that you should stay away from, you need to get "clued in" to health. When we return: the clues you need

Chapter 3: The 5 Nutrition Clues *(16 minutes, 30 seconds)*

DR. KATZ: Welcome back. Now if there is one thing detectives care about more than anything else, it's clues. Time now to get clued-in to health. You guys ready?

CLASS: Yes.

DR. KATZ: Now, there are a lot of food choices out there, and we talked about some of the challenges of interpreting whether a food is good for us or not, based on what's on the package. But with the clues a Nutrition Detective uses, we can see right past all that, and you'll be to tell which ones you want to take and which ones you want to leave. Which ones get a "thumbs up" and which ones get a "thumbs down," using just 5 clues.

Now, the first clue we've talked about already. Angela, can you tell whether a food is good for you or not by looking at the front of the package?

ANGELA: No.

DR. KATZ: We went to the ingredient list and the Nutrition Facts, right? That's really the first clue. Don't trust what is on the front of the package. That's like an advertisement. Right, Brianna? We go right to the Nutrition Facts, right to the ingredient list and then we need to know how to interpret what we find there.

The second clue is this: the first ingredient on that list of ingredients is the one that there is the most of in the food. Coco, you remember you had a breakfast cereal that we looked at before, and the first ingredient was…?

COCO: Sugar.

DR. KATZ: It was sugar, right? Now what that means is there was more sugar than anything else in that breakfast cereal. And we all agreed that if you are going to have something made mostly out of sugar, it ought to be dessert, not breakfast cereal, right? Your moms don't want you putting jelly beans in a bowl and pouring milk over it and calling it breakfast. Right? OK

But the first ingredient is the biggest, and so here we use these ducks. The big Mama duck followed by the little baby ducks. Big Mama duck - first ingredient, that's the one there's the most of. That's your second clue. OK? So here we have a product. Long list of ingredients - first one is sugar. That means it is made mostly of sugar, and that would be fine if it were a candy, but it's a breakfast cereal like the one that Coco was holding before. Right?

Now, we talked about some things that can be hidden in food. Ryan, do you remember what partially hydrogenated oil is? Trans fat, exactly. And Austin, what did we hear about trans fat?

AUSTIN: It's not very healthy.

DR. KATZ: Right. It gums up your blood vessels and all that – so we have trans fat that can gum up your blood vessels, and high fructose corn syrup, which is, Ryan?

RYAN: Sugar.

DR. KATZ: We get too much of that and artificial flavorings, Angela we talked about you growing before, right? And the idea that you are going to grow out of the food you eat, and we don't want to grow more Angela out of artificial flavorings, right?

ANGELA: No.

DR. KATZ: That's right, but you have to be able to find these things on the food label, right? Now the trouble with that is what if you've got a long list of ingredients - really, really long. And somewhere in there, hidden, you've got partially hydrogenated oil, and you have to find it. It could be hard to find. How do you find something hidden in a crowd? Well, if you've ever played "Where's Waldo," or "I Spy," or any kind of a game where you have to know what something looks like, and then find it in a crowd, you can then pick it out, even if there is a big clutter.

We are going to go into a crowd. And we are going to figure out how to find things. Before we go into the crowd, I just want to introduce you to somebody. This character here is Fingers the Fox. Fingers is a shady character. He looks a little suspicious because he has a big bag of stuff over his shoulder. Now is Fingers were hidden in a crowd, he'd still look just like Fingers, right? So, once you know what he looks like, I think you can find him. Don't you? Let's go see if we can put it to test. Everybody ready? On three: One, Two, Three. *(The group is transported to a scene with cartoon characters.)* Wow – all right, guys. So we were talking about looking for suspicious ingredients in a crowded ingredient list, and here we are to prove that we can find the suspicious character in a big crowd

GABRIEL: Hi, Dad.

DR. KATZ: Gabriel, nice to see you! Everybody - my son Gabriel, a Nutrition Detective from way back. You never know who you are going to meet in a crowd. So here we are, surrounded by this crowd. But we met Fingers the Fox, the suspicious character that we are looking for, just like those sneaky ingredients that get into a long ingredient list. We want those to jump out of us so we can step away from those boxes. All we have to do is spot them, just like spotting Fingers. Now he's lost in the crowd, but we know what he looks like. Can you find him?

AUSTIN: Hey, there he is!

DR. KATZ: Good job, yeah Fingers! So we can spot Fingers in the crowd because we know what he looks like. We can spot those sneaky ingredients just the same and make better choices. Good job. *(The group is transported back to the classroom)*

DR. KATZ: Well that was great, huh?

CLASS: Wow! That was awesome! Cool!

DR. KATZ: Now that we've gotten up close and personal with Fingers the Fox, here's the point. You don't have to be able to draw Fingers to know what he looks like. You could find him in a crowd now. And you don't have to remember exactly "partially hydrogenated oil" (Ryan, have you got that yet?) and "high fructose corn syrup" - long complicated names - to know that they do not belong in your food. So when you look at that ingredient list, what you are looking for is just that familiar look, that long complicated name that doesn't look like it belongs in your food. That's Fingers the Fox. Suspicious character. Step away from the box and nobody will get hurt.

DR. KATZ: Here is clue number 4. The longer the ingredient list, the more mischief. A Nutrition Detective usually likes foods with a shorter ingredient list, because, for instance, Brianna, the ingredients in broccoli are….?

BRIANNA: Broccoli.

DR. KATZ: And the ingredients in your average banana would be… Angela?

ANGELA: Banana.

DR. KATZ: Banana – and there we go. So, foods direct from nature, like fruits and vegetables, they just have an ingredient list one word long, right? They just are what they are. So the longer the ingredient list, the less that food looks like nature. So we've got this giraffe with such a really long neck to remind us – when you see a really long ingredient list, generally that's not a good food choice. We're going to look for something else. Now, what do you think is wrong with this picture? We've got ketchup over ice cream. Does that make sense to you, Coco? Do you like that combination?

COCO: I wouldn't eat that.

DR. KATZ: You wouldn't eat that. OK, it doesn't sound appealing.

COCO: No.

DR. KATZ: The reason for this picture, though, is that ketchup, which you think is made out of tomatoes, also contains added sugar. And sometimes so much added sugar - believe it or not, there's more added sugar in ketchup than ice cream toppings. So this looks a bit strange, but in fact it is kind of strange to have so much sugar. But if you've got a long ingredient list, that's the kind of mischief that can go on. What do you think about this picture, Austin? Do you routinely pour salt over your breakfast cereal?

AUSTIN: Uh, not really.

DR. KATZ: Not most days, huh? Angela, what do you think? Do you salt your breakfast cereal?

ANGELA: No.

DR. KATZ: Do you like salty breakfast cereal?

ANGELA: No.

DR. KATZ: Some of the breakfast cereals you guys eat are actually very salty. But because there's a lot of sugar in there, you don't even notice the salt. But if there's that long ingredient list, you've got sugar covering over salt, and artificial flavorings. This is the kind of thing that can go on. OK? So a short ingredient list is our friend. That's a choice we want to take. A long ingredient list – generally something we want to leave behind.

Now, we've gotten 4 of the 5 clues a Nutrition Detective needs. Time to get the fifth clue. And for that, we have to go undercover. This is the special clue for the undercover unit that's going in search of whole grain. Now, before I teach you how to find whole grain, let's talk a little bit about it. Is whole grain important? Is there a reason why we should care whether grains are whole grains or not? Dominic?

DOMINIC: It has fiber.

DR. KATZ: Fiber! Excellent. Yeah, if we're going to single out the one thing about the nutrition in whole grains - it can be rice, it can be wheat, it can be corn, it can be a variety of different grains – but if they're whole grains, they're usually a good source of fiber. Now we're going to actually use that to help us get clued-in to which are whole grains, and which are not.

Now, we need to care about the difference between whole grains and refined grains, because a refined grain – that's a term used when some of the good nutrients are stripped away from a grain – and unfortunately, a lot of the foods available to us – breads and cereals and chips and crackers – which are made from grains – aren't made from the whole grain. They're made from refined grains.

Now, it makes a pretty big difference. Here you see a whole grain dressed up nicely, and here you see a refined grain looking naked and ashamed because a lot of the good nutritional stuff has been stripped away. And it's embarrassing to be a refined grain like that.

OK, so we want to be able to tell the difference. The trouble is, when you look at a nutrition label, sometimes it can be a little confusing. So here, first ingredient – whole wheat flour. Does that sound like a whole grain? It says it's whole wheat. It says it's a whole grain. But here we have another product and the first ingredient is enriched flour – wheat flour. Angela, is this a whole grain?

ANGELA: No.

DR. KATZ: How do you know?

ANGELA: He's not dressed, and he's all naked.

DR. KATZ: OK, I gave you a clue there. Right, so it doesn't say whole wheat, but it's kind of confusing. It says wheat, and there really is an important difference between a whole grain, which has fiber and all the good nutrients of the grain, and a refined grain, which has a lot of that stripped away. All right, I think to show you what I mean about how important it is to have the whole thing, as opposed to just part of the thing, we need to go take a ride in a special plane I've prepared for you. Everybody ready?

CLASS: Yeah!

DR. KATZ: *(The group is now in the plane)* So we were talking about how important it is to tell apart a whole grain from just a part of a grain, and I thought it might help demonstrate how important it is to have the whole thing to be in this airplane. You know what a whole plane has?

CLASS: What?

DR. KATZ: It has wings, and that makes flying pretty comfortable! Now if you only had part of a plane, you'd have no wings. *(Plane starts to fall)*

CLASS: Aaaahhhh!…

DR. KATZ: That's no good! OK? That was close! We really want a whole plane, and we really want whole grains! All right, let's land this thing.

DR. KATZ: *(Back in class)* What did you think of that?

CLASS: Oooohhhh …. Fun! That was great!

DR. KATZ: I don't want to do that again anytime soon, but I hope I've made my point. A whole plane is a heck of a lot better than part of a plane, and the same is true with the grains that we eat. We really want the whole grain, so the thing is, how can we tell, looking at the nutrition label?

And we heard from Dominic that one of the things that makes whole grains good for us is fiber. Fiber is our friend. It's good for our bodies, and so we want 2 or more grams of fiber in every serving of a grain product. Now a grain product is pasta, bread, cereal, crackers, chips, granola bars, cereal bars – all those different kinds of things that are made out of wheat, or corn, or rice. OK?

So anything made out of those grains, 2 or more grams of fiber per hundred calories. If you see a product that has one gram or less of fiber, and it's supposed to be a grain product – so let's say it's a bread, and it says multi-grain bread. It doesn't say multi-<u>whole</u> grain bread, does it? It just says multi-grain bread. Most people are going to be fooled by that. Are you going to trust the front of the package? Of course not! You're Nutrition Detectives, right? You're going to go right to the ingredient list, right to the Nutrition Facts. On the ingredient list, you're going to look and see – is it whole grain? And on the Nutrition Facts panel, if it has 1 gram or less of fiber, it's a whole grain imposter. And a lot of foods really are imposters.

You know, you can have white bread that doesn't pretend to be a whole grain, but then there are some breads out there that say multi-grain or seven-grain, and I bet you they're fooling your mom or dad if they're doing the shopping. But you now are going to know the difference. And a whole grain imposter is a wolf dressed up as Grandma here. OK? So that's our clue.

So let's take a look. Here we have a product. It's made from grain, but it has only 1 gram of fiber. Coco? What do you think of that?

COCO: That is a whole grain imposter.

DR. KATZ: OK, I think you're probably right. It really ought to have more whole grain in it than that, and we're going to say "no, thanks." So any time we see 1 gram or fiber, or zero grams of fiber, that's our clue that this is probably a whole grain imposter. And here's the good news. If you keep looking around at a different bread or a different cereal, you can find one that has those 2 grams of fiber.

There is one whole class of foods that you don't even need Nutrition Detectives skills for. We've been talking about them throughout, because I've asked you what the ingredients are in an orange, Angela, and you told me…

ANGELA: It's an orange!

DR. KATZ: It's an orange. And Brianna, I asked you about banana, and you told me the ingredient is….

BRIANNA: Banana.

DR. KATZ: And Austin, the ingredients in lettuce are….

AUSTIN: Lettuce.

DR. KATZ: OK, exactly. Fruits and vegetables – and to some extent, whole grains – these are natural foods. The package is just the skin or the peel. That's all there is to it. So you should try to make fruits and vegetables a part of your diet every day. Now you could just eat bananas, and apples, and oranges, and grapes, and broccoli, but there are ways to add a rainbow of fruits and vegetables to your diet every day, so you can be sure that you fit them into your healthy diets. Do you want to see how to do that?

CLASS: Yeah.

DR. KATZ: Because I have a special rainbow beam, too. I'm going to show you how to add a rainbow of fruits and vegetables to your diet. Come on up here…. All right. So, for example, let's say we have a bowl of cereal, right? Just your basic bowl of cereal. But that's good, especially if it's a whole grain cereal, but we can do even better. We could add a rainbow of fruits to that cereal. How's that look? Pretty good, huh? Tastes even better, and we can do the same thing with vegetables.

So let's, for example, take a look at the pizza. Just your basic plain pizza, right? But we can do much better than that. We can add a rainbow here too, so let's do it, and add all those veggies. Look at that! So fruits and vegetables are great for us to eat, and you can eat them plain. You can just have fruit, or have a salad. But it's great when you can add them to food you like. I like pizza. How about you guys?

CLASS: Oh, yeah!

DR. KATZ: But if we can add a rainbow of veggies to our pizza, we can love the pizza and it will love us back, and that's the Nutrition Detectives way to do it, right?

CLASS: Yeah.

DR. KATZ: Let's go sit down. So lots of ways to add fruits and veggies to our diet, and that's all great. But we know that a lot of the foods that we're going to eat every day come in bags, boxes, bottles, jars, and cans. And we need to use our 5 clues to figure out which of those we should take, and which of those we should leave behind. Now we're going to put them to use. I want you guys to come with me on a nutrition safari. Sound good?

CLASS: Yeah.

DR. KATZ: All right, very good. *(Looking at the camera)* And you'll come along with us, too, and watch how we can put the 5 clues to work for us.

Chapter 4: Our Nutrition Safari *(5 minutes, 25 seconds)*

(The group has been magically transported into in a "jungle" of giant food packages.)

CLASS: Wow! Wow!

DR. KATZ: All right, guys, so here we are! We materialized right in the middle of a nutrition safari. I brought Gabe with us again – nice to see you, Gabe. And you know safaris can be a little bit dangerous. You never know what you're going to run into, so I brought reinforcements – my wife Catherine, who helped develop the Nutrition Detectives program – in case we run into any especially tricky clues, she can help us out.

Now, as we work our way through this nutrition landscape, we're going to encounter all 5 clues. Let's start with clue number 1. *(They begin to look at different food products – one for each of the 5 clues.)* All right, everybody, we're going to start our safari with clue number 1. Now the symbol for Nutrition Detectives clue number 1 is a magnifying glass. Gabriel, what is clue number 1?

GABRIEL: Don't be fooled by the advertisements on the front, but go to the Nutrition Facts on the back.

DR. KATZ: Excellent answer. A Nutrition Detective isn't fooled by what's on the front of the package. We know we've got to go where the facts are – the Nutrition Facts panel and the ingredient list. And sometimes those tell a very different story from what's on the front. So we look at this ingredient list, and we see there's no orange juice in this orange juice.

CLASS: Zero percent juice.

DR. KATZ: That's right….Here we are ready to deal with clue number 2... And the symbol for Nutrition Detectives clue number 2 is that mama duck at the head of the line of ducklings. Angela, what is clue number 2?

ANGELA: The first ingredient is the biggest!

DR. KATZ: Exactly. The food is mostly made out of that first ingredient. Let's take a look and see what that means here….Now if we look for the mama duck on this ingredient list, we see that the first ingredient is sugar. That would be OK if this were a candy, but this is a breakfast cereal. You're not really supposed to have candy for breakfast, are you?

CLASS: That's a lot of sugar. Wow!

DR. KATZ: All right, everybody. Here we are at clue number 3. Now the symbol for Nutrition Detectives clue number 3 is that sneaky Fingers the Fox. Brianna, what is clue number 3?

BRIANNA: It's the one that helps you spot out the ingredients that aren't supposed to be in your food.

DR. KATZ: That's right. Those suspicious ingredients that can hide in the ingredient list, just like Fingers can try to hide in a crowd. But we know what he looks like. We can find him. We can find those sneaky ingredients, too, can't we? So let's see if we can find Fingers the Fox in this ingredient list… There, jumping out at me – partially hydrogenated oil. You know what to do when you see that – step away from the box and nobody will get hurt.

All right, everybody, here we are now at clue number 4. Now the symbol for Nutrition Detectives clue number 4 is the long neck of the giraffe. Austin, what is clue number 4?

AUSTIN: Clue number 4 is the longer the list, the less healthy it is for you.

DR. KATZ: Absolutely. Generally true – the longer that ingredient list, the more stuff hides in there that we don't really want to eat. A Nutrition Detective is usually looking for a shorter ingredient list. Let's take a look and see what we've got here… This ingredient list almost runs right off the page, doesn't it? A Nutrition Detective knows what to do with this – look for something better.

Home stretch now. Here we are at clue number 5. Now, the symbol for Nutrition Detectives clue number 5 is that wolf disguised in Grandma's clothing. Dominic, what is clue number 5?

DOMINIC: Clue number 5 is that you should <u>look</u> for a whole grain, and <u>look</u> <u>out</u> for a whole grain imposter.

DR. KATZ: Excellent! And one of the best ways to do that is to remember that fiber is our friend, and that may help us tell the difference. And Catherine, you help us out. As we look over here, where do we look for the fiber on this product?

CATHERINE KATZ: Now, I have a little trick for you guys! You see those 2 big black lines right there? And you see a percent sign? You guys know what a percent sign looks like, right?

CLASS: Yeah! Right!

CATHERINE KATZ: OK, look at the first one, and go "zhoop!" *(She says this word as she scans with her hand down the food label to the last percent sign)*

CLASS: *(All scanning with their hands down the food label)* "Zhoop!"

CATHERINE KATZ: You see that? You've got to do "zhoop" all the way to the last percent sign, and right there, there is dietary fiber. Look at what it is! What should it be if it's a whole grain?

CLASS: 2 – whole grain!

CATHERINE KATZ: Exactly!

DR. KATZ: 2 grams or more, right, for that one?

CLASS: No! That's an imposter!

DR. KATZ: Hey, great job. We've been through all 5 clues! Come on! *(He gestures for them to leave the "jungle" of food packages. The group is transported to a table of unpackaged foods such as fruits, vegetables, and whole grain bread products. As they stand on this table, they begin to look at the giant foods surrounding them.)*

CLASS: Wow!

DR. KATZ: We're in a very different part of the nutrition landscape now. Ryan, do you see any confusing nutrition labels around here?

RYAN: Nope, not at all.

DR. KATZ: Neither do I. Here, it looks like you can make some pretty good choices. Coco, what do you think of these foods?

COCO: Well, I think these are very healthy foods.

DR. KATZ: Absolutely! You know how we look for a short ingredient list? Well, the shortest ingredient list of all is just one word - those kinds of foods that come direct from nature. You look around here, you see a lot of these – fruits, vegetables, we've got some whole grains. These are wonderful foods. And when you're here, it's pretty hard to get lost. But for all those other food choices where you can go wrong, you use the 5 clues of a Nutrition Detective, and you'll never get lost.

Well, I'm pleased to say we've made it safely through our nutrition safari. And now it's time to head back to the classroom. Join us there, won't you? If you do, we'll have some fun in the classroom, playing with our food.

Chapter 5: Playing with Our Food *(5 minutes, 5 seconds)*

DR. KATZ: Welcome back! We've mastered the 5 clues now, and it's time to see just how powerful they are in helping us really make good food choices. And I'm going to let you guys do something your parents would never let you do. I'm going to let you play with your food! And Gabe would never forgive me if I didn't let him join in the fun, so he's going to join you while we do this. We're now going to use the 5 clues of a Nutrition Detective, and look at real foods, and see that we can make the choice between "clued-in" choices that we want to take home with us ("take it!") and "clue-less" choices. Catherine is going to explain how the game's going to work.

CATHERINE KATZ: All right, guys. We have a bunch of grocery bags here filled with different things – cookies, breads, cereal, juice – and in each of them, there are some "clued-in" ("take it!") and there are some "clue-less" ("leave it!") choices. Now you guys know, because of your 5 clues, which ones are which. The "clued-in" ("take it!") choices, when you find them, put them on this table, and the "clue-less" ("leave it!") choices, put on that table. I'm going to time you, so remember your 5 clues! Ready, Dr. Katz?

DR. KATZ: I'm ready. *(They pass out the food packages to the students.)*

CATHERINE KATZ: OK. On your mark, get set, go!
(Speeded-up scenes of the children looking at the food products in each bag, deciding whether they are "clued-in" or "clue-less" choices, and putting the appropriate food products on each table.)

DR. KATZ: Great job**!** OK, very good. That looked like hard work, but also a lot of fun. But here's the important thing. Behind me are 2 tables, right? Over here, a table of foods that before you had the 5 clues, you might have chosen. Now we know they're pretty clueless choices. But here's the more interesting thing – For every product on this table *(pointing to the "clueless" table),* there's another food over here *(pointing to the "clued-in" table)* - just like it – a bread like a bread, crackers like crackers, chips like chips – except these all satisfy the demanding requirements of a Nutrition Detective. Right? You looked at these foods carefully, thinking of the 5 clues, and you decided that you could take all of these. Well, I think that's a very important lesson. Right?

You can make better choices using the 5 clues. You don't have to give anything up. If you like chips, you can have chips. If you like cookies, you can have cookies, but if you use the 5 clues, you can choose better chips, and better cookies, and better cereals and breads that are going to like you back, and be good for your body, and help you be healthy, which is important, because healthy people have more….

CLASS: Fun!

DR. KATZ: Exactly! Everybody, stand up, please *(They all stand up).*

CATHERINE KATZ: And now, you're certified Nutrition Detectives! *(She holds up a Nutrition Detectives button to pin on each student.)* OK?

DR. KATZ: Austin? *(Austin walks up to get his button.)*

CATHERINE KATZ: *(Talking to Austin)* Congratulations!

DR. KATZ: Congratulations! Well-done!

CATHERINE KATZ: *(Talking to Ryan)* Congratulations!

DR. KATZ: Nice job, nice job. Angela?

CATHERINE KATZ: *(Talking to Angela)* Congratulations!

DR. KATZ: *(as Catherine Katz congratulates their son Gabriel)* Gabe, I think you've been around this block before. Nice job, buddy.

CATHERINE KATZ: *(Talking to Coco)* Congratulations!

DR. KATZ: Brianna?

CATHERINE KATZ: *(Talking to Brianna)* Well done, congratulations!

DR. KATZ: And Dominic, excellent job!

CATHERINE KATZ: *(Talking to Dominic)* Congratulations!

DR. KATZ: Well-done! Congratulations to you all! *(Looking at the camera and talking to the video audience)* And you've done a great job, too. You've joined us here in this magical classroom. You've taken this journey with us. You also have learned the 5 clues. You also are certified Nutrition Detectives. So congratulations to you.

Now I want to send you home with some doggie bags for your brains – some important information you can chew on, now that you've been through the Nutrition Detectives program. Remember, first and foremost, that what we eat really matters. Remember that you can have food that tastes good that's good for you. You can like it, and it will like you back. You can choose food that's good for you in all the categories you love just by making better choices based on the 5 clues. Use those 5 clues every time you're choosing foods, and you will be a Nutrition Detective, a supermarket spy.

And one more important thing to remember – the reason why all of this matters so much. You want to be healthy. You want to have energy. Having lots of energy lets you do the things you love to do. Healthy people have more fun! Make good choices. Help your family make good choices. As a Nutrition Detective, you have the power to do that. Thank you very much for joining us.

END of Video (Total time: 50 minutes)