

10 Aisle Hopping



OVERVIEW

Read a fictional dialogue between two friends deciding what breakfast cereal to buy and evaluate some of the things that are important to people when they shop. Use a cost-benefit analysis to evaluate alternative choices in foods. Then play a simulation game to find out how people's purchasing decisions change as they learn more about products.

SUBJECTS

social studies, language arts

SKILLS

gathering (listening, recording, brainstorming), organizing (prioritizing, listing, charting), analyzing (comparing and contrasting, calculating, discussing), interpreting (summarizing, identifying cause and effect), applying (decision making), evaluating (establishing criteria, testing, assessing)

FRAMEWORK LINKS

30.2, 30.3, 30.4, 32, 63, 72

VOCABULARY

cost-benefit analysis, economic decision, opportunity cost, unit cost

TIME

one to two sessions

MATERIALS

copies of "A Tale of Two Cereals" (page 165); two grocery products of your choice (see the box "Choosing and Discussing Your Products" [pages 158-159] for more information)

CONNECTIONS

Try "Investigating Green Claims" (pages 142-154) after conducting "Aisle Hopping" with your students to further explore the analytical thinking required of smart shoppers. "Dollars and Sense" in Biodiversity Basics offers more insight into the connections among consumers, economics, and biodiversity.

Many of us face the same daunting challenge when we walk down a grocery store aisle. Even when we just need a box of cereal or a jar of sauce, we may stand in front of a wall of cereal boxes or sauce jars, eyeing labels, reading nutrition information, and checking prices. And it can be a challenge to find information that will help us choose one product over the dozens of others that seem to be almost the same.

We all want to get the most for our money, but that doesn't necessarily mean choosing the least expensive option. Many other factors also affect our decisions, including advertisements, packaging, quality, and nutrition. Those considerations, and a host of others, all come into play as we balance a product's price against additional factors in making a purchasing decision.

Another factor people may weigh is the environmental impact of a product. "Green" products can be more or less expensive than their less-environmentally friendly counterparts. Even when they cost more, many people are willing to pay higher prices for products that have environmental benefits. While it's not the right choice for every shopper every time, many people opt for environmental benefits when possible.

In this activity, your students will start to uncover some of the motivations for buying products that go beyond price. They'll read a fictional dialogue between two friends that will introduce the students to some of the important factors in economic decision-making. And they'll weigh for themselves some of the costs and benefits of traditional versus more environmentally friendly products. In the end, your students will develop a greater appreciation for what's important to them when they shop.

Before You Begin

Choose and purchase two grocery products to use in a simulation game. The two products should be roughly equivalent, with one product offering significant environmental benefits. See the discussion guide "Choosing and Discussing Your Products" (pages 158-159) for more on what type of products to choose. Prepare enough small samples of the products for each student to try each one, but be sure to keep the products' packaging intact so that the students can see and evaluate the two products.

Make copies of "A Tale of Two Cereals" (page 165) for each student, have students share copies, or copy onto an overhead transparency.

What to Do

1. List shopping considerations.

Ask the students to think back to the last time they were in a store shopping for something. As they made a decision about what to buy, what kinds of things did they think about? Have the students brainstorm about all of the different factors they considered when shopping for food, such as price, quality, appearance, or flavor. Record each factor as the students call them out. Once they've developed a comprehensive list of factors to consider, ask each student to write down the factors he or she uses to make shopping decisions. Ask the students to prioritize their lists, ranking each of the factors in order of importance to them when they shop. Once students have finished developing their personalized lists, they should put those lists out of sight. Explain that, during the rest of the activity, they'll be learning more about how we weigh a variety of factors when making shopping decisions.



After hearing the story, ask the students to summarize the economic decision the two characters face in the dialogue. (*In the story, the two characters are deciding between buying more expensive, name-brand cereals and less expensive, store-brand cereals.*)

If Jackie buys the more expensive cereal, what would she have to give up? (*She wouldn't have enough money to buy the CD she wants.*) Explain that economists call this the opportunity cost. The opportunity cost is what a person gives up by choosing to spend money in a particular way or on a particular item. Every economic decision involves an opportunity cost: Every dollar we spend on one product is a dollar we don't have to spend on something else. As in Jackie's case, those costs are sometimes significant. In other cases, the things we forego are not as important. In Simon's case, for example, there is nothing else he really wants.

2. Discuss factors in economic decisions.

Hand out one copy of "A Tale of Two Cereals" to each student (or ask students to share copies), and explain that this story includes a short dialogue between two friends who run into each other in the cereal aisle of their grocery store. Ask different students to read each part aloud for the class.

Ask the students what kinds of things about cereal are important to Simon. (*Simon is focused on the product's taste and its packaging. Because a top skateboarder appears on the box, Simon suggests that eating the cereal could possibly make him a better skateboarder. Those factors are so important to Simon that he is willing to pay more for them.*)

Choosing and Discussing Your Products

This activity requires you to find two products to use in the simulation game. Both products should be food items. However, one product should be fairly conventional while the other should offer environmental benefits. Because a wide variety of products will work for this simulation, we've left it up to you to decide which products to buy, based on what's available and affordable in your area. The following offers some tips on what you may want to buy, and how to discuss the environmental costs and benefits with students.

What to Buy

Choose two products that are roughly equivalent and that would be fairly easy for students to sample. Conventional and organic varieties of similar products will most likely be the easiest to find and compare. The following types of products are usually available in conventional and organic varieties:

- breakfast cereal (Try to find two similar types—for example, both might be flakes, puffs, or rings.)
- pasta sauce
- cookies
- bread
- jellies or jams
- fruits or vegetables

Most large grocery stores now carry a variety of organic products, so these products should not be hard to find. Most health food stores also carry organic products. If you can't find conventional and organic products to compare, look for food products that offer other environmental benefits. Examples include a product with little or no packaging (compared to a similar product with more packaging), or produce that is grown locally (compared to produce that has been shipped from another state or country).

Discussing the Environmental Pros and Cons

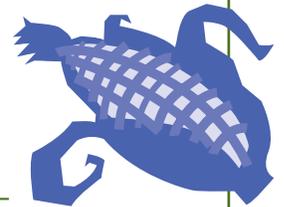
It's important to emphasize that, although some products are definitely better for the environment than others, it's not always possible to know exactly

how something was produced and what the environmental effects might have been during growing, harvesting, manufacturing, and transporting. Many experts say that the best thing consumers can do is to find out as much as they can about the product, look for labels that provide more information about how it was produced, and learn to recognize certain labels that certify that it was produced in a more environmentally friendly way. (For example, seafood marked with an MSC label indicates that the seafood was certified by the Marine Stewardship Council and harvested sustainably according to a specific set of environmental and social criteria.)

Conventional and Organic Farming:

This information is provided to help you discuss some of the pros and cons of organic and conventionally grown produce. Although organic is generally considered more environmental friendly than conventional agriculture, many experts believe that we will need to use a variety of approaches in the future to ensure that our farming practices protect the environment, are socially responsible, are economically viable for farmers and workers, and are efficient enough that we can grow food at affordable prices to sufficiently feed a growing population. Many think the answer will be an approach that emphasizes sustainability, is built on ongoing research, and combines the best of what we know from current methods, including organic farming techniques, natural pest control, watershed protection, targeted chemical applications when appropriate, fewer nonrenewable energy inputs, and habitat protection. The goal is to help farmers and ranchers adopt practices that are economically viable, environmentally sound, and socially responsible. See the Resources on page 164 to find out more about a variety of agricultural approaches.

Conventionally produced fruits, vegetables, and grains are generally grown using synthetic pesticides and fertilizers. These chemicals help



Choosing and Discussing Your Products (Cont'd.)

increase yields because they limit damage caused by pests and can increase the nutrients in the soil during the growing season. The higher yields translate into lower prices for consumers. The chemicals, however, can enter waterways, where they can cause water pollution and harm wildlife. Some people are also concerned about the effects of chemical pesticides on people, contending that many of the chemicals have not been fully tested to determine their potential effects on human health and the environment. Conventional farming can also contribute to soil degradation, soil runoff, loss of biodiversity (as new lands are converted for farming), and other environmental problems, and often requires huge inputs of energy from nonrenewable sources (such as petroleum). It's important to point out that there is great variation among farms and farming practices—and that many conventional farmers and ranchers are trying to incorporate more environmentally friendly practices into what they do.

Unlike conventional farming, organic produce is grown without using synthetic pesticides or fertilizers. Instead, more natural techniques and substances are used to control pests, protect soil fertility, and ensure long-term soil health. Organic farmers are also required to maintain a buffer zone between organic farms and neighboring conventional farms to protect their produce from chemical contamination, and they are not allowed to use genetically modified organisms. By not using synthetic chemicals, organic farms have taken a giant step forward in reducing our dependence on those chemicals, which many believe cause problems for people and wildlife. However, more research is needed to know how organic farming compares with conventional farming in terms of yields, biodiversity conservation, and overall environmental impact. For example, organic farms often use natural fertilizers (composted chicken and cow manure) that, when improperly used, can cause runoff and water contamination just as

synthetic fertilizers can. At the large scale, organic farms can contribute to biodiversity loss just as conventional farms can, through the conversion of new lands to agriculture. In addition, some organic farming methods are more labor intensive and are generally not subsidized (like some other crops produced in the United States), causing prices to be higher than conventionally farmed produce.

More and Less Packaging: Products that have a lot of packaging are often more attractive to consumers, as the packaging allows more room for product details, pictures, and other information consumers want. In addition, many consumers think that the extra packaging has protected their product from damage. The packaging, however, requires energy and resources to produce, makes the product heavier during shipment (so it requires more energy to transport the products), and leads to more waste when the packaging is disposed of. Products with less packaging require fewer resources to produce and transport and result in less waste. Unpackaged, or minimally packaged, products can save energy and save space in landfills.

Local and Long-Distance Produce: Produce that is grown at a distance from its end market requires much more energy to transport than does produce that is grown locally. Locally grown produce travels only a fraction of the miles, so it helps save energy. And less fuel burned means that less carbon dioxide—a heat-trapping gas linked to global climate change—enters the atmosphere.



3. Introduce cost-benefit analysis.

Explain to students that, whether or not we realize it, most of our decisions about what to buy involve some sort of cost-benefit analysis. What benefits will we get from the product? What are our opportunity costs? What are some of the other costs of choosing the product, such as environmental or social costs?

Tell students that, when comparing the monetary costs of two products, it is often more revealing to compare the products' costs per unit weight (the unit costs) than their overall prices. For example, each cookie from an 8 oz. box that costs \$3.00 is actually more expensive than each cookie from a 16 oz. box that costs \$4.00, even though the overall price of the first box is lower. In general, larger-sized packages tend to be cheaper per unit weight. They also tend to use less packaging overall, so their environmental impact is smaller.

Have students review the dialogue between Simon and Jackie. What would the students say are the benefits of the name-brand cereals? *(They might taste better, be packaged better, and be associated with celebrities.)* What are the costs of those cereals? *(They are more expensive. For Jackie, the higher price represents an opportunity cost—she would have to forego buying the CD she wants.)* Can your students identify some of the costs of the less-expensive store brand? *(These cereals might not taste quite as good as the name brand, they're not as nicely packaged, and they don't have celebrities advertising them.)* What are the benefits of buying store-brand cereals? *(They are much less expensive than name-brand cereals, so the opportunity cost of purchasing them is smaller. Also, according to many people, the taste is not very different from—and is sometimes better than—the taste of the name-brand cereal.)* Record your students' thoughts about the costs and



benefits on the board so that students can see them displayed together.

Ask the students how people decide what to buy when there are costs and benefits to every choice. Explain that economic decisions, such as the one in the cereal example, often involve values. Shoppers must decide which of the costs and benefits are most significant to them, and then must make their decisions based on their own interests and values. Sometimes, as in Jackie's case, price is the most important factor. Other times, different factors are more important, as in Simon's case.

4. Create a "shopping aisle."

Explain that you've selected two products, and the class members will now have the chance to make some food shopping decisions of their own. Explain that they'll have the chance to run back and forth across an imaginary shopping aisle as they decide which product to buy.

If you will be using an inside space, move the desks to the back of the room. Explain that the two walls on the sides of the room represent the two sides of the aisle. Ask the students to form a line in the center of the room, or aisle, to start the simulation. They'll be running from one side of the room to the other, so be sure to remove any obstructions in the middle of the room.

If you will be conducting the simulation in an outdoor area, use cones, rope, flags, or other markers to delineate the two sides of the "aisle." Again, ask the students to form a line in the center of the aisle to start the simulation.

Note: You may need to remind the students that, although they're running, they should remain orderly.



CONSUMER CHOICES: In 2002, the average consumer in the United States spent \$830 on entertainment, \$700 on apparel and related services, and \$300 on education.

There's no prize for being the first to reach the other side of the aisle, so there's no need to push or race. If you prefer, you may have the students walk instead of run.

You can also do a sit-down version of this activity. Have the students take out a piece of paper and draw two columns on it, one with the words "Product One" at the top, and one with the words "Product Two" at the top. Then have them record their impressions of each product's looks, price, environmental impacts, and taste, in turn. They can simply put a check in the column of the product that is superior for each category, or they can write descriptive words for each category.



5. Evaluate product looks.

The first piece of information on which the students will base their purchasing decision is how the products look. With the product you're calling Product One, walk down the right-hand side of the line of students and give them a brief look at the product's packaging. Once they've all seen the product, place it at the head of the right side. Next, walk down the left-hand side of the line of students, allowing them to see Product Two. Once each student has seen the product, place it at the head of the left side. Tell the students to consider their two options. Then, when you give the signal, they should run or walk to the side with the product they wish to buy.

After the students have arrived at their chosen side of the aisle, ask them why they've chosen that particular product. What about the way it looked made them want it more than the other?

6. Evaluate product prices.

Next, tell the students that you'll be revealing the price of each product. Be sure to point out the differences between both the unit prices and the actual prices of each product. Based on these new pieces of information and at your signal, the students can either choose to stay where they are, or they can run or walk across the aisle to choose the other product. After the students have made their selections, ask them

why they've chosen the products that they have. Have they all chosen the less-expensive option? If not, what are some of their reasons for paying more?

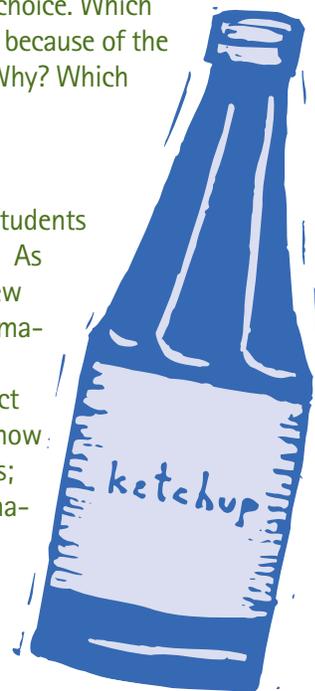
7. Evaluate environmental impacts.

Next, tell the students that the two products have different impacts on the environment. Using the discussion guide provided (pages 158–159), explain the pros and cons of each product's environmental impact. After answering any questions the students might have, on your signal, ask the students to run or walk to the product they'd choose, given this new information.

After the students have made their selections, ask a few students to explain their choice. Which students changed their minds because of the environmental information? Why? Which students didn't, and why?

8. Taste products.

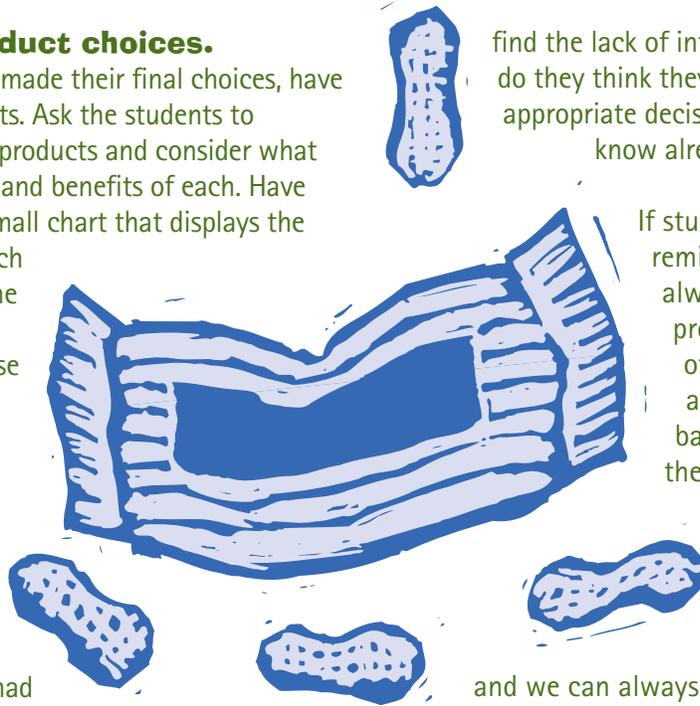
Finally, if possible, allow the students to taste each of the products. As they taste each product, review with them the pieces of information they've learned so far: They've seen how each product looks in its packaging; they know how much each product costs; they've gathered some information about each product's environmental impact; and now they've sampled each one. Ask the students to consider all of those factors and to make a final decision about which of the two products they would prefer to buy. On your signal, have them run or walk to the preferred product.



Note: Depending on the products you've chosen, it may make sense to introduce other information, and rounds, into the simulation. For example, if there is a nutritional difference between the two products, you might have students make a decision based on that information. You can add as many rounds to the game as you need to cover all the product information that you think is important, but the students' interest may wane if too many rounds are played.

9. Reflect on product choices.

After the students have made their final choices, have them return to their seats. Ask the students to reflect back on the two products and consider what they think are the costs and benefits of each. Have each student create a small chart that displays the costs and benefits of each product, and then ask the students to write down which product they chose and why. How did they weigh the different costs and benefits? Did any other factors that were not considered in the game influence their decisions, such as advertising for one or the other product they had seen previously? In the end, which factors were most important to them? Once they've completed the task, ask the students to share some of their responses.



find the lack of information to be daunting, or do they think they can make responsible, appropriate decisions based on what they know already?

If students seem frustrated, remind them that people are always learning more about the products they use. Consumers often change their minds about what's best to buy based on their knowledge as they weigh the currently available information against the many other factors that are important. There is not one right answer about what's best to buy, and we can always learn more about the costs and benefits of all of our options. If you'll be conducting other activities from this module, explain that they'll be learning more about how to evaluate and gather information on products in upcoming activities.

10. Discuss future decisions.

Ask the students to take out their original prioritized list of factors that they cited as being important to them. How closely does their original list match their decision-making process in the simulation? Did the simulation highlight additional factors that they hadn't considered at the start of the activity? Had they considered environmental impacts? Did their original priorities seem similar to their priorities in the simulation? Can they explain any changes in their thinking?

Finally, ask the students to reflect on how environmental considerations affected their decisions. How many students think they'll consider environmental impacts when they shop for products in the future? Explain that one challenge in considering environmental impacts is that a lot of information may be required to make a well-informed decision. Even though the information provided in this simulation may have seemed limited, it was probably more than they would usually receive. What do students think about the limited amount of information available? Do they



WRAPPING IT UP

Portfolio

The students' cost/benefit charts (if they made them) and lists of shopping priorities can be saved for their portfolios.

Writing Idea

Ask the students to imagine that, the next time they go grocery shopping with an adult, they decide to convince that person to switch from a favorite brand of some item to a more environmentally friendly choice (organic, recycled, nontoxic, and so on). What would the students say? How would the other person respond? Have them write a short dialogue describing this scene.

Assessment

Have the students make a "T" chart with the left side of the page labeled "Pro" and the right side of the page labeled "Con." At the very top of the page, have each student identify a product they have purchased recently (something different from what was discussed in class). Under the "Pro" column, have them identify all the benefits of the product they purchased compared to



similar products they could have purchased. On the "Con" side, have them list all the costs compared to similar products they could have purchased. Then have them circle the key reasons the purchase was made. At the bottom, in a single sentence, have the students answer the question: If you were to make this purchase again, would you make the same choice based on this analysis, and why?

Unsatisfactory—Elements of the assignment are incomplete. The list is not reflective of careful thought or consideration. The statement is not supported by the items circled on the list.

Satisfactory—The list includes such issues as cost, appearance, pressure to conform, advertising, personal values, wants, environmental concerns, and so on. The statement on future purchasing relates to the items that are circled.

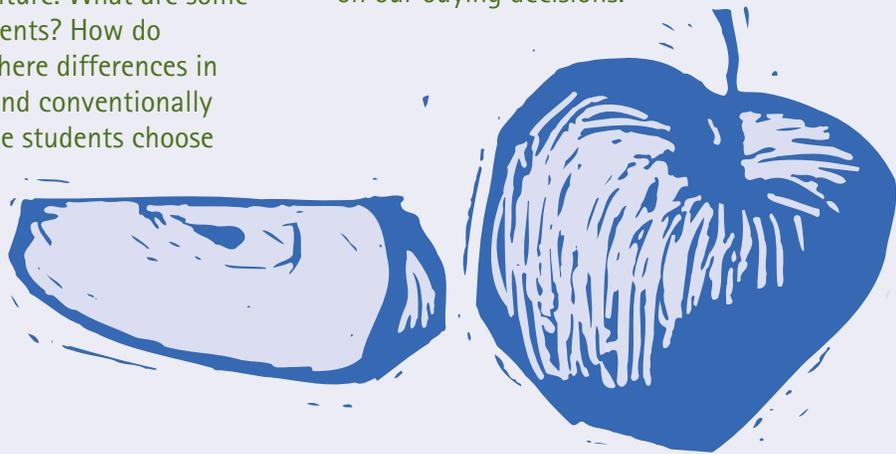
Excellent—The list is thorough and well considered. The statement demonstrates critical thinking about the purchase.



WRAPPING IT UP (Cont'd.)

Extensions

- Have the students think of a product of their choice and investigate the costs and benefits of that product, focusing especially on environmental costs and benefits. They might consider non-food items such as clothes and cars. Would they recommend buying the product? Why or why not?
- Have the students research the costs and benefits of organic agriculture. What are some of its critics' major arguments? How do supporters respond? Are there differences in the prices of organically and conventionally grown produce? Would the students choose to buy organically grown (rather than conventionally grown) products? Why or why not?
- Ask the students how brand conscious they are when it comes to buying food items. Find out some of the products they favor, and then organize a blind taste test to determine whether they really can tell the difference between their favored product and a generic or less expensive brand. Test as many tasters as possible, and then have the students graph the results. Follow up with a discussion about the influence of advertising and peer pressure on our buying decisions.



RESOURCES

The U.S. Department of Agriculture provides information on organic food production. www.nal.usda.gov/afsic/ofp

Consumer Reports magazine and Web site provides information to help consumers compare different products. www.consumerreports.org

Sustainable Agriculture Research and Education is a program of the U.S. Department of Agriculture's Cooperative State Research, Education, and Extension Service. Its Web site contains information and resources for educators and consumers about sustainable agriculture. www.sare.org

Explore what sustainable agriculture means, the issues it encompasses, and why it's important in reducing our impact on the environment. Also, investigate eco-labels and claims and explore how to shop sustainably at this Global Resource Action Center for the Environment (GRACE) Web site: www.sustainabletable.org.

The online "Eat Well Guide" helps consumers locate organic products and sustainably raised meats, eggs, and dairy in their local area. The guide also contains information about different production methods and labels that are oriented toward sustainability. www.eatwellguide.org

A Tale of Two Cereals **10** Aisle Hopping

In the cereal aisle of a grocery store.

Jackie: Hey, Simon—what are you doing here?

Simon: What do you think?

Jackie: Sorry, but you're the last person I'd expect to see in a grocery store. Are you figuring out how to jump over the cereal displays on your skateboard?

Simon: Very funny. No, my mom says that now that I know how to drive I have to do useful stuff, like shop for groceries. But at least I can get the cereal I want.

Jackie: So what kind are you getting?

Simon: Probably Cookie Os.

Jackie: Gross. Not me—I'm thinking of trying this new store-brand stuff: Berry Spots.

Simon: Berry Spots? That sounds like a skin disease! You should at least get the real stuff—Berries Galore.

Jackie: Nah, those cost too much. My mom only gave me \$5.00.

Simon: But they're \$4.99. What's the problem?

Jackie: Well, she said I could keep the change. So if I buy Berry Spots for half the price, I'll have \$2.50 left over. And with the \$11 I already have, that'll give me all I need to buy the new Boyz Will Be Boyz CD.

Simon: I get to keep the change, too, but who cares? I'm not really saving for anything. Besides,

you won't catch me buying any cheap-o store brands.

Jackie: Why not? It's probably the exact same stuff.

Simon: I doubt it. Look—the box is totally ugly.

Jackie: Who cares what the box looks like? It's the stuff inside that counts. Oh, wait, is that Daryl "The Thrasher" Anderson on the back of your Cookie Os?

Simon: What? Well . . . yeah. So what?

Jackie: Ha! You're buying those only because that's what your skateboard hero likes. You're so gullible!

Simon: I'm not gullible. But if there's even a remote chance that eating Cookie Os will help me float a massive switch ollie like The Thrasher, then they're worth every penny.

