Scientists grew this beef patty in a lab. Lab-grown meat could be the food of the future.

February 28, 2020

●

Vol. 10

●

No. 18

Edition 5–6

timeforkids.com

Teaching the Cover Story
Future Food

Current meat production methods require large amounts of land and resources and are taking a toll on the environment. Lab-grown meat could be a solution. But first, production costs must come down and the government must pass regulations.

Lesson Materials

• Class set of this week’s magazine
• Class set of “Photo Analysis” resource from timeforkids.com
• Class set of “Alternative Meat Market” resource (p. 4)
• Cultured Beef video access (found at the bottom of “Future Food” at timeforkids.com)

Fast Facts

• Dutch researcher Willem van Eelan was inspired to create lab-grown meat after he observed researchers growing human cells in a tank.
• In 1997, Van Eelan filed a patent for the concept of lab-grown meat.
• A handful of companies are currently producing lab-grown fish. For example, Finless Foods is developing lab-grown bluefin tuna and Wild Type is developing lab-grown salmon.
• On October 7, 2019, Aleph Farms, an Israeli food company, announced it had successfully created the first-ever lab-grown meat in space.

Within This Guide

Paired Text
Integrating Information
Article: “Cyber School,” p. 6
Online: “What’s the Password?” (November 1, 2019)

• Lesson Overview: Students will read “Cyber School” in the magazine and a paired text, “What’s the Password?,” online, to make a brochure about their own cyber school.
• Lesson Materials: Class set of this week’s magazine; online access to read paired text

Media Literacy
In the Magazine: “YouTube Trouble,” p. 7

• Lesson Overview: Students will read “YouTube Trouble” and learn about how YouTube targets its consumers. Then they will create their own ad based on consumer data.
• Lesson Materials: Class set of this week’s magazine; class set of “On-Target Ads” resource, on page 5 of this guide

Additional Resources

• Alternate Lexile® Levels: This week’s cover story, “Future Food,” is available online at three levels. So are “All-Star Face-Off” (p. 2) and “Cyber School” (p. 6).
• Assessment: This Teacher’s Guide includes a quiz on page 6 covering the entire student magazine. There is also a cover-story quiz online. The Distractor Guides for each assessment can be found at timeforkids.com, under Teaching Resources.
TEXT FEATURES LESSON

Warm-Up and Vocabulary

- Ask students to think about their favorite meal. Explain that this can be a meal at their favorite restaurant or one cooked at home. Then partner students up and have them list all the ingredients they think are included in their favorite meal.

- Bring students back together and discuss what’s required to produce that meal (e.g., to make a hamburger, farmers must grow lettuce, a tomato, and a cucumber for pickles; another farmer must supply the meat from a cow; a baker must bake the bread, and so on). Ask students to reflect on whether or not this is a simple process.

- Before reading, review the vocabulary words listed below and highlighted in the article.

Engage the Reader

- Have students open to pages 4 and 5 of the magazine. Direct their attention to the title of the article. Ask them to predict what they think the article is about. Ask: Why might food need to be different in the future? Connect students’ thinking back to the warm-up activity and their reflections on their favorite dish.

- Explain that today’s cover story is about an alternative, or different, way of making food. Show students the video *Cultured Beef*, about the process of producing cellular meat, at the bottom of this article at timeforkids.com.

Read the Text

- Before students read the article, show them the “Photo Analysis” resource. This can be located under Teaching Resources at timeforkids.com. Explain that they can learn a lot about an article’s topic by looking at the photographs and reading the captions. Further explain that when they’re reading an article with images, it’s important to stop and “read” the pictures as well. When they “read” a picture, they’re scanning to see what’s in the picture, thinking about why the author included that picture, and then looking for additional information like a caption or labels.

- Explain that the article’s images will add to students’ understanding of the topic. Ask them to start at the left side and label the images, clockwise, as “1,” “2,” “3,” and “4.” Next, have students count off by four. Explain that their number corresponds with the image they’ll use to answer the questions on the “Photo Analysis” resource. Have students read the article and complete the resource independently.

Respond to the Text

- After students have read the text, have them meet in groups of four. One student assigned to each number should be in each group. Each student will have one minute to share what he or she learned about the picture and how the picture supplements the text.

- Bring students back together to share as a group. Ask: What is the main idea of this article? (Be sure students include the author’s point of view.) Next, have students discuss each picture and how it contributes to the main idea and overall meaning of the text.

Extension Idea

- The sidebar in the story introduces students to a plant-based meat alternative. Have students use the resource “Alternative Meat Market,” on page 4 of this guide, to list evidence from the text and choose how to market each of the products to consumers.

- Have students use the “Try It!” section to look at how stores and commercials are marketing meatless products.

A-Z COVER STORY POWER WORDS

Here are all the words you might teach in this lesson. Select the words that are most appropriate for your students for direct instruction within the lesson.

- **cell noun**: one of the tiny units that make up all living things
- **extract verb**: to remove something by pulling it out
- **fossil fuel noun**: a fuel formed in the earth by plant or animal remains
- **graze verb**: to eat grass or other plants that are growing in a pasture
- **methane noun**: a colorless, odorless gas that can be burned for fuel

*Power Words not highlighted and defined in student magazine*
PAIRED TEXT & WRITING

INTEGRATE INFORMATION
ARTICLE: “CYBER SCHOOL,” P. 6
ONLINE: “WHAT’S THE PASSWORD?”
(NOVEMBER 1, 2019)

• Have students read “Cyber School,” on page 6 of the magazine. Then direct them to timeforkids.com to read “What’s the Password?” (11/01/2019). When they’re done reading, ask them to share answers to the following questions: What are hackers? How are they a threat in both articles? What problem is GenCyber trying to solve? What problem is Jessica Covarrubias at Google trying to solve?

• Next, instruct students to create a brochure that will advertise their own made-up cyber school. The brochure should provide answers to the following FAQs: 1) What specific skills will kids learn at this school? 2) How will they learn these skills? 3) Why is it necessary for kids to learn these skills? Students should use content from both articles to craft answers to these questions.

POWER WORDS
Go to timeforkids.com for definitions and to hear the words read aloud in a sentence.

“Cyber School,” p. 6: forensics, sound
“YouTube Trouble,” p. 7: advocate, consent

FOCUS ON WRITING

MEDIA LITERACY
ARTICLE: “YOUTUBE TROUBLE,” P. 7

Ask students to list the different ways that companies work to grab your attention so you’ll buy what they’re selling. Then ask: Do you believe these methods are fair? Why or why not? Have students share their answers. Next, tell students they’ll be learning how the video-sharing site YouTube works with advertisers to sell products to kids.

Direct students to read “YouTube Trouble.” When they’ve done so, have them share answers to the following questions: Who filed a complaint against YouTube, and why? What consequences do users face if their data is collected online? How does YouTube know which videos to recommend to consumers? How does the site profit from a user’s viewership? How does the site track a user’s device across the Internet?

Next, tell students to imagine what it’s like for a company to create unique advertisements based on consumer data (or what is otherwise known as “targeted advertising”). They’ll do this by completing “On-Target Ads,” the reproducible from the Common Sense K–12 Digital Citizenship Curriculum, on page 5 of this guide.

ANSWER KEY

<table>
<thead>
<tr>
<th>Magazine Quiz</th>
<th>Cover Story Quiz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. B</td>
<td>2. C</td>
</tr>
<tr>
<td>3. D</td>
<td>3. C</td>
</tr>
<tr>
<td>4. C</td>
<td>4. A</td>
</tr>
<tr>
<td>5. A</td>
<td>5. D</td>
</tr>
</tbody>
</table>

7. Answers will vary. See Distractor

Guide for grading rubric.
Alternative Meat Market

Read “Future Food” (February 28, 2020), an article about cellular and plant-based meat. Fill in the fact sheet below, and then choose how to market both alternatives to meat eaters.

<table>
<thead>
<tr>
<th>CELLULAR, LAB-GROWN MEAT</th>
<th>PLANT-BASED “MEAT”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price and Availability</strong></td>
<td><strong>Price and Availability</strong></td>
</tr>
<tr>
<td>• It’s readily available in grocery stores, restaurants, and fast-food chains.</td>
<td>• It’s readily available in grocery stores, restaurants, and fast-food chains.</td>
</tr>
<tr>
<td>• A pound of ground “beef” from the grocery store costs between $6 and $12.</td>
<td>• A pound of ground “beef” from the grocery store costs between $6 and $12.</td>
</tr>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Pros</strong></td>
</tr>
<tr>
<td>• It requires less land and water than raising cows.</td>
<td>• It requires less land and water than raising cows.</td>
</tr>
<tr>
<td>• It’s meant to mimic real meat without causing harm to animals.</td>
<td>• It’s meant to mimic real meat without causing harm to animals.</td>
</tr>
<tr>
<td><strong>Cons</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Meat eaters are not always willing to consider plant-based alternatives.</td>
<td>• Meat eaters are not always willing to consider plant-based alternatives.</td>
</tr>
<tr>
<td>• It might not taste exactly like real meat.</td>
<td>• It might not taste exactly like real meat.</td>
</tr>
<tr>
<td>• It’s slightly more expensive than real meat.</td>
<td>• It’s slightly more expensive than real meat.</td>
</tr>
</tbody>
</table>

Try It! Next time you’re at the grocery store or watching TV, look for meatless products and see how they’re advertised. What names do companies give the products, and how do they promote them?
On-Target Ads

After reading “YouTube Trouble” (February 28, 2020), use the data from consumers below to create a targeted advertisement.

**Directions**
You are in charge of new products at the clothing company ThreadMeister. The company is making plans to design and release a brand-new product. Analyze the consumer-data table below to decide what type of product it will be (jacket, clothes, shoes, etc.) and what details it will include. Then create a banner ad for the product that will be seen on other websites.

**Part 1: Consumer Data**

<table>
<thead>
<tr>
<th>The data shows . . .</th>
<th>This means the product should . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most customers come to ThreadMeister to buy jackets.</td>
<td></td>
</tr>
<tr>
<td>Many ThreadMeister customers also shop for hats, scarves, and boots.</td>
<td></td>
</tr>
<tr>
<td>Most clothes that are bought are dark in color: blue, black, or charcoal.</td>
<td></td>
</tr>
<tr>
<td>The majority of ThreadMeister customers live outside of cities and in colder climates.</td>
<td></td>
</tr>
<tr>
<td>Customers typically spend $100–$150 at the site.</td>
<td></td>
</tr>
</tbody>
</table>

**Part 2: Create a Banner Ad**
This ad should contain the name of the company, the product, and a piece of information about the product that will appeal to its target audience.

**Discuss:** What are the pros and cons of companies collecting your data?
ALL-STAR FACE-OFF: Analyze Graphic Features (RI.5.7; RI.6.7)

1. What is the most likely reason this photograph was chosen to represent the article?
   A. to show how the teams honored Kobe and Gianna Bryant
   B. to feature a player from the winning team
   C. to highlight the winner of the dunk contest, another event of the weekend
   D. to show James making the final basket of the game

FOR THE RECORD: Make an Inference (RI.5.1; RI.6.1)

2. Based on the information provided, what is Mayor Raggi referring to when she says “treasures”?
   A. Roman archaeologists
   B. a shrine
   C. Romulus
   D. all of the above

DATA DEEP DIVE: Explain Connections (RI.5.3; RI.6.3)

3. A similarity between a storm chaser and a pyrotechnician is most likely that they
   A. work in a lab.
   B. predict weather conditions.
   C. attend performances.
   D. do dangerous work.

FUTURE FOOD: Identify Claims and Evidence (RI.5.8; RI.6.8)

4. Which detail best supports the case for cellular meat?
   A. “Many people think it’s better for the planet than raising animals for food.”
   B. “That’s almost 2 billion more people than there are today.”
   C. “FAO says people could eat 73% more meat in 2050.”
   D. “Traditional meat production also requires lots of cows.”

FUTURE FOOD: Analyze Text Structure (RI.5.5; RI.6.5)

5. How is the section “Challenges Ahead” connected to the section “Why Cellular Meat?”
   A. It provides an alternate viewpoint.
   B. It names a solution to the problem.
   C. It tells what led to the invention.
   D. It describes another alternative to regular meat.

CYBER SCHOOL: Define Words and Phrases (RI.5.4; RI.6.4)

6. What does the word sleuth mean as it is used in the caption?
   A. online
   B. detective
   C. hacker
   D. pretend

CYBER SCHOOL: Identify Cause and Effect (RI.5.3; RI.6.3)

7. Why did the NSA start sponsoring cybersecurity camps?
   A. to address the high unemployment rate in the United States
   B. because the United States Coast Guard facility was recently attacked
   C. to train future cybersecurity workers
   D. to raise money to fund other cybersecurity initiatives

YOUTUBE TROUBLE: Identify Main Idea (RI.5.2; RI.6.2)

8. “YouTube Trouble” is an appropriate title because this article is mostly about
   A. the company going out of business.
   B. lower user rates among kids under 13.
   C. the risk that the convenience of the Internet poses.
   D. trouble over the use of kids’ data.

CODING HEROES: Read for Detail (RI.5.1; RI.6.1)

9. How did the students use coding to create SuperMe?
   A. to animate the characters
   B. to fund the project
   C. to design their own superheroes
   D. to create a board game

MAKING BREAKTHROUGHS: Analyze Author’s Purpose (RI.5.6; RI.6.6)

10. Which word best describes the tone of Tonya Bolden’s book?
    A. depressing
    B. remorseful
    C. inspirational
    D. cautionary
From misinformation to the 24-hour news cycle (on TV and now on social media), students must learn to navigate a noisy, biased, and challenging world. But with the right support, they can learn to be critical and not cynical—to speak up, not sit back.

That’s why Common Sense Education has renewed our efforts to curate best-in-class resources for teaching news and media literacy in the classroom with the News and Media Literacy Resource Center. This collection of classroom lessons, videos, printables, and more is updated often and carefully vetted by Common Sense editors (and teachers) to help educators find the resources that are “just right” for their classroom.

The guide features updated Common Sense Education lessons and tools, as well as curated picks of websites, articles, feeds, and newsletters from across the Web, on:

- NEWS LITERACY
- MEDIA LITERACY
- SOCIAL AND CULTURAL LITERACY

https://commonsense.org/media-literacy-center
ATTENTION, POSTMASTER AND SCHOOL SECRETARY:

FIRM BUNDLE
DO NOT BREAK OPEN!
THIS PACKAGE GOES TO ONE TEACHER

Need to reach us?
For 24-hour customer service, visit

• timeforkids.com/customerservice
  or
  Phone: 877-604-8017
  Fax: 813-433-5152
• Email: tfkcustserv@cdsfulfillment.com

Follow us on:
• facebook.com/timeforkids
• Instagram @timeforkids
• Twitter @timeforkids