

# Lose a Million (Bacteria) Game: The Rules

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm)

"Lose a Million (Bacteria)" is a fun, interactive game based on the popular TV game show, "Who Wants to be a Millionaire." The game begins with a million bacteria. The object of the game is to lose bacteria.

## You Will Need

- Game host
- Two to five contestants (depending on available time)
- Two chairs in the front of classroom for host and contestant
- Overhead projector
- Overhead transparencies with food safety questions (five sets of questions are provided for you)
- Raffle/theatre-style tickets with the same numbers on both ends
- Drawing bowl
- Five signs to illustrate each bacterial level (1,000,000 / 750,000 / 500,000, /250,000) and "Winner" sign
- Applause sign (optional)
- Slide whistle for incorrect answers (optional)
- Two to five "winner" prizes (optional)
- Two to five consolation prizes (optional)

## Getting Started

- The game is set up for five contestants with five sets of food safety questions.
- Write or type each question and photocopy them onto overhead transparencies.
- Make five signs to illustrate each bacterial level (1,000,000 / 750,000 / 500,000 / 250,000) and "Winner" sign. The Applause sign is optional.
- Give each student a numbered ticket as they enter the classroom. They should tear the ticket in half, place one half in the drawing bowl, and keep the other half.
- The game host reads the rules, then draws a numbered ticket from the drawing bowl. The student with the matching number comes to the front of the room. He or she is the first contestant!

## The Rules

1. Each contestant has the opportunity to answer four food safety questions. Before the host reads each question, the first level of bacteria to be reached (1,000,000) should be displayed. The host reads the question and four possible answers. As the questions progressively get more difficult, the host should ask the

contestant, "Is that your final answer?" after each response. For every correct answer, the amount of bacteria decreases by 250,000 -- from 1,000,000 to 750,000 to 500,000 to 250,000 to "Winner."

2. Each contestant can choose two lifelines during their round:

- Ask a Friend -- Students in the class who believe they know the correct answer should raise their hands. The contestant selects one student to give his or her answer. If there are no volunteers, the contestant draws a ticket, and the student with the matching ticket has a chance to respond.
- 50/50 and Try the Audience -- Cover up two of the incorrect answers. The host will ask the class if the first remaining answer is correct. Those who think it's correct will stand. Those who think it's incorrect will remain seated. Repeat for the last remaining answer. The contestant then selects his or her answer.

3. When the contestant selects a correct answer, hold up the Applause sign (optional). The contestant can now move on to the next question. Display the sign showing the next level of bacteria. A contestant who answers all four questions correctly wins a prize (optional) and returns to his or her classroom seat. A new ticket is drawn and the next contestant starts another round.

4. If the contestant selects an incorrect answer, blow the slide whistle (optional). The contestant wins a consolation prize (optional) and returns to his or her classroom seat. A new ticket is drawn and the next contestant starts another round.

### Game Highlights

- Assesses students' knowledge about food safety science
- Introduces students to safe food handling practices
- Promotes cooperative learning
- Encourages class participation

### Play the Game

[Game #1 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212708.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212708.htm) | [Game #2 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212709.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212709.htm) | [Game #3 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212711.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212711.htm) | [Game #4 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212712.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212712.htm) | [Game #5 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212713.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212713.htm)

[The Answers \(/Food/FoodScienceResearch/ToolsMaterials/ucm212715.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212715.htm)

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# Lose a Million (Bacteria) Game: #1

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm)

- 1. Pathogens that were not previously known to cause human illness are called:**
  - a) Energetic
  - b) Egyptian
  - c) Emerging
  - d) Elemental
- 2. Botulism is most commonly caused when this home activity is done improperly:**
  - a) Canning
  - b) Baking
  - c) Grilling
  - d) Vacuuming
- 3. This bacterium is the leading cause of diarrhea in the U.S., resulting in up to 6 million illnesses each year.**
  - a) *Lactobacillus*
  - b) *Campylobacter jejuni*
  - c) *E. coli* O157:H7
  - d) *Vibrio cholerae*
- 4. What mathematical value is used to calculate the reduction of bacteria in order to make food safe?**
  - a) Quotient
  - b) Square Root
  - c) Radius
  - d) Logarithm

[Next Game \(/Food/FoodScienceResearch/ToolsMaterials/ucm212709.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212709.htm)

[The Answers \(/Food/FoodScienceResearch/ToolsMaterials/ucm212715.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212715.htm)

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# Lose a Million (Bacteria) Game: #2

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm)

1. Which of these is not one of the "4 Cs" of proper food safety behavior?
  - a) Clean
  - b) Chill
  - c) Cook
  - d) Contaminate
2. This government agency regulates food safety of all products made from produce, dairy, eggs, and seafood.
  - a) CDC
  - b) NIH
  - c) FDA
  - d) USDA
3. Which of these foods is not kept safe through the process of pasteurization?
  - a) Milk
  - b) Orange Juice
  - c) Tomato
  - d) Egg
4. Which of these is not a cause of emerging pathogens?
  - a) DNA Mapping
  - b) Transduction
  - c) Transformation
  - d) Conjugation

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# Lose a Million (Bacteria) Game :#3

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm)

- 1. Which of these would not be found on a food label?**
  - a) Expiration Date
  - b) Sell by Date
  - c) Blind Date
  - d) Use by Date
- 2. The growth of this foodborne pathogen is of greatest concern at refrigerator temperatures.**
  - a) *Listeria*
  - b) *Salmonella*
  - c) *E. coli*
  - d) *Shigella*
- 3. Which of the following conditions have food safety implications?**
  - a) Curdled Milk
  - b) Freezer Burn
  - c) Prepared food left out at room temperature for more than 2 hours
  - d) Raw eggs that float in water
- 4. What percentage of people say they wash their fruits and vegetables before eating them? (1998 FDA survey)**
  - a) 52%
  - b) 79%
  - c) 65%
  - d) 97%

[Next Game \(/Food/FoodScienceResearch/ToolsMaterials/ucm212712.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212712.htm)

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# Lose a Million (Bacteria) Game: #4

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm)

- 1. What businesses employ the greatest number of high school students?**
  - a) Supermarkets
  - b) Movie Theatres
  - c) Delis
  - d) Fast Food Restaurants
- 2. What food temperatures constitute the "Danger Zone"?**
  - a) 0° F - 32° F
  - b) 40° F - 140° F
  - c) 140° F - 180° F
  - d) 180° F - 210° F
- 3. How does irradiation make food safe?**
  - a) It sterilizes it.
  - b) It damages the bacteria's DNA.
  - c) It makes it glow in the dark.
  - d) It boils all the water out of the food.
- 4. How long does it take for *Salmonella* to grow from 10 bacteria per gram to 1,000,000 per gram at room temperature?**
  - a) 13 hours
  - b) 24 hours
  - c) 48 hours
  - d) 72 hours

[Next Game \(/Food/FoodScienceResearch/ToolsMaterials/ucm212713.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212713.htm)

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# Lose a Million (Bacteria) Game: #5

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm)

1. Which of these groups is typically not at high risk for foodborne illness?
  - a) Children under age one
  - b) Teenagers who rollerblade
  - c) Women who are pregnant
  - d) Adults over age 65
2. What percentage of people say they do not wash their hands after handling raw meat? (1998 FDA Survey)
  - a) 25%
  - b) 10%
  - c) 44%
  - d) 50%
3. How many cases of gastrointestinal illnesses caused by food does the CDC estimate each year? (CDC MMWR)
  - a) 76,000,000
  - b) 5,200
  - c) 323,000
  - d) 500,000
4. What process did NASA adopt in the 1970s to ensure that food is safe for astronauts in space?
  - a) Pasteurization
  - b) Acidification
  - c) HACCP
  - d) Biotechnology

[The Answers \(/Food/FoodScienceResearch/ToolsMaterials/ucm212715.htm\)](/Food/FoodScienceResearch/ToolsMaterials/ucm212715.htm)

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# Lose a Million (Bacteria) Game: The Answers

["Lose a Million \(Bacteria\)" Game Main Page \(/Food/FoodScienceResearch/ToolsMaterials/ucm212691.htm\)](#)

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**Answers to [Game #1 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212708.htm\)](#)**

1. c) Emerging
2. a) Canning
3. b) *Campylobacter jejuni*
4. d) Logarithm

**Answers to [Game #2 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212709.htm\)](#)**

1. d) Contaminate
2. c) FDA
3. c) Tomato
4. a) DNA Mapping

**Answers to [Game #3 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212711.htm\)](#)**

1. c) Blind Date
2. a) *Listeria*
3. c) Prepared food left out at room temperature for more than 2 hours
4. d) 97%

**Answers to [Game #4 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212712.htm\)](#)**

1. d) Fast Food Restaurants
2. b) 40° F - 140° F
3. b) It damages the bacteria's DNA
4. a) 13 hours

**Answers to [Game #5 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212713.htm\)](#)**

1. b) Teenagers who rollerblade
2. a) 25%
3. a) 76,000,000



## 4. c) HACCP

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# Lose a Million (Bacteria) Game: The Answers

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[Answers to Game #1 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212708.htm\)](#)

1. c) Emerging
2. a) Canning
3. b) *Campylobacter jejuni*
4. d) Logarithm

[Answers to Game #2 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212709.htm\)](#)

1. d) Contaminate
2. c) FDA
3. c) Tomato
4. a) DNA Mapping

[Answers to Game #3 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212711.htm\)](#)

1. c) Blind Date
2. a) *Listeria*
3. c) Prepared food left out at room temperature for more than 2 hours
4. d) 97%

[Answers to Game #4 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212712.htm\)](#)

1. d) Fast Food Restaurants
2. b) 40° F - 140° F
3. b) It damages the bacteria's DNA
4. a) 13 hours

[Answers to Game #5 \(/Food/FoodScienceResearch/ToolsMaterials/ucm212713.htm\)](#)

1. b) Teenagers who rollerblade
2. a) 25%
3. a) 76,000,000

## 4. c) HACCP

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