

Calibrations and Answer Keys

Average Calibration Word Count = 357

High Quality Calibration

Food borne illness is serious health threat, especially for children and the elderly. In fact, food borne disease by pathogenic bacteria causes an estimated 6000 deaths and 24 million cases of illness every year in U.S alone, and the incidence is increasing. As a major food distributor, our company must take some responsibility for ensuring the safety of our nation's food supply. Because irradiation provides added protection from pathogenic bacteria by reducing their population in food, I strongly support the purchase of irradiated meat.

Irradiation is the deliberate process of exposing an item to radiation energy to bring about desirable changes. Irradiation kills harmful bacteria in food by damaging their DNA. The effective and safe

dose for food irradiation is well-established. As with any food processing method, irradiation alone does not ensure 100% bacteria-free food. However, with appropriate dose, irradiation can reduce pathogenic bacteria populations up to 99.999% without significantly affecting the quality of the food.

Opponents of food irradiation are concerned about the “radiolytic compounds” that are formed in very small quantities during irradiation. Although they claim that high concentrations of these chemicals have been implicated as carcinogens, no scientific studies have shown that consuming irradiated food causes cancer, even with a diet consisting of food irradiated at 10-fold of the approved dose. Vitamin loss in the irradiated food is expected due to the free radical formation during the irradiation; however it is comparable to the vitamin loss caused by cooking.

In school cafeterias, as well as food retail stores, food is handled in large quantities by many different workers, thus increasing the chance for food to be mishandled. The consequences of mishandled food in these environments can affect large numbers of people. Irradiated meat, by having a much lower initial bacterial counts, can help reduce the incidence of food borne illness stemming from mishandling.

Irradiation is a safe and effective way to reduce the incidence of food borne illness. Therefore, I support the purchase of irradiated meat.

1. Does the author identify his/her stand on the issue?

- Yes
 No

Answer: Yes

Feedback : none

2. Does the essay define the "irradiation"?

- Yes
 No

Answer: Yes

Feedback : none

3. Does the author state the questions/problems that are critical in making the decision?

- Yes
 No

Answer: Yes

Feedback : none

4. Does the author provide proper evidence that support his/her decision?

- Yes
 No

Answer: Yes

Feedback : none

5. Does the author use the supporting evidence without misinterpreting it?

- Yes
 No

Answer: Yes

Feedback : none

6. Does the author identify other perspectives and positions.

- Yes
 No

Answer: Yes

Feedback : none

7. Does the author explain and resolve the differences between the opposite views.

- Yes
 No

Answer: Yes

Feedback : none

8. Does the author explain the implications and consequences of his/her decision?

- Yes
 No

Answer: Yes

Feedback : none

9. Is there a conclusive phrase that summarizes the author's decision and its rationale.

- Yes
 No

Answer: Yes

Feedback : none

10. Is there any obvious spelling mistakes/grammatical error?

- None
 Some (1 or 2)
 Many (more than 2)

Answer: None

Feedback : none

11. How would you rate this text?

- 10 Highest
 9
 8
 7
 6
 5
 4
 3
 2
 1 Lowest

Rating: 10

Feedback : none

Mid Quality Calibration

Food borne pathogens cause millions of illnesses, hundreds of thousands of hospitalization, and even thousands of deaths per year in U.S.. Estimated annual costs from medical expenses and productivity loss secondary to food borne illness are between \$5 and \$23 billion per year. Irradiation can offer an added protection in our food supply by killing these harmful bacteria without hurting the quality of the food. Because of the seriousness of the food safety issues and the lack of adequate control measures to ensure 100% bacteria free food, irradiation is seen as an additional tool that can be used for improving food safety.

However, some studies indicate that in irradiated meat, the available thiamin may be reduced up to 50%. Other studies show that vitamins A, C, E, K are damaged in irradiated food. More seriously, animal studies have shown that consuming irradiated food caused many health effects such as tumors, kidney failure, death of offspring and miscarriages. However, these studies are not well-described in the reference articles, in terms of doses of the irradiation and the sample sizes. Other concerns of opponents in irradiated food include the formation of radiolytic compounds. While the presence of these chemicals has been confirmed, the amount found is too small to justify their claims. Some cooking practices, such as grilling, produce harmful carcinogens, yet we do not ban these practices, knowing that we don't consume these food everyday in large quantity.

Because irradiation reduces the number of harmful bacteria, additional use of chemicals or other sanitary practice to enhance the safety of the food can be reduced, thus saving resources.

Weighing the benefits and risks of irradiated food, I support irradiated food.

1. Does the author identify his/her stand on the issue?

- Yes
 No

Answer: Yes

Feedback : Very weak, though.

2. Does the essay define the "irradiation"?

- Yes
 No

Answer: No

Feedback : none

3. Does the author state the questions/problems that are critical in making the decision?

- Yes
 No

Answer: Yes

Feedback : none

4. Does the author provide proper evidence that support his/her decision?

- Yes
 No

Answer: Yes

Feedback : none

5. Does the author use the supporting evidence without misinterpreting it?

- Yes
 No

Answer: No

Feedback : In the second to the last paragraph: "other sanitary practice can be reduced" is not a true statement - irradiation can be an added safety measure, not to eliminate other sanitary practices.

6. Does the author identify other perspectives and positions.

- Yes
 No

Answer: Yes

Feedback : none

7. Does the author explain and resolve the differences between the opposite views.

- Yes
 No

Answer: Yes

Feedback : none

8. Does the author explain the implications and consequences of his/her decision?

- Yes
 No

Answer: No

Feedback : none

9. Is there a conclusive phrase that summarizes the author's decision and its rationale.

- Yes
 No

Answer: Yes

Feedback : The rationale is very weak.

10. Is there any obvious spelling mistakes/grammatical error?

- None
 Some (1 or 2)
 Many (more than 2)

Answer: None

Feedback : none

11. How would you rate this text?

- 10 Highest
 9
 8
 7
 6
 5
 4
 3
 2
 1 Lowest

Rating: 6

Feedback : Although the essay has most of the required components, the evidence is presented without much evaluation - merely listing of data from the reference articles. There was a clear misinterpretation of evidence regarding reducing other sanitary practices. Also the author's position is not clearly indicated before the summary sentence.

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My position is that my company should go ahead and purchase irradiated meat and distribute it to our customers like we would any of our products. My company is in business to make money. As an executive officer, I answer to the share holders. Naturally, we abide by all laws and regulations concerning the food and food distribution industry. There is nothing illegal about distributing irradiated food. My company would never intentionally distribute an unsafe product, and we don't believe irradiated food is unsafe. It is considered safe by the federal government, and that is sufficient for us. I am aware than there are those who don't believe that irradiated food is safe, or at least are not confident enough that it is safe to recommend its consumption. I have reviewed and weighed the evidence for and against irradiated food, and have come down on the side that irradiated food is safe and nutritious, and therefore, my company will distribute it as a part of our normal business.

I am aware that the school my children attend is one of my company's customers, and thus will likely serve irradiated meat to children who eat in the cafeteria. I have no reservations about my children eating irradiated food. However, decisions about the health and safety of my children are made by my wife and I together. If my wife has any reservations, I will defer to her wishes and send our children to school with packed lunches. In this case, if I am ever asked why my children don't eat the food served in the cafeteria, I will be honest and say that my wife is not comfortable letting our children eat the food served in the cafeteria.

In summary, I believe irradiated food is safe and nutritious, and will therefore recommend that my company purchase, package, and distribute irradiated meat to our customers who wish to purchase it.

1. Does the author identify his/her stand on the issue?

- Yes
 No

Answer: Yes

Feedback : none

2. Does the essay define the "irradiation"?

- Yes
 No

Answer: No

Feedback : none

3. Does the author state the questions/problems that are critical in making the decision?

- Yes
 No

Answer: No

Feedback : none

4. Does the author provide proper evidence that support his/her decision?

Yes

No

Answer: No

Feedback : none

5. Does the author use the supporting evidence without misinterpreting it?

Yes

No

Answer: No

Feedback : none

6. Does the author identify other perspectives and positions.

Yes

No

Answer: Yes

Feedback : none

7. Does the author explain and resolve the differences between the opposite views.

Yes

No

Answer: No

Feedback : none

8. Does the author explain the implications and consequences of his/her decision?

Yes

No

Answer: Yes

Feedback : none

9. Is there a conclusive phrase that summarizes the author's decision and its rationale.

Yes

No

Answer: Yes

Feedback : none

10. Is there any obvious spelling mistakes/grammatical error?

None

Some (1 or 2)

Many (more than 2)

Answer: Some (1 or 2)

Feedback : none

11. How would you rate this text?

10 Highest

9

8

7

6

- 5
- 4
- 3
- 2
- 1 Lowest

Rating: 2

Feedback : It is clear that this author did not read the resource articles - it is purely based on his personal feelings. There are no evidence stated that supports his point of view. Although some logic ("if government approved it, it must be OK") is involved, it shows no critical thinking on the author's part.

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