

Introduction

Welcome! Thank you for choosing to participate in this survey about buying behavior. It will take you approximately 10 minutes to complete.

Remember that all responses are voluntary and you can choose to exit the survey at any time.

Let's begin.

CULTURED CONJOINT

Please carefully read the article below in its entirety. You will be asked questions about it afterwards.

Cultured beef: the future of meat?

PUBLISHED: 20 January 2016



Dr. Mark Post, a researcher at Maastricht University in the Netherlands, served up the first Cultured beef product for taste testing at an event in London in 2013.

Cultured beef involves painlessly taking tissue from a live cow, extracting cells from the tissue, and feeding and nurturing them until they multiply many times. Eventually, the cells come together into small strips of muscle about a centimeter long and a few millimeters thick. Thousands of these strips are then layered together to form a beef product. From one tiny piece of tissue can come 45,000 pounds of beef.

"Let's make a proof of concept, and change the discussion from 'this is never going to work' to, 'well, we actually showed that it works, but now we need to get funding and work on it,'" Dr. Post said in an interview last fall in his office at Maastricht University.

"I think really the most important driver is the realization that livestock beef production has serious issues. It will not be able to match the demand in 2050 – the global demand – so we will have a shortage," he said. "It comes at the expense of a lot of environmental damage, because cows emit methane. And there are increasing concerns about the animal welfare issues."

As public awareness of Cultured beef grows, proponents like Post seem hopeful that their products will, one day, become just as acceptable as meat grown on animals – perhaps even more so.

Share or comment on this article



What was the researcher's name and university?

John Hayward, Stanford University

John Hayward, Maastricht University

Mark Post, Maastricht University

Mark Post, Harvard University

What is Cultured beef?

A new beef product only available in Brazil

Beef that involves *taking tissue cells from a live cow* and growing them independent from the animal until they're combined to make a product

Beef from a new breed of cow

Beef that involves *taking cells from plants* and growing them independent from plants until you can combine them to make a product

What does the researcher say is the most important driver of Cultured beef?

Just wanting to prove that Cultured beef products are possible

The realization that livestock beef production has some serious issues, such as environmental damage and animal welfare concerns

The realization that livestock beef production is going out of business

The high demand for new and interesting beef products

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-1-1}	#{e://Field/F-1-1-1}	#{e://Field/F-1-2-1}
#{e://Field/F-1-2}	#{e://Field/F-1-1-2}	#{e://Field/F-1-2-2}
#{e://Field/F-1-3}	#{e://Field/F-1-1-3}	#{e://Field/F-1-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely
would NOT
buy the
product

2

3

4

5

6

I definitely
would buy
the product
7

1

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Why did you make the choice that you did?

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\$ \{e://Field/F-2-1\}$	$\$ \{e://Field/F-2-1-1\}$	$\$ \{e://Field/F-2-2-1\}$
$\$ \{e://Field/F-2-2\}$	$\$ \{e://Field/F-2-1-2\}$	$\$ \{e://Field/F-2-2-2\}$
$\$ \{e://Field/F-2-3\}$	$\$ \{e://Field/F-2-1-3\}$	$\$ \{e://Field/F-2-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-3-1\}$	$\{e://Field/F-3-1-1\}$	$\{e://Field/F-3-2-1\}$
$\{e://Field/F-3-2\}$	$\{e://Field/F-3-1-2\}$	$\{e://Field/F-3-2-2\}$
$\{e://Field/F-3-3\}$	$\{e://Field/F-3-1-3\}$	$\{e://Field/F-3-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-4-1}	#{e://Field/F-4-1-1}	#{e://Field/F-4-2-1}
#{e://Field/F-4-2}	#{e://Field/F-4-1-2}	#{e://Field/F-4-2-2}

#{e://Field/F-4-3}	#{e://Field/F-4-1-3}	#{e://Field/F-4-2-3}
---------------------------	----------------------	----------------------

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-5-1}	#{e://Field/F-5-1-1}	#{e://Field/F-5-2-1}

#{e://Field/F-5-2}	#{e://Field/F-5-1-2}	#{e://Field/F-5-2-2}
#{e://Field/F-5-3}	#{e://Field/F-5-1-3}	#{e://Field/F-5-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
--	------------------	------------------

#{e://Field/F-6-1}	#{e://Field/F-6-1-1}	#{e://Field/F-6-2-1}
#{e://Field/F-6-2}	#{e://Field/F-6-1-2}	#{e://Field/F-6-2-2}
#{e://Field/F-6-3}	#{e://Field/F-6-1-3}	#{e://Field/F-6-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

--	--	--

	Product 1	Product 2
#{e://Field/F-7-1}	#{e://Field/F-7-1-1}	#{e://Field/F-7-2-1}
#{e://Field/F-7-2}	#{e://Field/F-7-1-2}	#{e://Field/F-7-2-2}
#{e://Field/F-7-3}	#{e://Field/F-7-1-3}	#{e://Field/F-7-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would

purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-8-1}	#{e://Field/F-8-1-1}	#{e://Field/F-8-2-1}
#{e://Field/F-8-2}	#{e://Field/F-8-1-2}	#{e://Field/F-8-2-2}
#{e://Field/F-8-3}	#{e://Field/F-8-1-3}	#{e://Field/F-8-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
 1
 2
 3
 4
 5
 6
 I definitely would buy the product
 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
 1
 2
 3
 4
 5
 6
 I definitely would buy the product
 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Do you have concerns about eating Cultured beef products?

Yes

No

What are your concerns with eating Cultured beef products?

Why don't you have any concerns about eating Cultured beef products?

Do you see any advantages to eating Cultured beef products?

Yes

No

What advantages do you see in eating Cultured beef products?

Why don't you see any advantages to eating Cultured beef products?

How much do you trust conventional beef products from recognizable brands, such

as Tyson?

I do not trust them at all	2	3	4	5	6	I completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of conventional beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Cultured beef products if they came from recognizable brands, such as Tyson?

I would not trust them at all	2	3	4	5	6	I'd completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of Cultured beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Cultured beef products if they came from a new brand that you hadn't heard of before?

I would not trust them at all 1	2	3	4	5	6	I'd completely trust them 7
--	---	---	---	---	---	--------------------------------------

Here's a fun question - If you could rename "Cultured beef" to anything else, what would it be?

Please rate the names below and provide any ideas if you have them.

	I definitely would NOT use this name 1	2	3	4	5	6	I definitely would use this name 7
Meat 2.0 beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safe beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pure beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any ideas for names for "Cultured beef", please tell us below!

Idea 1

Idea 2

Idea 3

CLEAN CONJOINT

Please carefully read the article below in its entirety. You will be asked questions about it afterwards.

Clean beef: the future of meat?

PUBLISHED: 20 January 2016



Dr. Mark Post, a researcher at Maastricht University in the Netherlands, served up the first Clean beef product for taste testing at an event in London in 2013.

Clean beef involves painlessly taking tissue from a live cow, extracting cells from the tissue, and feeding and nurturing them until they multiply many times. Eventually, the cells come together into small strips of muscle about a centimeter long and a few millimeters thick. Thousands of these strips are then layered together to form a beef product. From one tiny piece of tissue can come 45,000 pounds of beef.

"Let's make a proof of concept, and change the discussion from 'this is never going to work' to, 'well, we actually showed that it works, but now we need to get funding and work on it,'" Dr. Post said in an interview last fall in his office at Maastricht University.

"I think really the most important driver is the realization that livestock beef production has serious issues. It will not be able to match the demand in 2050 – the global demand – so we will have a shortage," he said. "It comes at the expense of a lot of environmental damage, because cows emit methane. And there are increasing concerns about the animal welfare issues."

As public awareness of Clean beef grows, proponents like Post seem hopeful that their products will, one day, become just as acceptable as meat grown on animals – perhaps even more so.

Share or comment on this article



What was the researcher's name and university?

Mark Post, Maastricht University

Mark Post, Harvard University

Matt Poll, Stanford University

Matt Poll, Maastricht University

What is Clean beef?

Beef that involves *taking cells from plants* and growing them independent from plants until you can combine them to make a product

A new beef product only available in Brazil

Beef from a new breed of cow

Beef that involves *taking tissue cells from a live cow* and growing them independent from the animal until they're combined to make a product

What does the researcher say is the most important driver of Clean beef?

The high demand for new and interesting beef products

Just wanting to prove that Clean beef products are possible

The realization that livestock beef production has some serious issues, such as environmental damage and animal welfare concerns

The realization that livestock beef production is going out of business

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-1-1\}$	$\{e://Field/F-1-1-1\}$	$\{e://Field/F-1-2-1\}$
$\{e://Field/F-1-2\}$	$\{e://Field/F-1-1-2\}$	$\{e://Field/F-1-2-2\}$
$\{e://Field/F-1-3\}$	$\{e://Field/F-1-1-3\}$	$\{e://Field/F-1-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely
would NOT
buy the
product

2

3

4

5

6

I definitely
would buy
the product
7

1

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Why did you make the choice that you did?

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\$ \{e://Field/F-2-1\}$	$\$ \{e://Field/F-2-1-1\}$	$\$ \{e://Field/F-2-2-1\}$
$\$ \{e://Field/F-2-2\}$	$\$ \{e://Field/F-2-1-2\}$	$\$ \{e://Field/F-2-2-2\}$
$\$ \{e://Field/F-2-3\}$	$\$ \{e://Field/F-2-1-3\}$	$\$ \{e://Field/F-2-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-3-1\}$	$\{e://Field/F-3-1-1\}$	$\{e://Field/F-3-2-1\}$
$\{e://Field/F-3-2\}$	$\{e://Field/F-3-1-2\}$	$\{e://Field/F-3-2-2\}$
$\{e://Field/F-3-3\}$	$\{e://Field/F-3-1-3\}$	$\{e://Field/F-3-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

- Product 1
- Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-4-1}	#{e://Field/F-4-1-1}	#{e://Field/F-4-2-1}
#{e://Field/F-4-2}	#{e://Field/F-4-1-2}	#{e://Field/F-4-2-2}

#{e://Field/F-4-3}	#{e://Field/F-4-1-3}	#{e://Field/F-4-2-3}
---------------------------	----------------------	----------------------

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-5-1}	#{e://Field/F-5-1-1}	#{e://Field/F-5-2-1}

#{e://Field/F-5-2}	#{e://Field/F-5-1-2}	#{e://Field/F-5-2-2}
#{e://Field/F-5-3}	#{e://Field/F-5-1-3}	#{e://Field/F-5-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
--	------------------	------------------

#{e://Field/F-6-1}	#{e://Field/F-6-1-1}	#{e://Field/F-6-2-1}
#{e://Field/F-6-2}	#{e://Field/F-6-1-2}	#{e://Field/F-6-2-2}
#{e://Field/F-6-3}	#{e://Field/F-6-1-3}	#{e://Field/F-6-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

--	--	--

	Product 1	Product 2
#{e://Field/F-7-1}	#{e://Field/F-7-1-1}	#{e://Field/F-7-2-1}
#{e://Field/F-7-2}	#{e://Field/F-7-1-2}	#{e://Field/F-7-2-2}
#{e://Field/F-7-3}	#{e://Field/F-7-1-3}	#{e://Field/F-7-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would

purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-8-1}	#{e://Field/F-8-1-1}	#{e://Field/F-8-2-1}
#{e://Field/F-8-2}	#{e://Field/F-8-1-2}	#{e://Field/F-8-2-2}
#{e://Field/F-8-3}	#{e://Field/F-8-1-3}	#{e://Field/F-8-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Do you have concerns about eating Clean beef products?

Yes

No

What are your concerns with eating Clean beef products?

Why don't you have any concerns about eating Clean beef products?

Do you see any advantages to eating Clean beef products?

Yes

No

What advantages do you see in eating Clean beef products?

Why don't you see any advantages to eating Clean beef products?

How much do you trust conventional beef products from recognizable brands, such

as Tyson?

I do not trust them at all	2	3	4	5	6	I completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of conventional beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Clean beef products if they came from recognizable brands, such as Tyson?

I would not trust them at all	2	3	4	5	6	I'd completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of Clean beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Clean beef products if they came from a new brand that you hadn't heard of before?

I would not trust them at all 1	2	3	4	5	6	I'd completely trust them 7
--	---	---	---	---	---	--------------------------------------

Here's a fun question - If you could rename "Clean beef" to anything else, what would it be?

Please rate the names below and provide any ideas if you have them.

	I definitely would NOT use this name 1	2	3	4	5	6	I definitely would use this name 7
Safe beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pure beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meat 2.0 beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultured beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any ideas for names for "Clean beef", please tell us below!

Idea 1

Idea 2

Idea 3

MEAT 2.0 CONJOINT

Please carefully read the article below in its entirety. You will be asked questions about it afterwards.

Meat 2.0 beef: the future of meat?

PUBLISHED: 20 January 2016



Dr. Mark Post, a researcher at Maastricht University in the Netherlands, served up the first Meat 2.0 beef product for taste testing at an event in London in 2013.

Meat 2.0 beef involves painlessly taking tissue from a live cow, extracting cells from the tissue, and feeding and nurturing them until they multiply many times. Eventually, the cells come together into small strips of muscle about a centimeter long and a few millimeters thick. Thousands of these strips are then layered together to form a beef product. From one tiny piece of tissue can come 45,000 pounds of beef.

"Let's make a proof of concept, and change the discussion from 'this is never going to work' to, 'well, we actually showed that it works, but now we need to get funding and work on it,'" Dr. Post said in an interview last fall in his office at Maastricht University.

"I think really the most important driver is the realization that livestock beef production has serious issues. It will not be able to match the demand in 2050 – the global demand – so we will have a shortage," he said. "It comes at the expense of a lot of environmental damage, because cows emit methane. And there are increasing concerns about the animal welfare issues."

As public awareness of Meat 2.0 beef grows, proponents like Post seem hopeful that their products will, one day, become just as acceptable as meat grown on animals – perhaps even more so.

Share or comment on this article



What was the researcher's name and university?

Matt Poll, Stanford University

Mark Post, Maastricht University

Matt Poll, Maastricht University

Mark Post, Harvard University

What is Meat 2.0 beef?

A new beef product only available in Brazil

Beef that involves *taking cells from plants* and growing them independent from plants until you can combine them to make a product

Beef from a new breed of cow

Beef that involves *taking tissue cells from a live cow* and growing them independent from the animal until they're combined to make a product

What does the researcher say is the most important driver of Meat 2.0 beef?

The realization that livestock beef production is going out of business

The realization that livestock beef production has some serious issues, such as environmental damage and animal welfare concerns

Just wanting to prove that Meat 2.0 beef products are possible

The high demand for new and interesting beef products

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-1-1\}$	$\{e://Field/F-1-1-1\}$	$\{e://Field/F-1-2-1\}$
$\{e://Field/F-1-2\}$	$\{e://Field/F-1-1-2\}$	$\{e://Field/F-1-2-2\}$
$\{e://Field/F-1-3\}$	$\{e://Field/F-1-1-3\}$	$\{e://Field/F-1-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely
would NOT
buy the
product

2

3

4

5

6

I definitely
would buy
the product
7

1

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Why did you make the choice that you did?

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\$ \{e://Field/F-2-1\}$	$\$ \{e://Field/F-2-1-1\}$	$\$ \{e://Field/F-2-2-1\}$
$\$ \{e://Field/F-2-2\}$	$\$ \{e://Field/F-2-1-2\}$	$\$ \{e://Field/F-2-2-2\}$
$\$ \{e://Field/F-2-3\}$	$\$ \{e://Field/F-2-1-3\}$	$\$ \{e://Field/F-2-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-3-1\}$	$\{e://Field/F-3-1-1\}$	$\{e://Field/F-3-2-1\}$
$\{e://Field/F-3-2\}$	$\{e://Field/F-3-1-2\}$	$\{e://Field/F-3-2-2\}$
$\{e://Field/F-3-3\}$	$\{e://Field/F-3-1-3\}$	$\{e://Field/F-3-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-4-1}	#{e://Field/F-4-1-1}	#{e://Field/F-4-2-1}
#{e://Field/F-4-2}	#{e://Field/F-4-1-2}	#{e://Field/F-4-2-2}

#{e://Field/F-4-3}	#{e://Field/F-4-1-3}	#{e://Field/F-4-2-3}
---------------------------	----------------------	----------------------

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-5-1}	#{e://Field/F-5-1-1}	#{e://Field/F-5-2-1}

#{e://Field/F-5-2}	#{e://Field/F-5-1-2}	#{e://Field/F-5-2-2}
#{e://Field/F-5-3}	#{e://Field/F-5-1-3}	#{e://Field/F-5-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
--	------------------	------------------

#{e://Field/F-6-1}	#{e://Field/F-6-1-1}	#{e://Field/F-6-2-1}
#{e://Field/F-6-2}	#{e://Field/F-6-1-2}	#{e://Field/F-6-2-2}
#{e://Field/F-6-3}	#{e://Field/F-6-1-3}	#{e://Field/F-6-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

--	--	--

	Product 1	Product 2
#{e://Field/F-7-1}	#{e://Field/F-7-1-1}	#{e://Field/F-7-2-1}
#{e://Field/F-7-2}	#{e://Field/F-7-1-2}	#{e://Field/F-7-2-2}
#{e://Field/F-7-3}	#{e://Field/F-7-1-3}	#{e://Field/F-7-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would

purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-8-1}	#{e://Field/F-8-1-1}	#{e://Field/F-8-2-1}
#{e://Field/F-8-2}	#{e://Field/F-8-1-2}	#{e://Field/F-8-2-2}
#{e://Field/F-8-3}	#{e://Field/F-8-1-3}	#{e://Field/F-8-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
 1
 2
 3
 4
 5
 6
 I definitely would buy the product
 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
 1
 2
 3
 4
 5
 6
 I definitely would buy the product
 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Do you have concerns about eating Meat 2.0 beef products?

Yes

No

What are your concerns with eating Meat 2.0 beef products?

Why don't you have any concerns about eating Meat 2.0 beef products?

Do you see any advantages to eating Meat 2.0 beef products?

Yes

No

What advantages do you see in eating Meat 2.0 beef products?

Why don't you see any advantages to eating Meat 2.0 beef products?

How much do you trust conventional beef products from recognizable brands, such

as Tyson?

I do not trust them at all	2	3	4	5	6	I completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of conventional beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Meat 2.0 beef products if they came from recognizable brands, such as Tyson?

I would not trust them at all	2	3	4	5	6	I'd completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of Meat 2.0 beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Meat 2.0 beef products if they came from a new brand that you hadn't heard of before?

I would not trust them at all 1	2	3	4	5	6	I'd completely trust them 7
--	---	---	---	---	---	--------------------------------------

Here's a fun question - If you could rename "Meat 2.0 beef" to anything else, what would it be?

Please rate the names below and provide any ideas if you have them.

	I definitely would NOT use this name 1	2	3	4	5	6	I definitely would use this name 7
Safe beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultured beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pure beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any ideas for names for "Meat 2.0 beef", please tell us below!

Idea 1

Idea 2

Idea 3

PURE CONJOINT

Please carefully read the article below in its entirety. You will be asked questions about it afterwards.

Pure beef: the future of meat?

PUBLISHED: 20 January 2016



Dr. Mark Post, a researcher at Maastricht University in the Netherlands, served up the first Pure beef product for taste testing at an event in London in 2013.

Pure beef involves painlessly taking tissue from a live cow, extracting cells from the tissue, and feeding and nurturing them until they multiply many times. Eventually, the cells come together into small strips of muscle about a centimeter long and a few millimeters thick. Thousands of these strips are then layered together to form a beef product. From one tiny piece of tissue can come 45,000 pounds of beef.

"Let's make a proof of concept, and change the discussion from 'this is never going to work' to, 'well, we actually showed that it works, but now we need to get funding and work on it,'" Dr. Post said in an interview last fall in his office at Maastricht University.

"I think really the most important driver is the realization that livestock beef production has serious issues. It will not be able to match the demand in 2050 – the global demand – so we will have a shortage," he said. "It comes at the expense of a lot of environmental damage, because cows emit methane. And there are increasing concerns about the animal welfare issues."

As public awareness of Pure beef grows, proponents like Post seem hopeful that their products will, one day, become just as acceptable as meat grown on animals – perhaps even more so.

Share or comment on this article



What was the researcher's name and university?

Matt Poll, Stanford University

Mark Post, Harvard University

Mark Post, Maastricht University

Matt Poll, Maastricht University

What is Pure beef?

Beef from a new breed of cow

A new beef product only available in Brazil

Beef that involves *taking tissue cells from a live cow* and growing them independent from the

animal until they're combined to make a product

Beef that involves *taking cells from plants* and growing them independent from plants until you can combine them to make a product

What does the researcher say is the most important driver of Pure beef?

The realization that livestock beef production has some serious issues, such as environmental damage and animal welfare concerns

The high demand for new and interesting beef products

The realization that livestock beef production is going out of business

Just wanting to prove that Pure beef products are possible

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-1-1\}$	$\{e://Field/F-1-1-1\}$	$\{e://Field/F-1-2-1\}$
$\{e://Field/F-1-2\}$	$\{e://Field/F-1-1-2\}$	$\{e://Field/F-1-2-2\}$
$\{e://Field/F-1-3\}$	$\{e://Field/F-1-1-3\}$	$\{e://Field/F-1-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely
would NOT
buy the
product

2

3

4

5

6

I definitely
would buy
the product
7

1

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Why did you make the choice that you did?

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\$ \{e://Field/F-2-1\}$	$\$ \{e://Field/F-2-1-1\}$	$\$ \{e://Field/F-2-2-1\}$
$\$ \{e://Field/F-2-2\}$	$\$ \{e://Field/F-2-1-2\}$	$\$ \{e://Field/F-2-2-2\}$
$\$ \{e://Field/F-2-3\}$	$\$ \{e://Field/F-2-1-3\}$	$\$ \{e://Field/F-2-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-3-1\}$	$\{e://Field/F-3-1-1\}$	$\{e://Field/F-3-2-1\}$
$\{e://Field/F-3-2\}$	$\{e://Field/F-3-1-2\}$	$\{e://Field/F-3-2-2\}$
$\{e://Field/F-3-3\}$	$\{e://Field/F-3-1-3\}$	$\{e://Field/F-3-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

- Product 1
- Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-4-1}	#{e://Field/F-4-1-1}	#{e://Field/F-4-2-1}
#{e://Field/F-4-2}	#{e://Field/F-4-1-2}	#{e://Field/F-4-2-2}

#{e://Field/F-4-3}	#{e://Field/F-4-1-3}	#{e://Field/F-4-2-3}
---------------------------	----------------------	----------------------

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-5-1}	#{e://Field/F-5-1-1}	#{e://Field/F-5-2-1}

{e://Field/F-5-2}	{e://Field/F-5-1-2}	{e://Field/F-5-2-2}
{e://Field/F-5-3}	{e://Field/F-5-1-3}	{e://Field/F-5-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product123456I definitely would buy the product7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product123456I definitely would buy the product7

If you had to choose one product to purchase, which one would you buy?

Product 1
Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
--	------------------	------------------

#{e://Field/F-6-1}	#{e://Field/F-6-1-1}	#{e://Field/F-6-2-1}
#{e://Field/F-6-2}	#{e://Field/F-6-1-2}	#{e://Field/F-6-2-2}
#{e://Field/F-6-3}	#{e://Field/F-6-1-3}	#{e://Field/F-6-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

--	--	--

	Product 1	Product 2
#{e://Field/F-7-1}	#{e://Field/F-7-1-1}	#{e://Field/F-7-2-1}
#{e://Field/F-7-2}	#{e://Field/F-7-1-2}	#{e://Field/F-7-2-2}
#{e://Field/F-7-3}	#{e://Field/F-7-1-3}	#{e://Field/F-7-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would

purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-8-1}	#{e://Field/F-8-1-1}	#{e://Field/F-8-2-1}
#{e://Field/F-8-2}	#{e://Field/F-8-1-2}	#{e://Field/F-8-2-2}
#{e://Field/F-8-3}	#{e://Field/F-8-1-3}	#{e://Field/F-8-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Do you have concerns about eating Pure beef products?

Yes

No

What are your concerns with eating Pure beef products?

Why don't you have any concerns about eating Pure beef products?

Do you see any advantages to eating Pure beef products?

Yes

No

What advantages do you see in eating Pure beef products?

Why don't you see any advantages to eating Pure beef products?

How much do you trust conventional beef products from recognizable brands, such

as Tyson?

I do not trust them at all	2	3	4	5	6	I completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of conventional beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Pure beef products if they came from recognizable brands, such as Tyson?

I would not trust them at all	2	3	4	5	6	I'd completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of Pure beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Pure beef products if they came from a new brand that you hadn't heard of before?

I would not trust them at all 1	2	3	4	5	6	I'd completely trust them 7
--	---	---	---	---	---	--------------------------------------

Here's a fun question - If you could rename "Pure beef" to anything else, what would it be?

Please rate the names below and provide any ideas if you have them.

	I definitely would NOT use this name 1	2	3	4	5	6	I definitely would use this name 7
Safe beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meat 2.0 beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultured beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any ideas for names for "Pure beef", please tell us below!

Idea 1

Idea 2

Idea 3

SAFE CONJOINT

Please carefully read the article below in its entirety. You will be asked questions about it afterwards.

Safe beef: the future of meat?

PUBLISHED: 20 January 2016



Dr. Mark Post, a researcher at Maastricht University in the Netherlands, served up the first Safe beef product for taste testing at an event in London in 2013.

Safe beef involves painlessly taking tissue from a live cow, extracting cells from the tissue, and feeding and nurturing them until they multiply many times. Eventually, the cells come together into small strips of muscle about a centimeter long and a few millimeters thick. Thousands of these strips are then layered together to form a beef product. From one tiny piece of tissue can come 45,000 pounds of beef.

"Let's make a proof of concept, and change the discussion from 'this is never going to work' to, 'well, we actually showed that it works, but now we need to get funding and work on it,'" Dr. Post said in an interview last fall in his office at Maastricht University.

"I think really the most important driver is the realization that livestock beef production has serious issues. It will not be able to match the demand in 2050 – the global demand – so we will have a shortage," he said. "It comes at the expense of a lot of environmental damage, because cows emit methane. And there are increasing concerns about the animal welfare issues."

As public awareness of Safe beef grows, proponents like Post seem hopeful that their products will, one day, become just as acceptable as meat grown on animals – perhaps even more so.

Share or comment on this article



What was the researcher's name and university?

Mark Post, Maastricht University

Mark Post, Harvard University

Matt Poll, Maastricht University

Matt Poll, Stanford University

What is Safe beef?

Beef that involves *taking cells from plants* and growing them independent from plants until you can combine them to make a product

A new beef product only available in Brazil

Beef that involves *taking tissue cells from a live cow* and growing them independent from the animal until they're combined to make a product

Beef from a new breed of cow

What does the researcher say is the most important driver of Safe beef?

The realization that livestock beef production is going out of business

The high demand for new and interesting beef products

Just wanting to prove that Safe beef products are possible

The realization that livestock beef production has some serious issues, such as environmental damage and animal welfare concerns

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-1-1\}$	$\{e://Field/F-1-1-1\}$	$\{e://Field/F-1-2-1\}$
$\{e://Field/F-1-2\}$	$\{e://Field/F-1-1-2\}$	$\{e://Field/F-1-2-2\}$
$\{e://Field/F-1-3\}$	$\{e://Field/F-1-1-3\}$	$\{e://Field/F-1-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely
would NOT
buy the
product

2

3

4

5

6

I definitely
would buy
the product
7

1

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Why did you make the choice that you did?

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\$ \{e://Field/F-2-1\}$	$\$ \{e://Field/F-2-1-1\}$	$\$ \{e://Field/F-2-2-1\}$
$\$ \{e://Field/F-2-2\}$	$\$ \{e://Field/F-2-1-2\}$	$\$ \{e://Field/F-2-2-2\}$
$\$ \{e://Field/F-2-3\}$	$\$ \{e://Field/F-2-1-3\}$	$\$ \{e://Field/F-2-2-3\}$

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-3-1}	#{e://Field/F-3-1-1}	#{e://Field/F-3-2-1}
#{e://Field/F-3-2}	#{e://Field/F-3-1-2}	#{e://Field/F-3-2-2}
#{e://Field/F-3-3}	#{e://Field/F-3-1-3}	#{e://Field/F-3-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product
1

2

3

4

5

6

I definitely would buy the product
7

If you had to choose one product to purchase, which one would you buy?

- Product 1
- Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-4-1}	#{e://Field/F-4-1-1}	#{e://Field/F-4-2-1}
#{e://Field/F-4-2}	#{e://Field/F-4-1-2}	#{e://Field/F-4-2-2}

$\{e://Field/F-4-3\}$	$\{e://Field/F-4-1-3\}$	$\{e://Field/F-4-2-3\}$
---	-------------------------	-------------------------

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
$\{e://Field/F-5-1\}$	$\{e://Field/F-5-1-1\}$	$\{e://Field/F-5-2-1\}$

#{e://Field/F-5-2}	#{e://Field/F-5-1-2}	#{e://Field/F-5-2-2}
#{e://Field/F-5-3}	#{e://Field/F-5-1-3}	#{e://Field/F-5-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

	Product 1	Product 2
--	------------------	------------------

#{e://Field/F-6-1}	#{e://Field/F-6-1-1}	#{e://Field/F-6-2-1}
#{e://Field/F-6-2}	#{e://Field/F-6-1-2}	#{e://Field/F-6-2-2}
#{e://Field/F-6-3}	#{e://Field/F-6-1-3}	#{e://Field/F-6-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1	2	3	4	5	6	I definitely would buy the product 7
--	---	---	---	---	---	---

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would purchase if they were side by side in a grocery store.

--	--	--

	Product 1	Product 2
#{e://Field/F-7-1}	#{e://Field/F-7-1-1}	#{e://Field/F-7-2-1}
#{e://Field/F-7-2}	#{e://Field/F-7-1-2}	#{e://Field/F-7-2-2}
#{e://Field/F-7-3}	#{e://Field/F-7-1-3}	#{e://Field/F-7-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

On a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

Using the same scale, how would you rate Product 2?

I definitely would NOT buy the product 1 2 3 4 5 6 I definitely would buy the product 7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Below, you will be comparing two beef products. Please read the descriptions of each product carefully and then indicate which of the two products you would

purchase if they were side by side in a grocery store.

	Product 1	Product 2
#{e://Field/F-8-1}	#{e://Field/F-8-1-1}	#{e://Field/F-8-2-1}
#{e://Field/F-8-2}	#{e://Field/F-8-1-2}	#{e://Field/F-8-2-2}
#{e://Field/F-8-3}	#{e://Field/F-8-1-3}	#{e://Field/F-8-2-3}

Note: Conventional products are typical beef products found in grocery stores today. Humane products are those with additional welfare certifications, such as "grass fed" or "pasture raised".

One a scale from 1 to 7, where 1 indicates that you would absolutely not buy the product and 7 indicates that you definitely would buy the product, how would you rate Product 1?

I definitely
would NOT
buy the
product
1

2

3

4

5

6

I definitely
would buy
the product
7

Using the same scale, how would you rate Product 2?

I definitely
would NOT
buy the
product
1

2

3

4

5

6

I definitely
would buy
the product
7

If you had to choose one product to purchase, which one would you buy?

Product 1

Product 2

Do you have concerns about eating Safe beef products?

Yes

No

What are your concerns with eating Safe beef products?

Why don't you have any concerns about eating Safe beef products?

Do you see any advantages to eating Safe beef products?

Yes

No

What advantages do you see in eating Safe beef products?

Why don't you see any advantages to eating Safe beef products?

How much do you trust conventional beef products from recognizable brands, such

as Tyson?

I do not trust them at all	2	3	4	5	6	I completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of conventional beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Safe beef products if they came from recognizable brands, such as Tyson?

I would not trust them at all	2	3	4	5	6	I'd completely trust them
1						7

If you can, name up to 5 words that come to mind when you think of Safe beef products.

Word 1

Word 2

Word 3

Word 4

Word 5

How much would you trust Safe beef products if they came from a new brand that you hadn't heard of before?

I would not trust them at all 1	2	3	4	5	6	I'd completely trust them 7
--	---	---	---	---	---	--------------------------------------

Here's a fun question - If you could rename "Safe beef" to anything else, what would it be?

Please rate the names below and provide any ideas if you have them.

	I definitely would NOT use this name 1	2	3	4	5	6	I definitely would use this name 7
Meat 2.0 beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultured beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pure beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any ideas for names for "Safe beef", please tell us below!

Idea 1

Idea 2

Idea 3

Diet

Which of these best describes what you currently eat?

Vegan Diet - eat no meat (including fish or chicken), milk products, egg, or other animal products

Atkins Diet - eat low-carbohydrate, high protein foods

Paleolithic Diet - consists of fish, meats, eggs, vegetables, fruit, fungi, roots, and nuts

Vegetarian Diet - eat egg and milk products, but no meat (including fish or chicken)

Pescatarian Diet - eat fish, egg, and milk products, but no other meat (including chicken)

No specific diet - A diet with no specific preferences or exclusions

Mediterranean Diet - A diet mimicking the traditional dietary patterns of southern Italy

Meat Reduction Diet - A diet attempting to reduce meat consumption, example Meatless Mondays

Other

When did you start your current diet? A rough date is fine.

Year

Month

How frequently do you currently eat meat (including chicken, pork, beef, and fish)?

Never 0-3 4-6 Once/day 2 times/day 3 times/day More than 3
times/week times/week times/day

In the past, have you ever identified with any of the following diets? Select all that apply.

Vegetarian Diet - eat egg and milk products, but no meat (including fish or chicken)

Vegan Diet - eat no meat (including fish or chicken), milk products, egg, or other animal products

Mediterranean Diet - A diet mimicking the traditional dietary patterns of southern Italy

Meat Reduction Diet - A diet attempting to reduce meat consumption, example Meatless Mondays

Paleolithic Diet - consists of fish, meats, eggs, vegetables, fruit, fungi, roots, and nuts

No specific diet - A diet with no specific preferences or exclusions

Pescatarian Diet - eat fish, egg, and milk products, but no other meat (including chicken)

Atkins Diet - eat low-carbohydrate, high protein foods

Other

For approximately how long did you identify with an Atkins diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

For approximately how long did you identify with a Paleolithic diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

For approximately how long did you identify with a Pescatarian diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

For approximately how long did you identify with a Vegetarian diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

For approximately how long did you identify with a Vegan diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

For approximately how long did you identify with a Meat Reduction diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

For approximately how long did you identify with a Mediterranean diet?

Give a rough estimate in years, months, or days.

Years

Months

Days

Demographics

What is your age?

What is your gender?

What is the highest grade of school or the highest degree you have completed?

Less than 12th grade, no diploma

High school diploma (or equivalent)

Some education past high school, no degree

Associate's degree or other non-Bachelor degree

Bachelor's degree

Graduate or professional degree

What is your household income?

less than \$24,999

\$25,000 to \$49,999

\$50,000 to \$74,999

\$75,000 to \$99,999

\$100,000 or more

What state do you currently reside in?

What race/ethnicity do you consider yourself? (Select all that apply)

African American or Black

Asian

European/Causasian

Indian

Middle Eastern

Latino, Hispanic, or Spanish

Native American

Pacific Islander

Other

Which of the following best describes where you live?

City

Suburb

Rural area

If you actively practice a particular religion, please select it from the list below:

Buddhist

Christian (Catholic, Protestant, etc.)

Hindu

Jewish

Muslim

Spiritual practice not associated with a specific religion

Other

Do not actively practice a particular religion

Completion code

Thank you for your participation!

Please complete the following instructions to receive full payment for your participation:

1. Copy this completion code: 719132
2. Paste the code into the HIT's completion code box

3. Submit the HIT

Powered by Qualtrics