

#NoBeef

Reducing beef and lamb,
for health and environment,
profitably.





Reducing Beef & Lamb Is...



1. More **profitable** (as shown by the University of Cambridge)

p. **3**



2. Exciting, delicious and **easy**.

p. **4**



3. Healthier and **safer**.

p. **9**



4. The single most effective thing a caterer can do to **combat climate change**.

p. **10**



Profitably Reducing Beef & Lamb

The University of Cambridge central catering service has stopped serving beef and lamb and demonstrated...



A **3% point increase in profits.**



A 16% reduction in cost per kg of meat purchased.



A **9% uplift in sales**, in spite of healthy competition.





Exciting, Delicious & Easy

And what makes it even better is how straight-forward it's been...



“The numbers speak for themselves: we’re making more money and serving more customers. This is the future.”

- *Tom Walston (Head of Business Services, University of Cambridge)*



“We’ve not had a single complaint from customers, and our staff are happier too: making exciting new recipes whilst doing a very positive thing for the health of the planet.”

- *Paula White (Catering Manager, University of Cambridge)*

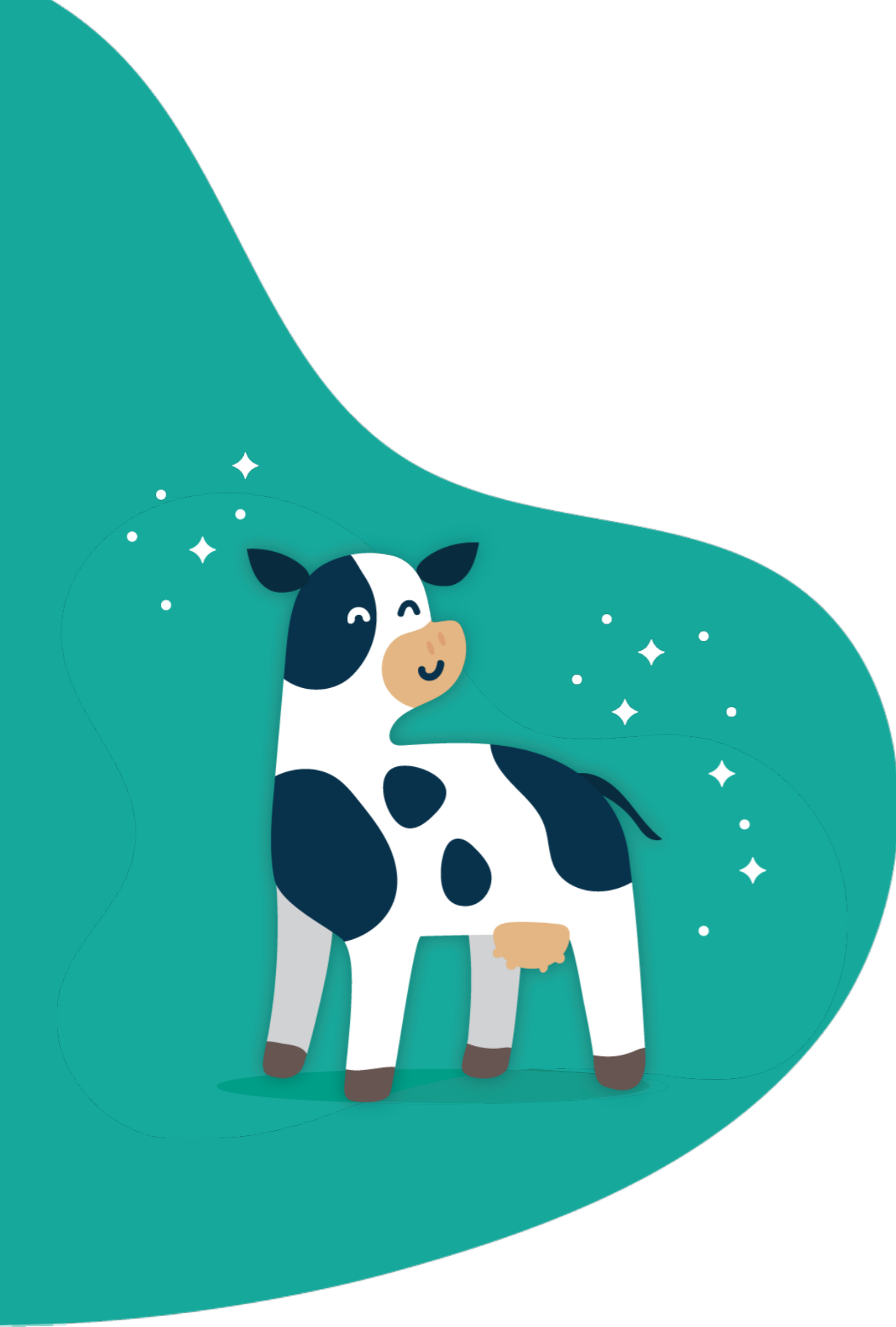


Exciting, Delicious & Easy

By informing staff about the positive impact of dropping beef and lamb, and inspiring them with new recipes and ideas, the change at Cambridge has been **more than just smooth...**

...it's been **welcomed by staff** eager to try new things, and happy to help fight the world's biggest problem: climate change!

The teams at **#NoBeef and Cambridge are here to help** (see page 19) with supporting, informing and teaching staff at other catering departments.





Exciting, Delicious & Easy

With almost 7,000 transactions a day, the team at Cambridge **hasn't had a single complaint.**

There's now even
more choice on offer.



The alternatives are delicious and selling well.
See page 22 for inspiration.

New options are served at a
similar price point.



The ingredients are less expensive, and so while the caterers **make more money**, customers get larger portions, with more tasty extras.

Exciting, Delicious & Easy

(food provided with the support of Darwin and Murray Edwards colleges)

When the team at the University of Cambridge set up a **pop-up café** to trial their new beef-free, lamb-free recipes, they expected the food to last all day, but it was **sold out in 20 minutes.**



Demand for environmentally-conscious food is growing...



Exciting, Delicious & Easy



“By removing beef and lamb from menus, and promoting animal-free products, even when continuing to serve meats like pork and chicken, **the positive environmental impact is enormous.**”

– *Peter Lumb (Environmental Coordinator, University of Cambridge)*



“Both our customers and our staff are increasingly demanding food that reflects their **concern for the environment**”

– *Paula White (Catering Manager, University of Cambridge)*



Healthier & Safer

Removing beef and lamb isn't just better for the environment...



By removing beef and lamb from menus, the **safety risks** of handling these raw red meats are eliminated.



Reducing red meat intake is now understood to reduce the chances of developing **heart disease**, certain **cancers**, and even **diabetes**.

(more information can be found at www.Obeef.com/our-health)

Combatting Climate Change

The science is clear: reducing beef and lamb is the most effective thing a caterer can do to **combat climate change**.

The science is all summarised in a video that has had almost **2M views** on Facebook and is available here:

www.Obef.com

Or over the next few slides...



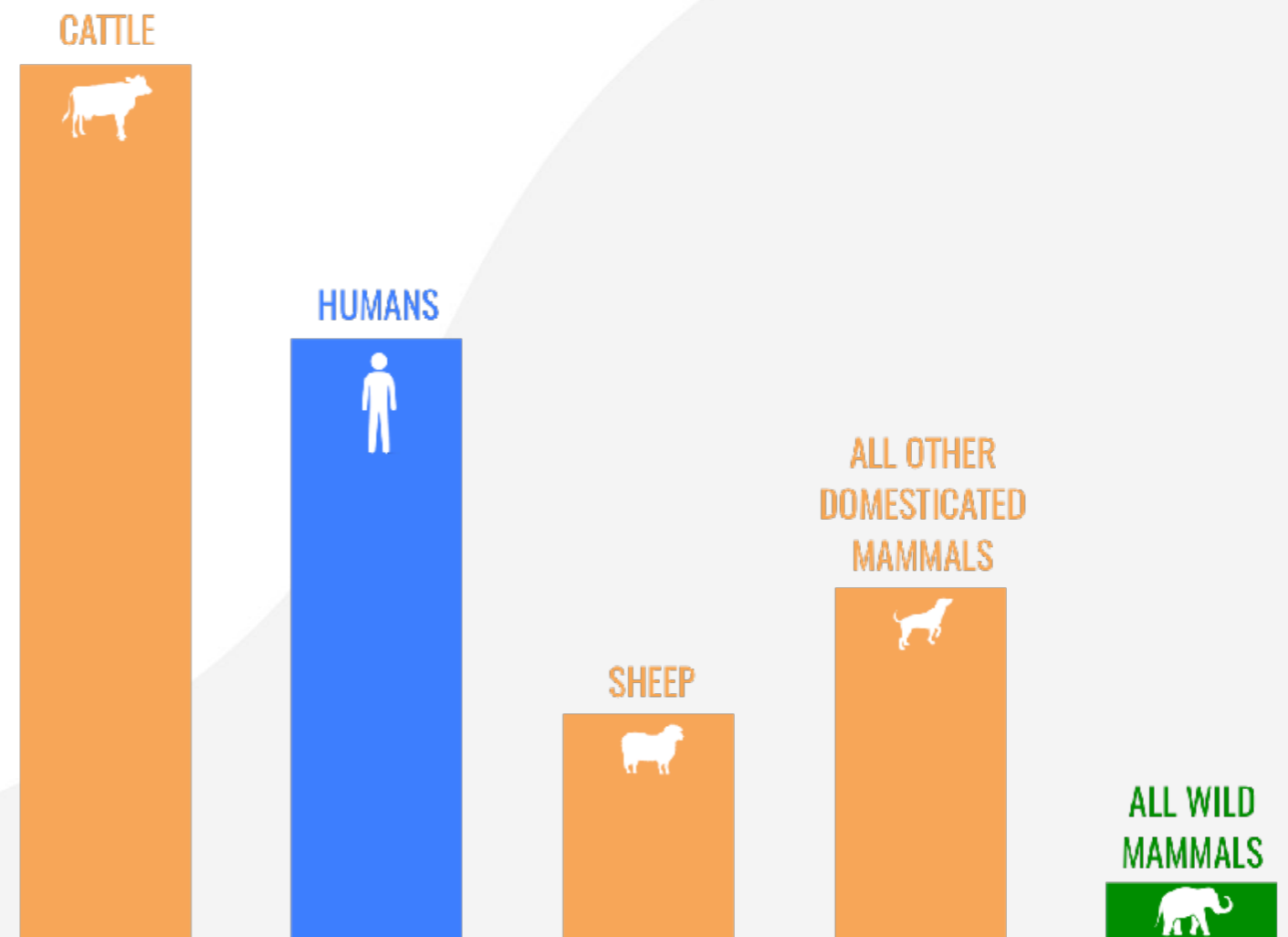


Combatting Climate Change

The number of cows and sheep on Earth is enormous.

52% of all land mammal mass on the planet is cow and sheep.

Humans only make up 28%, and wild mammals only 3%.



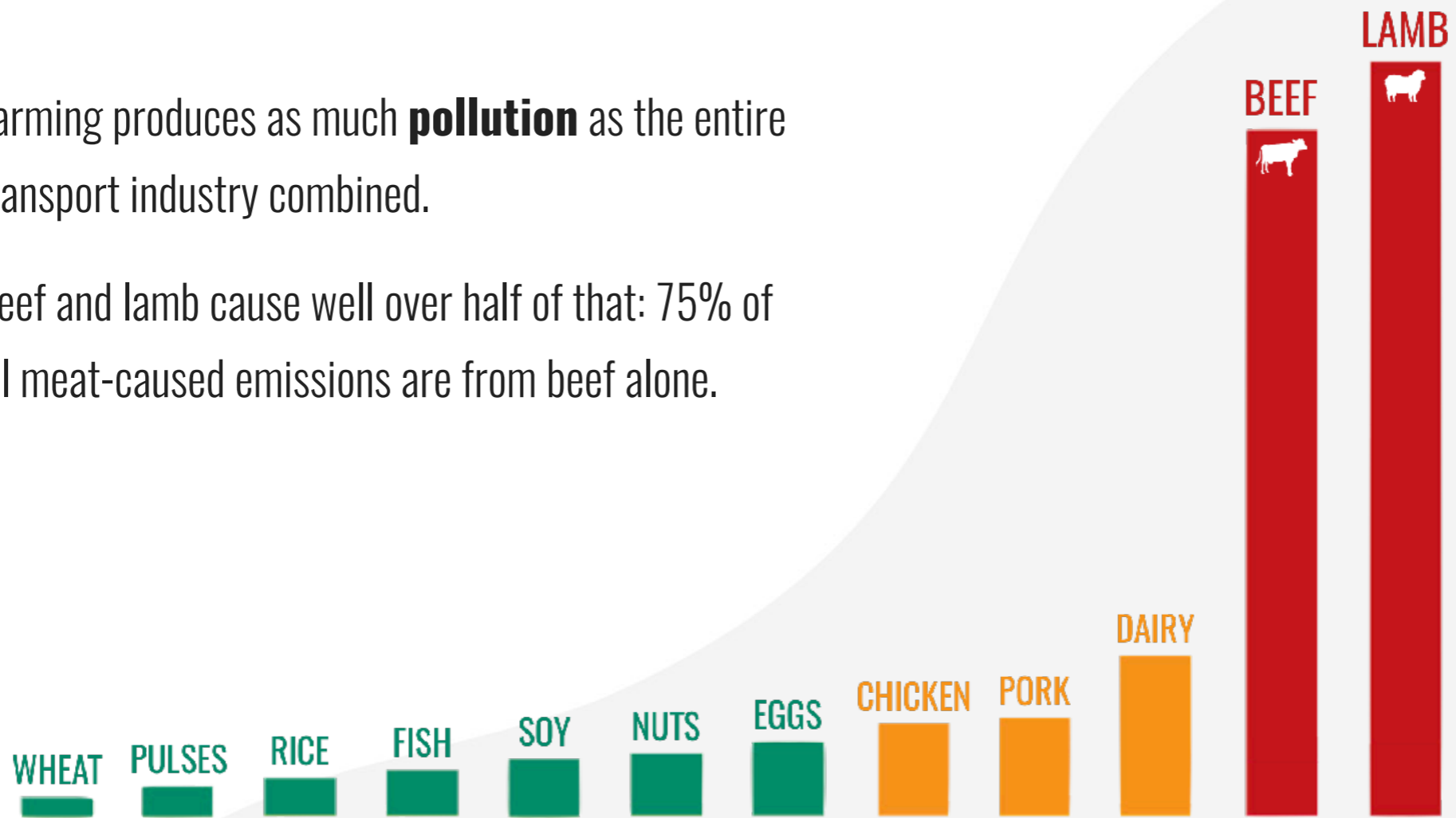
Land mammal biomass (The Earth's Biosphere, Vaclav Smil, 2003)



Combatting Climate Change

Farming produces as much **pollution** as the entire transport industry combined.

Beef and lamb cause well over half of that: 75% of all meat-caused emissions are from beef alone.



Greenhouse gas emissions per kg of protein (World Resources Institute, 2016)



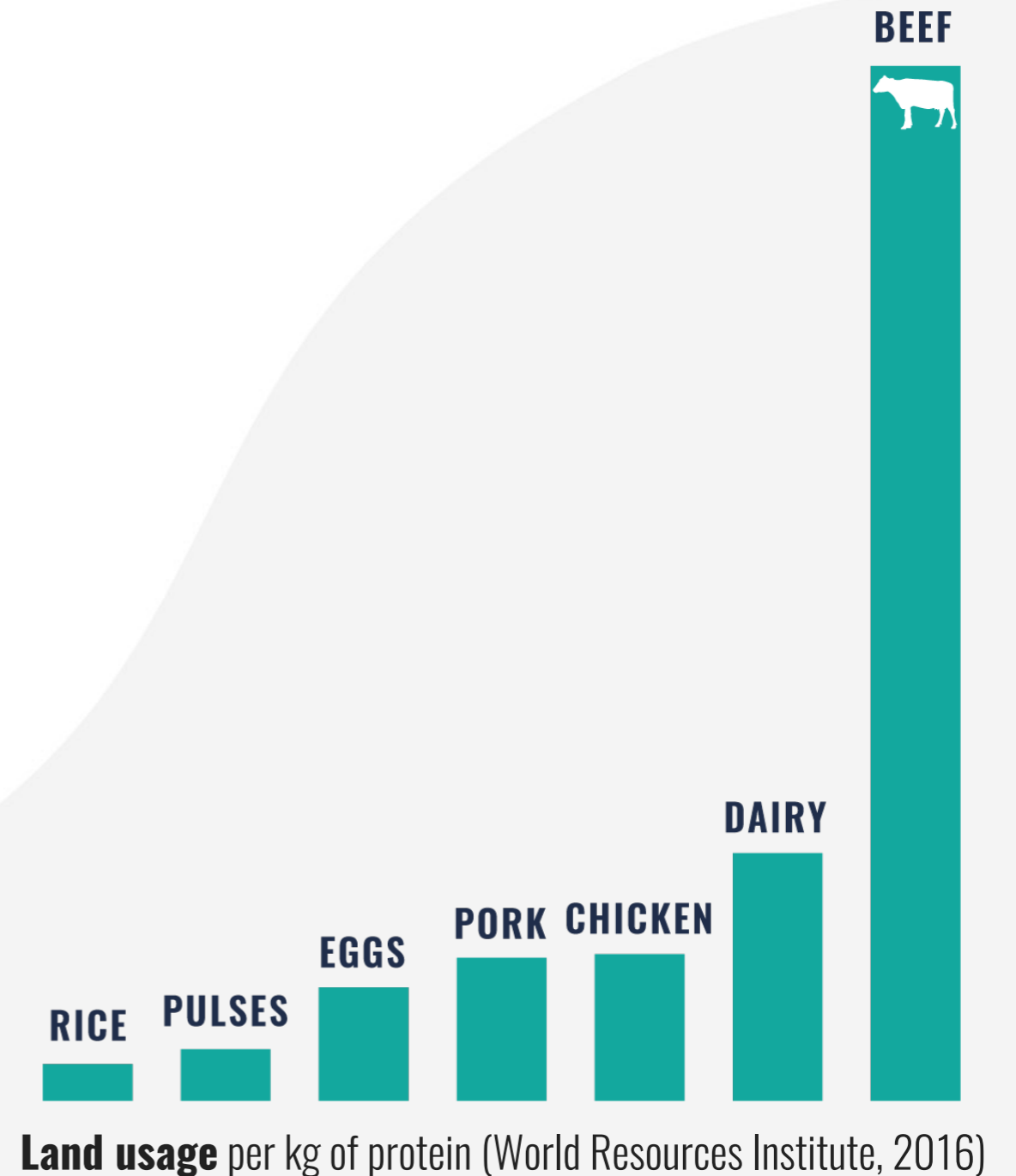
Combatting Climate Change

Cows take up enormous quantities of land:
not just grazing land, but land to grow their food too.

41% of the USA's land is dedicated to livestock.

Over half of this is for cows.

Whilst lamb is not displayed on the chart to the right, its impact is similar to beef.



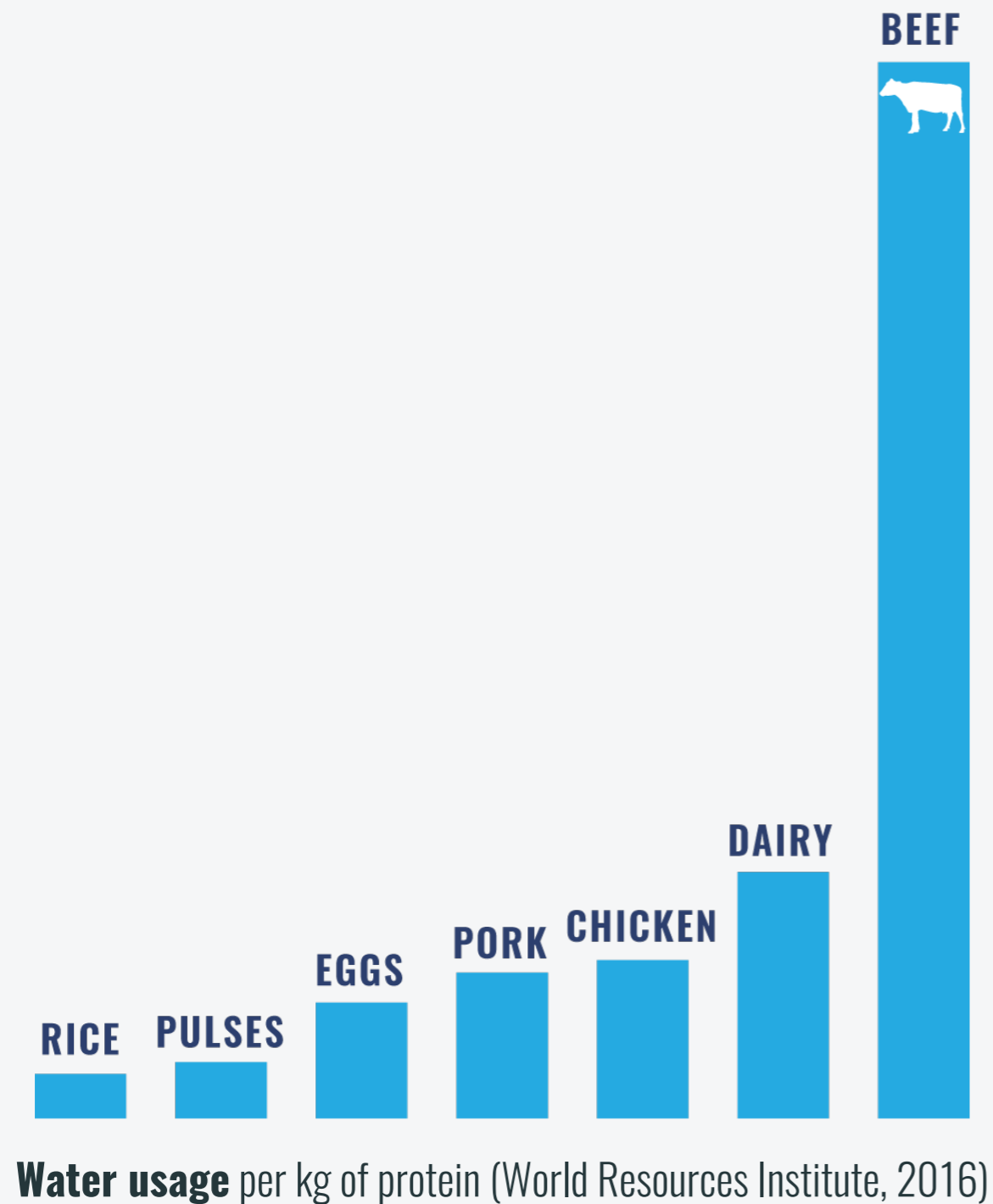


Combatting Climate Change

According to the FAO, 70% of global freshwater is used by agriculture. The greatest consumer of this is cows.

Some scientists claim that **1kg of beef requires 100,000 litres of water.**

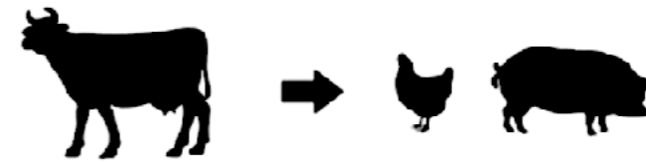
Whilst lamb is not displayed on the chart on the left its impact is similar to beef.





Combatting Climate Change

Switching from beef and lamb to **other meats** results in...



60% less water used, **85% less** greenhouse gas emissions, **85% less** farmland.
(per serving of protein)

Switching from beef and lamb to **animal-free proteins** results in...



85% less water used, **95% less** greenhouse gas emissions, **95% less** farmland.
(per serving of protein)

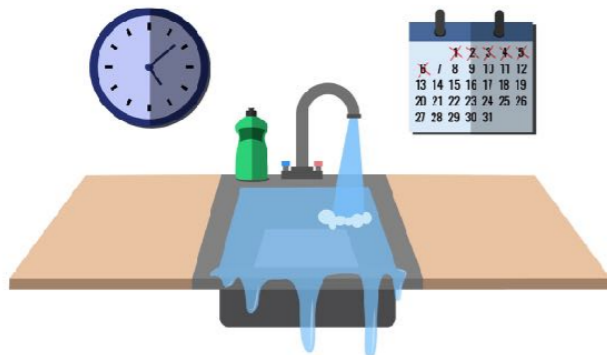
Beef and lamb farming combined are the biggest drivers of deforestation, ground water depletion, and soil degradation worldwide.



Combatting Climate Change

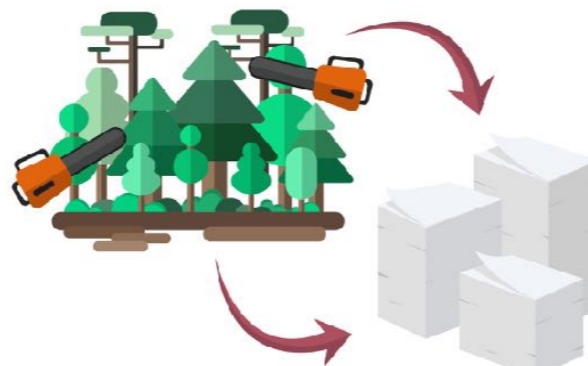
These infographics show conservative estimates for the impact of a single individual cutting out beef and lamb for a year...

#NoBeef for a year can save 50,000 litres of water.



That's equivalent to turning the kitchen tap on full blast and leaving it for 6 days.

#NoBeef for a year can save 1,300 square metres of land.



That's enough land to grow the trees for 7 million sheets of a paper.

#NoBeef for a year can save 2.2 tonnes of CO₂ equivalents.



That's roughly equivalent to filling 16.5 bathtubs with petroleum and setting them all on fire.

As you can see, the positive impact of an entire restaurant or catering department cutting out beef and lamb is enormous!

Combatting Climate Change

#NoBeef is widely supported by top academics around the world.

Here are just a few...



Prof. Paul R. Ehrlich

Stanford University



Prof. Maureen E. Raymo

Columbia University



Prof. Gidon Eshel

Harvard University &
Bard College



Prof. Christopher Gardner

Stanford University



Prof. David Katz

Yale University



Prof. Jeff McMahan

University of Oxford



Prof. Sally Haslanger

MIT



Prof. Peter Singer

Princeton University

(more information can be found at www.Obeef.com)



Contacts & Promotion

Feel free to use the #NoBeef
logo and any of the media from
www.Obef.com



Contacts & Promotion



The **#NoBeef** team and the **University of Cambridge** catering service are **here to help**:

Get in touch with us...

frankie@obeef.com

nathan@matthewshribman.com

mj@matthewshribman.com

We'll connect you with the relevant people at Cambridge, and help with everything from the strategies and practicalities of dropping beef and lamb, through to communicating the climate science.

#NoBeef was founded by Matthew Shribman

www.MatthewShribman.com // www.instagram.com/MatthewShribman // www.youtube.com/ScienceInTheBath

APPENDIX



Cambridge's Sustainable Food Policy



Here are the key points of Cambridge University's **award-winning Sustainable Food Policy**, which was developed with numerous top academics.



1. Reduce the consumption of meat, in particular ruminant meat (e.g. beef and lamb).
2. Promote the consumption of more vegetarian and vegan foods.
3. Ensure that no fish from the Marine Conservation Society (MCS) 'Fish to Avoid' list is served in the University and seek Marine Stewardship Council certification.
4. Reduce the amount of food that is wasted in the University.
5. Source food and other products locally where possible in order to sustain the local economy and reduce environmental impacts.
6. Use Fairtrade products where applicable, and promote products which actively support Fairtrade initiatives.
7. Ensure that animal welfare standards are adhered to for any animal produce purchased and to insist on Red Tractor Assured standards as minimum, where applicable.
8. Communicate to customers, staff and suppliers our commitment to serving sustainable food.

For more info, visit this website:

www.environment.admin.cam.ac.uk/sustainable-food



Baked sweet potato, bean & tofu empanadas. Chargrilled heirloom tomato, rocket & crispy tofu. Avocado chimichurri

From: Robinson College
Serves: 8

Allergens: Contains gluten

Ingredients...

For the dough...

Qty	Unit	Item
370	g	Peeled Sweet Potato
130	g	Plain Flour
65	g	Wholemeal Flour
65	g	Cornflour

For the filling...

Qty	Unit	Item
1		Small Red Onion Diced
1		Small Red Pepper Diced
50	g	Diced Sweet Potato
200	g	Diced Tofu
1		Clove Garlic
		Seasoning
		Olive Oil

For the Avocado chimichurri...

Qty	Unit	Item
1		Diced Avocado
200		Clove Garlic
1/2		Lemon And Lime Juice
1		Small Chopped Chilli
		Pinch Parsley And Coriander
1		Finely Chopped Shallots
		Seasoning

Baked sweet potato, bean rocket and crispy tofu, Avocado chimichurri

Total greenhouse gases per serving: 1117.5g CO2e
Total greenhouse gases per serving equivalent to driving 3.75 miles in an average UK petrol car

For comparison:

Baked sweet potato, bean rocket and crispy tofu, Avocado chimichurri

Total greenhouse gases per serving: 4267.5g CO2e
Total greenhouse gases per serving equivalent to driving 14.32 miles in an average UK petrol car

Mee Rebus

From: Darwin College
Serves: 1

Allergens: Celery, Soya

Directions...

1. Soak the chillies in boiling water for 10 minutes.
2. Blend the chillies, ginger, turmeric, onion, soy bean paste and 12 vegetable oil to a smooth paste.
3. Boil white potatoes until tender.
4. Heat the Vegetable oil and add the chilli paste, cook for about 3mins.
5. Add the sweet potato, chopped stock, then simmer for 10-15 until sweet potatoes are soft.
6. Add the cooked white potatoes to the heat.
7. Blend the above until silky and add sugar and salt to taste.
8. Add the cherry tomatoes and coriander.
9. Garnish with chopped coriander. Serve with rice or noodles.

Tofu Mee Rebus

Total greenhouse gases per serving: 1117.5g CO2e
Total greenhouse gases per serving equivalent to driving 3.75 miles in an average UK petrol car

For comparison: Beef Mee Rebus

Total greenhouse gases per serving: 4267.5g CO2e
Total greenhouse gases per serving equivalent to driving 14.32 miles in an average UK petrol car

Spicy Jackfruit Tacos

From: Murray Edwards College
Serves: 4

Allergens: Tortillas contain gluten

Directions...

1. Thoroughly rinse, drain and sort the Jackfruit, the pieces come in chunks or triangle shapes, cut off the centre "core" portion of the Jackfruit that's tougher in texture and separate it from the rest of the fruit, chop into smaller pieces. For the remaining portion of the jackfruit that appears stringier, use your hands to pull into small shredded pieces. Rinse the Jackfruit once more in a colander, drain, and thoroughly dry.
2. Heat a large pan over medium heat, once hot; add oil of choice, onion, and garlic. Sauté for 4-5 minutes or until onions are golden brown and softened.
3. Add Jackfruit, Salt, Paprika, Cumin, Chilli Powder, then some of the Maple Syrup or Sugar, Chilli Peppers, Water, Lime Juice and the Habanero Sauce. Stir to coat the Jackfruit and reduce heat to low - medium. Cover and cook for about 20 minutes, stirring occasionally.
4. For finer texture, as your Jackfruit is cooking, use your spoon to mash the Jackfruit into smaller pieces, or use two forks to shred the jackfruit as it cooks down.
5. Once the Jackfruit has been properly simmered, taste and adjust flavour as needed, adding more Paprika or Cumin for smokiness, Chilli Powder for heat, Chipotle Pepper for spice, Sugar or Maple Syrup for sweetness, Lime for acidity.
6. Turn up heat to medium-high and cook for 2-3 more minutes to get a little extra colour/texture, remove from heat.

Serving...

Finely shred the Red Cabbage, then on top of your Tortilla layer the Jackfruit mix followed by the Cabbage, roughly chopped Coriander, Black Beans and Salsa top with the Sriracha Sauce

Ingredients...

Qty	Unit	Item
565	g	Jackfruit in water or brine if you cannot source fresh
30	ml	Coconut Oil
55	g	White Onion (thinly sliced)
12	g	Garlic (minced)
1/2	tsp	Sea Salt
8	g	Ground Smoked Paprika
8	g	Ground Cumin
8	g	Chilli Powder
24-36	g	Maple Syrup or Organic Brown Sugar
2-3		Small Green Chilli Peppers
3	tsp	Habanero Sauce (use more or less to preferred spice level)
160	ml	Water (plus more as needed)
45	ml	Lime Juice

For Serving...

Corn or Flour tortillas
Red Cabbage
Coriander
Lime Wedges
425g Black Beans
Salsa
Sriracha Sauce

Jackfruit Tacos

Total greenhouse gases per serving: 1117.5g CO2e
CO2e per serving equivalent to driving 3.75 miles in an average UK petrol car

For comparison: Beef Tacos

Total greenhouse gases per serving: 4267.5g CO2e
CO2e per serving equivalent to driving 14.32 miles in an average UK petrol car



Some of Cambridge's Best Selling Recipes

Find the full cards at

www.Obef.com/campaign-material



Other Positive Changes

Every day, **7 million disposable cups** are thrown away in the UK alone.

Fewer than 1% are recycled.

By providing drinking fountains, giving a small discount on drinks served in customers' own cups, and only selling drinks in cans and glass, single-use plastic can be entirely removed from drinks, just like at Cambridge University.

www.canowater.com



Other Positive Changes

Vegware packaging and cutlery are made from plants and are entirely compostable, provided they're disposed of in an industrial composting system.



Disposable **plastic can be radically reduced** by providing clearly labelled compost bins that teach people to dispose of their packaging and cutlery in the same bin as their food waste.

