

Take a Bite

Climate Food Flashcards v2

We put together these cards to help you find out about the impact of food on the environment, and its nutritional value.

What games can you think of to play with these cards? Here are some ideas to get you started:

- Use them like Top Trumps
- Build your favourite sandwich
- Deal 1 card each face down – which causes the least emissions?

We would love to hear how you use them. Please email us at info@ggdot.org or tweet with [#takeabitecc](https://twitter.com/takeabitecc)

Free download: go to our website to download the latest version of the cards and print your own copy!
www.ggdot.org/flashcards



Climate Food Flashcards v2 by



www.ggdot.org/flashcards

as part of the project



TAKE A **BITE** OUT OF
CLIMATE CHANGE

We are grateful for support from

MANCHESTER
1824

The University of Manchester



The University
Of Sheffield.
Institute for
Sustainable Food.



SHEFS



Take a Bite

Climate Food Flashcards v2

To make these cards, we focused on two kinds of environmental impact and three nutritional benefits of commonly eaten foods. The actual values will differ, e.g. depending on soil quality, the weather, and what animals eat.

We converted carbon emissions to equivalent time driving a car at 40mph.

You can see all the data sources here
www.ggdot.org/flashcards

Emissions of greenhouse gases (e.g. carbon dioxide) cause climate change.

Water is a precious resource. These cards show the amount used to produce food.

Fibre helps us digest. Children aged 5-11 should eat 20g a day, and adults 30g.

Calories give us energy. Adults need 2000 to 2500 kCal a day.

Protein grows and repairs our bodies. An adult weighing 65kg should eat 50g a day.



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N8
AgriFood



Steak

Portion, fried (100g)



CO₂e
29
minutes
driving



Emissions 4723 gCO₂e



Water 668 litres



Fibre 0 g



Calories 242 kCal



Protein 30 g

Steak

Portion, fried (100g)



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Lamb

Portion (100g)



CO₂e
27
minutes
driving



Emissions 4430 gCO₂e



Water 350 litres



Fibre 0 g



Calories 249 kCal



Protein 30 g

Lamb

Portion (100g)



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Sausage

Two small (100g)



CO₂e
6
minutes
driving



Emissions 1035 gCO₂e



Water 424 litres



Fibre 6 g



Calories 259 kCal



Protein 14 g

Sausage

Two small (100g)



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Veggie sausage

Two small (100g)



CO₂e
2
minutes
driving



Emissions 361 gCO₂e



Water 73 litres



Fibre 3 g



Calories 247 kCal



Protein 14 g

Veggie sausage

Two small (100g)



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Quorn

From frozen, portion (100g)



CO₂e
2
minutes
driving



Emissions 379 gCO₂e



Water 200 litres



Fibre 11 g



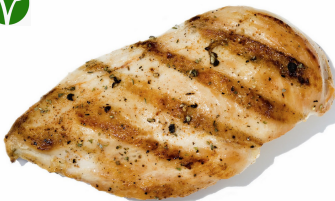
Calories 196 kCal



Protein 13 g

Quorn

From frozen, portion (100g)



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Salmon

Portion (100g)



CO₂e
5
minutes
driving



Emissions 879 gCO₂e



Water 290 litres



Fibre 0 g



Calories 320 kCal



Protein 22 g

Salmon

Portion (100g)



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Cod

Portion (100g)



CO₂e
4
minutes
driving



Emissions 642 gCO₂e



Water 137 litres



Fibre 0 g



Calories 198 kCal



Protein 21 g

Cod

Portion (100g)



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Chicken

Portion (100g)



CO₂e
6
minutes
driving



Emissions 923 gCO₂e



Water 325 litres



Fibre 0 g



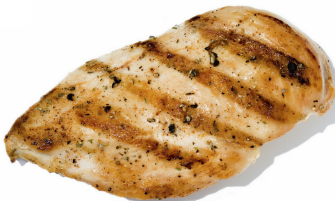
Calories 240 kCal



Protein 28 g

Chicken

Portion (100g)



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Ham

Three slices (100g)



CO₂e
6
minutes
driving



Emissions 1070 gCO₂e



Water 394 litres



Fibre 0 g



Calories 115 kCal



Protein 19 g

Ham

Three slices (100g)



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Cheese

Three slices (100g)



CO₂e
10
minutes
driving



Emissions 1590 gCO₂e



Water 139 litres



Fibre 0 g



Calories 416 kCal



Protein 25 g

Cheese

Three slices (100g)



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Pizza

Large slice (100g)



CO₂e
3
minutes
driving



Emissions 477 gCO₂e



Water 108 litres



Fibre 6 g



Calories 272 kCal



Protein 12 g

Pizza

Large slice (100g)



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Eggs

Two eggs (100g)



CO₂e
3
minutes
driving



Emissions 470 gCO₂e



Water 139 litres



Fibre 0 g



Calories 143 kCal



Protein 14 g

Eggs

Two eggs (100g)



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Baked beans

From a can (200g)



CO₂e
3
minutes
driving



Emissions 430 gCO₂e



Water 115 litres



Fibre 25 g



Calories 162 kCal



Protein 10 g

Baked beans

From a can (200g)



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Beans

Cooked at home (200g)



CO₂e
1
minutes
driving

 Emissions 206 gCO₂e

 Water 115 litres

 Fibre 25 g

 Calories 186 kCal

 Protein 14 g

Beans

Cooked at home (200g)



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Lentils

Cooked at home (200g)



CO₂e
0.9
minutes
driving



Emissions 151 gCO₂e



Water 179 litres



Fibre 29 g



Calories 176 kCal



Protein 12 g

Lentils

Cooked at home (200g)



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Chickpeas

From a can (200g)



CO₂e
2
minutes
driving



Emissions 393 gCO₂e



Water 168 litres



Fibre 27 g



Calories 230 kCal



Protein 14 g

Chickpeas

From a can (200g)



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Almonds

Handful (30g)



CO₂e
0.4
minutes
driving



Emissions 63 gCO₂e



Water 295 litres



Fibre 7 g



Calories 184 kCal



Protein 6 g

Almonds

Handful (30g)



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Peanuts

Handful (30g)



CO₂e
0.6
minutes
driving



Emissions 96 gCO₂e



Water 95 litres



Fibre 6 g



Calories 181 kCal



Protein 7 g

Peanuts

Handful (30g)



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Peanut butter

Two tablespoons (30g)



CO₂e
0.8
minutes
driving



Emissions 126 gCO₂e



Water 95 litres



Fibre 5 g



Calories 187 kCal



Protein 7 g

Peanut butter

Two tablespoons (30g)



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Cream

Two tablespoons (28g)



CO₂e
0.8
minutes
driving



Emissions 137 gCO₂e



Water 23 litres



Fibre 0 g



Calories 54 kCal



Protein 1 g

Cream

Two tablespoons (28g)



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Milk

One cup (250ml)



CO₂e
3
minutes
driving



Emissions 550 gCO₂e



Water 116 litres



Fibre 0 g



Calories 110 kCal



Protein 9 g

Milk

One cup (250ml)



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Soy milk

One cup (250ml)



CO₂e
2
minutes
driving



Emissions 250 gCO₂e



Water 88 litres



Fibre 2 g



Calories 113 kCal



Protein 9 g

Soy milk

One cup (250ml)



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Oat milk

One cup (250ml)



CO₂e
0.7
minutes
driving



Emissions 110 gCO₂e



Water 111 litres



Fibre 7 g



Calories 148 kCal



Protein 3 g

Oat milk

One cup (250ml)



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Cereal

Portion (30g) + milk (200g)



CO₂e
3
minutes
driving



Emissions 519 gCO₂e



Water 121 litres



Fibre 2 g



Calories 202 kCal



Protein 9 g

Cereal

Portion (30g) + milk (200g)



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Porridge

With 200g water



CO₂e
0.6
minutes
driving



Emissions 101 gCO₂e



Water 106 litres



Fibre 6 g



Calories 110 kCal



Protein 3 g

Porridge

With 200g water

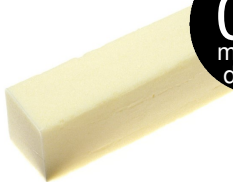


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Butter

One tablespoon (14g)



CO₂e
0.7
minutes
driving



Emissions 116 gCO₂e



Water 34 litres



Fibre 0 g



Calories 104 kCal



Protein 0 g

Butter

One tablespoon (14g)

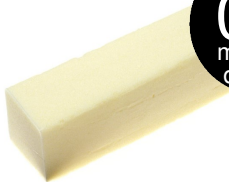


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Veg spread

One tablespoon (14g)



CO₂e
0.1
minutes
driving

 Emissions 19 gCO₂e

 Water 29 litres

 Fibre 0 g

 Calories 77 kCal

 Protein 0 g

Veg spread

One tablespoon (14g)



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Vegetable oil

One tablespoon (14g)



CO₂e
0.3
minutes
driving



Emissions 52 gCO₂e



Water 28 litres



Fibre 0 g



Calories 126 kCal



Protein 0 g

Vegetable oil

One tablespoon (14g)



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Yogurt

Small pot (100g)



CO₂e
1
minutes
driving



Emissions 200 gCO₂e



Water 49 litres



Fibre 0 g



Calories 97 kCal



Protein 4 g

Yogurt

Small pot (100g)



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Soy yogurt

Small pot (100g)



CO₂e
0.5
minutes
driving



Emissions 80 gCO₂e



Water 41 litres



Fibre 3 g



Calories 45 kCal



Protein 4 g

Soy yogurt

Small pot (100g)



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Bread

Two slices (80g)



CO₂e
0.4
minutes
driving



Emissions 60 gCO₂e



Water 30 litres



Fibre 6 g



Calories 190 kCal



Protein 7 g

Bread

Two slices (80g)

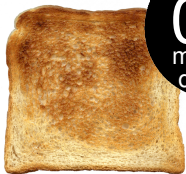


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Toast

Two slices (64g)



CO₂e
0.5
minutes
driving



Emissions 90 gCO₂e



Water 30 litres



Fibre 5 g



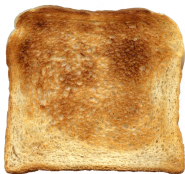
Calories 190 kCal



Protein 6 g

Toast

Two slices (64g)



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Spaghetti

Portion (200g)



CO₂e
2
minutes
driving



Emissions 332 gCO₂e



Water 33 litres



Fibre 10 g



Calories 282 kCal



Protein 9 g

Spaghetti

Portion (200g)



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Rice

Portion (200g)



CO₂e
5
minutes
driving



Emissions 800 gCO₂e



Water 216 litres



Fibre 0 g



Calories 262 kCal



Protein 6 g

Rice

Portion (200g)

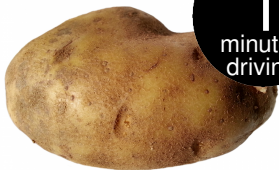


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Potato

Large (200g)



CO₂e
1
minutes
driving



Emissions 240 gCO₂e



Water 16 litres



Fibre 7 g



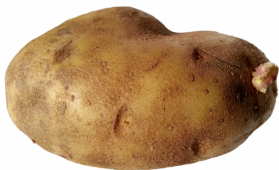
Calories 148 kCal



Protein 4 g

Potato

Large (200g)



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Chips

Oven cooked (200g)



CO₂e
4
minutes driving



Emissions 600 gCO₂e



Water 33 litres



Fibre 8 g



Calories 488 kCal



Protein 6 g

Chips

Oven cooked (200g)



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Peas

Portion (80g)



CO₂e
1
minutes driving



Emissions 204 gCO₂e



Water 26 litres



Fibre 11 g



Calories 56 kCal



Protein 4 g

Peas

Portion (80g)



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Broccoli

Portion (80g)



CO₂e
0.5
minutes
driving



Emissions 82 gCO₂e



Water 17 litres



Fibre 7 g



Calories 27 kCal



Protein 3 g

Broccoli

Portion (80g)



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Asparagus

Seasonal, 5 spears (80g)



CO₂e
1
minutes
driving



Emissions 160 gCO₂e



Water 169 litres



Fibre 2 g



Calories 10 kCal



Protein 1 g

Asparagus

Seasonal, 5 spears (80g)



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Asparagus

By air, 5 spears (80g)



CO₂e
6
minutes
driving



Emissions 1016gCO₂e



Water 116 litres



Fibre 2 g



Calories 10 kCal



Protein 1 g

Asparagus

By air, 5 spears (80g)



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French beans

By air (80g)



CO₂e
3
minutes
driving



Emissions 477 gCO₂e



Water 26 litres



Fibre 7 g



Calories 21 kCal



Protein 2 g

French beans

By air (80g)



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French beans

Seasonal (80g)



CO₂e
0.5
minutes
driving



Emissions 88 gCO₂e



Water 26 litres



Fibre 7 g



Calories 21 kCal



Protein 2 g

French beans

Seasonal (80g)



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Sweetcorn

From frozen (80g)



CO₂e
1
minutes
driving



Emissions 182 gCO₂e



Water 75 litres



Fibre 7 g



Calories 54 kCal



Protein 3 g

Sweetcorn

From frozen (80g)



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Cabbage

Portion (80g)



CO₂e
0.3
minutes
driving



Emissions 54 gCO₂e



Water 11 litres



Fibre 5 g



Calories 11 kCal



Protein 1 g

Cabbage

Portion (80g)



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Carrot

One, cooked (80g)

CO₂e
0.5
minutes
driving



Emissions 90 gCO₂e



Water 2 litres



Fibre 6 g



Calories 27 kCal



Protein 0 g

Carrot

One, cooked (80g)



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Tomato

Heated greenhouse (80g)



CO₂e
6
minutes
driving



Emissions 1002 gCO₂e



Water 0.8 litres



Fibre 3 g



Calories 11 kCal



Protein 0 g

Tomato

Heated greenhouse (80g)



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Tomato

Seasonal, medium (80g)



CO₂e
0.1
minutes
driving



Emissions 13 gCO₂e



Water 0.8 litres



Fibre 3 g



Calories 11 kCal



Protein 0 g

Tomato

Seasonal, medium (80g)



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Lettuce

Seasonal (30g)



CO₂e
0.3
minutes
driving



Emissions 44 gCO₂e



Water 4 litres



Fibre 1 g



Calories 3 kCal



Protein 0 g

Lettuce

Seasonal (30g)



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Avocado

One medium (80g)



CO₂e
1
minutes driving



Emissions 192 gCO₂e



Water 107 litres



Fibre 9 g



Calories 152 kCal



Protein 2 g

Avocado

One medium (80g)



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Apple

From storage, small (80g)



CO₂e
0.2
minutes
driving



Emissions 40 gCO₂e



Water 35 litres



Fibre 3 g



Calories 41 kCal



Protein 0 g

Apple

From storage, small (80g)



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Banana

Small (80g)

CO₂e
0.3
minutes
driving



Emissions 55 gCO₂e



Water 43 litres



Fibre 2 g



Calories 65 kCal



Protein 1 g

Banana

Small (80g)

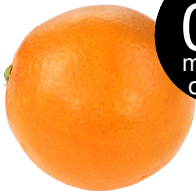


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Orange

Small (80g)



CO₂e
0.2
minutes
driving



Emissions 32 gCO₂e



Water 32 litres



Fibre 5 g



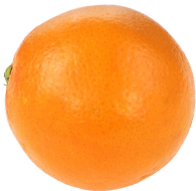
Calories 29 kCal



Protein 1 g

Orange

Small (80g)



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Raspberries

Seasonal, handful (80g)



CO₂e
1
minutes
driving



Emissions 176 gCO₂e



Water 21 litres



Fibre 0 g



Calories 0 kCal



Protein 0 g

Raspberries

Seasonal, handful (80g)



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Raspberries

By air, handful (80g)



CO₂e
3
minutes
driving



Emissions 568 gCO₂e



Water 21 litres



Fibre 0 g



Calories 0 kCal



Protein 0 g

Raspberries

By air, handful (80g)



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Strawberries

Seasonal, handful (80g)



CO₂e
1
minutes
driving



Emissions 136 gCO₂e



Water 17 litres



Fibre 3 g



Calories 24 kCal



Protein 0 g

Strawberries

Seasonal, handful (80g)



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Strawberries

By air, handful (80g)



CO₂e
2
minutes
driving



Emissions 408 gCO₂e



Water 14 litres



Fibre 3 g



Calories 24 kCal



Protein 0 g

Strawberries

By air, handful (80g)



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Orange juice

Small glass (200ml)



CO₂e
2
minutes
driving



Emissions 400 gCO₂e



Water 146 litres



Fibre 1 g



Calories 72 kCal



Protein 2 g

Orange juice

Small glass (200ml)



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Tap water

Large glass (500ml)



CO₂e
0
minutes
driving



Emissions

0

gCO₂e



Water

0.5

litres



Fibre

0

g



Calories

0

kCal



Protein

0

g

GG   T

Tap water

Large glass (500ml)



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Water

Plastic bottle (500ml)



CO₂e
0.8
minutes
driving



Emissions 136 gCO₂e



Water 0.5 litres



Fibre 0 g



Calories 0 kCal



Protein 0 g

Water

Plastic bottle (500ml)



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Fizzy drink

One can (330ml)



CO₂e
1
minutes
driving



Emissions 158 gCO₂e



Water 50 litres



Fibre 0 g



Calories 205 kCal



Protein 0 g

Fizzy drink

One can (330ml)



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Sugar

One teaspoon (6g)



CO₂e
0.1
minutes
driving



Emissions 15 gCO₂e



Water 6 litres



Fibre 0 g



Calories 24 kCal



Protein 0 g

Sugar

One teaspoon (6g)



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Milk chocolate

Small bar (25g)



CO₂e
0.5
minutes
driving



Emissions 88 gCO₂e



Water 182 litres



Fibre 1 g



Calories 130 kCal



Protein 2 g

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Milk chocolate

Small bar (25g)



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Biscuit

One plain (13g)



CO₂e
0.1
minutes
driving



Emissions 17 gCO₂e



Water 19 litres



Fibre 1 g



Calories 60 kCal



Protein 1 g

Biscuit

One plain (13g)



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Chocolate biscuit

One plain (13g)



CO₂e
0.1
minutes
driving



Emissions 23 gCO₂e



Water 40 litres



Fibre 1 g



Calories 63 kCal



Protein 1 g

Chocolate biscuit

One plain (13g)



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Crisps

Small packet (25g)



CO₂e
0.3
minutes
driving



Emissions 54 gCO₂e



Water 41 litres



Fibre 4 g



Calories 123 kCal



Protein 2 g

Crisps

Small packet (25g)



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Coffee

Cup, with tbsp milk



CO₂e
0.6
minutes
driving



Emissions 96 gCO₂e



Water 39 litres



Fibre 0 g



Calories 9 kCal



Protein 1 g

Coffee

Cup, with tbsp milk



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Latte

With 400ml milk



CO₂e
6
minutes
driving



Emissions 1024 gCO₂e



Water 503 litres



Fibre 0 g



Calories 176 kCal



Protein 14 g

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Latte

With 400ml milk



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Tea

Cup, with tbsp milk



CO₂e
0.6
minutes
driving



Emissions 94 gCO₂e



Water 9 litres



Fibre 0 g



Calories 7 kCal



Protein 1 g

Tea

Cup, with tbsp milk



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