Please take 1 paper from the jar and then

SCAN HERE



Choice

Bringing CHOICE into Environmental Education

Non Formal Education Workshop
for food sustainabiility &
communication

www.climatechoice.eu



Dr. Karachalios Ilias - National Technical Univeristy of Athens
CHOICE Ambassador

Choice

Why food choices matter

1/3 **of global human-caused greenhouse gas emissions are linked to the food system**

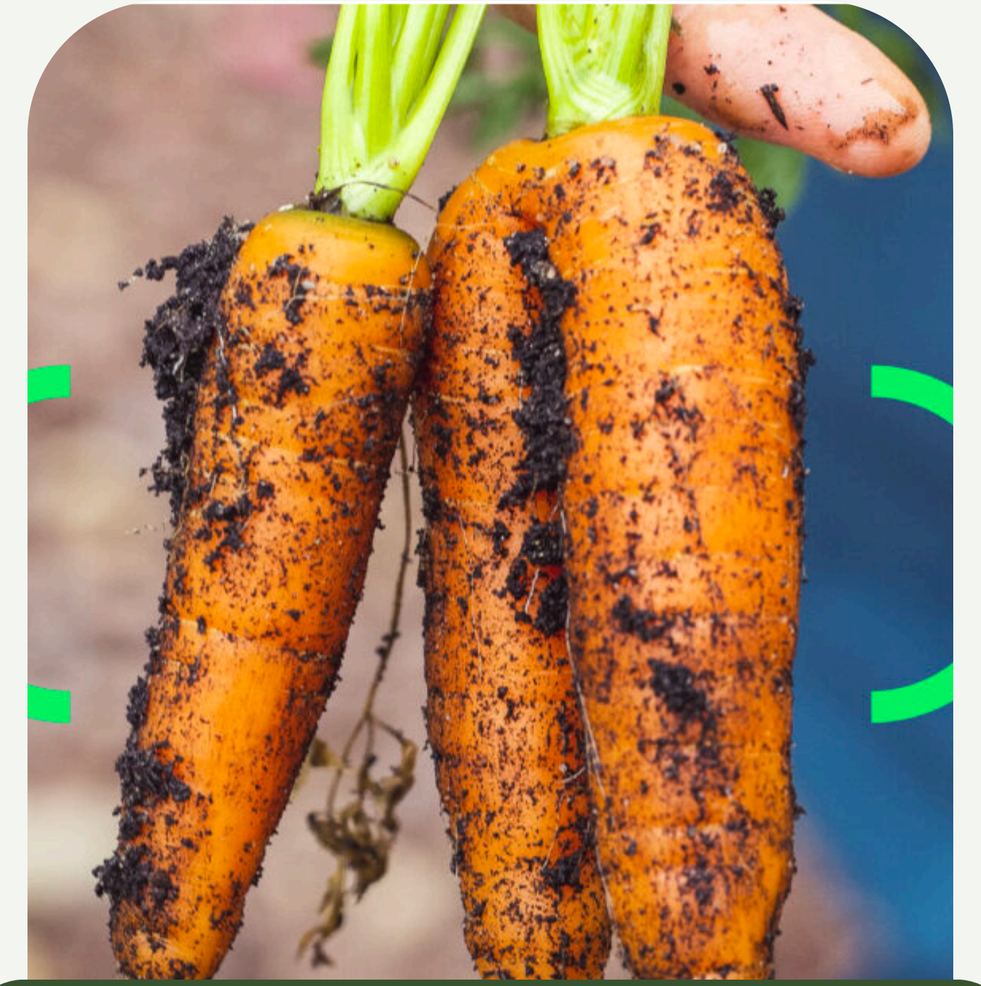
The way we produce, purchase, consume and waste food affects:

CLIMATE

BIODIVERSITY

HEALTH

FOOD SECURITY

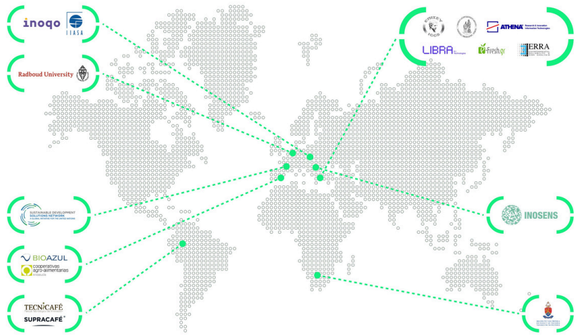


Everyday choices matter. The systems around us shape those choices.

WHAT IS CHOICE PROJECT?

An Horizon Europe project exploring how scientific knowledge, digital tools and communication can support more sustainable choices across food systems.

Choice



www.climatechoice.eu

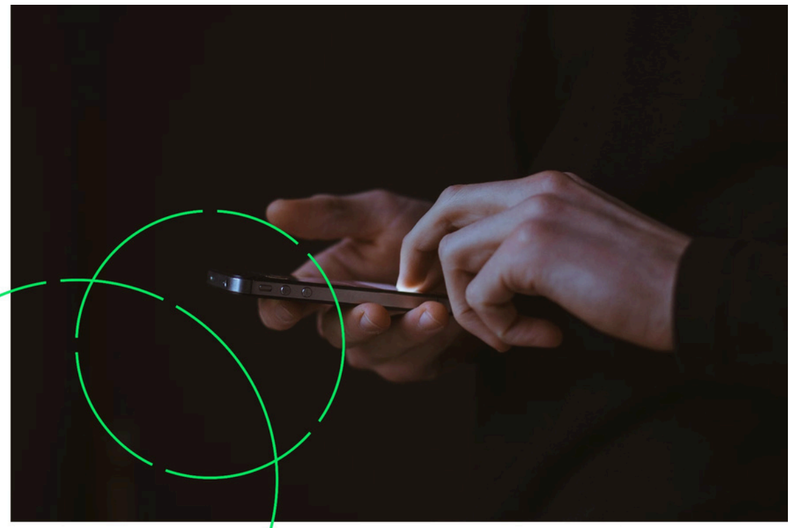
CHOICE in numbers

- 5 M€
  EU Funding
- 16 Organizations
  Partners
- 5 Global Hubs
  Pilot Campaigns
- 36 Months
  Duration
- 8 Countries
  Global Scale

Choice

CHOICE immersive tools

Facilitate engagement and "green marketing" campaigns.



01. PRODUCT IMPACT ASSESSMENT PLATFORM

Tracks grocery purchases, providing feedback on CO2 emissions and sustainability, encouraging sustainable shopping habits.

02. SHRINK YOUR FOOD WASTE APP

Tracks food expiry dates, offers preservation tips, and educates users on minimizing household food waste.

03. DATA STORYTELLING EXPLORATION

Transforms raw data into engaging narratives, combining visual and emotional elements to drive impactful climate communication and food related behavior change.

04. GAMIFICATION

Integrates immersive gameplay and narrative elements to educate and inspire climate-friendly behaviors and actions.

Choice

Priorities & campaigns

Act locally, Impact Globally

Plant-based, sustainable diets



Sustainable farming practices



Reduce food waste



Producer – Retailer – Consumer

Choice

CHOICE pilot campaigns

Five contexts, different audiences and different food-system challenges



AUSTRIA

Sustainable consumption
>1000 people



SPAIN

Sustainable farming
olive oil & livestock
>200 farmers



GREECE

sustainable food choices
>1000 people



COLOMBIA

Sustainable coffee
production
>200 farmers



SOUTH AFRICA

Sustainable food choices
>1000 young people

Campaigns and digital tools help the project examine how audiences respond to different messages.

CHOICE

Only South Africa C1 fell short

Campaign reach: target vs achievement

25 of 26 campaigns exceeded their target

Austria

GA target: >1,000 users per campaign

C1	4,754	4.75x
C2	509,856	509.9x
C3	1,300,000	1,300x
C4	1,300,000	1,300x
C5	1,427,648	1,427.6x

South Africa

GA target: >1,000 users per campaign

C1	546	0.55x
C2	1,379	1.38x
C3	1,024	1.02x
C4	1,066	1.07x
C5	1,083	1.08x

Greece

GA target: >1,000 young people per campaign

C1	3,566	3.57x
C2	122,694	122.7x
C3	113,540	113.5x
C4	109,776	109.8x
C5	108,219	108.2x

Spain - livestock

GA target: >200 farmers per campaign

C1	440	2.2x
C2	967	4.83x
C3	1,832	9.16x

3 campaigns reported

Spain - olive oil

GA target: >200 farmers per campaign

C1	1,035	5.17x
C2	642	3.21x
C3	5,648	28.2x

3 campaigns reported

Colombia

GA target: >200 farmers per campaign

C1	283	1.42x
C2	303	1.51x
C3	240	1.2x
C4	298	1.49x
C5	203	1.01x

CHOICE

— GA target: 20%

Behavioral change: target vs achievement

13 of 21 reported campaign results exceeded the 20% target

Austria

Behavioral change by campaign

C1	Not reported	-
C2	Not reported	-
C3	Not reported	-
C4	Not reported	-
C5		58.8%

South Africa

Behavioral change by campaign

C1	Not reported	-
C2		29.55%
C3		19.59%
C4		36.36%
C5		44.23%

Greece

Behavioral change by campaign

C1	11.49%
C2	20.4%
C3	9.77%
C4	23.4%
C5	-7.9%

Spain - livestock

Behavioral change by campaign

C1	57.78%
C2	11.78%
C3	146.2%

3 campaigns reported

Spain - olive oil

Behavioral change by campaign

C1	108%
C2	45.6%
C3	16.48%

3 campaigns reported

Colombia

Behavioral change by campaign

C1	28.6%
C2	25%
C3	2.11%
C4	50%
C5	7.59%

At or above target Below target 20% target marker

Source: supplied behavioral change table. Shared linear scale: -10% to 150%. Missing results are not treated as zero.

CHOICE

GA target Achieved

What we promised. What we achieved.

Grant Agreement targets compared with reported final results

Participatory labs

TARGET 15

ACHIEVED 18

+20% vs target

Campaigns

TARGET 15

ACHIEVED 16

+6.7% vs target

RCTs / A/B tests

TARGET 20

ACHIEVED 24

+20% vs target

Users reached

TARGET 15,000

ACHIEVED 5,005,151

333.7x the target

Producers reached

TARGET 2,000

ACHIEVED 11,891

5.95x the target

Behavioral change

TARGET 20%

ACHIEVED 21.2%

+1.2 percentage points

Source: corrected figures supplied by the project team; Grant Agreement not independently checked.

Each panel uses its own linear scale from zero. RCT results shown as the reported A/B test count.



WHAT WILL WE DO TODAY?











TAKE A STAND

- Read the statement on the screen.
- Stand along the line according to how strongly you agree or disagree.
- Be ready to briefly explain your position.
- Listen to different perspectives.
- You may change your position at any time.

There are no right or wrong answers.

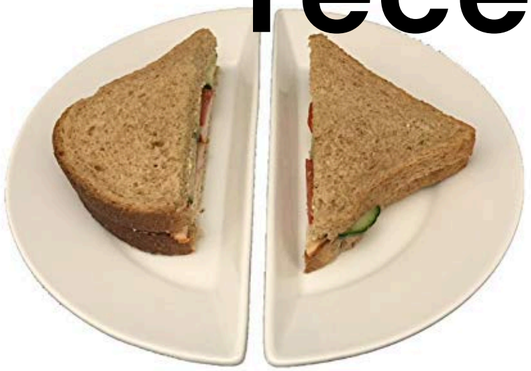
AGREE

OR

DISAGREE

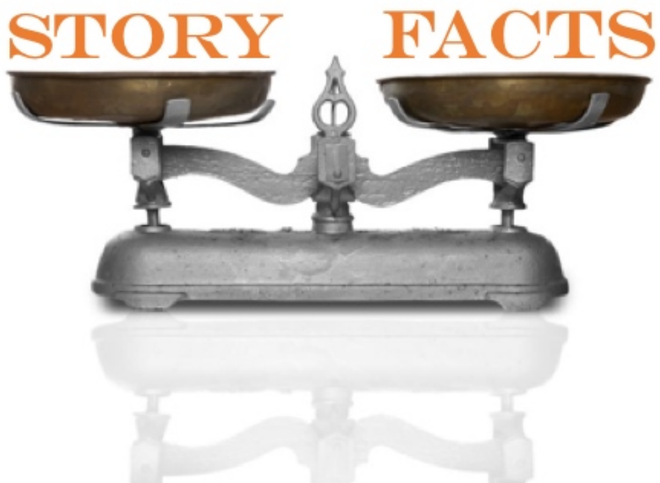


Restaurants should serve smaller portions by default, even if customers feel they receive less value for money.



Agree / Disagree?

Facts are more persuasive than personal stories in sustainability communication.



Agree / Disagree?

A strong sustainability message should create concern, even if it makes the audience uncomfortable.



Agree / Disagree?

Choice

OPEN CAFE







OPEN CAFE

- At each table, compare Campaign A and Campaign B.
- Discuss which campaign you consider more effective and why.
- Vote for A or B at the end of each round.
- You will participate in 2 rounds and move to a new table after Round 1.
- One participant remains at each table as the recorder.
- The recorder does not join or influence the discussion.
- The recorder notes the group's choice and main reasons in each round.
- After both rounds, we return to the plenary.
- Each recorder presents which campaign was preferred and why.


Choice
CAMPAIGNS & AB TESTING
www.climatechoice.eu

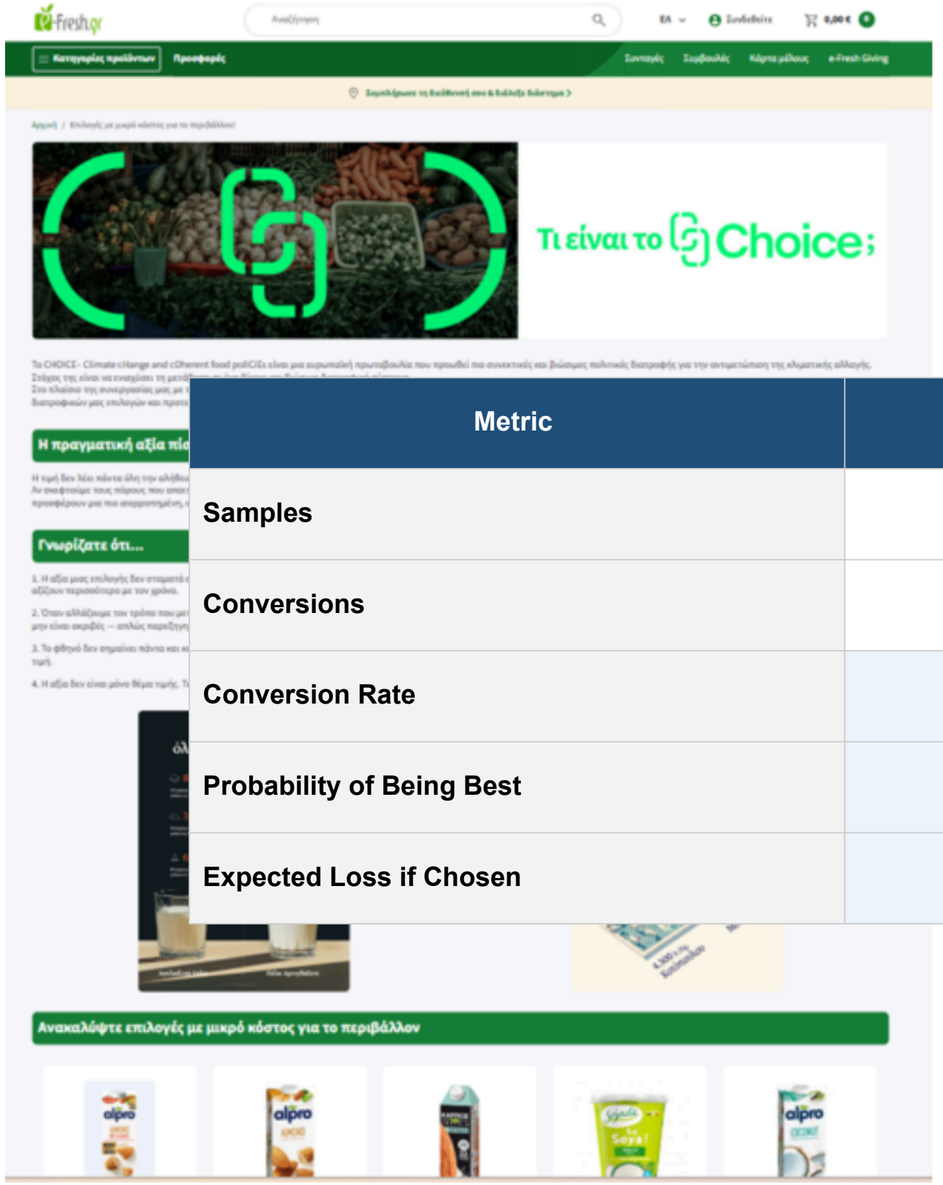
A. Price doesn't always determine value



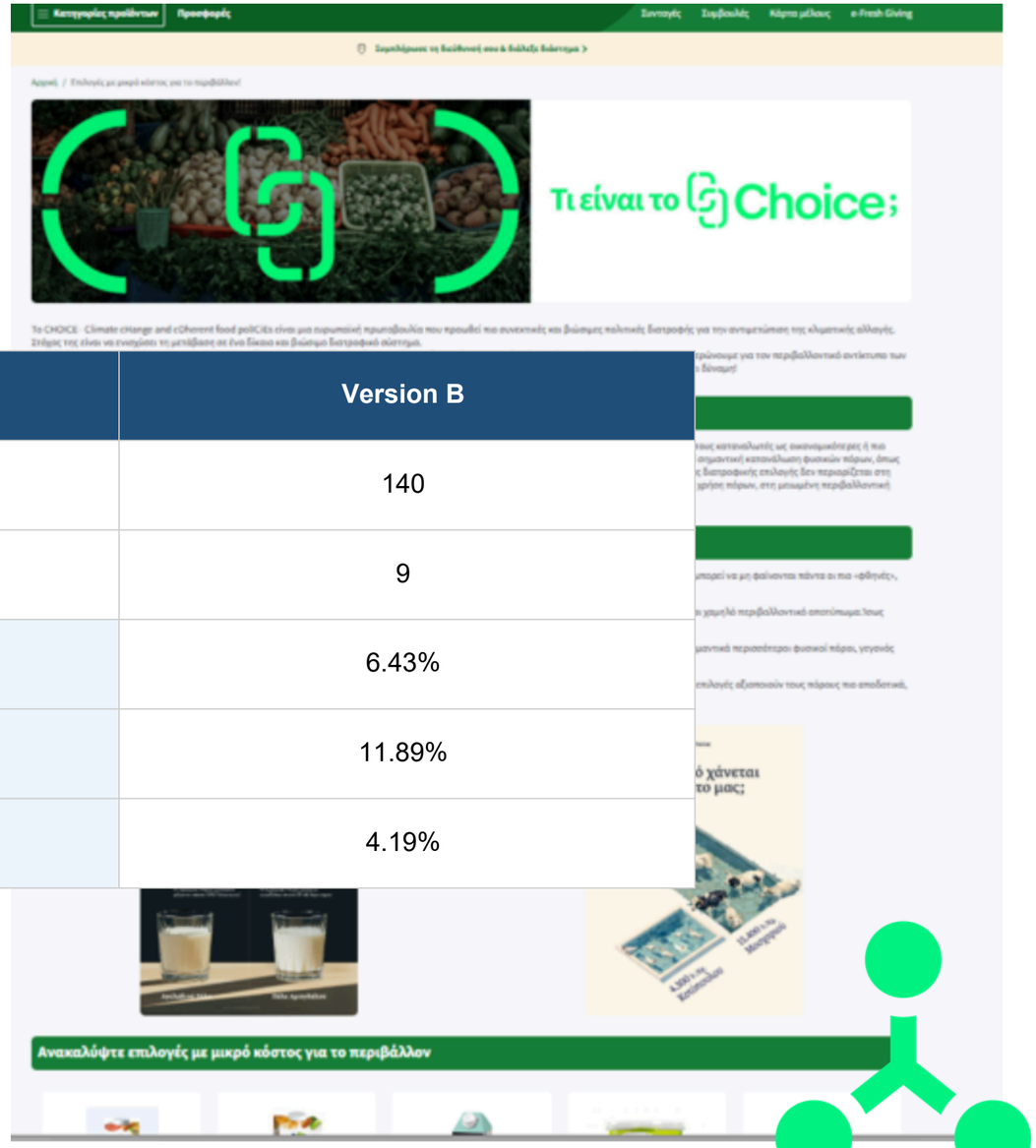
B. The real value behind your choice



A. Price doesn’t always determine value



B. The real value behind your choice



Metric	Version A	Version B
Samples	134	140
Conversions	14	9
Conversion Rate	**10.45%**	6.43%
Probability of Being Best	**88.11%**	11.89%
Expected Loss if Chosen	**0.20%**	4.19%

A.



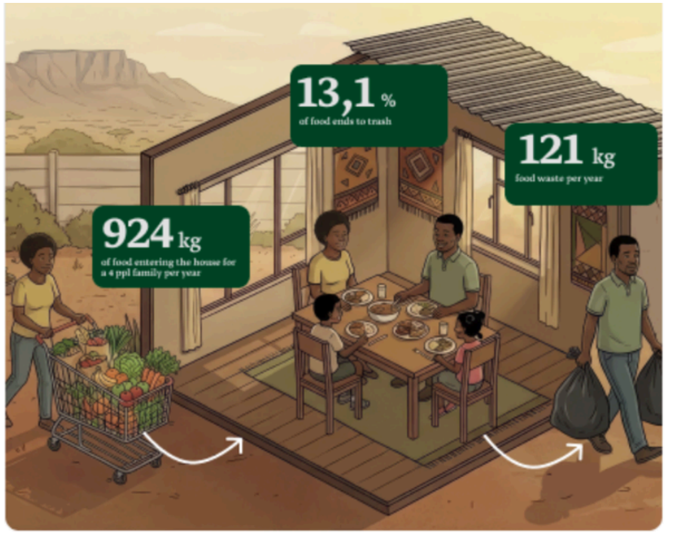
The fruits and vegetables paradox in South Africa

We only eat 20% of the fruits and vegetables we need to stay healthy and from this small amount, we waste another 20%. There's already not enough fruits and vegetables on our plates while too much ends up in the bin. Meanwhile 1 in 4 South African households live with hunger. That's wasted food, wasted nutrition, and wasted resources, in a country that needs every bite.

Waste nothing, rather fuel your body not the bin.

Source: World Wide Fund for Nature (WWF), 2017
Council for Scientific and Industrial Research [CSIR], 2021

B.



Did You Know: The food you waste costs energy to produce?

A family of four wastes 121 kg of food every year. Across South Africa, that's 1,875,000 tonnes of food waste. Producing this food burned enough energy to provide electricity for Joburg for 20 days. Reducing waste means respecting the food that fuels you and the electricity behind its journey.

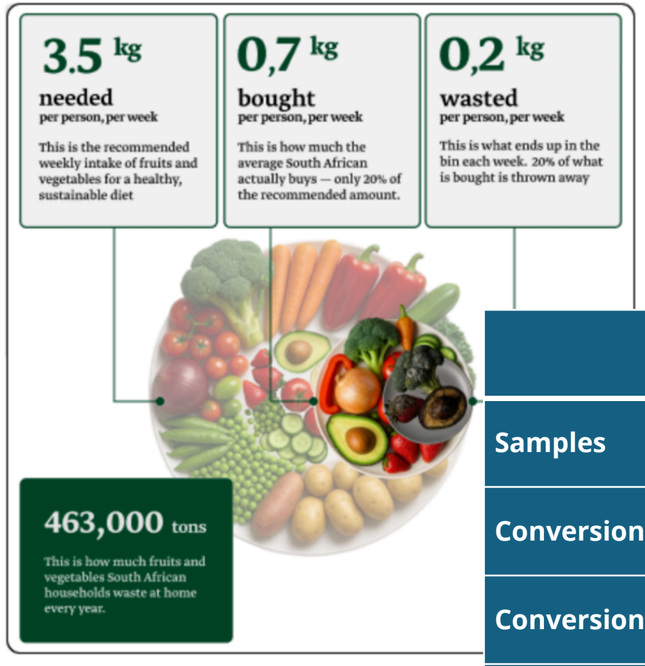
Don't waste your food. Make the energy count.

Source: World Wide Fund for Nature (WWF), 2017
Council for Scientific and Industrial Research [CSIR], 2021

Survey Code

SA 1

A.



Metric	Variation A	Variation B
Samples	510	464
Conversions	460	410
Conversion Rate	90.20%	88.36%
Probability of Being Best	82.27%	17.73%
Expected Loss if Chosen	0.19%	2.03%

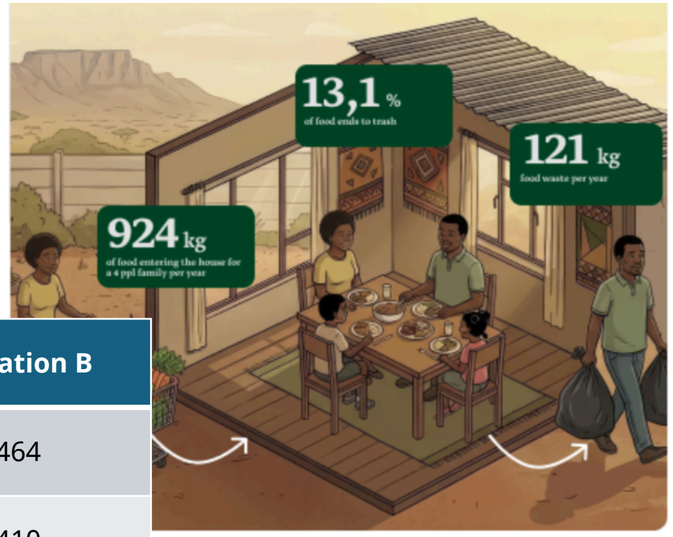
The fruits and veget… paradox in South A…

We only eat 20% of the fruits and vegetables we need to stay healthy and from this small amount, we waste another 20%. There's already not enough fruits and vegetables on our plates while too much ends up in the bin. Meanwhile 1 in 4 South African households live with hunger. That's wasted food, wasted nutrition, and wasted resources, in a country that needs every bite.

Waste nothing, rather fuel your body not the bin.

Source: World Wide Fund for Nature (WWF), 2017
Council for Scientific and Industrial Research [CSIR], 2021

B.



…ou Know: The food …waste costs energy to produce?

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Don't waste your food. Make the energy count.

Source: World Wide Fund for Nature (WWF), 2017
Council for Scientific and Industrial Research [CSIR], 2021

Survey Code

A.


12:29
UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
HERITAGE MEETS TODAY
GOGO'S COOKING - WHERE THERE ARE MEMORIES IN EVERY BITE
WOULD YOU RECREATE YOUR GOGO'S RECIPES & MAKE THEM YOUR OWN?
#AmadomboloMeetsAirfyer
Her recipe. Your twist. Our future.
Would you like to participate in a short survey (just 3 quick

B.


12:29
UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
LESS WATER NEEDED THRIVES IN DRY CONDITIONS
SORGHUM IS RICH IN BIOACTIVE COMPOUNDS
SORGHUM IS A NUTRIENT-DENSE WHOLE GRAIN
WHAT HAPPENS WHEN YOU SWAP MAIZE FOR SOGHUM?
REDUCES CHRONIC DISEASES AS FOCUSED ON POLYPHENOLS AND ENDOSPERM DIGESTION
FIFTH MOST SIGNIFICANT CARBOHYDRATE-RICH CROP IN THE WORLD
CHOOSING SOGHUM PROMOTES SUSTAINABLE LOCAL FOOD SYSTEMS
Would you like to participate in a short survey (just 3 quick

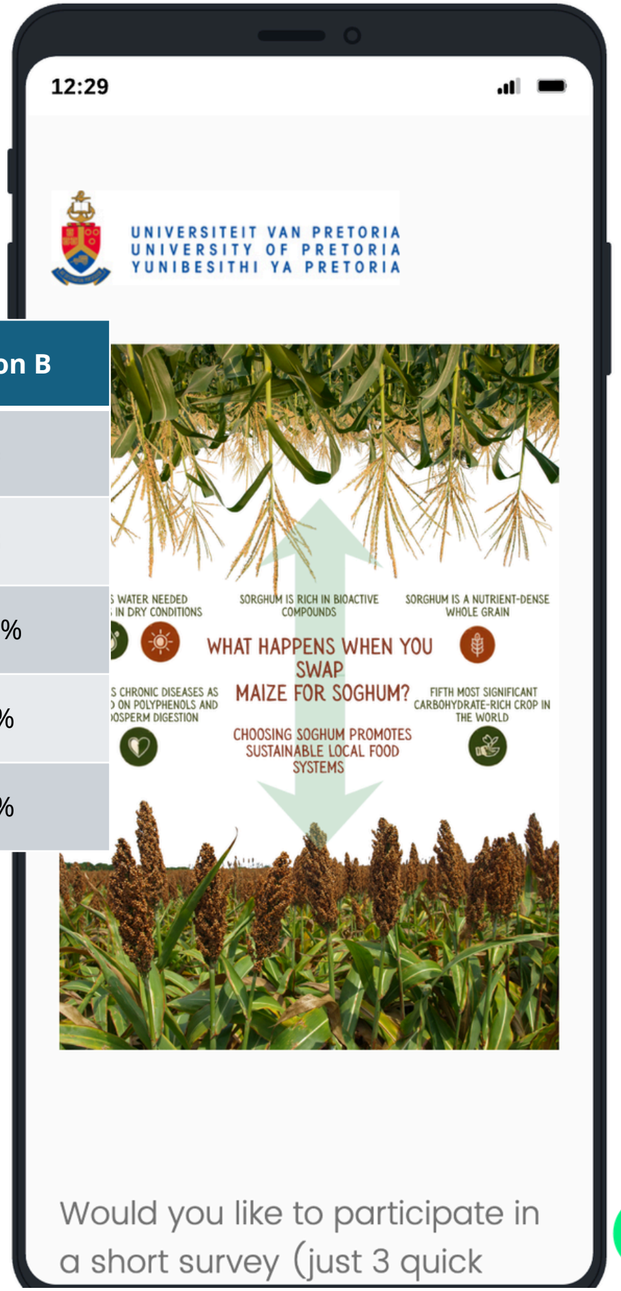
SA 2

A.



Metric	Variation A	Variation B
Samples	508	516
Conversions	489	473
Conversion Rate	96.26%	91.67%
Probability of Being Best	99.90%	0.10%
Expected Loss if Chosen	0.00%	4.57%

B.

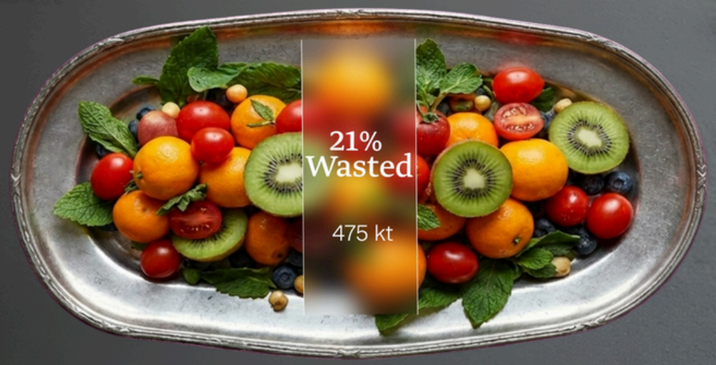


A.

Choice

Did you know you can grow your own food from scraps?

Fruits and vegetables are among the most wasted foods in South Africa. Each year, **2,261 kt** of them enter South African homes, and nearly **475 kt** is discarded.



Don't waste your scraps.
Regrow them.



Place scraps in water | Let roots grow | Transfer to soil

Save food. Save money. Grow your own.

Source: Council for Scientific and Industrial Research [CSIR], 2021

B.

Did you know you can grow your own food from scraps?

Fruits and vegetables are among the most wasted foods in South Africa. Each year, around 21% of the fruits and vegetables entering our homes ends up in the bin.



2,261 kt entering homes → **475 kt** discarded

Don't waste your scraps. Regrow them at home.



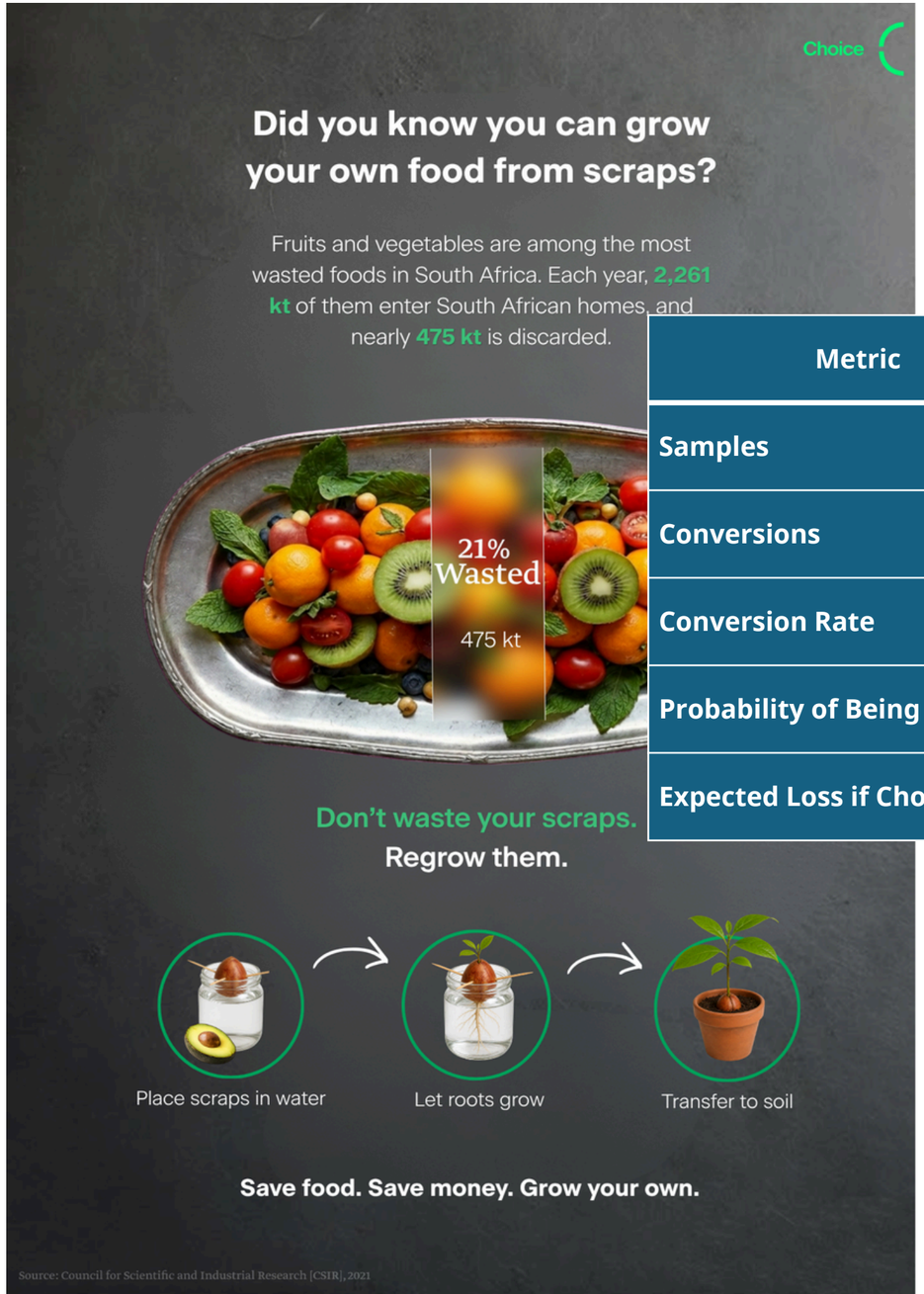
Place scraps in water | Let roots grow | Transfer to soil

Save food. Save money. Grow your own.

Source: Council for Scientific and Industrial Research [CSIR], 2021

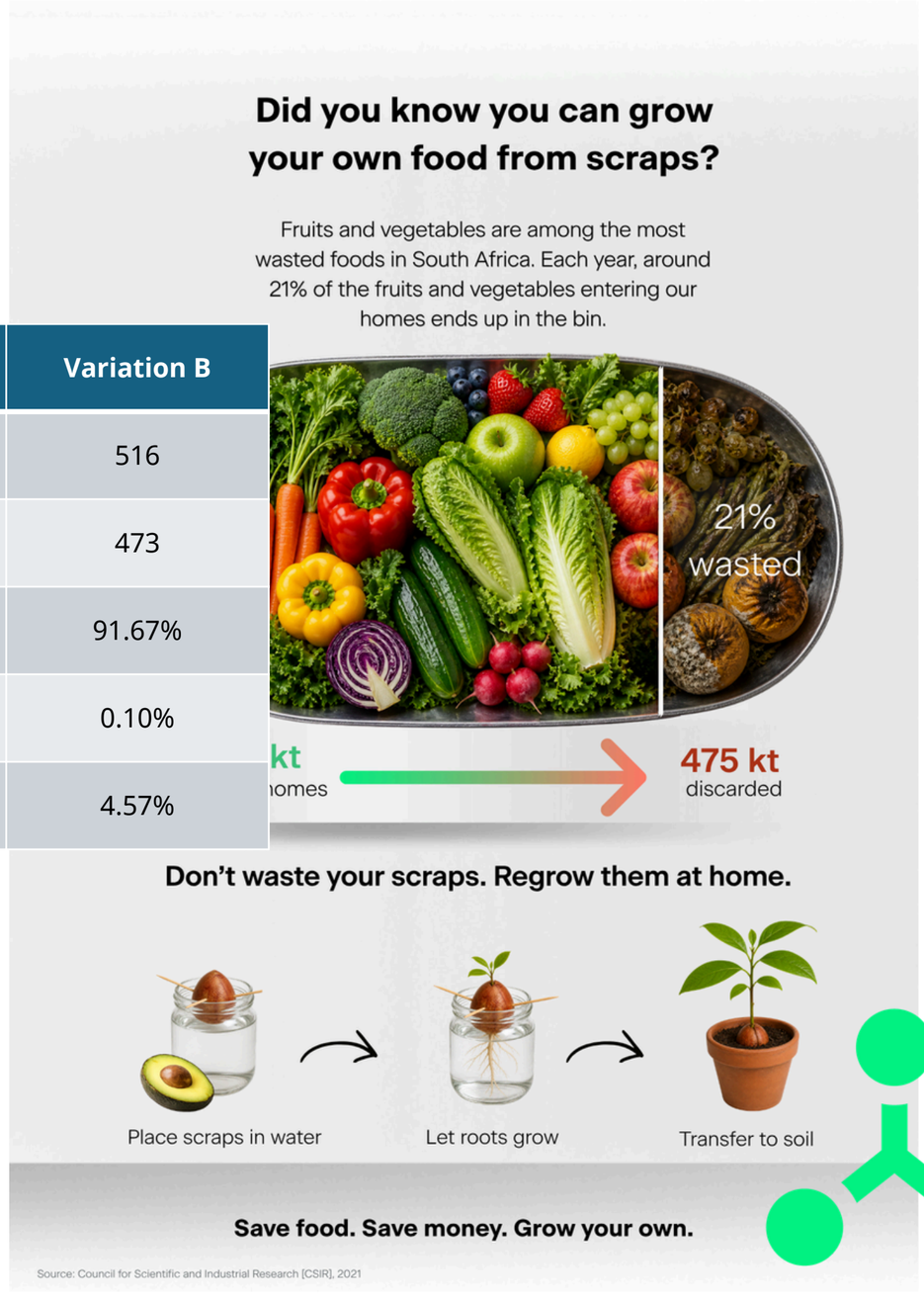
SA 3

A.

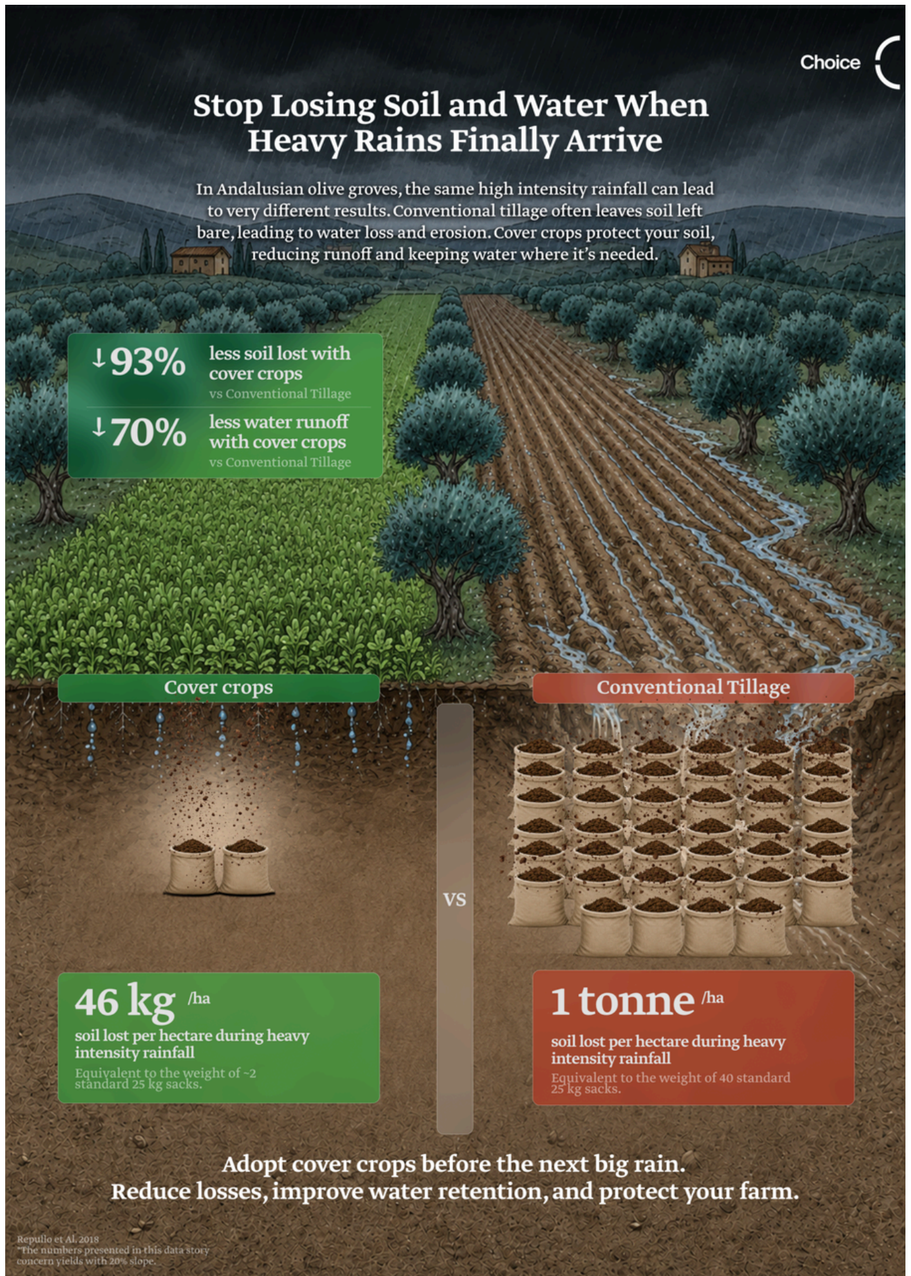


Metric	Variation A	Variation B
Samples	508	516
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Conversion Rate	96.26%	91.67%
Probability of Being Best	99.90%	0.10%
Expected Loss if Chosen	0.00%	4.57%

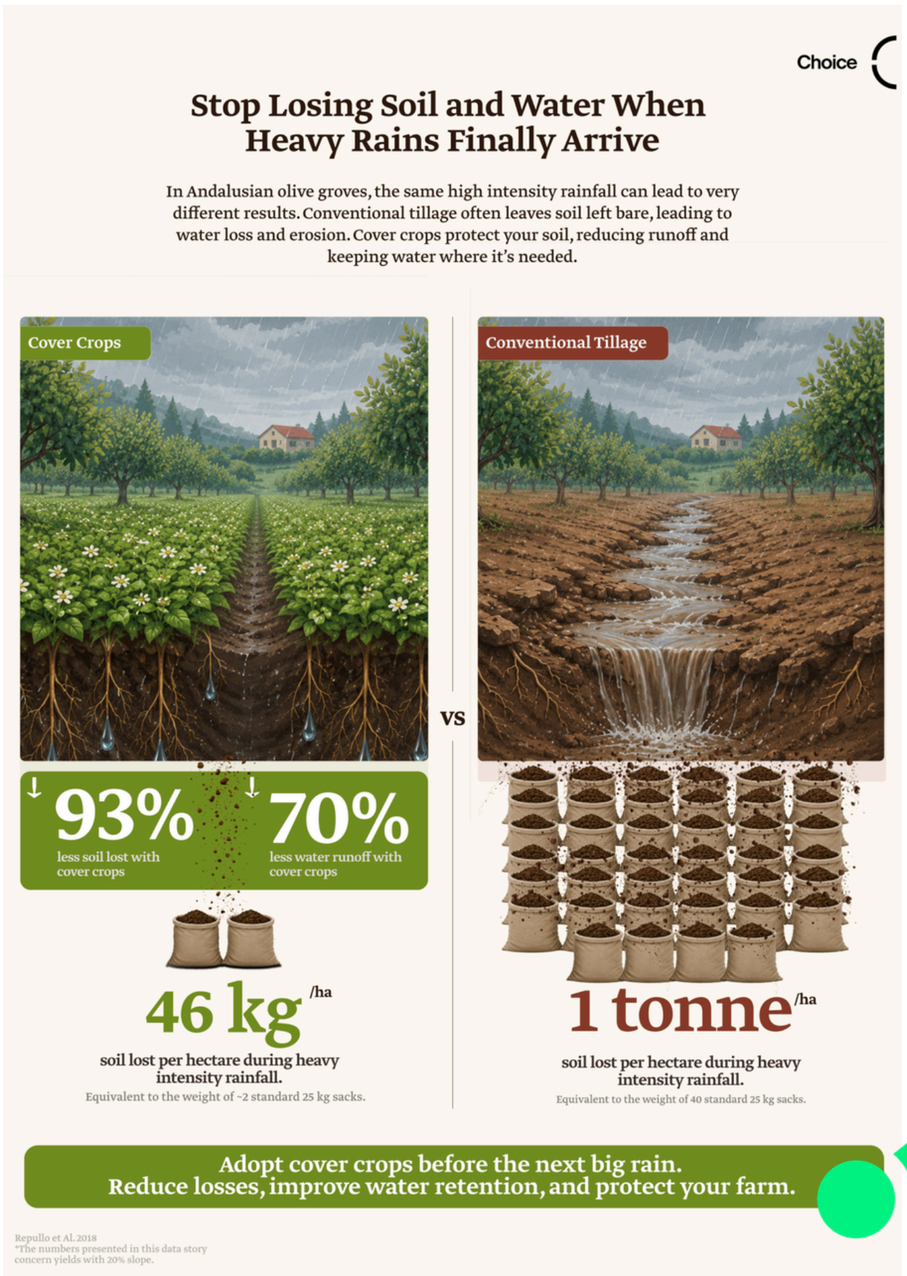
B.



A.


Choice
Stop Losing Soil and Water When Heavy Rains Finally Arrive
In Andalusian olive groves, the same high intensity rainfall can lead to very different results. Conventional tillage often leaves soil left bare, leading to water loss and erosion. Cover crops protect your soil, reducing runoff and keeping water where it's needed.
↓93% less soil lost with cover crops vs Conventional Tillage
↓70% less water runoff with cover crops vs Conventional Tillage
Cover crops
Conventional Tillage
VS
46 kg /ha
soil lost per hectare during heavy intensity rainfall
Equivalent to the weight of ~2 standard 25 kg sacks.
1 tonne /ha
soil lost per hectare during heavy intensity rainfall
Equivalent to the weight of 40 standard 25 kg sacks.
Adopt cover crops before the next big rain.
Reduce losses, improve water retention, and protect your farm.
Repullo et Al. 2018
*The numbers presented in this data story concern yields with 20% slope.

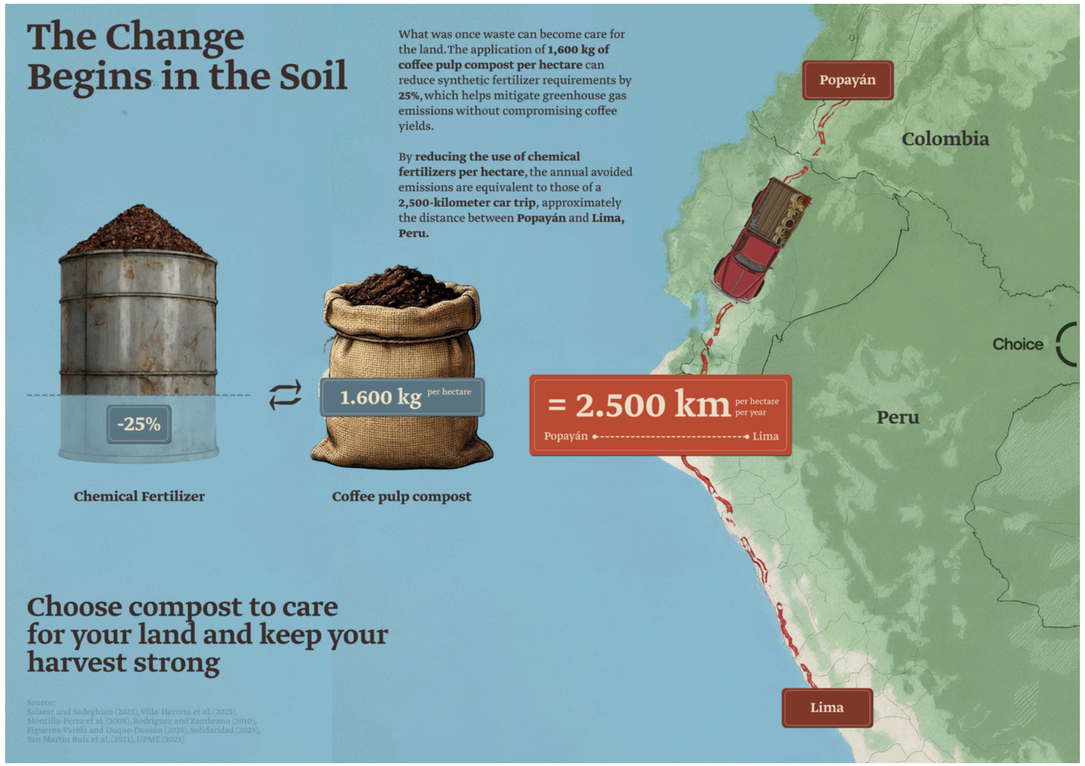
B.


Choice
Stop Losing Soil and Water When Heavy Rains Finally Arrive
In Andalusian olive groves, the same high intensity rainfall can lead to very different results. Conventional tillage often leaves soil left bare, leading to water loss and erosion. Cover crops protect your soil, reducing runoff and keeping water where it's needed.
Cover Crops
Conventional Tillage
VS
↓93% less soil lost with cover crops
↓70% less water runoff with cover crops
46 kg /ha
soil lost per hectare during heavy intensity rainfall.
Equivalent to the weight of ~2 standard 25 kg sacks.
1 tonne /ha
soil lost per hectare during heavy intensity rainfall.
Equivalent to the weight of 40 standard 25 kg sacks.
Adopt cover crops before the next big rain.
Reduce losses, improve water retention, and protect your farm.
Repullo et Al. 2018
*The numbers presented in this data story concern yields with 20% slope.

A.

B.


From Waste to Stronger Plants
The honey water generated from the production of 30 cups of coffee carries an organic pollution load equal to one person's daily metabolic waste.
30 cups of coffee
Organic pollution equivalent to the daily human metabolic waste load of one person
Honey water
When honey water is treated and converted into fertilizer, its application to nursery plants can result in increases of...
Biol fertilizer
Plan Height
+38%
Total Leaf Area
+60%
Stem Diameter
+15%
Total Leaf Area 520cm²
Height 30,2cm
Stem diameter 4,9cm
Total Leaf Area 831cm²
Height 41,6cm
Stem diameter 5,6cm
Without Biol fertilizer
With Biol fertilizer
Turn coffee waste into new life for your plants and soil.
Source:
Zuluaga and Zambrano (1993) ,
TECNICAFÉ (2022), Ferrás Negrín et al. (2023)
Choice


The Change Begins in the Soil
What was once waste can become care for the land. The application of 1,600 kg of coffee pulp compost per hectare can reduce synthetic fertilizer requirements by 25%, which helps mitigate greenhouse gas emissions without compromising coffee yields.
By reducing the use of chemical fertilizers per hectare, the annual avoided emissions are equivalent to those of a 2,500-kilometer car trip, approximately the distance between Popayán and Lima, Peru.
-25%
Chemical Fertilizer
1.600 kg per hectare
Coffee pulp compost
= 2.500 km per hectare per year
Popayán
Lima
Popayán
Colombia
Peru
Choice
Choose compost to care for your land and keep your harvest strong
Source:
Salazar and Sadeghian (2023); Villa-Herrera et al. (2025), Montilla-Perez et al. (2008), Rodriguez and Zambrano (2016), Figueroa-Varela and Duque-Dussán (2025), Solidaridad (2023), San Martín Ruiz et al. (2021), UPME (2023)

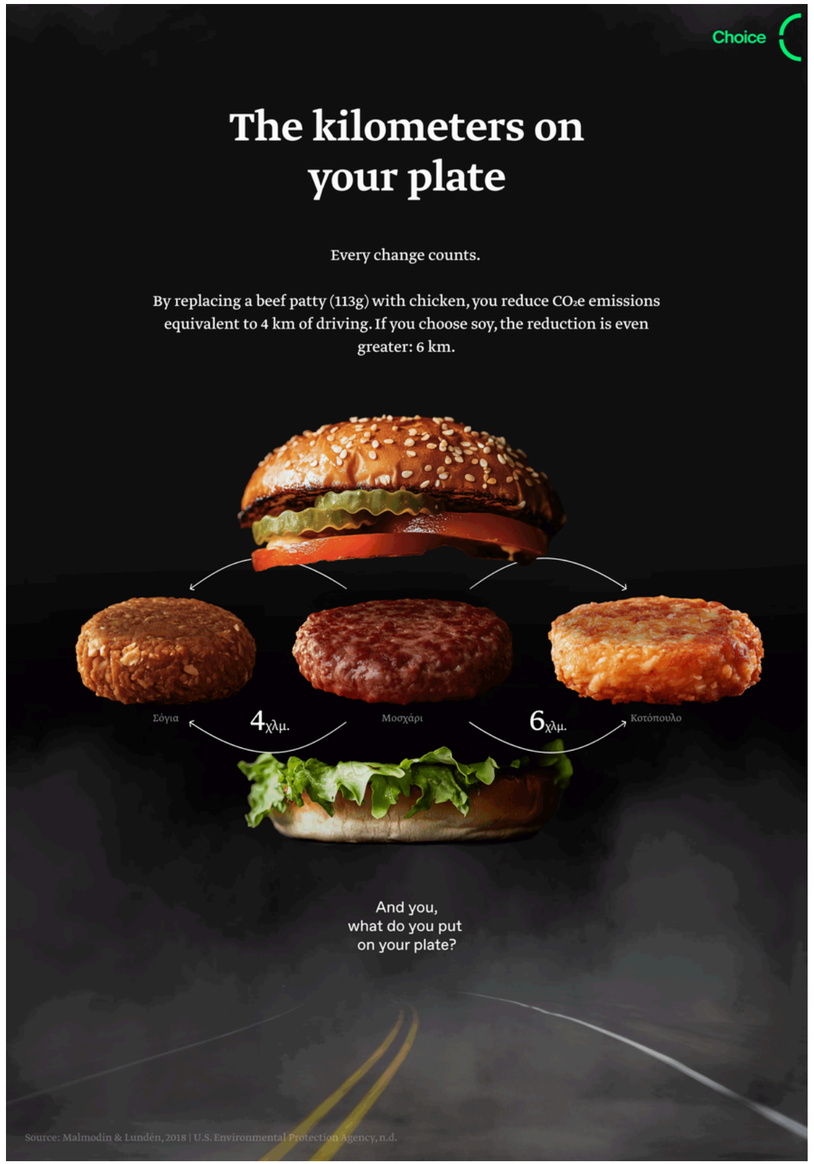
A.


Choice
How many phones does your milk charge?
The milk you drink is not as innocent as you think.
Producing 1 glass of cow's milk emits as much CO_2e as 64 smartphone charges*. Producing 1 glass of almond milk emits the equivalent of 14 charges (4.5 times less).
64 Mobile Phones
14 Mobile Phones
Dairy milk
Almond milk
And you, what kind of milk are you having?
Source: | EPA Greenhouse Gas Equivalencies Calculator
*The data were derived from a vast range of farms, processors, packaging types, and retailers, covering five key environmental indicators.

B.


Choice
Which one actually costs more?
On the shelf, dairy milk costs less than almond milk. For Earth, the production of 2 liters of dairy milk has a much higher cost than the production of 1 liter of almond milk*.
8,95 m²
Producing 1 liter of dairy milk requires 8.95 m² of land.
0,5 m²
Producing 1 liter of almond milk requires 0.5 m² of land.
3,15 kg CO_2e
The production of 1 liter of cow's milk emits 3.15 kg of CO_2e.
0,7 kg CO_2e
Producing 1 liter of almond milk emits 0.7kg of CO_2e.
628,2 lt.
Producing 1 liter of cow's milk requires 628.2 liters of water.
371,46 lt.
Producing 1 liter of almond milk requires 371.46 liters of water.
*The data were derived from a vast range of farms, processors, packaging types, and retailers, covering five key environmental indicators.
Cow Milk
Almond Milk
Source: Poore & Nemecek, 2018

A.



Same info
different message

B.



A.


*The data were derived from a vast range of farms, processors, packaging types, and retailers, covering five key environmental indicators.
Choice
3,15 CO₂e
0,7 CO₂e
Dairy milk
Almond milk
What kind of milk is in your glass?
The Earth is concerned about the origin of your milk. Producing 1 liter of dairy milk emits 3.15 kg of CO₂e*, while almond milk emits just 0.7 kg.
Source: Poore, J., & Nemecek, T. (2018).
Small choices add up to big change. Change your dairy milk to an alternative and reduce CO2e by 4.5 times. Every little bit matters.

B.

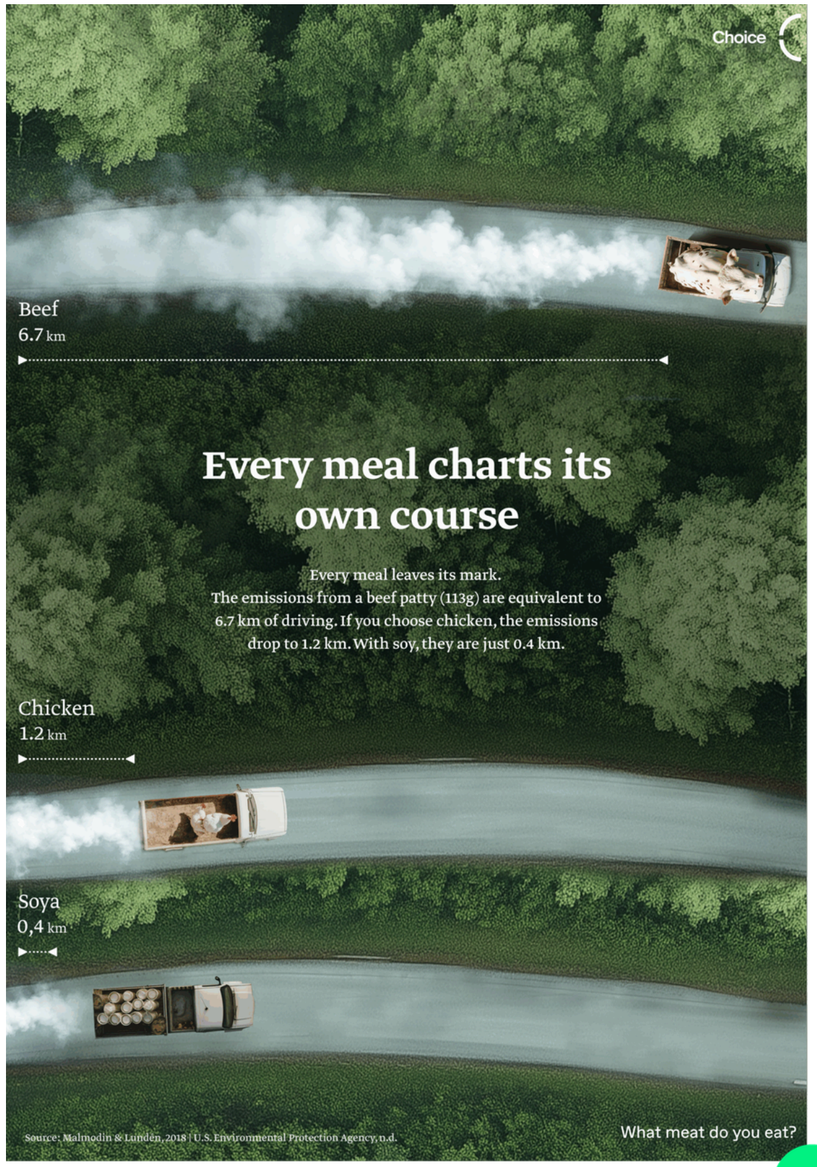

Choice
How polluting is dairy milk?
The milk you drink each week has a bigger environmental impact than you might think.
23 cars driving for 1 kilometer emit as much CO₂e as the production of 7 glasses of dairy milk*. Almond milk emits 4.5 times less CO₂e.
23 Cars
5 Cars
And you, what kind of milk do you have?
Dairy milk
Almond milk
Source: Poore, J., & Nemecek, T. (2018). | EPA Greenhouse Gas Equivalencies Calculator
*The data were derived from a vast range of farms, processors, packaging types, and retailers, covering five key environmental indicators.

A.



Same message different graphic

B.

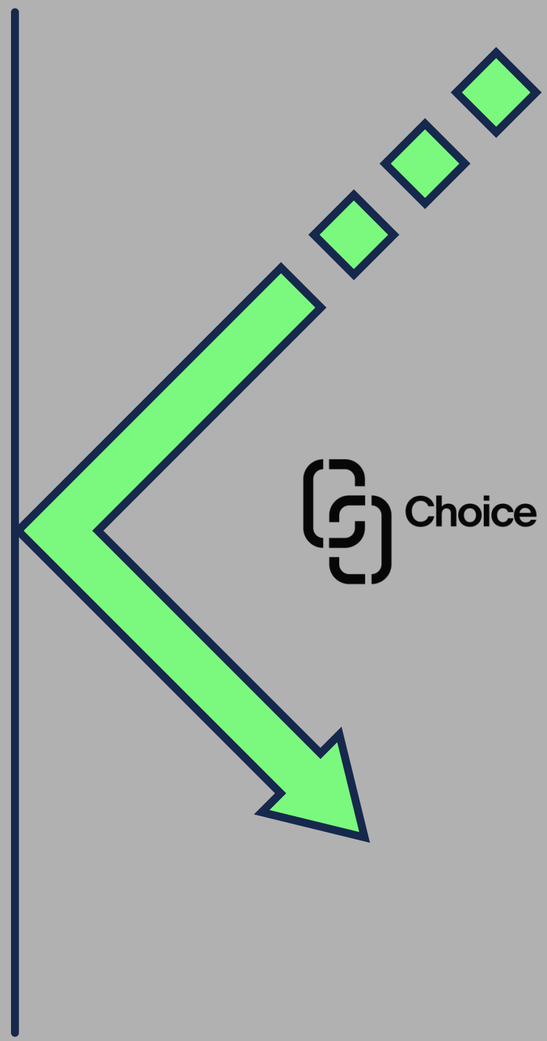


Choice

What did the comparisons show?



The MORE you REFLECT the MORE you LEARN



REFLECTION 1 - THINK DIFFERENTLY

Choice

What changed in the way you think today?

1. Think quietly for 1 minute.
2. Share your thoughts with the person next to you for 2 minutes.
3. Be ready to share one key insight with the group.

Listen, compare and build on each other's ideas.

REFLECTION 2 - APPLY THE LEARNING

Choice

What would you adapt before using a sustainability campaign with your learners or community?

1. Discuss the question in groups of 4.
2. Consider the audience, language, message, emotion and call to action.
3. Agree on one important adaptation.
4. Select one person to share it with the group.

You have 3 minutes.

REFLECTION 3 - COMMIT TO ACTION

Choice

What is one realistic action you could take during the next 14 days?

1. Write down one specific and achievable action.
2. Share it with the person next to you.
3. Keep your answer or take a photo of it.
4. Be ready to share your commitment, if you wish.

Small actions become meaningful when they are specific and achievable.

SCAN HERE




Best
DAY
ever!



Follow-up Questionnaire

TWO WEEKS AFTER THE WORKSHOP

You will receive a short follow-up questionnaire by email.
Please enter the same anonymous participant code you used today.
This allows us to compare your answers over time without identifying you.
The questionnaire includes a few questions similar to those you answered today.
Your participation remains voluntary and your responses remain anonymous.

Please keep your participant code and complete the questionnaire when you receive it.



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Sustainable Eating

THANK YOU!

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