

## Join the global movement

#### Imperial College London













FoodTech HUB Latam

















#### **Global Consumer Trends for Food & Drink** in a Turbulent World

Dr. David Hughes

**Emeritus Professor of Food Marketing** 

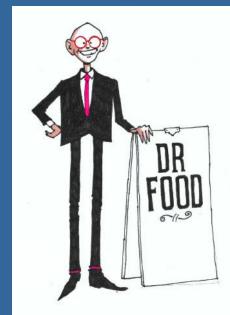


**Aarhus City Hall** Aarhus, Denmark Wednesday, September 27th, 2023



@profdavidhughes

www.supermarketsinyourpocket.com



#### We are Living in Particularly Turbulent Times which are, likely, the New Normal!

### unprecedented

**Definition:** 

never done or known before.

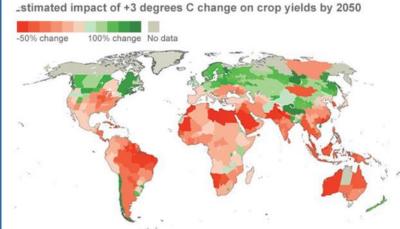
/n'presidentid/









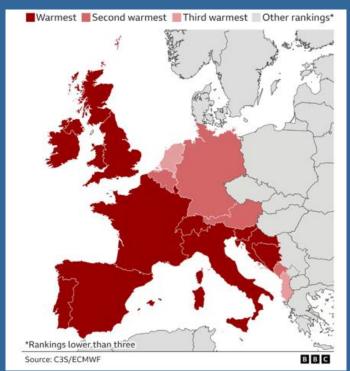








#### Twelve European countries broke temperature records in 2022



Soaring temperatures to record rainfall: Asia reels as climate crisis takes hold

July 17th, 2023

Typhoon floods China's northeastern crops in latest blow to global grain supplies

August 8th, 2023

El Niño planet-warming weather phase has begun

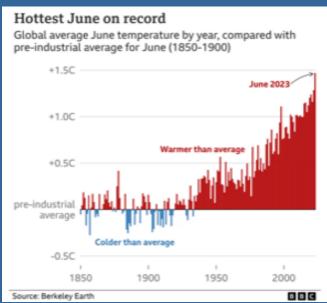


Tackling climate change needs a rapid transformation of the way our world works, travels, eats and uses energy, according to an important UN review.

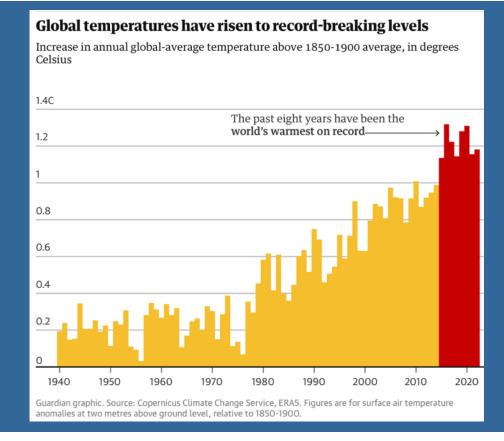
September 8th, 2023

#### Ocean heat record broken, with grim implications for the planet August 4th, 2023





## Global temperatures in 2023 set to be among hottest on record



Sea level rise accelerates, European glacier melt shatters records,

US scientists confirmed that El Niño had started. Experts say it will likely make 2024 the world's hottest year.

Imperial College London



#### Food security is back on EU leaders' menu with a global flavour

## Countries are Increasingly Concerned About Their Food Security

## UK sleepwalking into food supply crisis, says farming union December 6th, 2022



'Tsunami of need' - UK's biggest food bank network launches emergency appeal October 20th, 2022



Yes, we have no tomatoes: Why shelves are emptying in UK stores

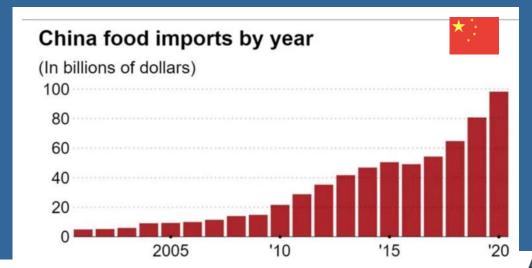
February 2023

Rabobank analysis forecasts "eggflation" to remain high in 2023 Canada is facing a dangerous food insecurity crisis



Nearly 6 million people in Canada experienced

food insecurity in 2021,



Lack of fertiliser and CO2 gas selfsufficiency a risk to food security



India's ban on rice exports raises fear of global food price rises

July 27th, 2023



Argentina keeps beef export ban in place until 2024 January 2023

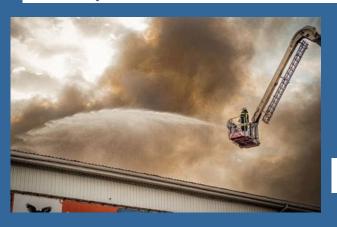
Imperial College

#### It Ain't Over 'til it's Over!\*

Russia halts grain deal in what UN calls blow to needy people everywhere

July 18-20th, 2023

Kyiv says Russia targets grain infrastructure with strikes on Ukraine's Odesa port





Russia destroys 60,000 tonnes of grain in Black Sea missile strike

Cereal crops and other commodities including olives and tomatoes hit by Europe's heatwave

July 27th, 2023

Quality worries in Europe as rain stalls harvest

August 4th, 2023

## India's ban on rice exports raises fear of global food price rises July 20th, 2023

Attempt to curb domestic inflation behind country's decision on non-basmati white rice



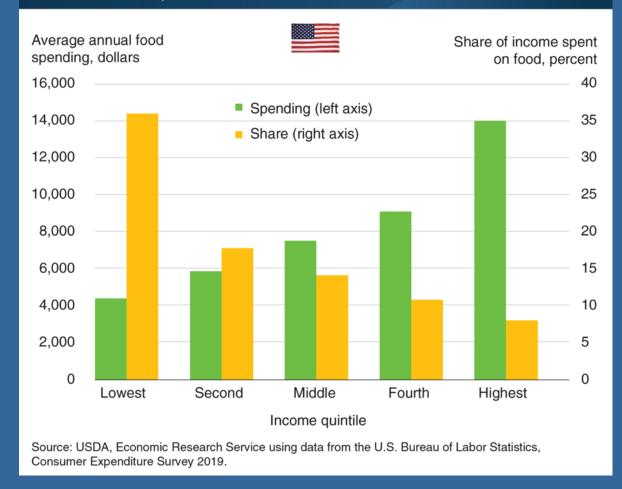


The Global Risks Report 2023 18th Edition "... predicts persistent polycrises of food, energy & fertilizer shortages during the next 2 years ... food system failures are unavoidable and society can expect further food price spikes as the cost of living crisis continues".



#### Food spending and share of income spent on food by U.S. households, 2019

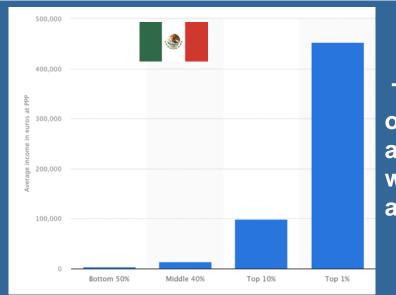




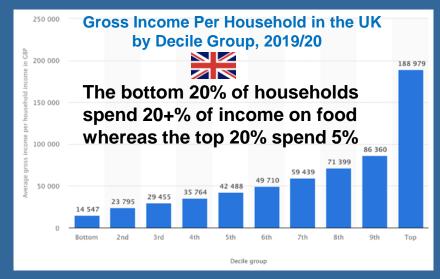
The Lowest 20% of Households
Spend 37% of Their Income on
Food Whereas the Top 20%
Spend 7% of Their Income on Food

#### The "Haves" and "Have Nots"

Average income in Mexico in 2021, by income percentile



The top 10% of households are comfortable whereas 90% are in trouble!





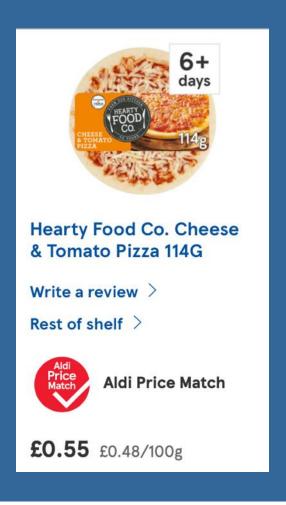
#### **How Low Can You Go?!**

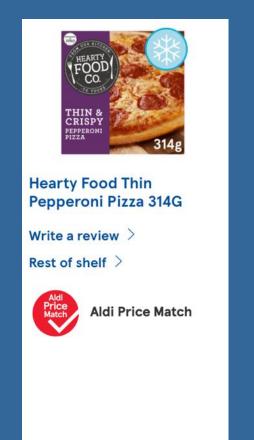


Hard Discounters, Aldi and Lidl, Drive Ferocious Retail Food Price War in UK. Cost-of-Living Crisis is Causing Economic, Social & Political Crises Worldwide!

A Pizza for <€/\$1?!



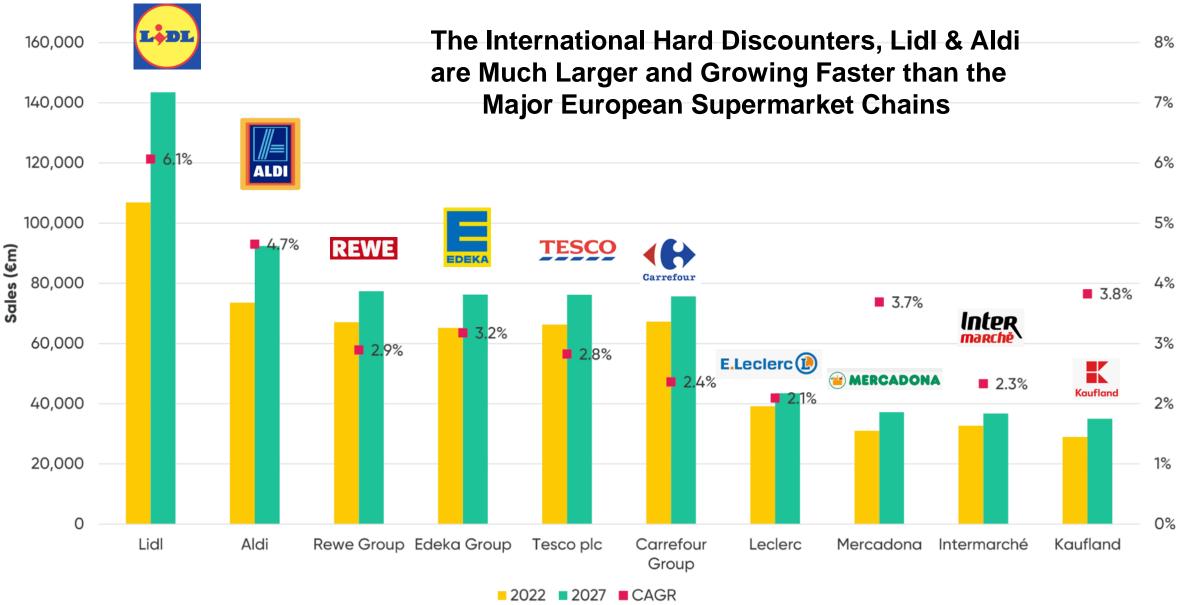






£0.90 £0.29/100g

#### Europe's top 10 grocery retailers: sales growth 2022-27





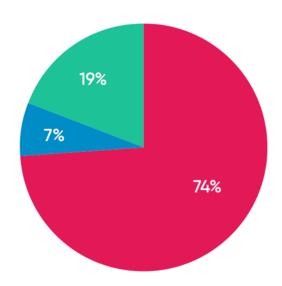


#### Data at a glance

## IGD

Source: IGD Research, May 2023, Base: 997 GB shoppers, balanced sample

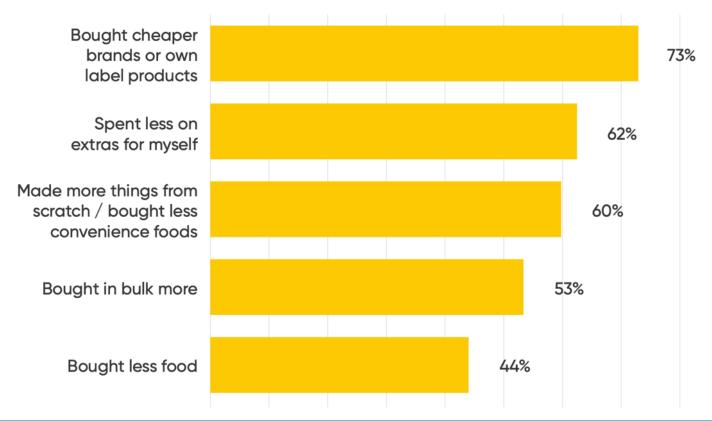
#### Changes in shopping choices



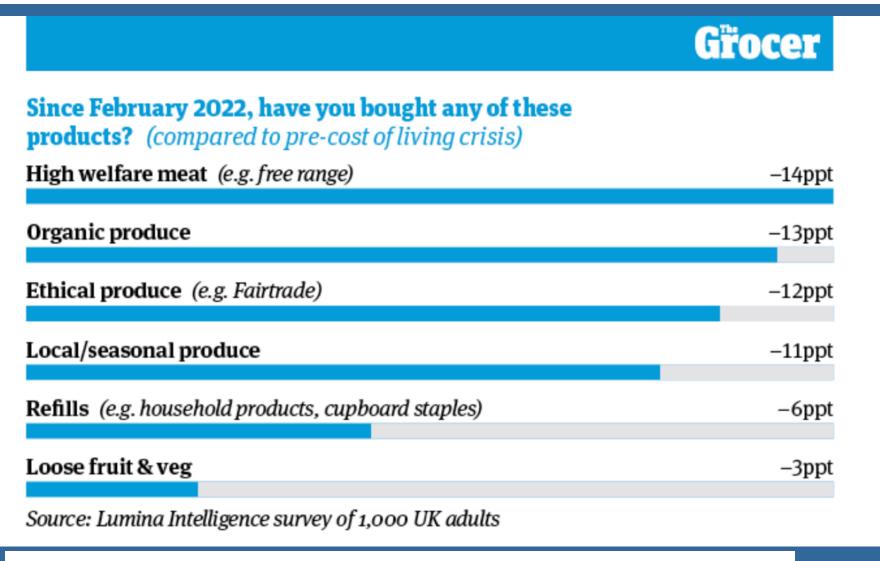
- The cost-of-living crisis has impacted my food and grocery shopping choices
- Neither agree nor disagree
- The cost-of-living crisis has NOT impacted my food and grocery shopping choices

#### Changes in shopping choices

% making changes to food and grocery shopping in last few months



#### Shoppers giving up on organic and healthy foods to cope with cost of living



"With 49% of households focusing on value for money when buying new food and drink products, UK shoppers find themselves in a bit of a fix as they struggle to balance tight budgets with their health and sustainability values," said Katrina Bishop, UK Thought Leadership Activation Manager at NielsenlQ.

Survey undertaken August 2022







May 2023

In the EU, p.c. fresh produce consumption down by 10% in 2022/23. F&V seen as being expensive. Frozen sales spike!

UK Organic Sales Decline in a
Market Environment with
Food Price Inflation at 18% p.a.:
Organic Meat & Poultry
Organic Fruit and Veg.

w/e April 16 2023 versus 2022

KANTAR

Imperial College

#### Meat for the "Haves" & "Have Nots"



#### What can You Afford to Pay €/\$3.50 or €/\$80 per Kg.?



#### Meat Price Hierarchy

Lamb Beef Fish Pork Chicken













Waitrose British Beef Extra Trimmed Fillet Steak Typical weight 0.25kg

★★★☆(300)

Typical weight 0.25kg ★★★★☆(141)

Steak

No.1 Dry Aged

Hereford Beef Fillet

£10.41 each est. £41.00/kg

£16.50 each est. £66.00/kg



#### There's "Have" and "Have Not" Dogs, Too!









**Tesco Complete Beef & Vegetable 12 Kilograms** 

Write a review >

Rest of shelf

£12.25 £1.02/kg

€/\$1.20 or €/\$14 per kg?

#### HOW DO CONSUMERS SOLVE THEIR MEAL PROBLEMS?

FROM FOOD SERVICE

COOKING **FROM SCRATCH** 

INGREDIENTS FROM SUPERMARKETS.

CONVENIENCE STORES, ON/OFFLINE BUTCHERS, WET MARKETS, ETC.

**FROM RETAIL** 

FORMAL SIT DOWN RESTAURANT

CASUAL DINE **QSR** 

**RESTAURANT EAT OUT** 

STREET FOOD

SANDWICH / COFFEE SHOP CHAINS

**MEALS REGULAR MEALS MINI-MEALS** 

**MEAL COMPONENTS MEAL SOLUTIONS** 

CONVENIENCE **READY MEALS MEAL KIT INSTORE MEAL DEALS** MEAL KIT DELIVERED

RESTAURANT DARK KITCHENS

**DELIVERY "EAT OUT IN"** 

**DELIVERY BRANDED MEAL** 

FOOD TO GO "TAKEAWAY"

**RESTAURANT** "EAT OUT IN"

**FOOD RETAIL & FOOD SERVICE CONVERGE** 

CONVENIENCE **NO COOKING** 

COOKING

SUPERMARKET RESTAURANT **DELICATESSEN COUNTER FOOD TO GO SUPERMARKET** SUPERMARKET DARK KITCHEN

> Imperial College London



#### DINE IN TONIGHT

WAITROSE











#### **Food Retail and Food Service Converge**





#### Emerging, and Sometimes Stumbling, New Routes to the Food & Drink Consumer

Delivering: Restaurant Meals, **Groceries and More** 



**Meal Kits and "Ready Meals"** 



freshprep



instacart

GRUBHUB







"Super Fast" Guys















Top-Tier Considerations When Choosing Which Food and Beverage Products to Buy

The Hartman Group's Brand Ambition: Food and Beverage Private Brands & Beyond report finds that consumers consider taste, price and quality as the first-tier criteria when choosing which foods and beverages to buy.

#### **Top Five Selection Drivers**

(Among Category buyers, Average across 8 profiled categories)













On sale or in promotion





**Brand I love** 



To choose a product, consumers want to know how it will satisfy taste expectations, whether it is offered at an acceptable price point, the product makeup and provenance. Brand plays a supporting role, often standing in for a constellation of properties consumers seek, including distinctive taste experiences.



Brand Ambition: Food and Beverage Private Brands & Beyond report

#### And don't forget:

- Convenience
- **Health (if I remember)**
- Values-related issues (when they're affordable)

Source:

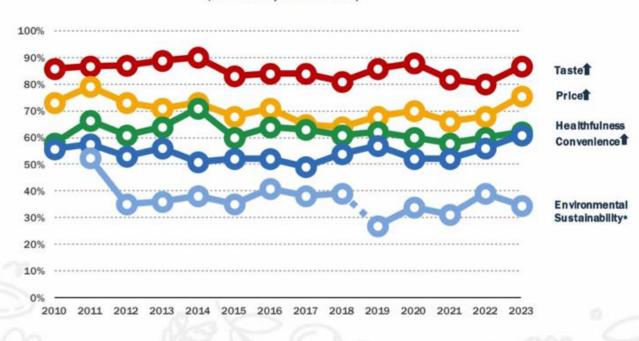
Imperial College London

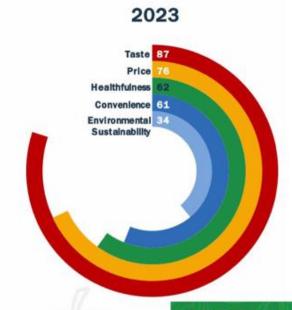
#### Taste #1 Purchase Driver



#### **Purchase Drivers Over Time**

(% 4-5 Impact out of 5)





2023 Food and Health Survey

International Food Information Council

Driscoll's
Only the Finest Berries

- 5

Note: Prior to 2019, "Environmental Sustainability" was addressed as "Sustainability"

[TREND] Q6 How much of an impact do the following have on your decision to buy foods and beverages? SUMMARY: TOP 2 (Great Impact/Somewhat of an Impact); (n=1,022)







#### **Distillation of 2023 Global Consumer Trends**

- Budgeteers Redefining Value: affordable & healthy supportive of "my values"
- "Unpuzzle" Health: Adding Positives Rather Than Just Removing Negatives
- Transparency Traceability Sustainability Authenticity
- Eco-economy (on food waste, plastic, energy, water, etc.)
   Positively Imperfect
- Consolidation of Hybrid Working (impact on food service)
- Quick Quality and Convenience
- Here and Now Revenge Spending (guilt-free indulgence)
- Trusted Traditional ..... but Excite Me!
- Generational Push looking after Digital Natives Gen. Z (on issues & digital)
- Simplified Plant-Based (i.e. NOT multi-ingredient, over-processed fake meat!)



#### JM Smucker to acquire Hostess Brands in \$5.6bn deal



September 11<sup>th</sup>, 2023



The deal includes a range of sweet baked food brands from Hostess Brands, such as Donettes, Twinkies, CupCakes, DingDongs, Zingers, CoffeeCakes, HoHos, Mini Muffins, Fruit Pies, and the Voortman cookie brand.

#### Demand for Twinkies on the Rise

**Ingredients: Twinkies** 

Enriched Bleached Wheat Flour [Flour, Reduced Iron, B Vitamins (Niacin, Thiamine Mononitrate (B1), Riboflavin (B2), Folic Acid)], Corn Syrup, Sugar, High Fructose Corn Syrup, Water, Partially Hydrogenated Vegetable and/or Animal Shortening (Soybean, Cottonseed and/or Canola Oil, Beef Fat), Whole Eggs, Dextrose. Contains 2% or Less of: Modified Corn Starch, Glucose, Leavenings (Sodium Acid Pyrophosphate, Baking Soda, Monocalcium Phosphate), Sweet Dairy Whey, Soy Protein Isolate, Calcium and Sodium Caseinate, Salt, Mono and Diglycerides, Polysorbate 60, Soy Lecithin, Soy Flour, Cornstarch, Cellulose Gum, Sodium Stearoyl Lactylate, Natural and Artificial Flavors, Sorbic Acid (to Retain Freshness), Yellow 5, Red 40.

Urban Myth has it that Twinkies have a Similar Half Life to Uranium-236 (23.4 million years)!



#### Nestlé's axe of Wunda and Garden Gourmet points to plant-based saturation

**March 2023** 

#### **Big Meat retrenches as meat** alternatives lose their luster

October 2022



Why Plant-Based Meat Struggling?

- Unappealing taste & texture
- **Expensive relative to meat**
- **Crowded & confusing marketplace**
- Big Meat lack of branding experience
- **Worrisomely long ingredient list**



Another grim quarter sees Beyond Meat's losses mount as sales plummet September 2023





JBS pulls plug on Planterra Foods **US plant-based meat operation** 



**October 3rd, 2022** 



April 18th, 2023

Kellogg discontinues MorningStar Farms Incogmeato burger



Smithfield: Scaling back





#### Yet, "Fake Meat" Keeps Coming and Cell-Based Meat Arrives

#### Dairy giant FrieslandCampina makes UK alt meat debut with Tender'lish August 15th, 2023

**USDA** approves 'cell-cultivated chicken' label June 14th, 2023











First application for cultivated meat approval in Europe submitted





July 26th, 2023



Chicken grown from cells in bioreactors produced by Upside Foods and Eat Just will be labeled "cell-cultivated chicken" when it is sold and served to the public. The USDA approved both companies' labels earlier this month.







## Plant-based main dishes rolled out under Tesco Finest range May 15th, 2023





#### Mondelēz launching vegan Cadbury bar

**October 7th, 2021** 







#### Nestlé launches vegan KitKat in 15 European countries September 1st, 2022



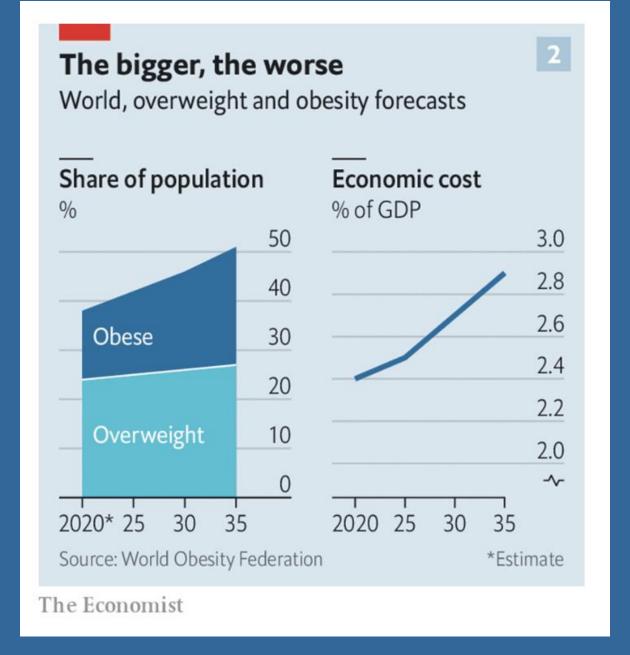


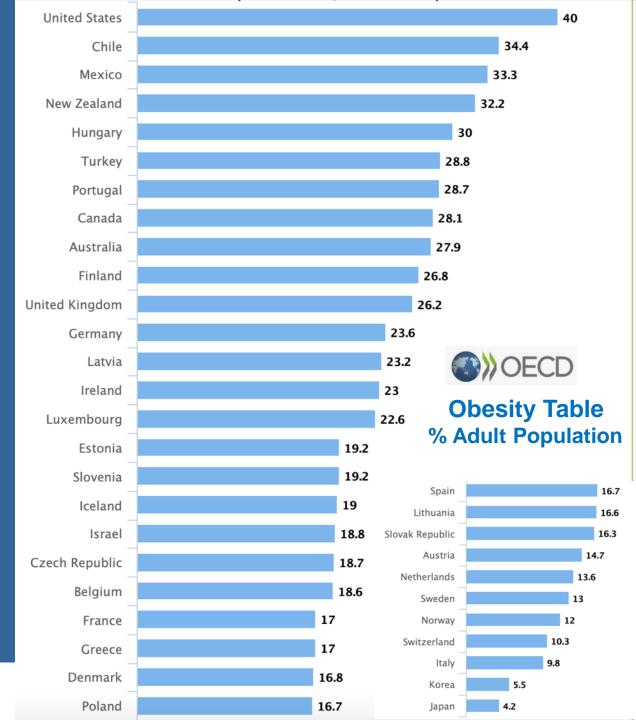
- The milk in the original KitKat is replaced in KitKat V with a ricebased alternative, the CPG giant said in a statement. The new candy is certified vegan and made from sustainably sourced cocoa.
- The plant-based chocolate category is currently small but has attracted attention from major candy makers eager to cash in on growing consumer interest in avoiding animal-derived foods and minimizing their environmental footprint.





# THE POWER IS ON YOUR PLATE





#### Indicators consumers use to work out if a food or drink item is healthy



Ultraprocessed foods A consumer perspective

Health ...!GD

Q: Which are the top three indicators you might use to work out if a food & drink item was healthy or not?



#### Nestlé debuts 'breakthrough' technology that reduces sugars in key ingredients July 14th, 2023





Nestlé has developed what it claims is a "versatile and cost-effective" sugar reduction technology that can be used across different product categories.

It uses an enzymatic process to reduce intrinsic sugar in ingredients such as malt, milk, and fruit juices by up to 30%, with "minimal impact on taste and texture", according to Nestlé.









The ingredients company also is pitching the ingredient as a way to reduce food waste.

## Mars Wrigley launches first of its kind quartet of non-HFSS treats

May 2022





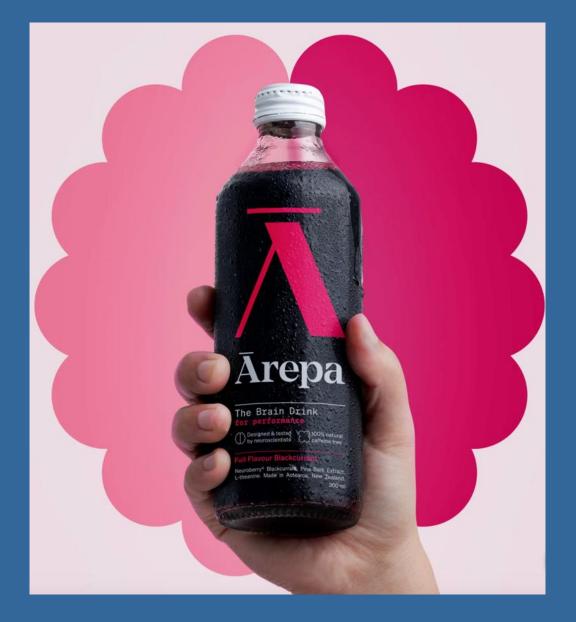


February 14th, 2023
Cadbury launches first range of non-HFSS chocolate



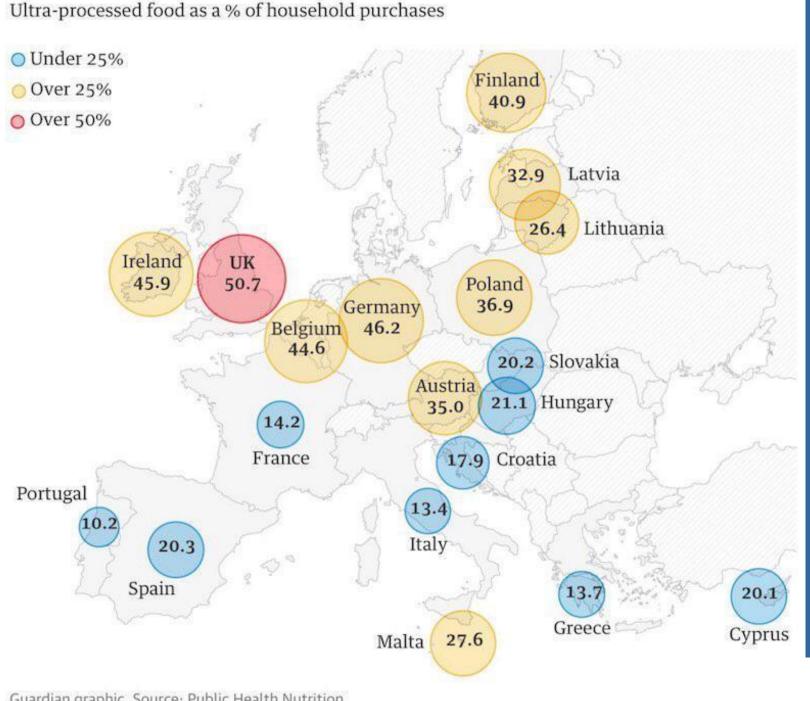








Stuffed Full of Intellectual Property



Ultra-processed food raises risk of heart attack and stroke, two studies show

September 3<sup>rd</sup>, 2023 Research presented to annual meeting of European Society of Cardiology prompts calls for action

There's a Move Underway "Against" UPF. YES, it has it's own acronym already!

**Expect to See Lots of Discussion** on Nutrient Density of Food Products as Healthy Eating/Diets Regain **Prominence as Inflation Moderates.** 











# LE B.A.BA du mieux MANGER





## Carrefour and Colruyt Introducing Nutri-Scores On Private Label Products

**How Would Your Products Score?** 

















- The majority of Nestlé's traditional food and drinks do not meet a "recognised definition of health."
- Just 37% of its consumer food and beverage products meet international health standards.
- The global food company acknowledged the issue in an internal presentation seen by the Financial Times.

Imperial College London



#### **Nutri-Scores on Carrefour Meat Products**

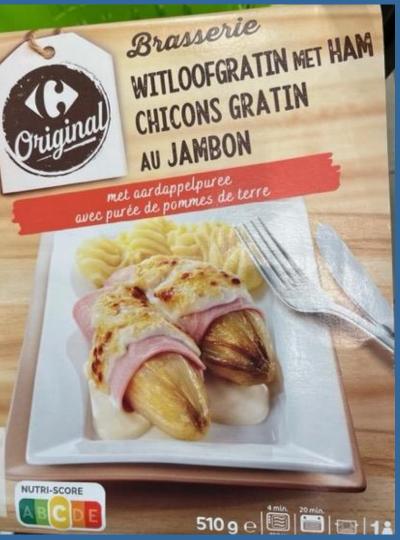
C



















A "Red Traffic Light" Nutri-score
Doesn't Necessarily Turn Off
the Consumer. There are
Allowable, Guilt-Free,
"! Deserve It" Treats!











Health Warnings on Front-of-Pack: Latin America Big Deal; UK Modest; USA Absent!



## Environmental activists target UK's luxury department stores and retailers in 'milk pour'



'Terrified for my future': climate crisis takes heavy toll on young people's mental health March 2023 Guardian

Third of young people 'very worried' about climate change March 21st, 2023

A survey commissioned by the Woodland Trust found there was more anxiety among 16-24-year-olds than among the over  $65 \mathrm{s}$ 

#### **Driving Forces on the Health of the Planet?**

Young climate activists join Greta Thunberg for first major Fridays for Future strikes of pandemic September 2021





Sweden charges Greta Thunberg for blockading oil port July 6th, 2023

Diets for the climate: UK government hit with legal challenge for neglecting critical cuts to meat & dairy

August 2022







# Agricultural Issues and COP 26: Some Outcomes Relevant to Agriculture

# COP26: 105 countries pledge to cut methane emissions by 30 per cent

... from 2020 levels by 2030

# GLASGOW LEADERS' DECLARATION ON FORESTS AND LAND USE

There'll be Much More
Naming & Shaming on
Methane Polluters in Future.

It's Looking Good for Seaweed Farming!







**Livestock Production and Food Waste** 



Satellites seek out methane leaks from pipelines, oil fields, landfills and farms



### **Government land grab? Dutch** authorities offer to buy farms to fall in line with EU emission targets



29 Nov 2022 --- Dutch farmers are facing a new dilemma in the ongoing fight with government. They have been told to either make farms more sustainable or risk facing a compulsory buy-out situation - which would see the government directly buying livestock land to reduce "undesirable emissions" so that farms fall in line with EU targets.

EU okays \$1.61 billion for Dutch government to buy out farmers, reduce nitrogen May 3<sup>rd</sup>, 2023

## Ireland considers "culling" 200,000 dairy cows

June 6th, 2023



The plan by the Irish government's Department of Agriculture to cull 200,000 cows at a cost of €600 million over the next three years in order to meet carbon targets has made headlines in the European Media this week.



Jacinda Ardern's 'fart tax' plans rip the guts out of small-town New Zealand, argue **New Zealand Farmers Welcome** October 12th, 2022 enraged farmers

**Opposition's Agriculture Emissions Policy** June 12th, 2023

## PepsiCo, Walmart team on \$120M investment in regenerative agriculture

July 27th, 2023









PepsiCo and Walmart announced a \$120 million investment on Wednesday to support North American farmers in the <u>adoption of regenerative agriculture practices</u>.

The seven-year collaboration is expected to improve soil health and water quality on more than 2 million acres of farmland, the companies said in a statement, delivering an expected 4 million metric tons in greenhouse gas emission reductions by 2030.

Jim Andrew, PepsiCo's chief sustainability officer, said in a statement that for regenerative agriculture to make business sense, farmers need economic, agronomic and cultural support.

# "LET'S ALL CHIP IN" WITH MCCAIN'S REGENERATIVE AGRICULTURE CAMPAIGN TARGETING GEN Z August 1st, 2023













#### Coles launches own brand of carbon neutral beef

Sainsbury's relaunches Taste the
Difference beef with a 25% lower carbon
footprint
September 18th, 2023



coles

April 21st, 2022





Sainsbury's



Coop Sweden launches 'Methane-reduced' beef

The premium Aberdeen Angus-based British beef range launches today in stores served by its northern depots, and was described by the retailer as "the largest low-carbon beef range ever produced in the UK".

June 24th, 2022



Step change for sustainable dairy? Danone pledges to cut methane emissions by 30%



In fact, Danone pledges the farmers producing its milk will cut methane emissions by 30% by 2030!



Imperial College London



## Wind-powered cargo ship embarks on



August 22<sup>nd</sup>, 2023

## Pyxis Ocean fitted with pioneering wind technology sets sail charting new lower-carbon path for global maritime industry

A container ship retrofitted with giant, rigid sails embarked on its maiden voyage yesterday (21 August), testing new technology that could bring cutting-edge wind propulsion to commercial cargo shipping.

maiden voyage

Pyxis Ocean, owned by Mitsubishi
Corp and chartered by shipping firm
Cargill, is the first vessel to be
retrofitted with two WindWings —
large sails measuring up to 37.5m in
height.

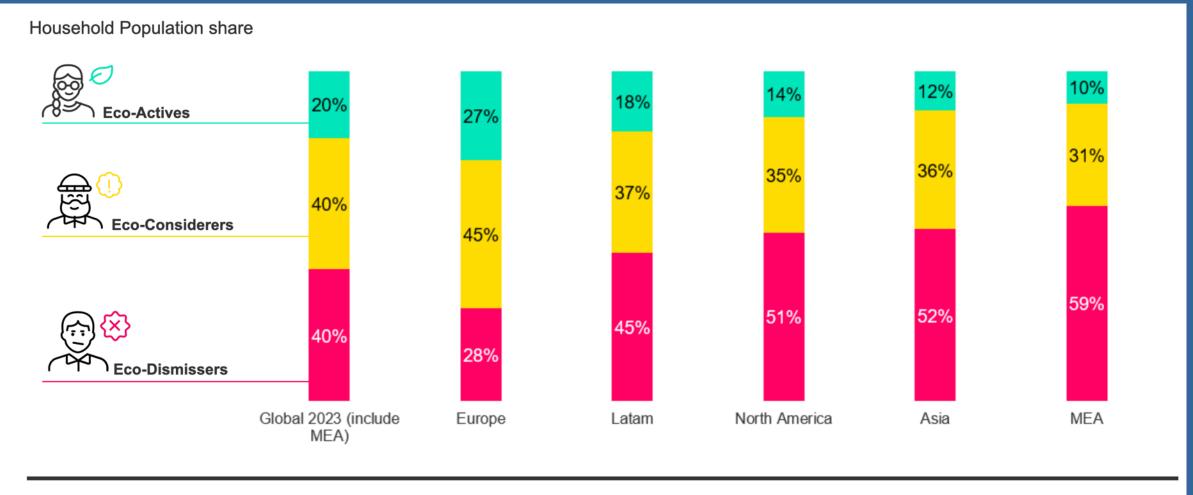


The wind-powered Pyxis Ocean set sail from China on 21 August

Image: Cargill



### Global Differences by Region on Eco/Enviro-Concerns





Source: Worldpanel Division, Kantar, Europanel, GfK - Who Cares? Who Does? 2023 FMCG spending in year ending 2022 Gglobal based on 35 countries

**WCWD?** 2023



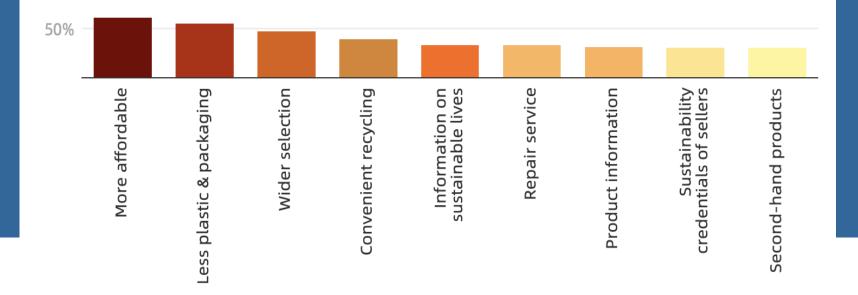
# 7 in 10 Consumers Globally Want to Live More Sustainably: Alibaba Survey

July 31st, 2023

- Emerging Asian markets are more likely to shop with sustainability in mind
- Affordability, convenience and information are the biggest barriers, say consumers

## How Businesses Can Help Consumers Make Sustainable Choices

Consumers were asked which of the following, if any, would encourage you the most to live more sustainably? Select up to five ways



### And Eco-Scores are Next Up!

LIDL TO HELP CONSUMERS GO GREENER WITH NEW ECO-SCORE TRIAL IN SCOTLAND





## What will be Your Enviro-Score?













02 Feb 2023 --- A myriad of so-called eco-labels are being rolled out across various F&B products, but with no gold standard or strict rules governing precisely what the logos mean and what methodology is behind them, concerns are growing that they will confuse consumers and ultimately be counterproductive.







### Alibaba Launches Carbon Ledger to Drive Ecofriendly Consumer Behavior August 2022

Consumers will earn points for making low-carbon choices within Alibaba's ecosystem, such as buying energy-efficient appliances, recycling boxes, and declining disposable utensils with takeout orders.

They can use the points to claim digital badges and shopping discounts on Alibaba's e-commerce platforms.

The launch brings the Hangzhou-based company closer to its goal of slashing carbon emissions by 1.5 gigatons across its digital ecosystem by 2035. Alibaba pioneered the concept Scope 3+ and has pledged to influence others to be greener as a platform operator.





# More than 60% of UK consumers lack trust in carbon claims, report finds





More than 60% of UK consumers lack trust in carbon footprint claims on food and drink packaging, new research from Bord Bia has revealed.

July 6th, 2023

Bord Bia (the Irish Food Board) found that 61% of UK consumers do not fully believe the carbon footprint labelling found on grocery products.

Almost three quarters of those surveyed in the 'Consumer and carbon, cutting through the carbon jargon' insights report called for more transparency overall.

# the Food Data Transparency Partnership

• To consult on implementing mandatory public reporting against a set of health metrics and explore a similar approach to sustainability and animal welfare.



 To provide consumers with the information to make more sustainable, ethical, and healthier food choices and incentivise industry to produce healthier and more ethical and sustainable food.

Senior representatives from across the food industry have formed a partnership to develop common metrics for carbon emission reporting from "Farm to Fork". In time, similar initiatives will be started for health and animal welfare metrics. The intent is to bring comparability and transparency to "Green Reporting".

June 20th, 2023







### PepsiCo's Net Water **Positive Vision**

Reduce Use + Replenish More



#### **Efficiency**

Achieve best-in-class<sup>1</sup> or world-class<sup>2</sup> water-use standards t all company-owned and third-party facilities by 2030

Over 11 billion liters of water a year avoided 50% reduction<sup>4</sup> in water use at PepsiCo sites\* Nearly half



#### Replenishment

Replanish more than 100% of water used at all high-water-risk sites by 2030



#### Safe Water Access

Provide 100 million people with safe water access by 2030



#### Alliance for Water Stewardship Standard

Adopt in high-water-risk areas where PepsiCo operates by 2025





We're crafting the foods + beverages you love with less water than ever.





## Have a paper-wrapped break with *KitKat*January 11th, 2023





So, What Took You So Long?!

Smarties becomes the first global confectionery brand to switch to recyclable paper packaging

**January 26th, 2021** 

# Mars bar plastic wrapper swapped for paper May 2023



Mondelēz's Cadbury chooses recycled plastic over paper for new Dairy Milk chocolate wrappers

September 20th, 2021







# Upcycled food launches leap as concerns around waste grow: report April 29th, 2023







Launches of food and beverages containing upcycled ingredients saw a 122% compound annual growth rate in the five years ending third-quarter 2021, according to a report from Innova Market Insights. This figure was higher than products using recycled plastic in packaging (59%) and those carrying carbon-emissions claims (47%).

Nearly half of consumers surveyed by Innova said they are actively trying to cut food waste. The market research group also found that 62% of consumers are willing to pay more for food and beverage products that are dedicated to stopping food waste.

In 2015, Many Countries Signed Up to UN SDG 12.3: Cutting Per Capita Food Waste by 50% by 2030. We are HUGELY Behind Schedule. Reducing Food Waste Initiatives are Racing Up the Agenda for Consumers, Corporates and Governments.



# Takeaway Sandwich Company with Community Values







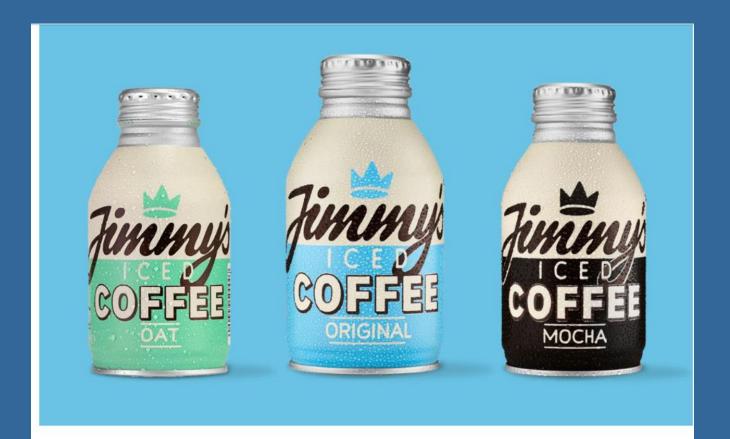




July 27th, 2023



As well as sales growth,
Sustainability & Health
Credentials key attractions:
B Corp.; HFSS compliant.



#### **Britvic announces acquisition of Jimmy's Iced Coffee**

Beverage giant <u>Britvic</u> has announced the acquisition of UK-based ready-to-drink iced coffee brand <u>Jimmy's Iced Coffee</u>.

According to Britvic, Jimmy's Iced Coffee is "the fastest growing RTD iced coffee brand in the segment," generating a retail sales value of £17 million in the year to June 2023, a 43% increase from the previous year.

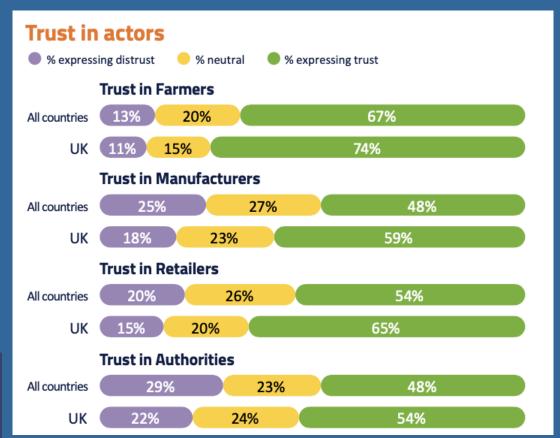
Jimmy's coffees have fewer calories per serving than the category average, come in fully recyclable packaging and are HFSS-compliant.

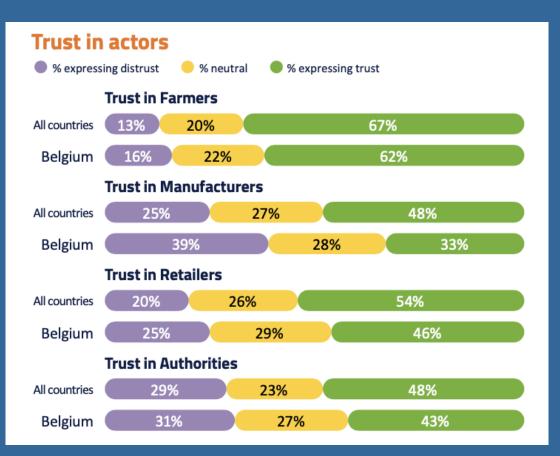


#### Who Do Consumers Trust Most When Thinking About Their Food Across Europe?









Belgians are Much Less Trusting than Brits about Food Actors Past the Farm Gate!



The

Trust

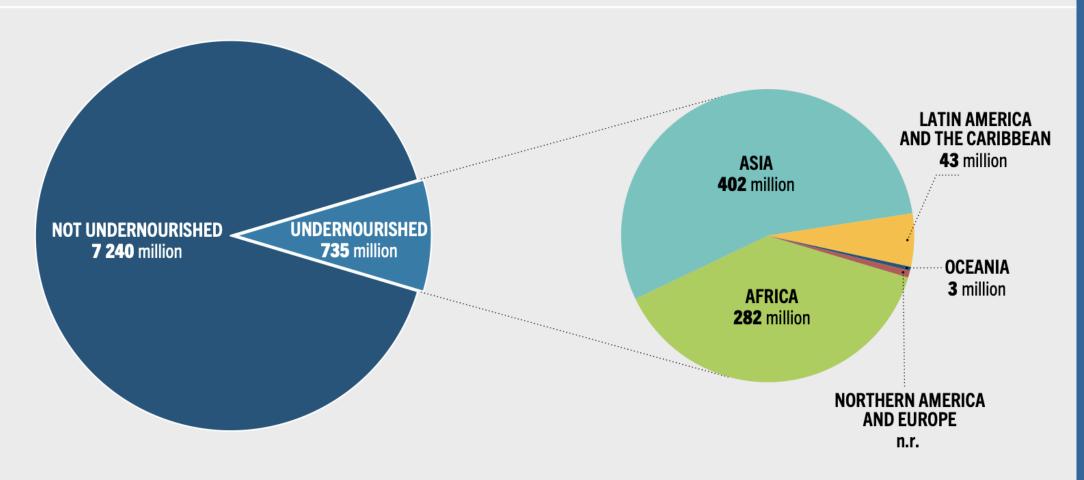
Report

and the role of trust in the food chain

**EIT Food** 



## FIGURE 3 IN 2022, ASIA WAS HOME TO 55 PERCENT (402 MILLION) OF THE PEOPLE IN THE WORLD AFFECTED BY HUNGER, WHILE MORE THAN 38 PERCENT (282 MILLION) LIVED IN AFRICA



NOTES: Projected values are based on the projected midranges. The full ranges of the projected 2022 values can be found in **Annex 2**. n.r. = not reported, as the prevalence is less than 2.5 percent.

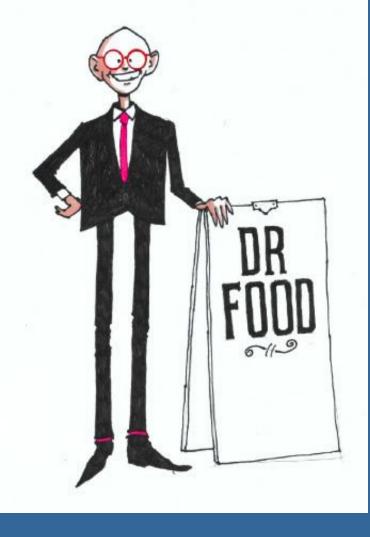
SOURCE: FAO. 2023. FAOSTAT: Suite of Food Security Indicators. In: FAO. [Cited 12 July 2023]. www.fao.org/faostat/en/#data/FS





2nd Place World Food Programme Food for Life © M Yousuf Tushar, Bangladesh

#### Happy With Food



### **CONTACT POINTS:**

e-mail: profdavidhughes@aol.com

**Telephone contact:** 

**Mobile/Cell** +44(0)7798 558276

@ProfDavidHughes

Retail Blog: www.supermarketsinyourpocket.com

