Dieta planetaria y enfermedades crónicas: panorama actual y retos futuros

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¿Qué día la humanidad agotará los recursos de la Tierra previstos para 2024?

Día de la Deuda Ecológica de la Tierra

"Es el día del año en que nosotros, los seres humanos, ya hemos acabado con los recursos naturales disponibles del año",

## El 'Earth Overshoot Day' llega cada vez antes

Fecha del Día de la Sobrecapacidad de la Tierra/
Día del Sobregiro de la Tierra en cada año

2005
2020
2010
1990
1975
1970
2015
1995
1980
2023
2000
1985
2024

Ene 01
Ago 01
Dic 31
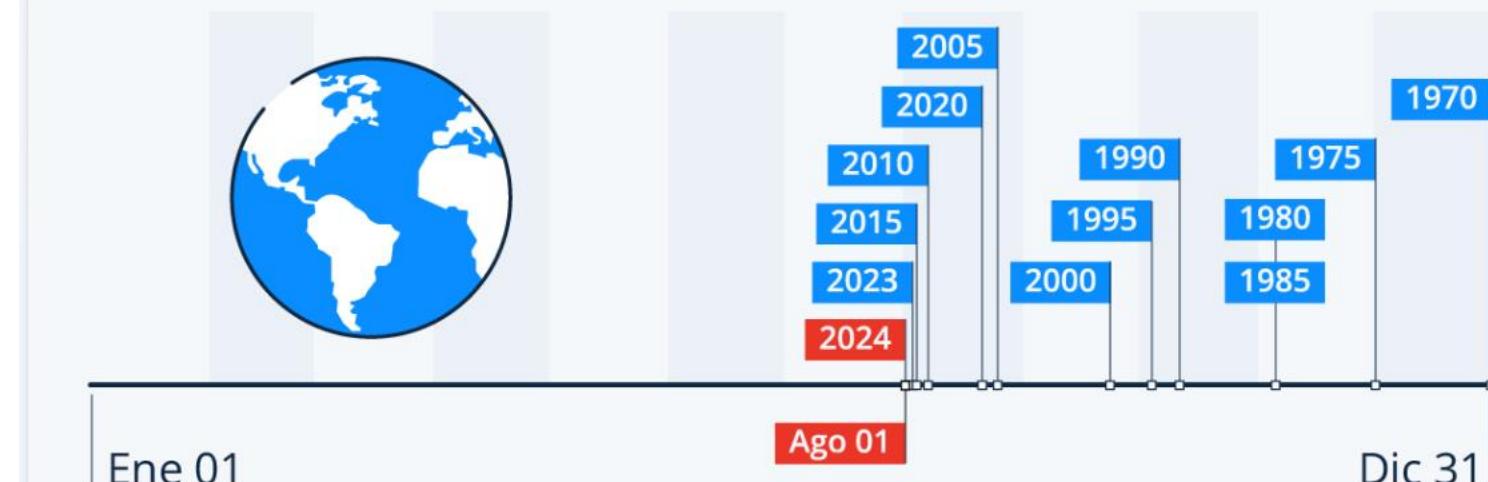
Algunos tópicos sobre cambio climático

Average temperature anomaly, Global
Global average land-sea temperature anomaly relative to the 1961-1990 average temperature baseline.
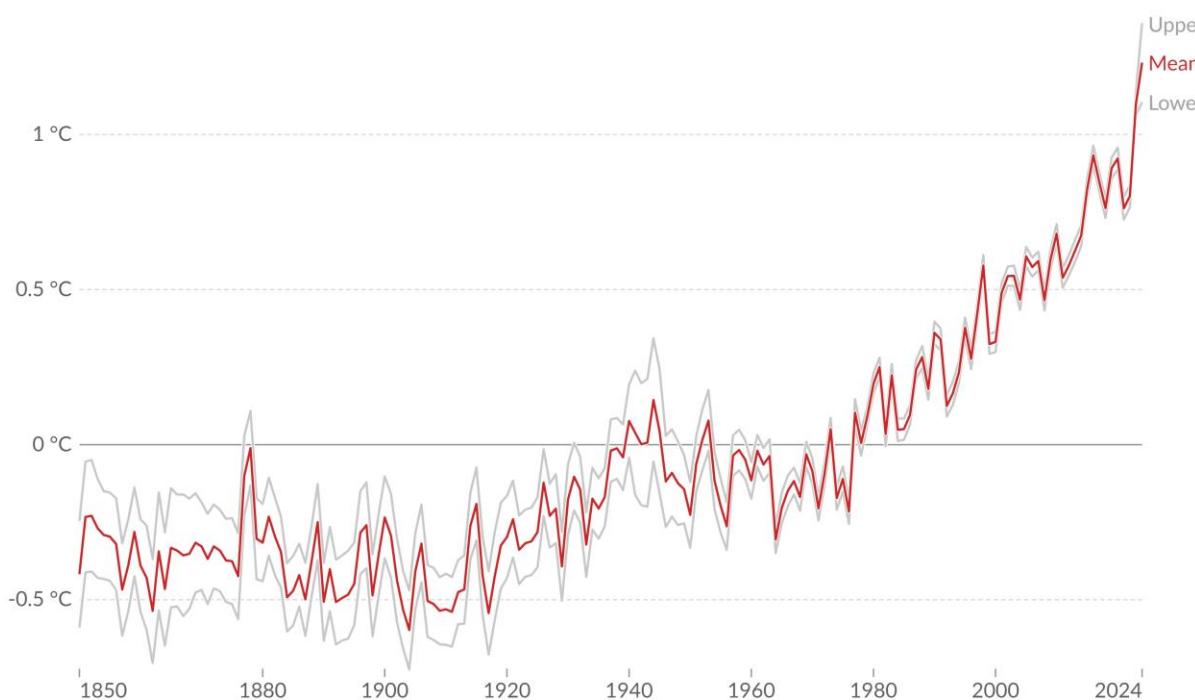
Data source: Met Office Hadley Centre (2024)
Note: The gray lines represent the upper and lower bounds of the 95% confidence interval.

OurWorldinData.org/co2-and-greenhouse-gas-emissions | CC BY

Hannah Ritchie, Pablo Rosado and Veronika Samborska (2024) - "Climate Change" Published online at OurWorldinData.org. Retrieved from: 'https://ourworldindata.org/climate-change' [Online Resource]

Global greenhouse gas emissions from food production
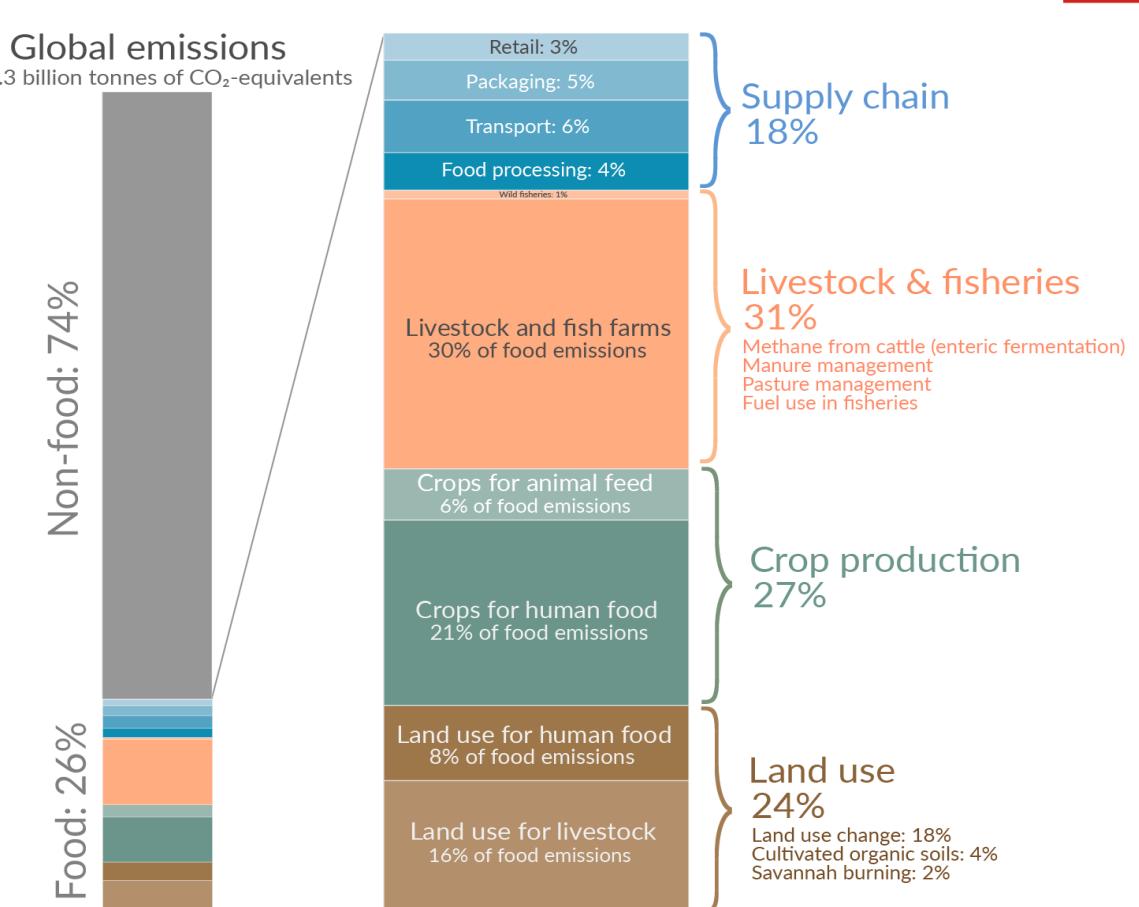
Global emissions
52.3 billion tonnes of CO_2-equivalents

Non-food: 74%
Food: 26%

Retail: 3%
Packaging: 5%
Transport: 6%
Food processing: 4%

Supply chain 18%

Wild fisheries: 1%

Livestock and fish farms
30% of food emissions

Livestock & fisheries 31%
Methane from cattle (enteric fermentation)
Manure management
Pasture management
Fuel use in fisheries

Crops for animal feed
6% of food emissions

Crops for human food
21% of food emissions

Crop production 27%

Land use for human food
8% of food emissions

Land use for livestock
16% of food emissions

Land use 24%
Land use change: 18%
Cultivated organic soils: 4%
Savannah burning: 2%

Algunos tópicos sobre las enfermedades crónicas

Las enfermedades crónicas han sido y siguen siendo algunas de las principales causas de morbilidad y mortalidad en todo el mundo.

Con el aumento de la esperanza de vida, la prevalencia y el costo de las enfermedades crónicas siguen aumentando, previendo que alcanzará 47 billones de dólares en todo el mundo en 2030.

Muchas de estas afecciones pueden prevenirse, y sus principales factores de riesgo son la inactividad física, la mala alimentación, el consumo de tabaco y el exceso de alcohol.

Obesity in adults, 1975 to 2016

Estimated prevalence of obesity[1], based on general population surveys and statistical modeling. Obesity is a risk factor[2] for chronic complications, including cardiovascular disease, and premature death.

- Americas (WHO)
- Europe (WHO)
- Eastern Mediterranean (WHO)
- Africa (WHO)
- Western Pacific (WHO)
- South-East Asia (WHO)

Data source: World Health Organization - Global Health Observatory (2024)

OurWorldinData.org/obesity | CC BY
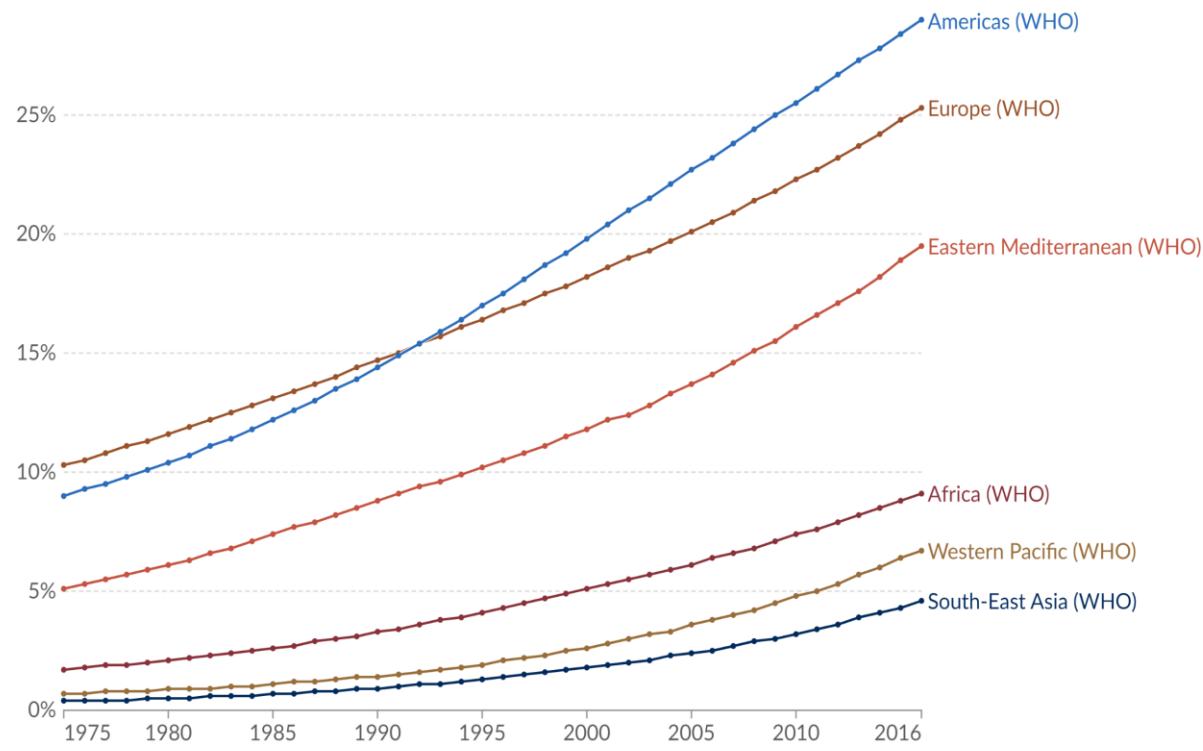
Share of children who are overweight or obese, 2022

Share of children under five years old that are defined as overweight or obese. A child is classified as overweight if their weight-for-height is more than two standard deviations from the median of the World Health Organization (WHO) Child Growth Standards.

No data   0%   5%   10%   15%   20%   25%   30%

Data source: World Health Organization - Global Health Observatory (2024)

OurWorldinData.org/obesity | CC BY

Hannah Ritchie and Max Roser (2017) - "Obesity" Published online at OurWorldinData.org.
Retrieved from: 'https://ourworldindata.org/obesity' [Online Resource]
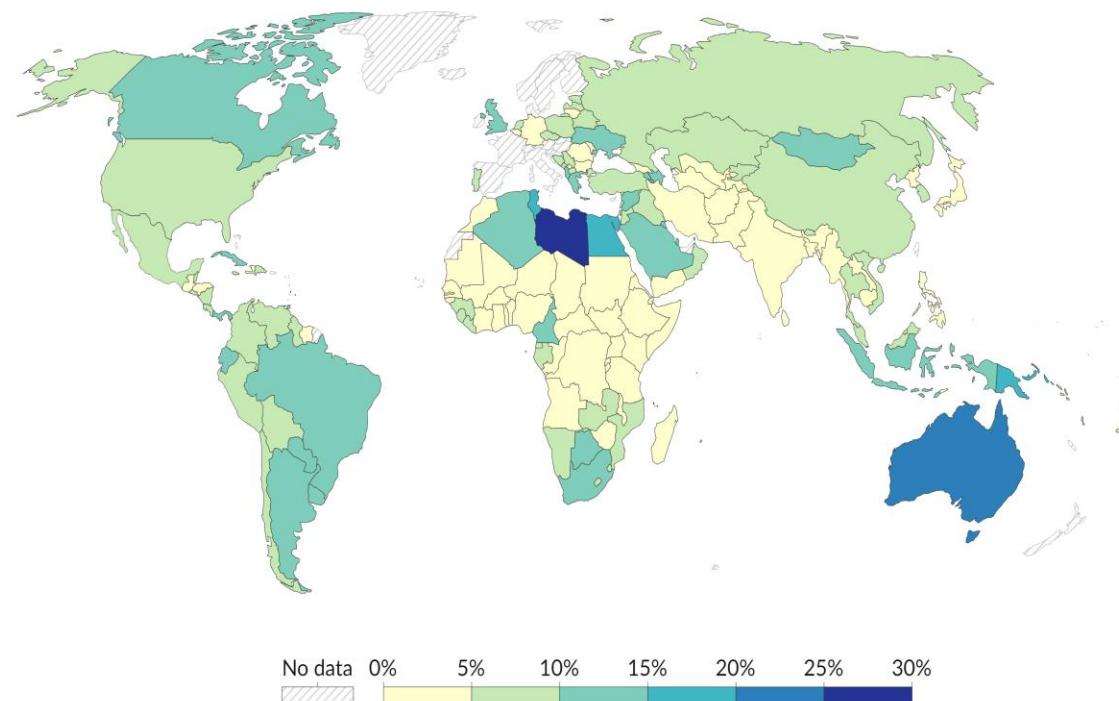
Total disease burden by cause, World

Total disease burden measured as Disability-Adjusted Life Years (DALYs) per year. DALYs measure the total burden of disease – both from years of life lost due to premature death and years lived with a disability. One DALY equals one lost year of healthy life.

Injuries

Communicable, maternal, neonatal, and nutritional diseases

Non-communicable diseases (NCDs)
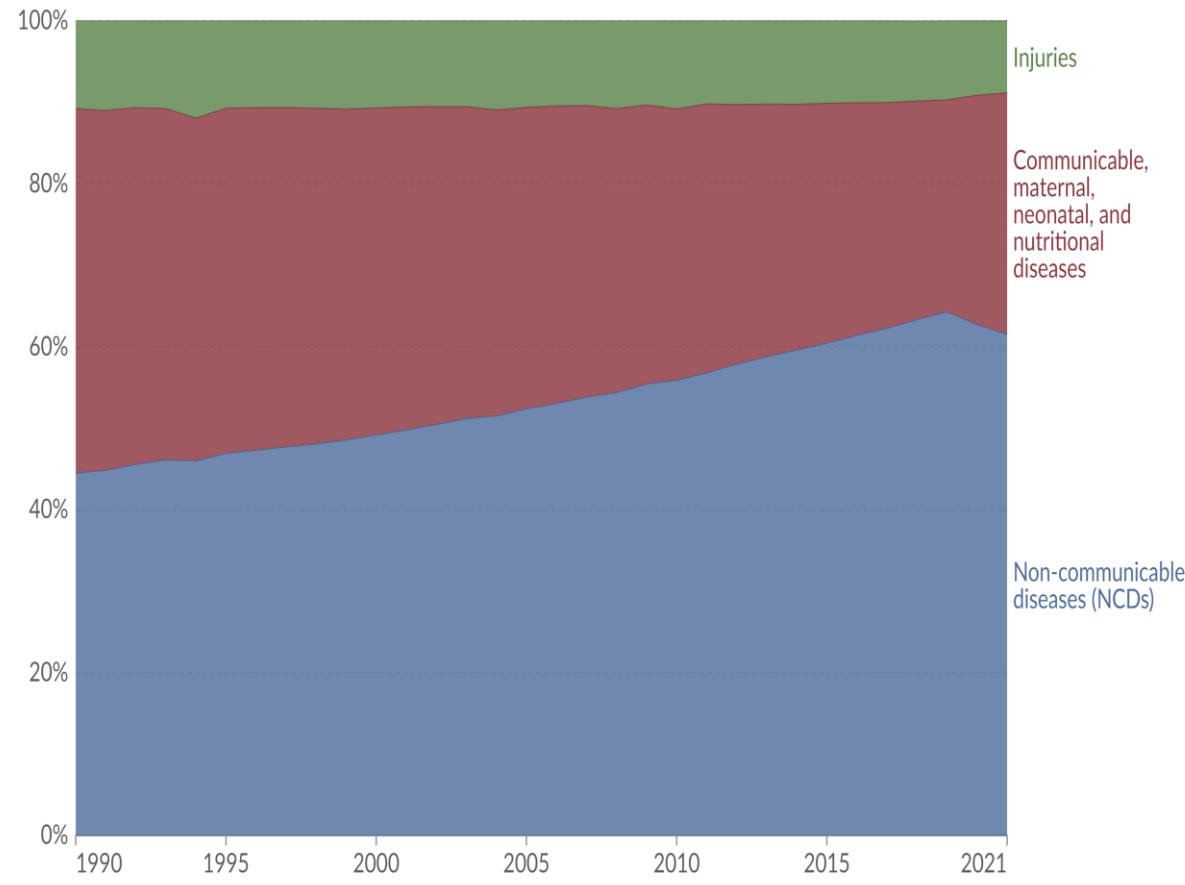
Total disease burden by cause

Total disease burden measured as Disability-Adjusted Life Years (DALYs) per year. DALYs measure the total burden of disease – both from years of life lost due to premature death and years lived with a disability. One DALY equals one lost year of healthy life.

Injuries　Communicable, maternal, neonatal, and nutritional diseases　Non-communicable diseases (NCDs)

Low-income countries

High-income countries

Lower-middle-income countries

Upper-middle-income countries
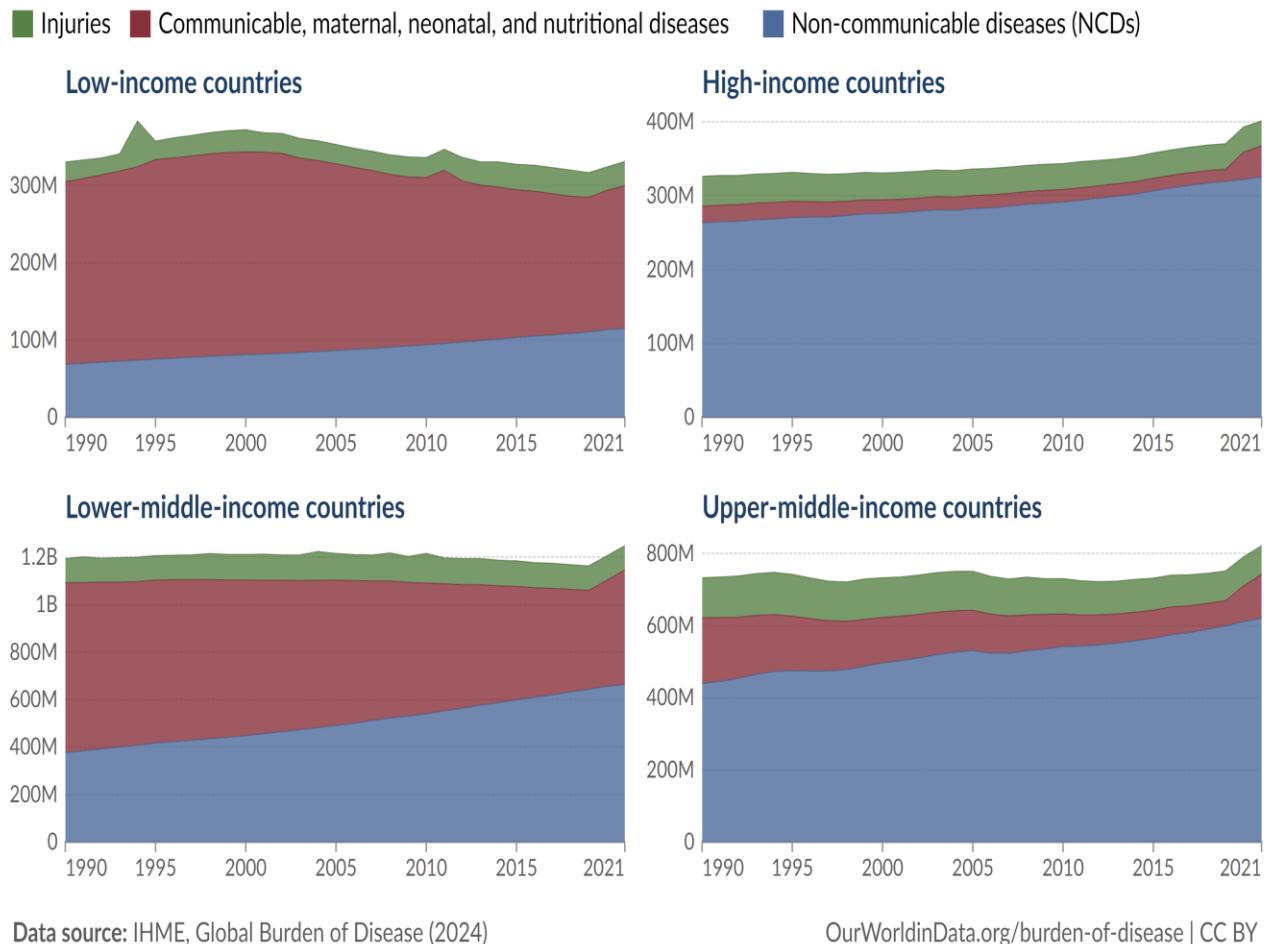
Share of total disease burden by cause, World, 2021

Total disease burden, measured in Disability-Adjusted Life Years (DALYs) by sub-category of disease or injury. DALYs measure the total burden of disease – both from years of life lost due to premature death and years lived with a disability. One DALY equals one lost year of healthy life.

Cause	%
Cardiovascular diseases	14.9%
Respiratory infections and TB	12.1%
Cancers	8.8%
Covid-19	7.4%
Neonatal disorders	6.5%
Musculoskeletal disorders	5.6%
Mental disorders	5.4%
Other NCDs	4.9%
Diabetes and kidney diseases	4.3%
Neurological disorders	3.9%
Respiratory diseases	3.8%
Unintentional injuries	3.7%
Digestive diseases	3.1%
Enteric infections	2.5%
Malaria & neglected tropical diseases	2.5%
Transport injuries	2.4%
Nutritional deficiencies	1.7%
HIV/AIDS and STIs	1.7%
Skin diseases	1.4%
Self-harm	1.2%
Substance use disorders	1.1%
Interpersonal violence	0.9%
Maternal disorders	0.4%
Conflict & terrorism	0.3%
Natural disasters	<0.1%

Data source: IHME, Global Burden of Disease (2024)

OurWorldinData.org/burden-of-disease | CC BY

Note: Non-communicable diseases are shown in blue; communicable, maternal, neonatal and nutritional diseases in red; injuries in grey.

What do people die from? Causes of death globally in 2019

The size of the entire visualization represents the total number of deaths in 2019: 55 million. Each rectangle within it is proportional to the share of deaths due to a particular cause.

74% died from noncommunicable diseases

14% died from infectious diseases

33% died from heart diseases
Heart attacks, strokes, and other cardiovascular diseases.
Per year: 18.5 million deaths
Per average day: 50,850 deaths

18% Cancers
Per year: 10 million deaths
Per average day: 27,600 deaths

7% Chronic respiratory diseases
COPD, Asthma, and others

3.9% Neurological diseases
Alzheimer's, Parkinson's, epilepsy, and others

4.5% Digestive diseases
Cirrhosis and others

2.7% Diabetes

5.7% Other noncommunicable diseases

4.4% Pneumonia
and other lower respiratory diseases
Per year: 2.5 million deaths
Per average day: 6800 deaths

2.7% Diarrheal diseases
Per year: 1.5 million deaths
Per average day: 4200 deaths

2% Tuberculosis

1.5% HIV/AIDS

1.1% Malaria

2.1% other infectious diseases

3.3% Neonatal deaths
babies who died within the first 28 days of life

0.4% Maternal deaths

0.4% Nutritional deficiencies

2.3% Transport accidents
Per year: 1.3 million deaths
Per average day: 3500 deaths

3.1% Other accidents
including falls, drownings, and fires.

1.3% Suicides Per year: 760,000 deaths / Per average day: 2080 deaths

0.7% Homicides Per year: 415,000 deaths / Per average day: 1140 deaths

0.2% War battle deaths   0.05% Terrorism

Less than 1% died due to interpersonal violence

Data source: IHME Global Burden of Disease and Global Terrorism Database
OurWorldinData.org – Research and data to make progress against the world's largest problems.

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Max Roser, Hannah Ritchie and Fiona Spooner (2021) - "Burden of Disease" Published online at OurWorldinData.org. Retrieved from: 'https://ourworldindata.org/burden-of-disease' [Online Resource]

THE LANCET

Food in the Anthropocene: the EAT-*Lancet* Commission on healthy diets from sustainable food systems

"Food in the Anthropocene represents one of the greatest health and environmental challenges of the 21st century."

A Commission by *The Lancet*

En el ámbito global, en relación con la dieta saludable de referencia, la población consume alrededor de:

- Tres veces más carnes rojas y vegetales altos en almidón.
- 50% más huevos.
- Cantidades menores a las recomendadas de carne de ave y pescado.
- Cantidades muy pequeñas de verduras, frutas, leche y derivados, leguminosas, granos enteros y oleaginosas.

Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. 2019.
Disponible en: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31788-4/fulltext
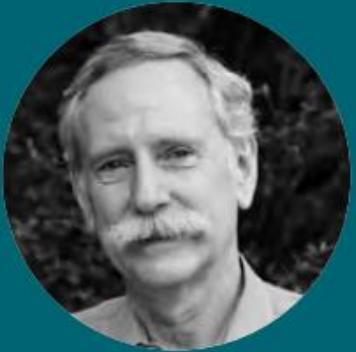
Profesor Walter Willett MD
Escuela de Salud Pública T.H. Chan de la
Universidad de Harvard

"La transformación a dietas saludables para el 2050 requerirá cambios sustanciales en la dieta. El consumo mundial de frutas, vegetales, frutos secos y legumbres deberá duplicarse, y el consumo de alimentos como la carne roja y el azúcar deberá reducirse en más del 50%.

Una dieta rica en alimentos de origen vegetal y con menos alimentos de origen animal confiere una buena salud y beneficios ambientales".

- Las dietas poco saludables representan actualmente un mayor riesgo para la morbilidad y la mortalidad que la suma de las prácticas sexuales sin protección, el alcohol, las drogas y el tabaco.

- La producción mundial de alimentos amenaza la estabilidad climática y la resiliencia del ecosistema y constituye el mayor impulsor de degradación medioambiental y transgresión de los limites planetarios.

Meta

"Dieta de salud planetaria"

Papel fundamental que desempeñan las dietas para vincular la salud humana y la sostenibilidad ambiental, y la necesidad de integrar estas agendas, a menudo separadas, en una agenda global común para la transformación del sistema alimentario para lograr los ODS y el Acuerdo de París.

Objetivo 1. Dietas saludables

Ingesta de grupos de alimentos específicos para optimizar la salud

Realidad

África Sub-Sahariana

729%

100%

288%

293%

153%

Límites de salud

100%

GLOBAL

Ingesta limitada

| Carne roja | Vegetales almidonados |

Alimentos opcionales

| Huevos | Aves | Productos lácteos |

Alimentos destacados

| Pescado | Verduras | Fruta | Legumbres | Granos enteros | Frutos secos |

| Pescado | Verduras | Fruta | Legumbres | Granos enteros | Frutos secos |

Norteamérica

638%

100%

171%

268%

145%

234%
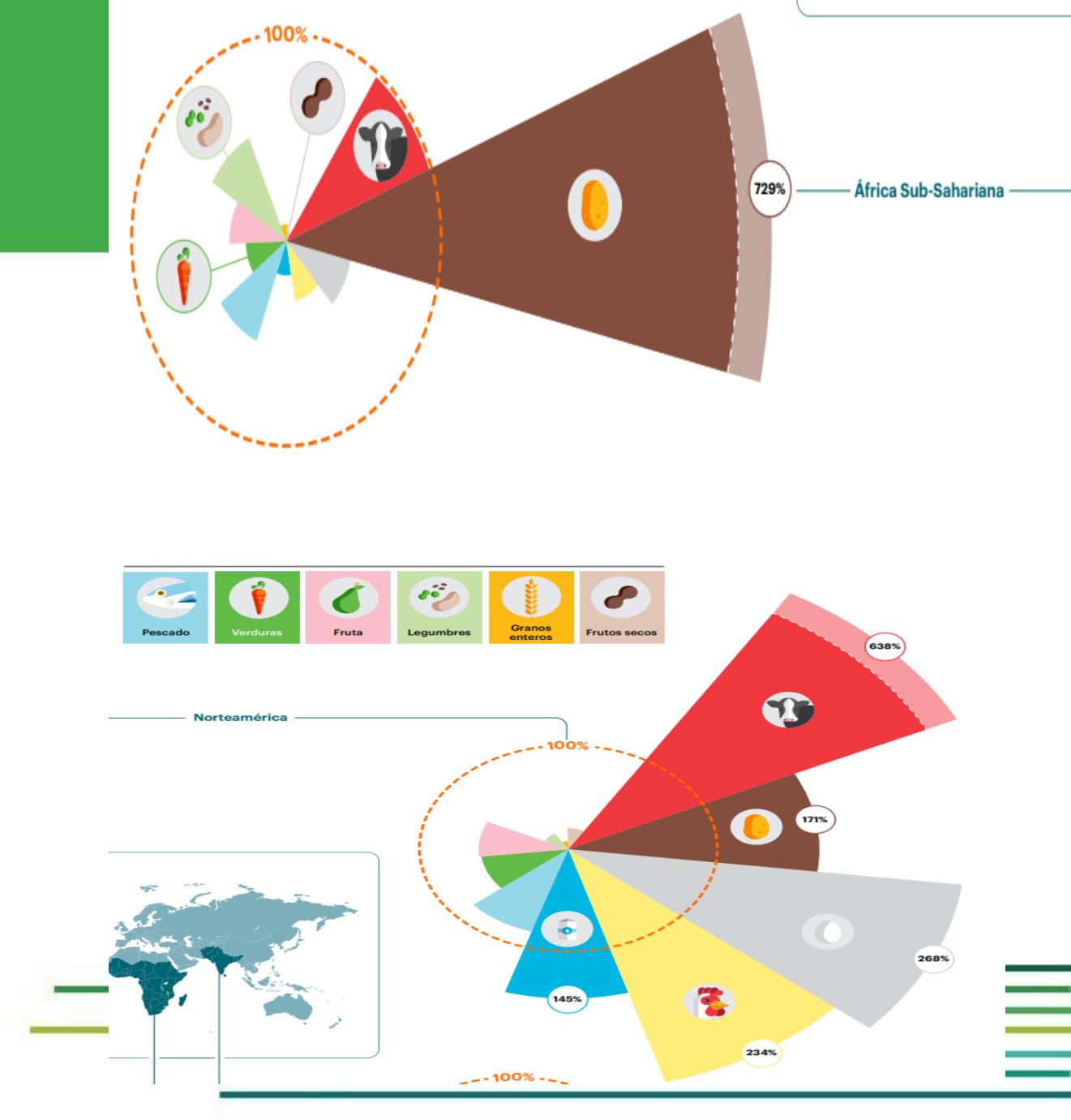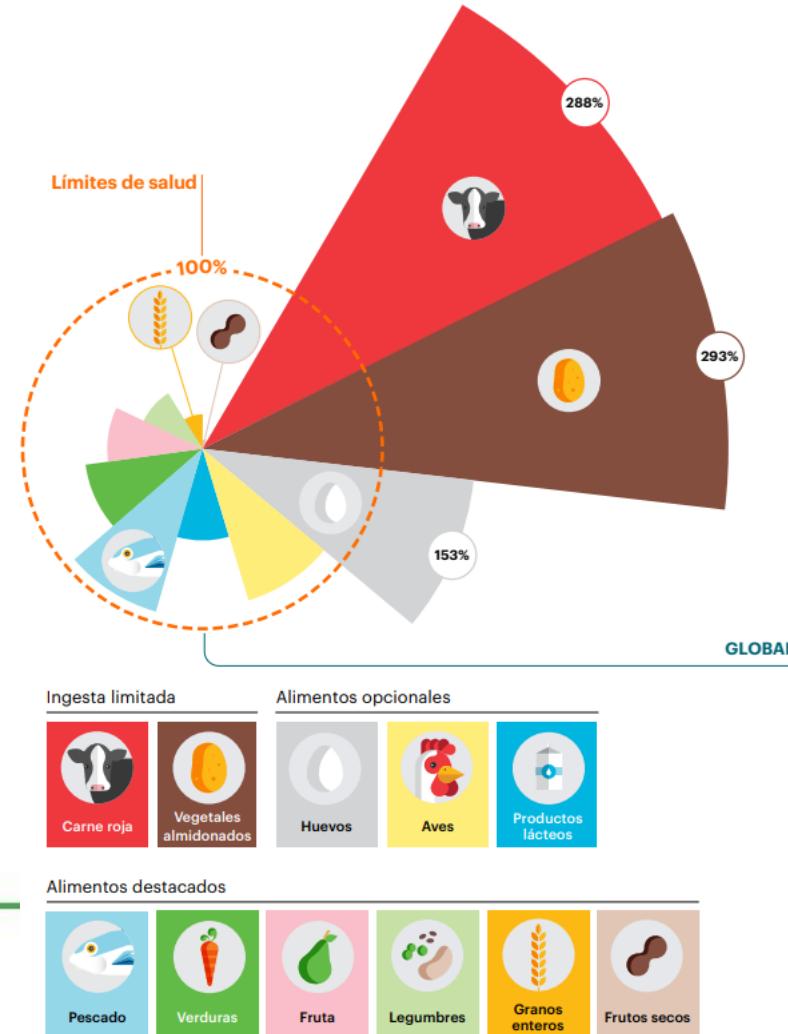
Propuesta

Plato de salud planetaria:

a. Mitad del plato de verduras y frutas
b. La otra mitad, aparece mostrada en base a su contribución en calorías, y debe consistir principalmente en:

- Granos enteros
- Fuentes de proteínas vegetales
- Aceites vegetales insaturados
- Cantidades modestas de proteínas de origen animal (opcional)

Planetary Health Diet Index

	EAT-*Lancet* reference diet (for 2500 kcal/d)		PHDI scoring criteria (total 0–140)		
	g/day	kcal/day	Min score (0) in g/d	Max score (10) in g/d	Weight in score
Whole grains	232 (0–60% of total energy intake)	811	0	≥75 for women ≥90 for men	1
Starchy vegetables (eg, potatoes, cassava)	50 (0–100)	39	≥200	≤50	1
Vegetables (not including potatoes or other starchy vegetables)	300 (200–600)	78	0	≥300	1
Whole fruit	200 (100–300)	126	0	≥200	1
Dairy foods (eg, milk, cheese, yoghurt)	250 (0–500)	153	≥1000	≤250	1
Red or processed meat (eg, beef, lamb, pork)	14 (0–28)	30	≥100	≤14	1
Chicken and poultry (eg, duck, goose, ostrich)	29 (0–58)	62	≥100	≤29	1
Eggs	13 (0–25)	19	≥120	≤13	1
Fish and shellfish	28 (0–100)	40	0	≥28	1
Nuts (eg, peanuts and tree nuts, such as walnuts, almonds, hazelnuts, pecans, cashews, pistachios)	50 (0–75)	291	0	≥50	1
Non-soy legumes (eg, dry beans, lentils, peas)	50 (0–100)	172	0	≥100	0·5
Soybeans and soy foods	25 (0–50)	112	0	≥50	0·5
Added fat: unsaturated oils (not including trans fat; olive soybean, rapeseed, sunflower, peanut oil)	40 (20–80)	354 (14·16% of total energy intake)	≤3·5% of total energy intake	≥21% total energy intake	1
Added fat: saturated oils and trans fat (eg, palm oil, coconut oil, dairy fat, butter, margarine, lard, tallow)	11·8 (0–11·8)	96 (3·8% of TEI)	≥10% of total energy intake	0% of total energy intake	1
Added sugar and sugar from fruit juice	31 (0–31)	120 (4·8% of total energy intake)	≥25% of total energy intake	≤5% of total energy intake	1

g/d=grams per day. kcal/d=kcal per day.

***Table 1:* Planetary Health Diet Index**

Energía

Ingesta energética media mundial per cápita estimada en 2370 kcal/día.

Utilizaron 2500 kcal por día como base.

	Ingesta de macronutrientes gramos por día (rango posible)	Ingesta de calorías kcal por día
Granos enteros **Arroz, trigo, maíz y otros**	232	811
Tubérculos o vegetales almidonados **Patatas y yuca**	50 (0–100)	39
Verduras **Todo tipo de verduras**	300 (200–600)	78
Frutas **Todo tipo de frutas**	200 (100–300)	126
Productos lácteos **Leche entera o equivalentes**	250 (0–500)	153
Fuentes de proteínas **Ternera, cordero y cerdo**	14 (0–28)	30
Pollo y otras aves	29 (0–58)	62
Huevos	13 (0–25)	19
Pescado	28 (0–100)	40
Legumbres	75 (0–100)	284
Nueces y semillas	50 (0–75)	291
Grasas añadidas **Aceites insaturados**	40 (20–80)	354
Aceites saturados	11.8 (0-11.8)	96
Azúcares añadidos **Todo tipo de azúcares**	31 (0–31)	120

14g x 7= 98g = 1 porción a la semana

29g x 7= 203g = 2 porciones a la semana

13g x 7= 91g = 2 unidades a la semana

28g x 7= 196g = 2 porciones a la semana

75g x 7= 525g = 4 porciones a la semana

50g / 10 = 5p día

Tabla 1
Objetivos científicos para una dieta de salud planetaria, con posibles rangos, para una ingesta de 2500 kcal/día

Ejercicio realizado por la ND Alejandra Gómez

Ejercicio aplicado

Mujer 45 años - IMC: 24,5kg/mt^2 - Actividad laboral: poco activa - Ejercicio aeróbico/fuerza, moderado, 3 veces semana
REE (DRI): 1850kcal/d

Grupo alimentos	L	M	W	J	V	S	D
Cereales	6	5	5	6	5	5	6
Plátanos y tubérculos	2	2	2	2	2	2	2
Verduras	4	3	3	4	3	3	4
Frutas	4	4	4	4	4	4	4
Leches enteras	1	1	1	1	1	1	1
Carnes				1			
Pollo y aves			1		1		
Huevos		1				1	
Pescado	1						1
Leguminosas		1	1		1	1	
Nueces y semillas	5	5	5	5	5	5	5
Grasas	5	5	4	5	4	5	5
Azúcares							

Ejercicio realizado por la ND Alejandra Gómez

Aporte nutricional

	L	M	Esperado
Total calorías	1843	1832	**1850**
% proteína	13	15	**14 – 20**
% grasas	32	30	**20 – 35**
% CHO	55	55	**50 – 65**
% grasa saturada	7	7	**<10**
% grasa monoinsaturada	12	11	
%e grasa poliinsaturada	11	10	
% Proteína de alto valor biológico	42	39	
CHO's Concentrados (g / %)	0	0	
Proteína (g/Kg)	1,1	1,2	
Colesterol mg	83	81	**<300**
Fibra g	34,3	39,2	
Calcio mg	735	741	**1000**
Hierro mg	18,5	19,7	**27**
Potasio mg	3952	4157	**4700**
Magnesio mg	404	434	**320**
Zinc mg	10	10,3	**8**
Vit A (ER)	1792,0	1570,0	
Folatos ug	512	591	**400**
Vit B12 ug	2,4	2,41	**2,4**
Vit C mg	380	362	**75**

Average per capita fruit intake vs. minimum recommended guidelines, 2021

Our World in Data

Countries shown in blue have an average per capita intake below 200g per person per day; countries in green are greater than 200g. National and World Health Organization (WHO) typically set a guideline of 200g per day.

No data · Below dietary guidelines · Meets dietary guidelines
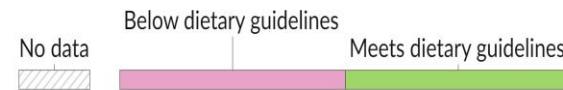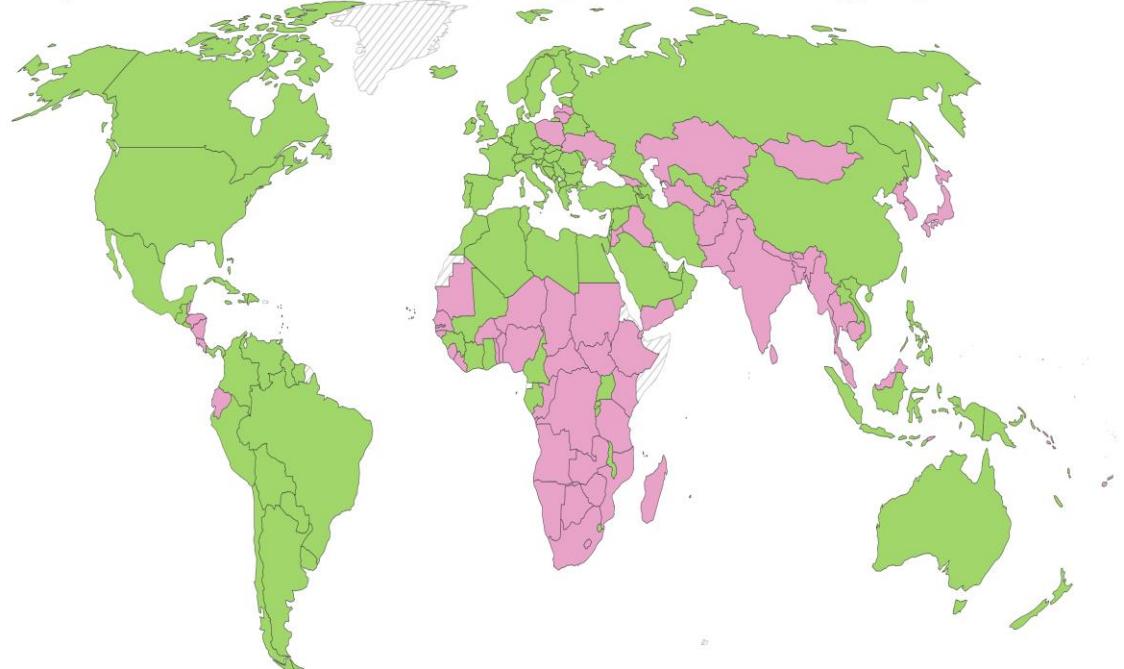
Data source: Food and Agriculture Organization of the United Nations (2023); World Bank (2023)
Note: Figures represent average per capita supply of fruit, which does not correct for waste at the household level.
OurWorldinData.org/diet-compositions | CC BY

Average per capita vegetable intake vs. minimum recommended guidelines, 2021

Our World in Data

Countries shown in pink have an average per capita intake below 250g per person per day; countries in green are greater than 250g. National and World Health Organization (WHO) recommendations tend to range between 200-250g per day.

No data · Below dietary guidelines · Meets dietary guidelines
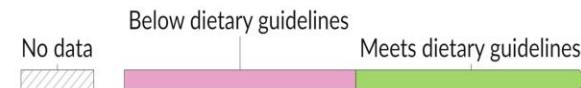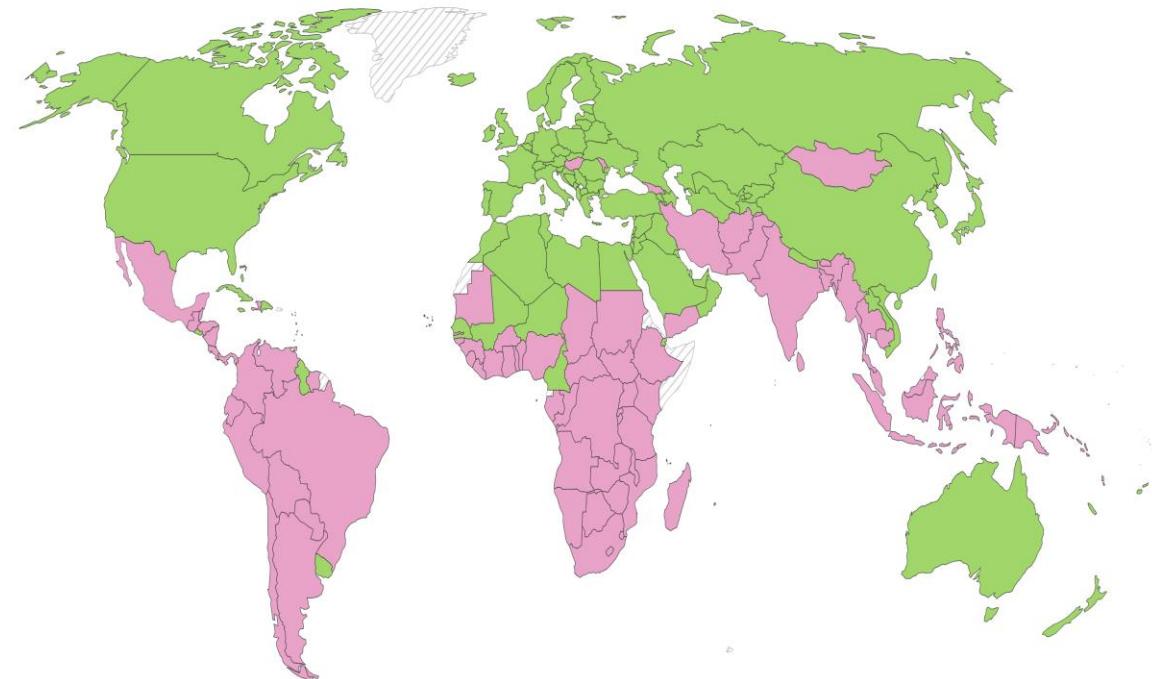
Data source: Food and Agriculture Organization of the United Nations (2023)
Note: Figures represent average per capita supply of vegetables, which does not correct for waste at the household level.
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How do actual diets compare to the EAT–Lancet diet?

Diets are shown as average daily per capita supply of different food groups, compared to the EAT-Lancet diet. The EAT-Lancet diet is a diet recommended to balance the goals of healthy nutrition and environmental sustainability for a global population.

Legend: Cereals · Roots and tubers · Vegetables · Fruits · Dairy (milk equivalents) · Red meat · Chicken · Eggs · Fish · Legumes · Nuts · Oils (added fats) · Sugar

Country	Cereals	Roots and tubers	Vegetables	Fruits	Dairy	Red meat	Chicken	Total
United States	299 g	154 g	311 g	247 g	698 g	185 g	153 g	2,323 g
Argentina	358 g		185 g	257 g	435 g	181 g		1,889 g
Colombia	349 g	217 g		488 g	334 g			1,886 g
Brazil	356 g	143 g	140 g	257 g	394 g	141 g		1,824 g
Mexico	466 g		207 g	313 g	326 g			1,798 g
Peru	450 g	335 g	183 g	327 g	155 g			1,714 g
Chile	402 g	175 g	197 g	145 g	259 g			1,628 g
Ecuador	461 g		248 g	296 g				1,421 g
Bolivia	376 g	236 g	229 g					1,409 g
EAT-Lancet	232 g		300 g	200 g	250 g			1,324 g

Data source: Food and Agriculture Organization of the United Nations; EAT-Lancet Commission

Note: Diets by country are given as food supply – this is higher than actual intakes because it does not correct for consumer waste.

OurWorldinData.org/diet-compositions | CC BY

Article

Nutritional Status, Intentions and Motivations towards Adopting a Planetary Health Diet—A Cross-Sectional Study

Urszula Ambroży [1], Ewa Błaszczyk-Bębenek [2], Dorota Ambroży [3], Paweł Jagielski [2], Łukasz Rydzik [3,*] and Tadeusz Ambroży [3]

Table 5. Contribution of food products in dietary pattern groups.

Product	Dietary Pattern	Very Important n	%	Important n	%	Neutral n	%	Unimportant n	%	Very Unimportant n	%	p Value
White meat	O	21	16.03%	45	34.35%	20	15.27%	17	12.98%	28	21.37%	<0.001 *
	PD	5	5.88%	14	16.47%	8	9.41%	11	12.94%	47	55.29%	
Red meat	O	10	7.63%	24	18.32%	27	20.61%	34	25.95%	36	27.48%	<0.001 *
	PD	2	2.35%	3	3.53%	4	4.71%	9	10.59%	67	78.82%	
Vegetables	O	71	54.20%	51	38.93%	6	4.58%	3	2.30%	0	0.00%	<0.001 *
	PD	76	89.41%	8	9.41%	1	1.18%	0	0.00%	0	0.00%	
Fruits	O	61	46.56%	51	38.93%	11	8.40%	6	4.58%	2	1.53%	0.130
	PD	47	55.29%	33	38.82%	4	4.71%	0	0.00%	1	1.18%	
Whole grain cereal products	O	35	26.72%	68	51.91%	17	12.98%	8	6.11%	3	2.29%	0.012 *
	PD	39	45.88%	33	38.82%	11	12.94%	2	2.35%	0	0.00%	
Fish and sea food	O	16	12.21%	54	41.22%	15	11.45%	18	13.74%	28	21.37%	0.065
	PD	11	12.94%	22	25.88%	13	15.29%	9	10.59%	30	35.29%	
Dairy, milk and milk products	O	29	22.14%	56	42.75%	14	10.69%	14	10.69%	18	13.74%	0.231
	PD	17	20.00%	29	34.12%	12	14.12%	12	14.12%	15	17.65%	
Eggs	O	19	14.50%	64	48.85%	37	28.24%	10	7.63%	1	0.76%	0.024 *
	PD	35	41.18%	40	47.06%	7	8.24%	3	3.53%	0	0.00%	
Legumes	O	24	18.32%	48	36.64%	41	31.30%	1	0.76%	0	0.00%	<0.001 *
	PD	45	52.94%	32	37.66%	8	9.41%	0	0.00%	0	0.00%	
Plant-based fats	O	19	14.50%	64	48.85%	37	28.24%	10	7.63%	1	0.76%	<0.001 *
	PD	35	41.18%	40	47.06%	7	8.24%	3	3.53%	0	0.00%	
Animal fats	O	2	1.53%	17	12.98%	45	34.35%	37	28.24%	30	22.90%	<0.001 *
	PD	0	0.00%	4	4.71%	10	11.76%	12	14.12%	59	69.41%	
Nuts and seeds	O	30	22.90%	61	46.56%	22	16.79%	15	11.45%	3	2.29%	<0.001 *
	PD	36	42.35%	38	44.71%	7	8.24%	3	3.53%	1	1.18%	
Sweets and sweet drinks	O	7	5.34%	36	27.48%	33	25.19%	31	23.66%	24	18.32%	0.020 *
	PD	2	2.35%	17	20.00%	17	20.00%	24	28.24%	25	29.41%	
Alcoholic beverages	O	3	2.29%	18	13.74%	33	25.19%	32	24.43%	45	34.35%	0.011 *
	PD	1	1.18%	5	5.88%	12	14.12%	28	32.94%	39	45.88%	

PD—planetary health diet; O—other dietary patterns, n—proportions, %—percentages, * $p < 0.05$.

Table 6. Characteristics of products determining grocery choices among participants within divided groups.

Product Characteristics	Dietary Pattern	Very Important n	%	Important n	%	Neutral n	%	Unimportant n	%	Very Unimportant n	%	p Value
Taste	O	83	53.36%	46	35.11%	1	0.76%	1	0.76%	0	0.00%	0.929
	PD	54	63.53%	31	36.47%	0	0.00%	0	0.00%	0	0.00%	
Health benefits	O	45	34.35%	68	51.91%	16	12.21%	2	1.53%	0	0.00%	<0.001 *
	PD	50	58.82%	30	35.29%	2	2.35%	2	2.35%	1	1.18%	
Price	O	36	27.48%	80	61.07%	8	6.11%	4	3.05%	3	2.29%	0.254
	PD	17	20.00%	55	64.71%	8	9.41%	4	4.71%	1	1.18%	
Easy to prepare	O	23	17.56%	58	44.27%	41	31.30%	4	3.05%	5	3.82%	0.133
	PD	12	14.12%	33	38.82%	26	30.59%	11	12.94%	3	3.53%	
Product comes from sustainable agriculture	O	11	8.40%	41	31.30%	49	37.40%	24	18.32%	6	4.58%	<0.000 *
	PD	18	21.18%	39	45.88%	22	25.88%	5	5.88%	1	1.18%	
Quality	O	61	46.56%	65	49.62%	5	3.82%	0	0.00%	0	0.00%	0.271
	PD	49	57.65%	30	35.29%	5	5.88%	0	0.00%	1	1.18%	

PD—planetary health diet; O—other dietary patterns, n—proportions, %—percentages, * $p < 0.05$.

Estimated micronutrient shortfalls of the EAT–*Lancet* planetary health diet

Ty Beal, Flaminia Ortenzi, Jessica Fanzo

Las ingestas recomendadas no procedían de las últimas ingestas dietéticas de referencia de la Autoridad Europera de Seguridad alimentaria o del Instituto de Medicina de EE.UU.

La dieta de salud planetaria tiene altas cantidades de fitato (>2400 mg), lo que compromete la biodisponibilidad del zinc.

Las necesidades energéticas de la dieta se calcularon asumiendo que las personas eran moderadamente activas o muy activas, lo que puede ser un supuesto poco realista.

No se evaluó la adecuación nutricional de las mujeres en edad reproductiva.

Cubrir las carencias de micronutrientes a través de alimentos mínimamente procesados e intrínsecamente densos en nutrientes.
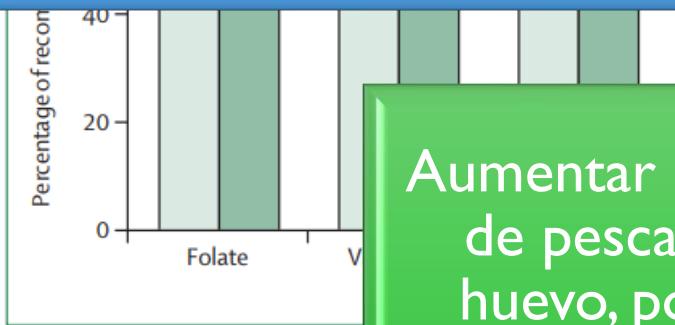
Aumentar alimentos de origen animal del 14% al 27% de las Kcal totales.

Reducir el fitato dietético de 1985 mg a 1021 mg.

Aumentar la ingesta diaria de pescado, mariscos, huevo, pollo y aves de corral, carne de vacuno y cerdo.

Reducir la ingesta diaria de leguminosas, frutos secos, soja.

Adherence to the Planetary Health Diet Index and correlation with nutrients of public health concern: an analysis of NHANES 2003–2018

Sarah M. Frank [1,2], Lindsay M. Jaacks [1], Linda S. Adair [2,3], Christy L. Avery [2,4], Katie Meyer [3,5], Donald Rose [6], Lindsey Smith Taillie [2,3,*]
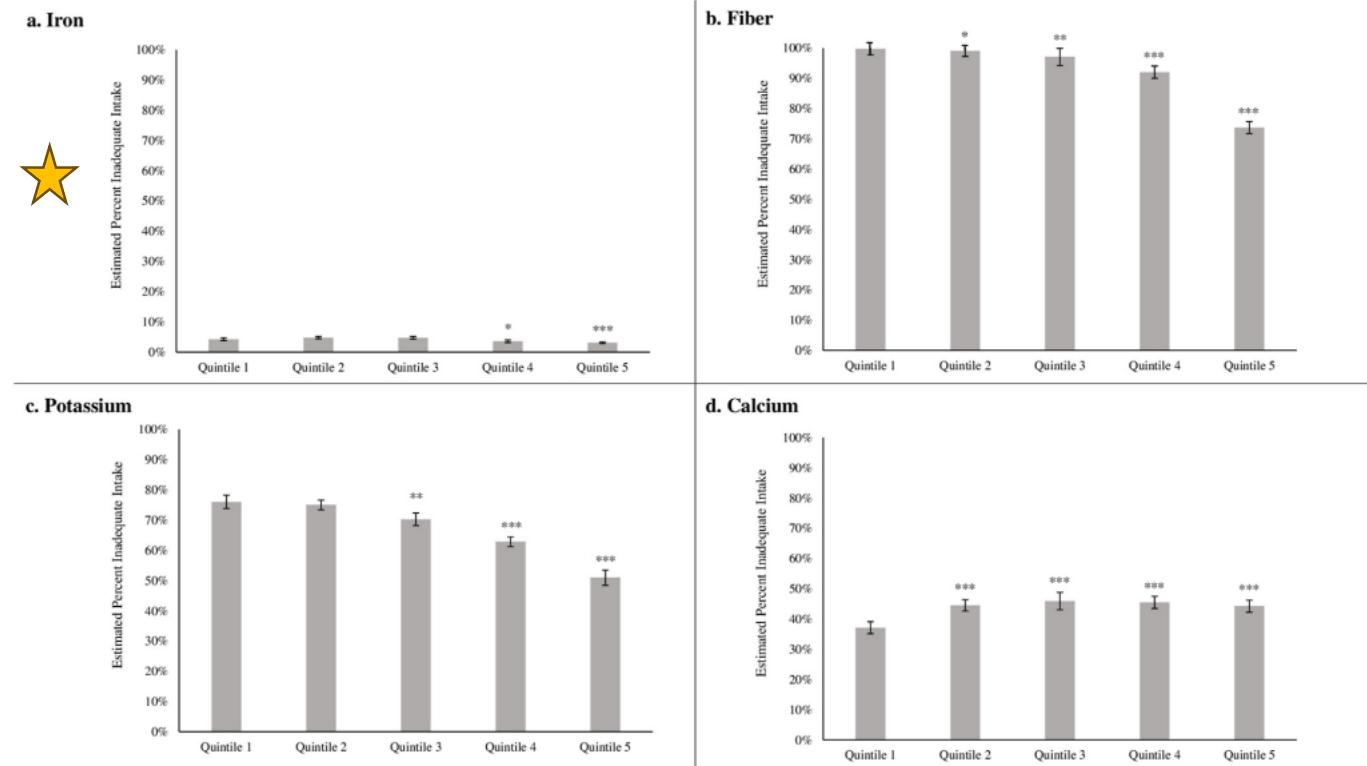
FIGURE 2. Predicted probability of meeting the recommended daily allowance for iron by quintile of Planetary Health Diet Index score, NHANES 2003–2018.[1,2]
[1]Quantile regression models were adjusted for total energy intake.[2]$*P < 0.05$, $**P < 0.01$, and $***P < 0.001$ for the difference from quintile 1.

Association between planetary health diet and cardiovascular disease: a prospective study from the UK Biobank

Mercedes Sotos-Prieto [1,2,3,4]*, Rosario Ortolá[1,2], Javier Maroto-Rodriguez [1],
Adrián Carballo-Casla[2,5], Stefanos N. Kales[4],
and Fernando Rodríguez-Artalejo [1,2,3]

Figure 1 Hazard ratios (95% CI) for CVD risk per two-point increment of each Planetary Health Diet Index food group in the UK Biobank. Multivariable-adjusted model: for sex, age, ethnicity, education, deprivation index, region of assessment, smoking status, energy intake, physical activity, BMI, diabetes, cancer, hypertension, cholesterol-lowering medication, number of medications, and vitamin supplement use.

Adherence to a Planetary Health Diet, Environmental Impacts, and Mortality in Chinese Adults

Yi-Xiang Ye, MBBS; Ting-Ting Geng, PhD; Yan-Feng Zhou, PhD; Pan He, PhD; Ji-Juan Zhang, MBBS; Gang Liu, PhD; Walter Willett, PhD; An Pan, PhD; Woon-Puay Koh, PhD

Table 3. Association Between Planetary Health Diet Score and All-Cause and Cause-Specific Mortality in the Singapore Chinese Health Study

Variable	Quintiles of planetary health diet score, HR (95% CI)					P value for trend[a]
	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	
Planetary health diet score, range	13-47	47-53	53-58	58-63	63-95	NA
Person-year of follow-up	228 222	239 839	244 012	247 935	251 184	NA
All-cause mortality						
Events, No.	5648	4712	4412	4147	3680	NA
Model 1[b]	1 [Reference]	0.85 (0.82-0.89)	0.82 (0.79-0.86)	0.81 (0.77-0.84)	0.77 (0.74-0.80)	<.001
Model 2[c]	1 [Reference]	0.90 (0.87-0.94)	0.89 (0.85-0.92)	0.88 (0.84-0.91)	0.85 (0.81-0.89)	<.001
Cause-specific mortality						
CVD mortality						
Events, No.	1771	1403	1387	1254	1133	NA
Model 1[b]	1 [Reference]	0.82 (0.76-0.88)	0.84 (0.78-0.90)	0.79 (0.73-0.85)	0.77 (0.71-0.83)	<.001
Model 2[c]	1 [Reference]	0.84 (0.78-0.90)	0.85 (0.79-0.92)	0.81 (0.75-0.87)	0.79 (0.73-0.85)	<.001
Cancer mortality						
Events, No.	1810	1552	1409	1360	1207	NA
Model 1[b]	1 [Reference]	0.87 (0.81-0.93)	0.81 (0.76-0.87)	0.81 (0.75-0.87)	0.76 (0.71-0.82)	<.001
Model 2[c]	1 [Reference]	0.96 (0.89-1.03)	0.93 (0.86-0.99)	0.95 (0.88-1.02)	0.93 (0.86-1.00)	.04
Respiratory diseases mortality						
Events, No.	1274	1052	943	883	739	NA
Model 1[b]	1 [Reference]	0.84 (0.77-0.91)	0.79 (0.72-0.85)	0.78 (0.71-0.85)	0.71 (0.65-0.78)	<.001
Model 2[c]	1 [Reference]	0.90 (0.83-0.98)	0.87 (0.80-0.95)	0.87 (0.80-0.95)	0.81 (0.74-0.89)	<.001

Abbreviations: CVD, cardiovascular disease; NA, not applicable.

[a] Linear trends were assessed by treating the median values of the quintiles of planetary health diet score as a continuous variable.

[b] Model 1 was adjusted for age, sex, and energy intake (kcal/d).

[c] Model 2 was additionally adjusted for dialect group (Cantonese or Hokkien), educational level (no formal education, primary school, or secondary school or higher), body mass index, smoking status (never, former, or current), alcohol frequency (none, monthly, weekly, or daily), physical activity (<0.5 h/wk, 0.5-3.9 h/wk, or ≥4 h/wk), sleep duration (<6 h/d, 6-8 h/d, or >8 h/d), and self-reported history of physician-diagnosed hypertension and diabetes.

Planetary health diet and cardiovascular disease: results from three large prospective cohort studies in the USA

Caleigh M Sawicki*, Gautam Ramesh*, Linh Bui, Nilendra K Nair, Frank B Hu, Eric B Rimm, Meir J Stampfer, Walter C Willett, Shilpa N Bhupathiraju

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	p-trend
Cardiovascular disease						
Cases	2104	2068	1964	1937	1758	..
Person-years	904 156	908 271	909 118	910 133	910 302	..
Model 1	1 (ref)	0·90 (0·85–0·96)	0·81 (0·76–0·87)	0·77 (0·72–0·82)	0·67 (0·63–0·71)	<0·0001
Model 2	1 (ref)	0·96 (0·91–1·03)	0·91 (0·85–0·97)	0·89 (0·84–0·95)	0·83 (0·78–0·89)	<0·0001
Coronary heart disease						
Cases	1202	1150	1152	1064	931	..
Person-years	904 998	909 139	909 919	910 989	911 064	..
Model 1	1 (ref)	0·88 (0·81–0·96)	0·84 (0·78–0·92)	0·75 (0·69–0·82)	0·63 (0·58–0·69)	<0·0001
Model 2	1 (ref)	0·95 (0·88–1·04)	0·96 (0·88–1·04)	0·89 (0·81–0·97)	0·81 (0·74–0·88)	<0·0001
Stroke						
Cases	954	970	854	914	874	..
Person-years	905 213	909 314	910 157	911 063	911 087	..
Model 1	1 (ref)	0·92 (0·85–1·01)	0·77 (0·70–0·84)	0·79 (0·72–0·87)	0·72 (0·66–0·79)	<0·0001
Model 2	1 (ref)	0·98 (0·89–1·07)	0·84 (0·77–0·93)	0·89 (0·81–0·98)	0·86 (0·78–0·95)	0·0004
Ischaemic stroke						
Cases	459	519	427	495	437	..
Person-years	905 671	909 743	910 576	911 459	911 490	..
Model 1	1 (ref)	1·02 (0·90–1·15)	0·78 (0·69–0·90)	0·87 (0·76–0·98)	0·73 (0·64–0·83)	<0·0001
Model 2	1 (ref)	1·06 (0·93–1·20)	0·85 (0·74–0·97)	0·96 (0·84–1·10)	0·86 (0·75–0·99)	0·01

Data are number of cases, number of person-years, or hazard ratios (95% CI). Model 1: inverse variance-weighted fixed effects meta-analysis of age-adjusted cohort-specific hazard ratios. Model 2: additionally adjusted for energy intake, alcohol (0, >0 to <5, 5 to <10, 10 to <15, or ≥15 g/d), multivitamin use (yes or no), aspirin use (yes or no), smoking (never smoker, past smoker, current smoker 1–14 cigarettes per day, current smoker 15–24 cigarettes per day, or current smoker ≥24 cigarettes per day), physical activity (<3, 3 to <9, 9 to <18, 18 to 27, 27 to <42, or ≥42 total metabolic equivalent of task per week), BMI (<21, 21 to <23, 23 to <25, 25 to <27, 27 to <30, 30 to <33, 33 to <35, 35 to <40, or ≥40 kg/m²), marital status (never married, married, widowed, or divorced or separated), family history of type 2 diabetes (yes or no), family history of cardiovascular disease (yes or no), postmenopausal hormone use (premenopausal, postmenopausal never used, postmenopausal currently using, or postmenopausal past use), oral contraceptive use (NHS II only; current, past, or never used), race (White or not White), hypertension (yes or no), hypercholesterolaemia (yes or no), and incident diabetes (yes or no).

Table 3: Association between Planetary Health Diet Index and incident cardiovascular disease, coronary heart disease, and stroke in meta-analysis of the Nurses' Health Study I, Nurses' Health Study II, and Health Profssionals Follow-up Study

Patrones alimentarios que promueven todas las dimensiones de la salud y el bienestar de las personas; tienen una baja presión e impacto ambiental; son accesibles, asequibles, seguras y equitativas; y son culturalmente aceptables.

FAO y OMS. Dietas saludables sostenibles - Principios rectores. Roma. 2020. Disponible en: https://doi.org/10.4060/ca6640es

OXFAM Intermón. Dieta climatarian. Comer sin contribuir al cambio climático. sf

DIETA CLIMATARIAN

Come sin contribuir al cambio climático
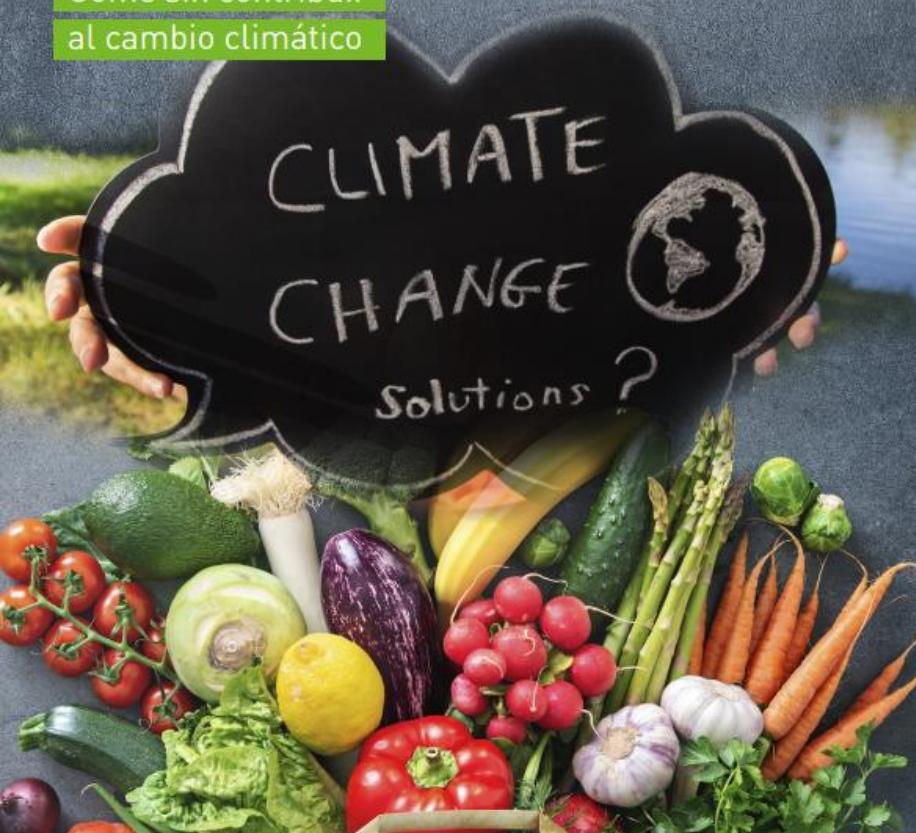
Comprar cerca de casa	Productos de cercanía	Producción ecológica
Más frutas y verduras y menos carne	Más alimentos crudos	Cocinar más cantidad
Disminuir los desperdicios	No usar plástico	

Guías alimentarias

Muy pocos países cuentan con Guías Alimentarias basadas en alimentos que incorporen entre sus objetivos la salud y la sostenibilidad: Brasil, México, Suecia, Qatar y Alemania.
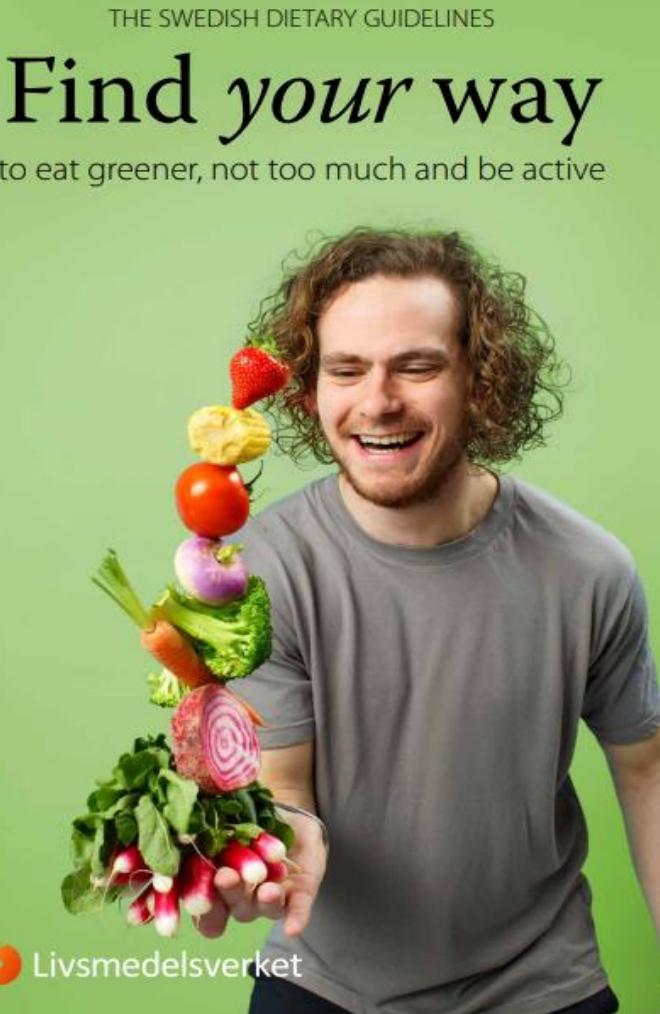
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Cada año desaparecen miles de especies vegetales y animales que ya no podremos conocer, que nuestros hijos ya no podrán ver, perdidas para siempre… En esta perspectiva son loables y a veces admirables los esfuerzos de científicos y técnicos que tratan de aportar soluciones a los problemas creados por el ser humano, pero esa intervención humana, cuando se pone al servicio de las finanzas y el consumismo, hace que la tierra en que vivimos se vuelva menos rica y bella, cada vez más limitada y gris.

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COMPROMISOS DE LOS NUTRIÓLOGOS CON LA SALUD PLANETARIA

Renata Rivera-Flores[1], Edna J. Nava-González[2] , Martha Kaufer-Horwitz[3] , Claudia Hunot-Alexander[4] , Nancy G. Valenzuela-Rubio[5]

Como nutriólogos debemos reconocer la dependencia entre la salud humana y la planetaria y, que la transición a sistemas alimentarios sostenibles es una responsabilidad compartida que alcanzaría varios niveles sólo sí:

- Ponemos en contexto lo que supone hablar de salud planetaria en relación a la nutrición
- Desalentamos la desinformación a través de un juicio crítico de la evidencia
- Adquirimos competencias para ver de manera integrada el sistema alimentario, en las tres dimensiones del desarrollo sostenible
- Nos involucramos en grupos interdisciplinarios de discusión sobre sistemas alimentarios sostenibles
- Unificamos y fortalecemos los gremios de profesionales de la nutrición
- Apoyamos las nuevas políticas públicas a favor de sistemas alimentarios sostenibles
- Generamos herramientas, recursos o investigación y estos son compartidos

Orientamos a la población para cambiar a una dieta tanto saludable como sostenible

Fomentamos la reducción del desperdicio de alimentos, tanto antes como después del consumo

Participamos en acciones de seguridad alimentaria como son los bancos de alimentos

Generamos acciones para implementar la actual guía alimentaria saludable y sostenible para la población mexicana, la cual contempla iniciar con lactancia materna exclusiva y hasta los 6 meses de edad

Enseñamos a seleccionar los alimentos locales y a reducir el consumo de los ultraprocesados

Trabajamos a escala institucional (en el gobierno, organizaciones, instituciones o comunidades) para desarrollar políticas y programas (para el campo, escuelas o grupos vulnerables) dirigidos a lograr la equidad nutricional

Hacemos investigación y medimos el avance de la nutrición

Creamos conciencia y capacitamos a los profesionales en formación de la importancia de tener una visión global donde se vea la integración de la salud humana con la planetaria

Una dieta sana y sostenible es posible, sin embargo, se requiere un esfuerzo unificado de la sociedad civil, gobierno, academia.

La salud humana y la preservación del medio ambiente son dos de los mayores retos de nuestro tiempo, y están íntimamente ligados.

¡Gracias!

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