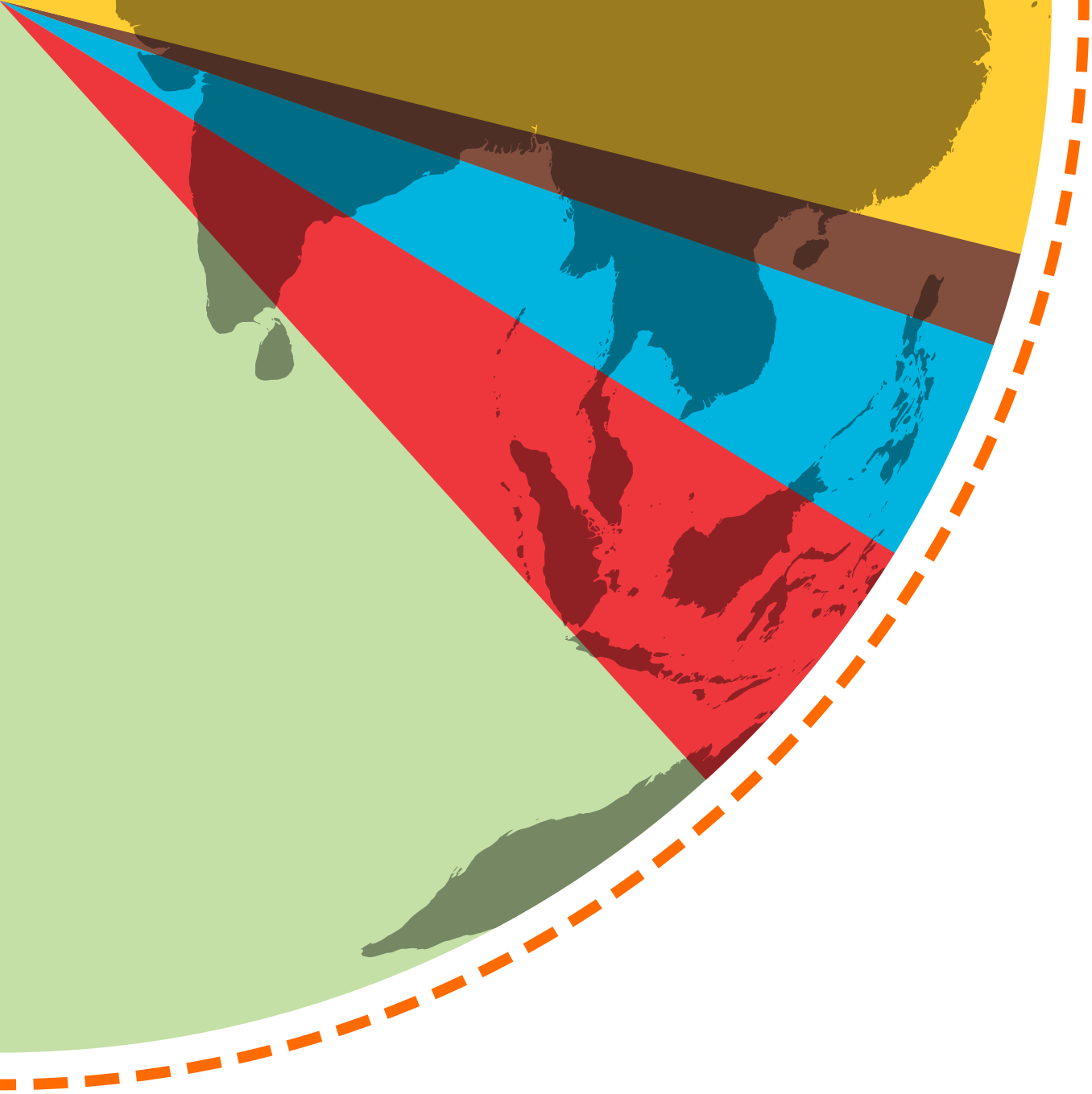

Summary Report of the EAT-*Lancet* Commission

Healthy Diets From
Sustainable Food Systems

Food Planet Health

EAT

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This report was prepared by EAT and is an adapted summary of the Commission *Food in The Anthropocene: the EAT-Lancet Commission on Healthy Diets From Sustainable Food Systems*. The entire Commission can be found online at *thelancet.com/commissions/EAT*.

The EAT-*Lancet* Commission and this summary report were made possible with the support of Wellcome Trust.

Prof. Walter Willett MD
Harvard T.H. Chan School of Public Health

"Transformation to healthy diets by 2050 will require substantial dietary shifts. Global consumption of fruits, vegetables, nuts and legumes will have to double, and consumption of foods such as red meat and sugar will have to be reduced by more than 50%. A diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits."

Our Food in the Anthropocene: Healthy Diets From Sustainable Food Systems

Without action, the world risks failing to meet the UN Sustainable Development Goals (SDGs) and the Paris Agreement, and today's children will inherit a planet that has been severely degraded and where much of the population will increasingly suffer from malnutrition and preventable disease.

Food is the single strongest lever to optimize human health and environmental sustainability on Earth. However, food is currently threatening both people and planet. An immense challenge facing humanity is to provide a growing world population with healthy diets from sustainable food systems. While global food production of calories has generally kept pace with population growth, more than 820 million people still lack sufficient food, and many more consume either low-quality diets or too much food. Unhealthy diets now pose a greater risk to morbidity and mortality than unsafe sex, alcohol, drug and tobacco use combined. Global food production threatens climate stability and ecosystem resilience and constitutes the single largest driver of environmental degradation and transgression of planetary boundaries. Taken together the outcome is dire. **A radical transformation of the global food system is urgently needed.** Without action, the world risks failing to meet the UN Sustainable Development Goals (SDGs) and the Paris Agreement, and today's children will inherit a planet that has been severely degraded and where much of the population will increasingly suffer from malnutrition and preventable disease.

There is substantial scientific evidence that links **diets with human health and environmental sustainability.** Yet the absence of globally agreed scientific targets for healthy diets and sustainable food production has hindered large-scale and coordinated efforts to transform the global food system. To address this critical need, the EAT-*Lancet* Commission convened 37 leading scientists from 16 countries in various disciplines including human health, agriculture, political sciences and environmental sustainability to develop global scientific targets for healthy diets and sustainable food production. This is the first attempt to set universal scientific targets for the food system that apply to all people and the planet.

Food is the single strongest lever to optimize human health and environmental sustainability on Earth.

The Commission focuses on two "end-points" of the global food system: final consumption (healthy diets) and production (sustainable food production, see Figure 1). These factors disproportionately impact human health and environmental sustainability. The Commission acknowledges that food systems have environmental impacts along the entire supply chain from production to processing and retail, and furthermore reach beyond human and environmental health by also affecting society, culture, economy, and animal health and welfare. However, given the breadth and depth of each of these topics, it was necessary to place many important issues outside the scope of the Commission.

Figure 1
An integrated agenda for food in the Anthropocene recognizes that food forms an inextricable link between human health and environmental sustainability. The global food system must operate within boundaries for human health and food production to ensure healthy diets from sustainable food systems for nearly 10 billion people by 2050.

1 Goal – 2 Targets – 5 Strategies

To Achieve Planetary Health Diets for Nearly 10 Billion People by 2050

#foodcanfixit

A large body of work has emerged on the environmental impacts of various diets, with most studies concluding that **a diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits.** Overall, the literature indicates that such diets are "win-win" in that they are good for both people and planet. However, there is still no global consensus on what constitutes healthy diets and sustainable food production and **whether planetary health diets* may be achieved for a global population of 10 billion people by 2050.**

By assessing the existing scientific evidence, the Commission developed global scientific targets for healthy diets and sustainable food production and integrated these universal scientific targets into a common framework, **the safe operating space for food systems,** so that planetary health diets (both healthy and environmentally sustainable) could be identified. This safe operating space is defined by scientific targets for intakes of specific food groups (e.g. 100 to 300 g/day of fruit) to optimize human health and scientific targets for sustainable food production to ensure a stable Earth system (see Figure 2).

The boundaries of the safe operating space are placed at the lower end of the scientific uncertainty range, establishing a "safe space" which, if transgressed, would push humanity into an uncertainty zone of rising risks. Operating outside this space for any Earth system process (e.g. high rates of biodiversity loss) or food group (e.g. insufficient vegetable intake) increases the risk of harm to the stability of the Earth system and human health. When viewed together as an integrated health and sustainability agenda, the **scientific targets that define a safe operating space for food systems allow the evaluation of which diets and food production practices together will enable achievement of the SDGs and the Paris Agreement.**

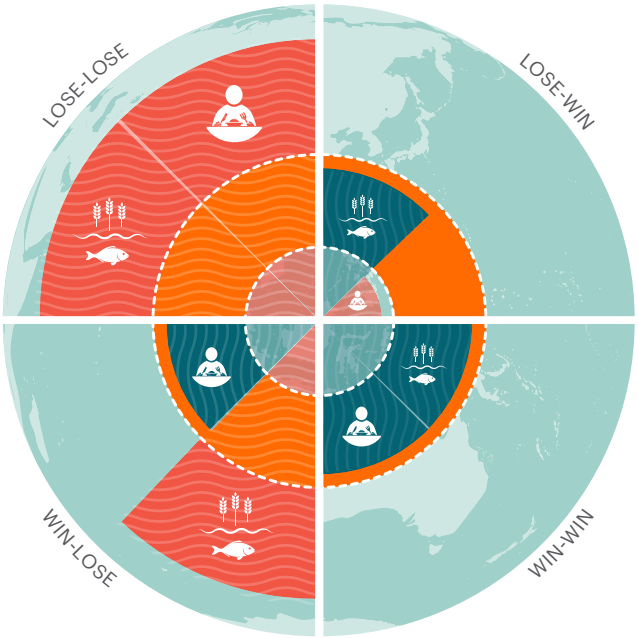

Figure 2

Scientific targets define the safe operating space for food systems and are represented here by the orange ring. The wedges represent either dietary patterns or food production, and together they reflect various dietary patterns that may or may not meet scientific targets for human health and environmental sustainability, i.e. outside of the safe operating space. These dietary patterns can be "healthy and unsustainable" (win-lose), "unhealthy and sustainable" (lose-win), "unhealthy and unsustainable" (lose-lose) and "healthy and sustainable" (win-win).

*Planetary health refers to the "the health of human civilization and the state of the natural systems on which it depends". This concept was put forth in 2015 by the Rockefeller Foundation-*Lancet* Commission on planetary health to transform the field of public health, which has traditionally focused on the health of human populations without considering natural systems. The EAT-*Lancet* Commission builds upon the concept of planetary health and puts forth the new term "planetary health diet" to highlight the critical role that diets play in linking human health and environmental sustainability and the need to integrate these often-separate agendas into a common global agenda for food system transformation to achieve the SDGs and Paris Agreement.

1 Goal – **2 Targets** – 5 Strategies

Setting Scientific Targets for Healthy Diets and Sustainable Food Production

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Target 1
Healthy Diets

A healthy diet should optimize health, defined broadly as being a state of complete physical, mental and social well-being and not merely the absence of disease. Scientific targets for healthy diets are based on the extensive literature on foods, dietary patterns and health outcomes (see Table 1).

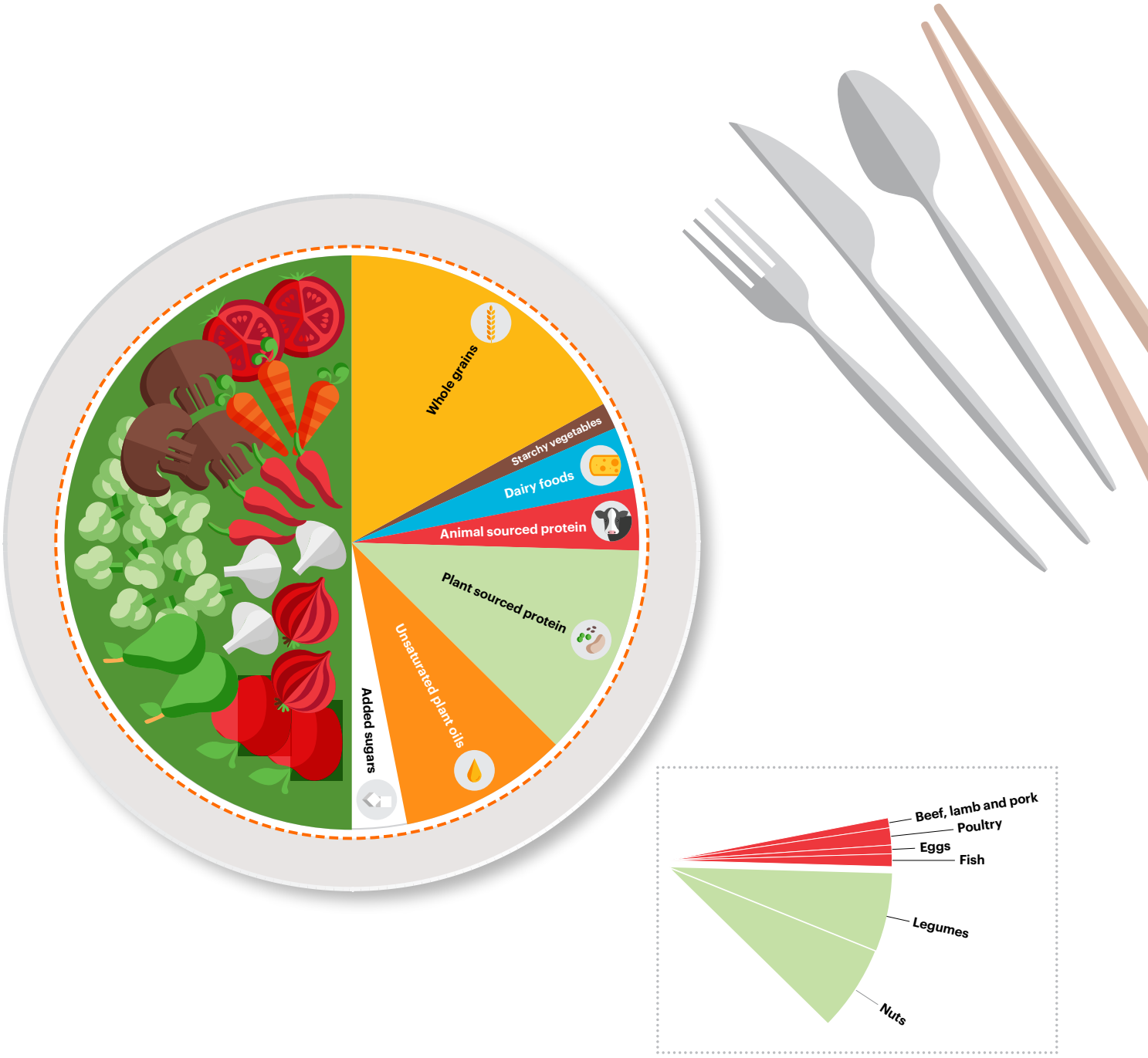


Figure 3
A planetary health plate should consist by volume of approximately half a plate of vegetables and fruits; the other half, displayed by contribution to calories, should consist of primarily whole grains, plant protein sources, unsaturated plant oils, and (optionally) modest amounts of animal sources of protein. For further details, please refer to section 1 of the Commission.

Target 1
Healthy Diets

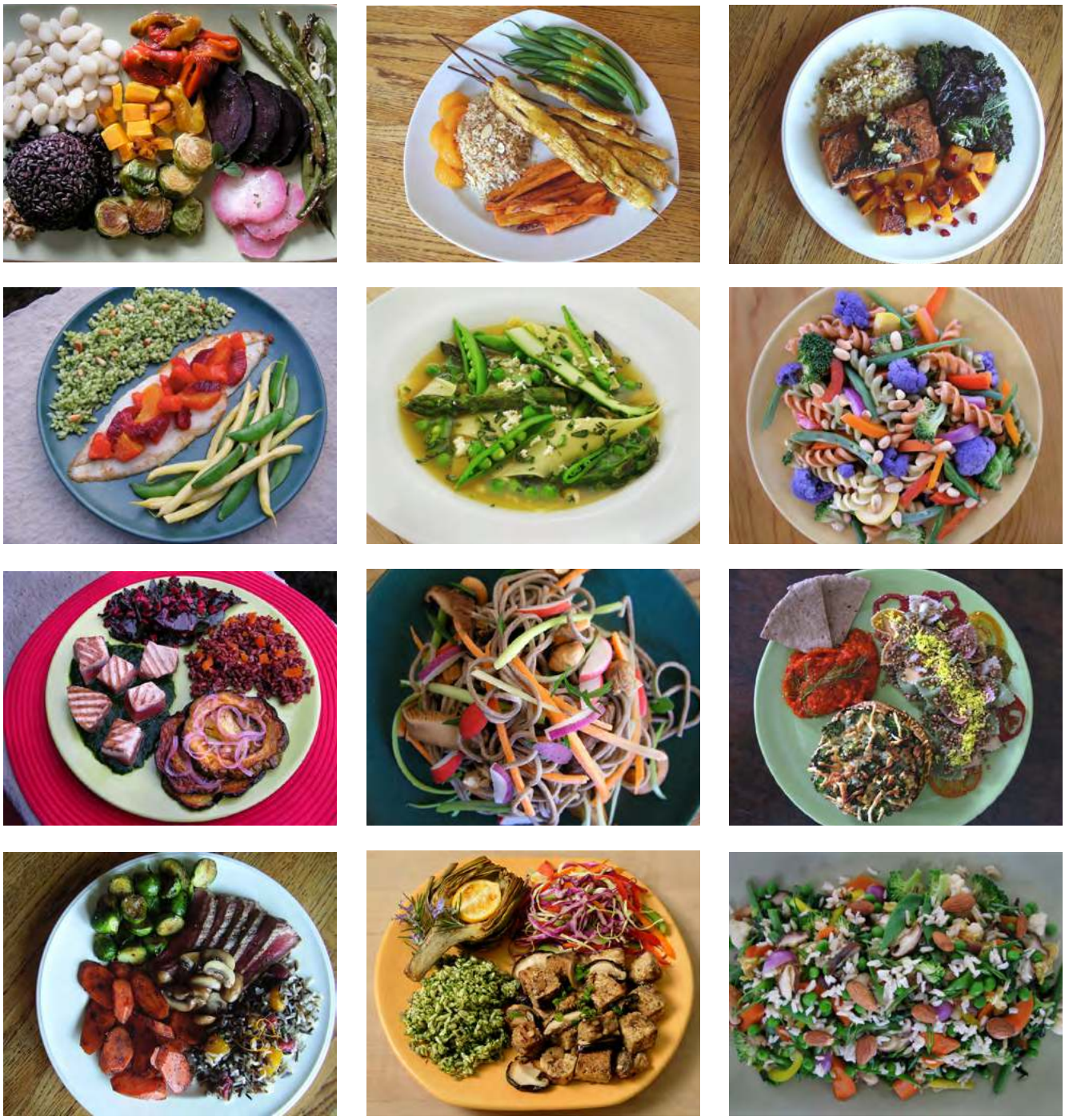
Healthy diets have an optimal caloric intake and consist largely of a diversity of plant-based foods, low amounts of animal source foods, contain unsaturated rather than saturated fats, and limited amounts of refined grains, highly processed foods and added sugars.

	Macronutrient intake grams per day (possible range)	**Caloric intake kcal per day**
Whole grains		
Rice, wheat, corn and other	**232**	**811**
Tubers or starchy vegetables		
Potatoes and cassava	**50** (0–100)	**39**
Vegetables		
All vegetables	**300** (200–600)	**78**
Fruits		
All fruits	**200** (100–300)	**126**
Dairy foods		
Whole milk or equivalents	**250** (0–500)	**153**
Protein sources		
Beef, lamb and pork	**14** (0–28)	**30**
Chicken and other poultry	**29** (0–58)	**62**
Eggs	**13** (0–25)	**19**
Fish	**28** (0–100)	**40**
Legumes	**75** (0–100)	**284**
Nuts	**50** (0–75)	**291**
Added fats		
Unsaturated oils	**40** (20–80)	**354**
Saturated oils	**11.8** (0-11.8)	**96**
Added sugars		
All sugars	**31** (0–31)	**120**

Table 1
Scientific targets for a planetary health diet, with possible ranges, for an intake of 2500 kcal/day.

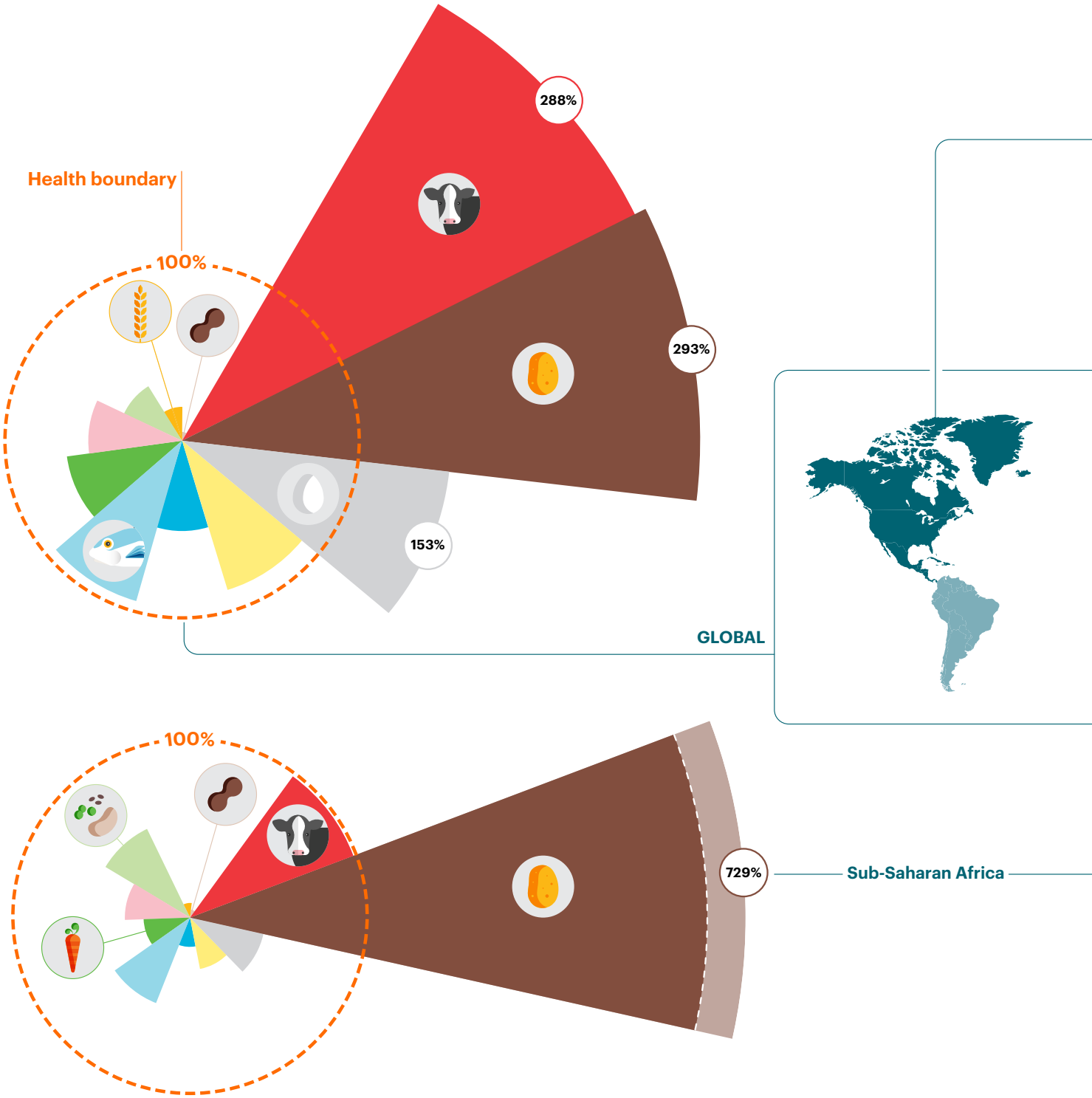
Although the planetary health diet, which is based on health considerations, is consistent with many traditional eating patterns, it does not imply that the global population should eat exactly the same food, nor does it prescribe an exact diet. Instead, the planetary health diet outlines empirical food groups and ranges of food intakes, which combined in a diet, would optimize human health. Local interpretation and adaptation of the universally-applicable planetary health diet is necessary and should reflect the culture, geography and demography of the population and individuals.

The plates below are examples of a planetary health diet. This is a flexitarian diet, which is largely plant-based but can optionally include modest amounts of fish, meat and dairy foods.



Transformation to healthy diets by 2050 will require substantial dietary shifts.

This includes a more than **doubling in the consumption of healthy foods such as fruits, vegetables, legumes and nuts, and a greater than 50% reduction in global consumption of less healthy foods such as added sugars and red meat** (i.e. primarily by reducing excessive consumption in wealthier countries). However, some populations worldwide depend on agropastoral livelihoods and animal protein from livestock. In addition, many populations continue to face significant burdens of undernutrition and obtaining adequate quantities of micronutrients from plant source foods alone can be difficult. Given these considerations, the role of animal source foods in people's diets must be carefully considered in each context and within local and regional realities.



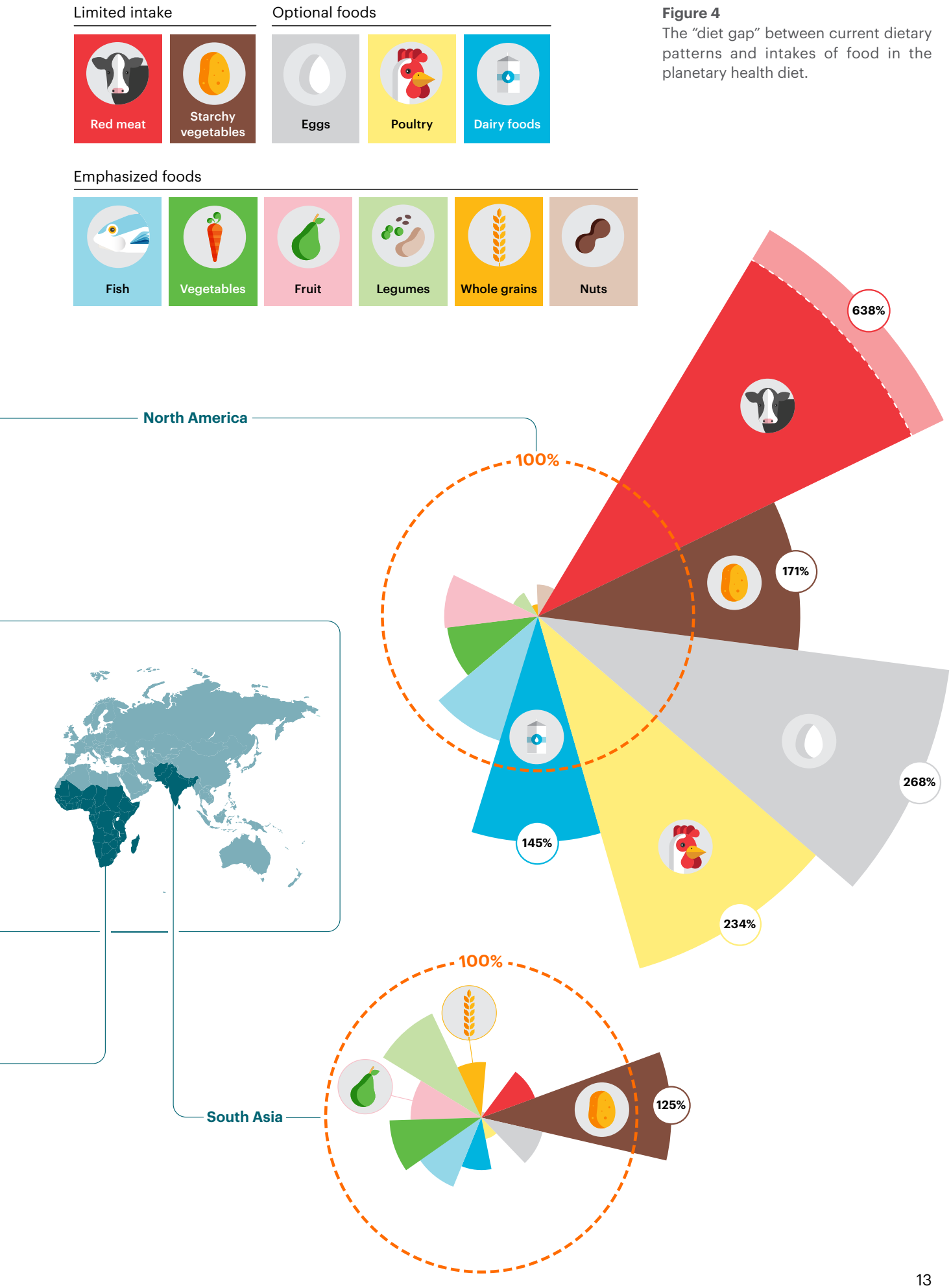


Figure 4
The "diet gap" between current dietary patterns and intakes of food in the planetary health diet.

Dietary changes from current diets toward healthy diets are likely to result in significant health benefits.

The Commission analyzed the potential impacts of dietary change on diet-related disease mortality using three approaches (see Table 2). All three approaches concluded that **dietary changes from current diets toward healthy diets are likely to result in major health benefits.** This includes preventing approximately 11 million deaths per year, which represent between 19% to 24% of total deaths among adults.

Approach 1 Comparative Risk	19%	or	11.1 million adult deaths per year
Approach 2 Global Burden of Disease	22.4%	or	10.8 million adult deaths per year
Approach 3 Empirical Disease Risk	23.6%	or	11.6 million adult deaths per year

Table 2
Estimated deaths prevented among adults by a global adoption of the planetary health diet.

Target 2 **Sustainable Food Production**

Interacting biogeophysical systems and processes in the Earth system, in particular between the climate system and the biosphere, regulate the state of the planet. The Commission focuses on six of these (Table 3), which are the main systems and processes affected by food production and for which scientific evidence allows the provision of quantifiable targets. These systems and processes are being increasingly recognized as necessary parameters for a system-wide definition of sustainable food production. For each of these, **the Commission proposes boundaries that global food production should stay within to decrease the risk of irreversible and potentially catastrophic shifts in the Earth system.** These planetary boundaries for food production conceptually define the upper limit of environmental effects for food production at the global scale.

For the climate change boundary for food production, the underlying assumption that has been applied is that the world will follow the Paris Agreement (keeping global warming to well below 2°C, aiming for 1.5°C) and decarbonize the global energy system by 2050. It has also been assumed that world agriculture will transition toward sustainable food production, leading to a shift from land use being a net source of carbon to becoming a net sink of carbon. The boundary estimate is thereby an assessment of the maximum amount of non-CO_2 gases (i.e. methane and nitrous oxide) that have been assessed as both necessary and hard to further reduce – at least before 2050 – in order to achieve both healthy diets for everyone on the planet and the targets of the Paris Agreement.

Earth system process	Control variable	Boundary (Uncertainty range)
Climate change	GHG emissions	**5 Gt CO_2-eq yr^{-1}** (4.7 – 5.4 Gt CO2-eq yr^{-1})
Land-system change	Cropland use	**13 M km^2** (11–15 M km^2)
Freshwater use	Water use	**2,500 km^3 yr^{-1}** (1000–4000 km^3 yr^{-1})
Nitrogen cycling	N application	**90 Tg N yr^{-1}** (65–90 Tg N yr^{-1}) * (90–130 Tg N yr^{-1})**
Phosphorus cycling	P application	**8 Tg P yr^{-1}** (6–12 Tg P yr^{-1}) * (8–16 Tg P yr^{-1})**
Biodiversity loss	Extinction rate	**10 E/MSY** (1–80 E/MSY)

*Lower boundary range if improved production practices and redistribution are not adopted.
**Upper boundary range if improved production practices and redistribution are adopted and 50% of applied phosphorus is recycled.

Table 3
Scientific targets for six key Earth system processes and the control variables used to quantify the boundaries.

Achieving planetary health diets.

Achieving a sustainable food system that can deliver healthy diets for a growing population presents formidable challenges. Finding solutions to these challenges requires an understanding of the environmental impacts of various actions. The readily implementable actions investigated by the Commission were: 1) A global shift toward healthy diets; 2) improved food production practices; and 3) reduced food loss and waste (see Table 4). The Commission's aim was to **identify a set of actions that meet the scientific targets for healthy diets and sustainable food production, which will allow for a transition of the global food system to within the safe operating space.**

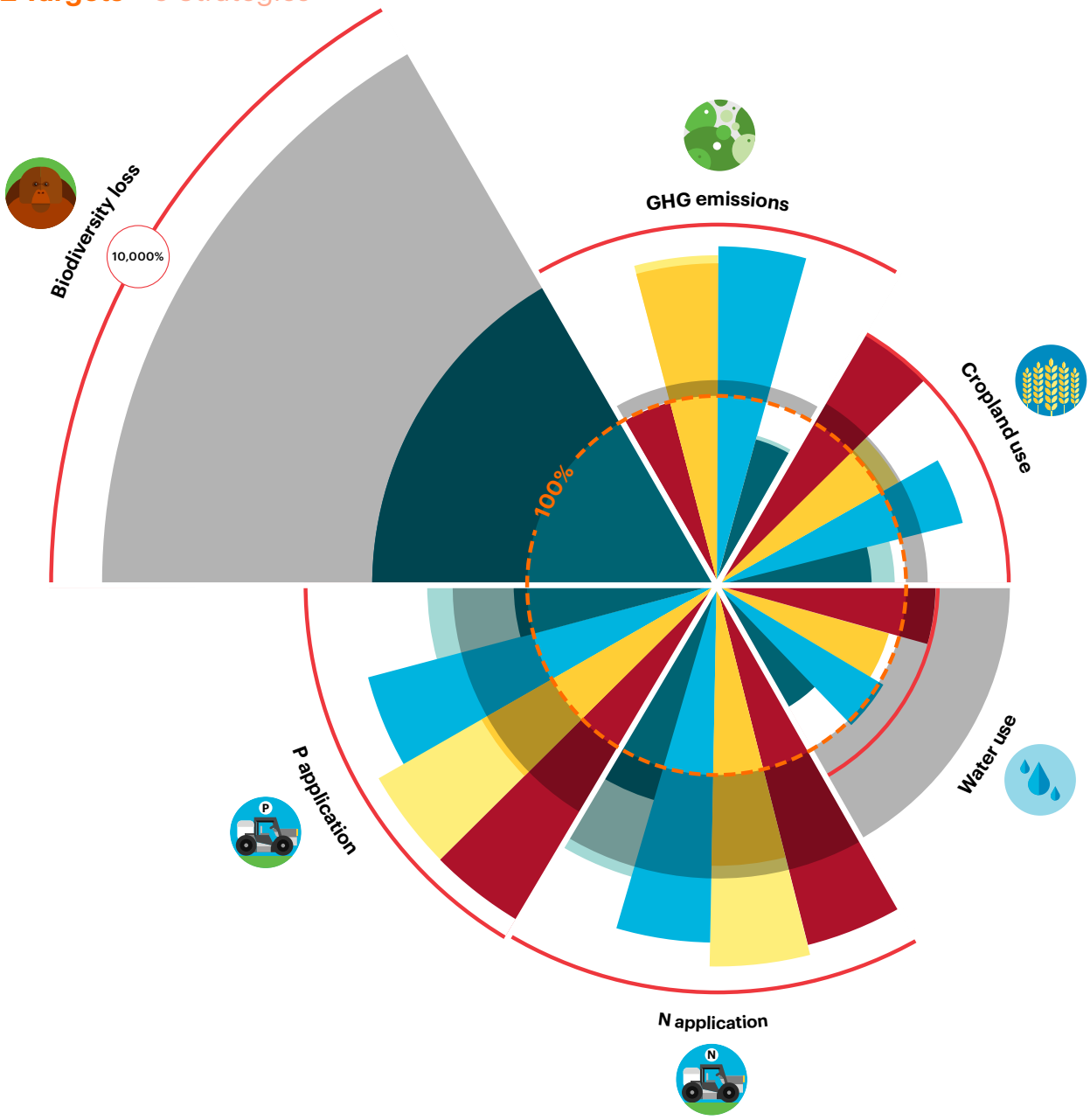
Applying this framework to future projections of world development indicates that food systems can provide healthy diets (defined here as a reference diet) for an estimated population of about 10 billion people by 2050 and remain within a safe operating space. However, even small increases in the consumption of red meat or dairy foods would make this goal difficult or impossible to achieve. The analysis shows that staying within the safe operating space for food systems **requires a combination of substantial shifts toward mostly plant-based dietary patterns, dramatic reductions in food losses and waste, and major improvements in food production practices.** While some individual actions are enough to stay within specific boundaries, no single intervention is enough to stay below all boundaries simultaneously.

Actions	Description
Dietary shift Planetary health diet	Planetary health diet – as outlined in Table 1.
Halve waste Reduced food loss and waste	Food losses and waste reduced by half, in line with SDG target 12.3.
PROD Improved production practices Standard level of ambition	Closing of yield gaps to about 75%; rebalancing nitrogen and phosphorus fertilizer application between over and under-applying regions; improving water management; and implementation of agricultural mitigation options that are economic at the projected social cost of carbon in 2050. For biodiversity, it was assumed that land is expanded first into secondary habitat or other managed ecosystems and then to intact forests.
PROD+ Improved production practices High level of ambition	High level of ambition practices on top of PROD scenario, including closing yield gaps to 90%; a 30% increase in nitrogen use efficiency, and 50% recycling rates of phosphorus; phase-out of first-generation biofuels, and implementation of all available bottom-up options for mitigating food-related GHG emissions. For biodiversity, it was assumed that land use is optimized across regions such that it minimizes impacts on biodiversity.

Table 4
Actions considered for reducing environmental impacts from food production.

			GHG emissions	Cropland use	Water use	Nitrogen application	Phosphorus application	Biodiversity loss
Food production boundary			5.0 (4.7–5.4)	13 (11.0–15.0)	2.5 (1.0–4.0)	90 (65.0–140.0)	8 (6.0–16.0)	10 (1–80)
Baseline in 2010			5.2	12.6	1.8	131.8	17.9	100–1000
Production (2050)	Waste (2050)	Diet (2050)						
BAU	Full waste	BAU	9.8	21.1	3.0	199.5	27.5	1,043
BAU	Full waste	Dietary shift	5.0	21.1	3.0	191.4	25.5	1,270
BAU	Halve waste	BAU	9.2	18.2	2.6	171.0	23.2	684
BAU	Halve waste	Dietary shift	4.5	18.1	2.6	162.6	21.2	885
PROD	Full waste	BAU	8.9	14.8	2.2	187.3	25.5	206
PROD	Full waste	Dietary shift	4.5	14.8	2.2	179.5	24.1	351
PROD	Halve waste	BAU	8.3	12.7	1.9	160.1	21.5	50
PROD	Halve waste	Dietary shift	4.1	12.7	1.9	151.7	20.0	102
PROD+	Full waste	BAU	8.7	13.1	2.2	147.6	16.5	37
PROD+	Full waste	Dietary shift	4.4	12.8	2.1	140.8	15.4	34
PROD+	Halve waste	BAU	8.1	11.3	1.9	128.2	14.2	21
PROD+	Halve waste	Dietary shift	4.0	11.0	1.9	121.3	13.1	19

Table 5
Various scenarios demonstrating the environmental impacts of implementing the action outlined in Table 4. The colors illustrate whether environmental impacts transgress food production boundaries: green - below lower range value; light green - below or equal to boundary but above lower range value; yellow - above boundary but below upper range value; red - above upper range value. BAU indicates business as usual scenario.



Baseline projections of environmental pressures in 2050

Dietary Shift
Planetary Health Diet

Halve waste
Reduced food loss and waste

PROD
Improved production practices
Standard level of ambition

PROD+
Improved production practices
High level of ambition

COMB
Combination of actions
Standard level of ambition

COMB+
Combination of actions
High level of ambition

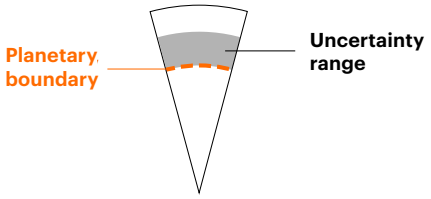


Figure 5
Impacts of a global shift toward planetary health diets, improved food production practices and reductions in food loss and waste from baseline projections of environmental pressures in 2050. The readily implementable actions and their combination are depicted as reductions from the 2050 baseline projections for each boundary. The aim is to find an action or set of actions that reduces the impact to within the uncertainty range (grey shading) or boundary (100% dashed line). For example, the "dietary shift" wedge that ends at 100% the GHG emissions boundary indicates that a dietary shift can reduce the projected increase of GHG emissions from 196% of present impacts to the boundary of 5 Gt CO_2-eq yr-1, which represents a reduction of 49% or 96 percentage points. Improved production practices (PROD) and reduced food loss and waste (halve waste) only reduce impacts by 18 percentage points and 12 percentage points respectively, both of which remain well above both the GHG emissions boundary and the uncertainty range. A combination of actions with a standard level of ambition (COMB) reduces the impact by 114 percentage points, which is well below the boundary. For biodiversity loss, only the impact of the most ambitious combination of actions is shown (COMB+), as only this level of action reduces the impact to within the uncertainty range (grey shading) for the biodiversity loss boundary.

Prof. Johan Rockström PhD
Potsdam Institute for Climate Impact
Research & Stockholm Resilience Centre

"Global food production threatens climate stability and ecosystem resilience. It constitutes the single largest driver of environmental degradation and transgression of planetary boundaries. Taken together the outcome is dire. A radical transformation of the global food system is urgently needed. Without action, the world risks failing to meet the UN Sustainable Development Goals and the Paris Agreement."

Five Strategies for a Great Food Transformation

The data are both sufficient and strong enough to warrant immediate action. Delaying action will only increase the likelihood of serious, even disastrous, consequences.

Humanity has never before set out to radically change the food system at the scale or speed envisaged by the Commission. There are no "silver bullet" solutions to the problems. Hard work, political will and sufficient resources are required. Opponents will warn of unintended consequences or argue that the case for action is premature or should be left to existing dynamics. This Commission disagrees. **The data are both sufficient and strong enough to warrant immediate action. Delaying action will only increase the likelihood of serious, even disastrous, consequences.** It is clear too that a **Great Food Transformation** will not occur without widespread multi-sector, multi-level action, which must be guided by scientific targets.

Strategy 1
Seek international and national commitment to shift toward healthy diets

The scientific targets set out by this Commission provide guidance for the necessary shift, recommending **increased consumption of plant-based foods – including fruits, vegetables, nuts, seeds and whole grains – while in many settings substantially limiting animal source foods.** This concerted commitment can be achieved by making healthy foods more available, accessible and affordable in place of unhealthier alternatives, improving information and food marketing, investing in public health information and sustainability education, implementing food-based dietary guidelines, and using health care services to deliver dietary advice and interventions.

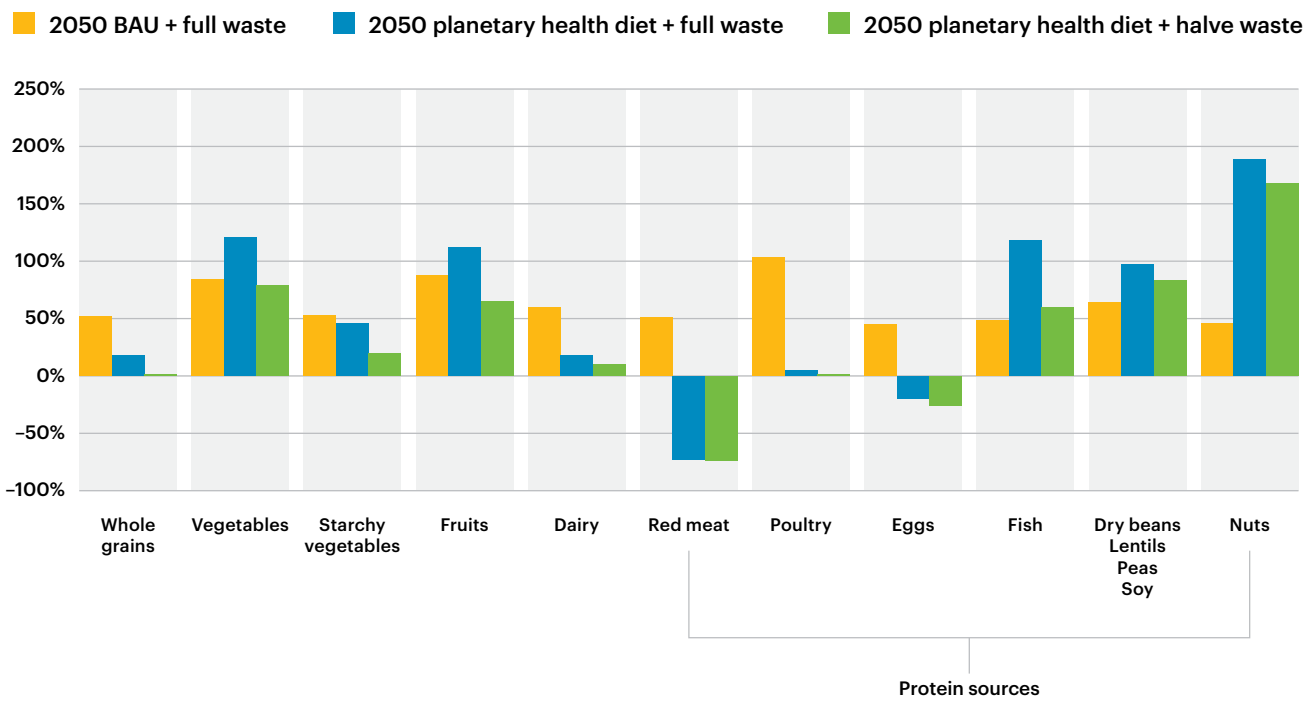


Table 6
Predicted change in food production from 2010 to 2050 (percent from 2010 scenario) for the business as usual (BAU) with full waste, the planetary health diet with full waste, and the planetary health diet with halve waste scenarios.

Strategy 2
Reorient agricultural priorities from producing high quantities of food to producing healthy food

Agriculture and fisheries must not only **produce enough calories to feed a growing global population but must also produce a diversity of foods that nurture human health and support environmental sustainability.** Alongside dietary shifts, agricultural and marine policies must be reoriented toward a variety of nutritious foods that enhance biodiversity rather than aiming for increased volume of a few crops, much of which is now used for animal feed. Livestock production needs to be considered in specific contexts.

Strategy 3
Sustainably intensify food production to increase high-quality output

The current global food system **requires a new agricultural revolution that is based on sustainable intensification and driven by sustainability and system innovation.** This would entail at least a 75% reduction of yield gaps on current cropland, radical improvements in fertilizer and water use efficiency, recycling of phosphorus, redistribution of global use of nitrogen and phosphorus, implementing climate mitigation options including changes in crop and feed management, and enhancing biodiversity within agricultural systems. In addition, to achieve negative emissions globally as per the Paris Agreement, the global food system must become a net carbon sink from 2040 and onward.

Strategy 4
Strong and coordinated governance of land and oceans

This implies **feeding humanity on existing agricultural land** i.e. by implementing a zero-expansion policy of new agricultural land into natural ecosystems and species-rich forests, aiming management policies at restoring and reforesting degraded land, establishing international land use governance mechanisms, and **adopting a "Half Earth" strategy for biodiversity conservation** (i.e. conserve at least 80% of preindustrial species richness by protecting the remaining 50% of Earth as intact ecosystems). Moreover, there is a need to **improve the management of the world's oceans** to ensure that fisheries do not negatively impact ecosystems, fish stocks are utilized responsibly, and global aquaculture production is expanded sustainably.

Strategy 5
At least halve food losses and waste, in line with UN Sustainable Development Goals

Substantially reducing food losses at the production side and food waste at the consumption side is essential for the global food system to stay within a safe operating space. Both technological solutions applied along the food supply chain and implementation of public policies are required in order to achieve an overall 50% reduction in global food loss and waste as per the targets of the SDGs. Actions include improving post-harvest infrastructure, food transport, processing and packing, increasing collaboration along the supply chain, training and equipping producers, and educating consumers.

Conclusion

The global adoption of healthy diets from sustainable food systems would safeguard our planet and improve the health of billions.

How food is produced, what is consumed, and how much is lost or wasted all heavily shape the health of both people and planet. The EAT-*Lancet* Commission presents an integrated global framework and for the first time, provides quantitative scientific targets for healthy diets and sustainable food production. The Commission shows that feeding 10 billion people a healthy diet within safe planetary boundaries for food production by 2050 is both possible and necessary.

The data are both sufficient and strong enough to warrant immediate action.

It also demonstrates that the universal adoption of a planetary health diet would help avoid severe environmental degradation and prevent approximately 11 million human deaths annually. However, to safeguard the natural systems and processes that humanity depends on and that ultimately determine the stability of the Earth system will require no less than a Great Food Transformation. The Commission calls for widespread multi-sector, multi-level action including: a substantial global shift toward healthy dietary patterns; large reductions in food loss and waste; and major improvements in food production practices. The data are both sufficient and strong enough to warrant immediate action.

Food will be a defining issue of the 21st century. Unlocking its potential will catalyse the achievement of both the SDGs and Paris Agreement.

Food will be a defining issue of the 21st century. Unlocking its potential will catalyse the achievement of both the SDGs and Paris Agreement. An unprecedented opportunity exists to develop food systems as a common thread between many international, national, and business policy frameworks aiming for improved human health and environmental sustainability. Establishing clear, scientific targets to guide food system transformation is an important step in realizing this opportunity.

Glossary

Anthropocene
A proposed new geological epoch that is characterized by humanity being the dominating force of change on the planet.

Planetary boundaries
Nine boundaries, each representing a system or process that is important for regulating and maintaining stability of the planet. They define global biophysical limits that humanity should operate within to ensure a stable and resilient Earth system—i.e. conditions that are necessary to foster prosperity for future generations.

Food loss and food waste
The terms "food loss" and "food waste" have distinct meanings as they occur at different stages of the food value chain. "Food loss" occurs before the food reaches the consumer as an unintended result of agricultural processes or technical limitations in the production, storage, processing and distribution phases. On the other hand, "food waste" refers to good quality food fit for consumption that is consciously discarded at the retail and consumption stages.

Earth system
Earth's interacting physical, chemical and biological processes consisting of land, oceans, atmosphere and poles, and include Earth's natural cycles—i.e. carbon, water, nitrogen, phosphorus and other cycles. Life, including human society, is an integral part of the Earth system and affects these natural cycles.

Biosphere
All parts of the Earth where life exists including the lithosphere (solid surface layer), hydrosphere (water) and atmosphere (air). The biosphere plays an important part in regulating the Earth system by driving energy and nutrient flow between components.

Boundaries
Thresholds set at the low end of the scientific uncertainty range that serve as guides for decisionmakers on acceptable levels of risk. Boundaries are baselines, unchanging and not time-bound.

Safe operating space for food systems
A space that is defined by scientific targets for human health and environmentally sustainable food production set by this Commission. Operating within this space allows humanity to feed healthy diets to about 10 billion people within the biophysical limits of the Earth system.

Food system
All elements and activities that relate to production, processing, distribution, preparation and consumption of food. This Commission focuses on two end-points of the global food system; final consumption (healthy diets) and production (sustainable food production).

Great Food Transformation
The unprecedented range of actions taken by all food system sectors across all levels that aim to normalise healthy diets from sustainable food systems.

The EAT-Lancet Commission

Co-chaired by Prof. Walter Willett and Prof. Johan Rockström, the EAT-*Lancet* Commission brought together 19 Commissioners and 18 co-authors from 16 countries in various fields including human health, agriculture, political science and environmental sustainability.

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Harvard T.H. Chan School of Public Health, Harvard Medical School & Channing Division of Network Medicine, Brigham and Women's Hospital

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The Stockholm Resilience Centre hosted the EAT-*Lancet* Commission secretariat and co-led the Commission's research activities with EAT. All Commissioners and co-authors contributed to the manuscript ideas, structure, and reviewing and have seen and approved the final version of the manuscript.

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About EAT

EAT is a global, non-profit foundation established by the Stordalen Foundation, Stockholm Resilience Centre and Wellcome Trust to catalyze a food system transformation.

Our vision:

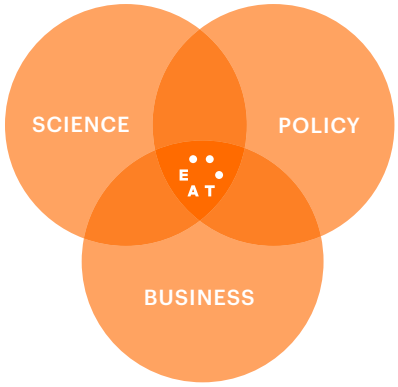
A fair and sustainable global food system for healthy people and planet – leaving no one behind.

Our mission:

Transform our global food system through sound science, impatient disruption and novel partnerships.

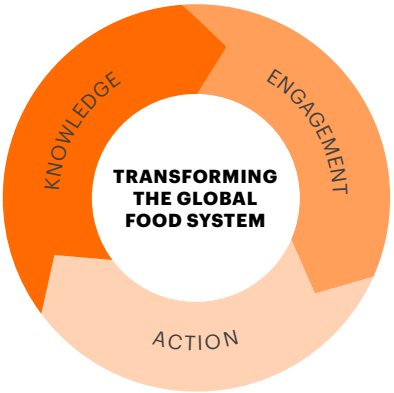
Our values:

- **Scale bold systems change based on solid science**
- **Accelerate impact through collaboration**
- **Deliver disruptive solutions, where others can't**
- **Embody diversity, honesty and integrity**
- **Champion fairness and equity, leaving no one behind**



To ensure success, we connect and partner across science, policy, business and civil society to achieve **five urgent and radical transformations by 2050:**

- Shift the world to healthy, tasty and sustainable diets
- Realign food system priorities for people and planet
- Produce more of the right food, from less
- Safeguard our land and oceans
- Radically reduce food losses and waste



To address these challenges, we use a framework for change that sets up a dynamic three-way interaction across knowledge, engagement and action. The generation of **new knowledge** provides direction and an evidence base for change. **Creative engagement** with partners across business, policy and science amplifies messages and spurs action for change. Partnerships inspired through engagement and informed by knowledge enable **actions** leading to change and impact at scale.

Our approach to food system transformation coupled with our framework for change constitute our DNA.

EAT is the science-based global platform for food system transformation

#foodcanfixit

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