# Sustainable Healthy Diets

Implications for policy & research

26 October 2017

european public health alliance





# European Public Health Alliance (EPHA)

A member-led organisation made up of public health NGOs, patient groups, health professionals and disease groups, we work to improve health and strengthen the voice of public health in Europe.



## WHAT ARE SUSTAINABLE DIETS?

"Sustainable Diets are those diets with <u>low</u> <u>environmental impacts</u> which contribute to <u>food and nutrition security</u> and to <u>healthy life</u> for <u>present and future</u> generations.

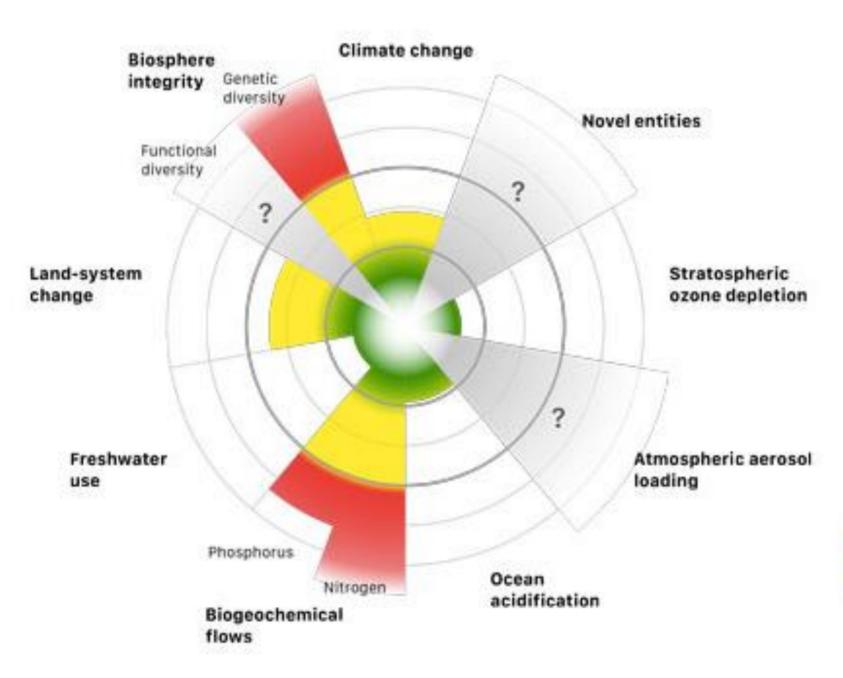
Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources." (FAO)





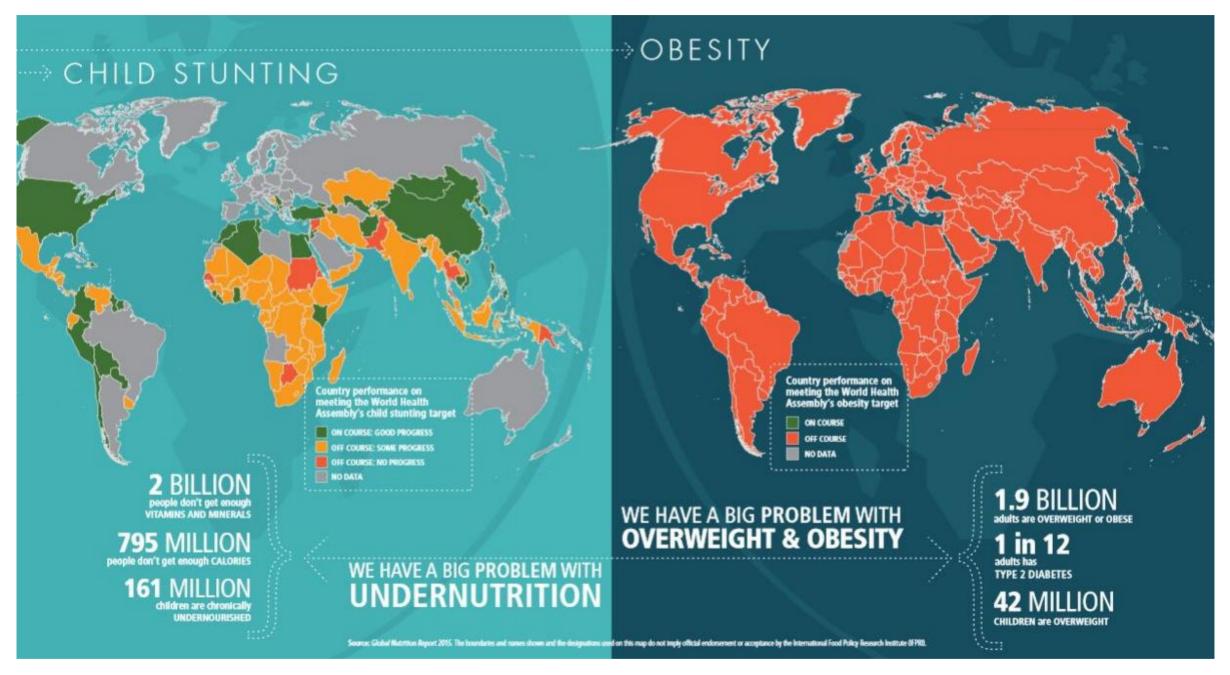


### WHY DOES IT MATTER?



Food system = major driver of pressures on "Planetary Boundaries".





@ Global Nutrition Report 2015

...and in Europe, unhealthy diet = risk factor No. 1 for all healthy life years lost. (Global Burden of Disease)



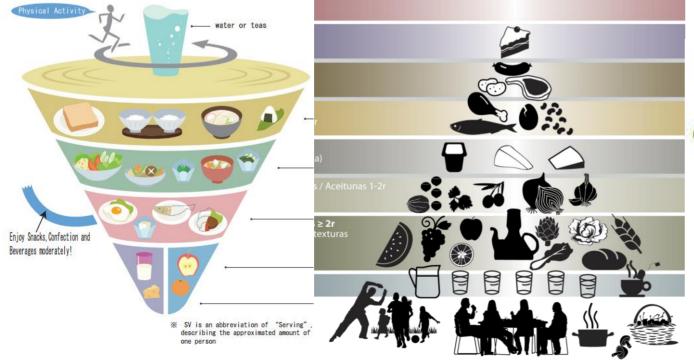
### DIETS FOR HUMAN HEALTH

#### WHO healthy diet: (Fact sheet N°394)

- •Fruits, vegetables, legumes, nuts and whole grains
- •At least 400g of fruits and vegetables a day
- •Less than 10% of total energy from free sugars
- •Less than 30% of total energy from fats
  - -Less than 10% of total energy from saturated fats
  - -Less than 1% of total energy from trans fats
- •Less than 5g of salt per day
- •And see: 'WHO Vitamins and minerals requirements in human nutrition'









#### Vegetarian & Vegan Diet Pyramid





### DIETS FOR PLANETARY HEALTH

#### ENVIRONMENTAL PYRAMID





Animal products = 'elephant in the room', but certainly not the only factor.

#### **FOOD PYRAMID**

"halving the consumption of meat, dairy products and eggs in the European Union would achieve a 40% reduction in nitrogen emissions, 25–40% reduction in greenhouse gas emissions and 23% per capita less use of cropland for food production."

(Westhoek et al. (2014) Global Environmental Change)



# SUSTAINABLE DIETS: TRADE-OFF OR SYNERGY?

"Across studies, consistent evidence indicated that a dietary pattern higher in plant-based foods (...) and lower in animal-based foods (especially red meat), as well as lower in total energy, is both healthier and associated with a lesser impact on the environment."

Nelson et al., 2016, Advances in Nutrition (systematic review)

"Transitioning toward more plant-based diets that are in line with standard dietary guidelines could reduce global mortality by 6–10% and food-related greenhouse gas emissions by 29–70% compared with a reference scenario in 2050. (...) Overall, we estimate the economic benefits of improving diets to be 1–31 trillion US dollars, which is equivalent to 0.4–13% of global gross domestic product (GDP) in 2050."

Springmann et al., 2016, PNAS



# **CONSIDERABLE 'ROOM FOR MANOEUVRE'**

Vegetal

Pig meat

products

(WHO)

Dairy

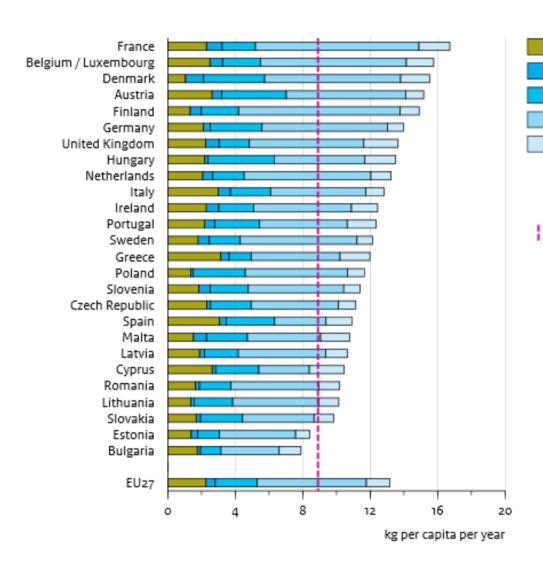
Beef and yeal

Other animal

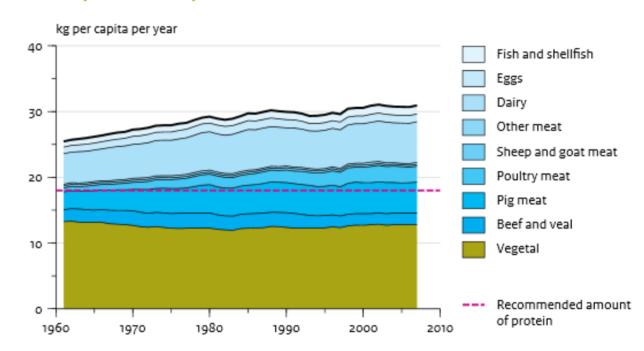
Maximum intake

of saturated fats

#### Intake of saturated fats in EU27, 2007



#### Intake of protein in EU27



Source: PBL analysis, based on FAO (2010), Gezondheidsraad (2001), NEVO (2010), Schmidhuber (2007), Voedingscentrum (2008), WHO (2003b, 2007)

Source: PBL analysis based on FAO (2010) and NEVO (2010)



# **CONTEXT: SOME CHALLENGES TOWARDS 2050**

Climate change

Expected falls in productivity up to 30% in

some regions (IPCC)

2.5 billion more people by 2050

Land availability 25% of soils degraded, '60 harvests left' (FAO)

1/3 of food wasted (FAO)

Overfishing
87% fisheries are
overexploited or fully
exploited (FAO)

Water scarcity
50% of world population
may live with water stress
by 2050 (MIT)

Antimicrobial resistance
10 million deaths per year by 2050? (AMR Review)

"6th global mass extinction event"



### SUSTAINABLE DIETS: POLICY IMPLICATIONS

- 1. There can be no sustainable food system (and thus no sustainable production) without sustainable consumption.
- 2. Sustainable diets concept can help guide our understanding of what is efficient resource use.
- 3. Consumption patterns are a policy challenge, not a 'given'.
- 4. Sustainable diets concept is helpful for articulating opportunities for co-benefits in a food systems transition.



## SUSTAINABLE DIETS: RESEARCH IMPLICATIONS

- 1. Need to mainstream lifecycle assessment into all food policy analysis and elaborate methodologies for applying full cost accounting.
- 2. Elaborate scenarios to discover possible society-wide repercussions of adopting different types of diets, including benefits, trade-offs and unintended consequences.
- 3. More research into the concept of 'nutritional yield' and options for applying it in practice.
- 4. More priority to policy implementation research, including policy innovation, monitoring and evaluation.



# MAXIMISING GROWTH OR FINDING BALANCE?







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