CAP “Objective 9”: key concepts through a public health lens

– some reflections for internal use only

Purpose

The European Commission has proposed nine new ‘specific objectives’ for the EU’s Common Agricultural Policy (CAP). One of these objectives – Article 6(i) of the proposed CAP Strategic Plans Regulation (CAP Objective 9) – deals, among others, with ‘food and health’.

This overview will discuss the key concepts used in the text of CAP Objective 9 as seen through a public health lens.

The overall aim of this is to present a basic starting point for assessing how health arguments could be used to strengthen the development of national CAP Strategic Plans on Objective 9 and a wider food systems transition.

CAP «Objective 9» Proposal

Proposal by Commission:

“improve the response of EU agriculture to societal demands on food and **health**, including **safe**, **nutritious** and **sustainable food**, **food waste**, as well as **animal welfare**.”

Article 6 (i) CAP Strategic Plans Regulation

CAP «Objective 9» Indicators

Proposal by Commission:

Impact indicator	Result indicator
I.26 Limiting **antibiotic use** in agriculture: sales/use in food producing animals	R.36 Limiting antibiotic use: Share of livestock units concerned by supported actions to limit the use of antibiotics (prevention/reduction)
I.27 Sustainable use of **pesticides**: Reduce risks and impacts of pesticides** ** Directive on sustainable use of pesticides	R.37 Sustainable pesticide use: Share of agricultural land concerned by supported specific actions which lead to a sustainable use of pesticides in order to reduce risks and impacts of pesticides
1.28 Responding to consumer demand for **quality food**: Value of production under EU quality schemes (incl. **organics**)	R.38 Improving **animal welfare**: Share of livestock units covered by supported action to improve animal welfare

Annex I CAP Strategic Plans Regulation

CAP «Objective 9» Key concepts

Based on the text of Objective 9 and the proposed indicators, the following key concepts can be identified:

1. **Health**
2. **Food safety**
3. **Nutrition**
4. **Sustainable food (incl. food waste)**
5. **Antibiotics use**
6. **Animal welfare**
7. **Pesticides**
8. **Quality food**
9. **Organic food**

CONCEPT 1: HEALTH

Health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.
(WHO)

Public health is the “art and science of preventing disease, prolonging life and promoting health through the organized efforts of society”.
(Acheson)

Public health policy aims to create the enabling conditions for people to maintain their health, improve health and well-being, and prevent ill-health or the deterioration of their health (based on WHO/Europe).

Determinants of health

The science and practice of public health is founded on the recognition that the health and well-being of individuals and populations, throughout every stage of life, is shaped by multiple social, economic, political, environmental and biological factors. (WHO)

These **determinants of health** are usually divided into:

- Social, or socio-economic, determinants
- Environmental determinants
- Health system determinants
- Commercial determinants
- Individual determinants

(EP Policy Department A)

The determinants of health mediate people's exposure to health risk factors, which in turn shape health outcomes

Health determinants

- Social
- Environmental
- Health system
- Commercial
- Individual

Health risk factors

(= attributes, characteristics or exposures that increases a person's chances of developing a disease)

Health outcomes

What are the causes of EU's burden of ill-health?

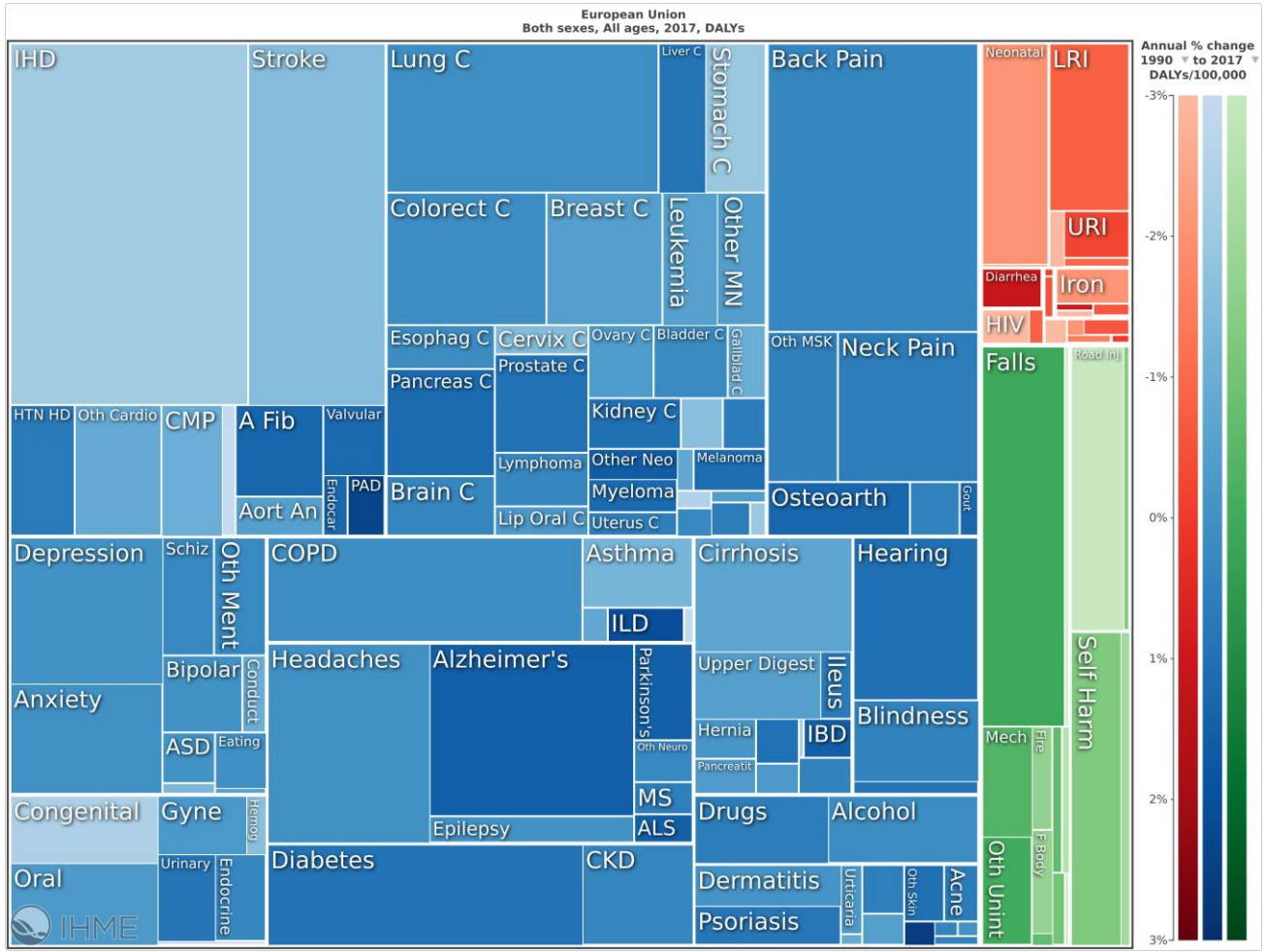
Graph shows approximation of DALYs in the EU – both sexes, all ages (2017).

DALY = Disability-Adjusted Life Year. One DALY can be thought of as one lost year of "healthy" life. It is calculated by adding years lost due to premature mortality + years lost due to disability.

In blue are **non-communicable diseases (NCDs)**. These represent a wide range of conditions not caused by infections. The five main NCDs are: cardiovascular disease (CVD), diabetes, cancers, chronic respiratory diseases and mental ill-health. More on NCDs here.

In red are communicable, neonatal and maternal diseases.

In green are injuries.



IHME, Global Burden of Disease

Inequities in health

Health inequities are a fundamental concern in public health. There is consistent evidence that people exposed to socio-economic vulnerabilities are disproportionately affected by ill-health (Marmot, 2013). For instance, low socio-economic groups appear to be around two times more likely to become obese (Loring & Robertson, 2014).

Approximately 12% of EU of population is unable to afford a nutritious meal every second day (Eurostat), in 2018 over 20% of the EU population was at **risk of poverty or social exclusion** (Eurostat).

Health inequities are health inequalities that are avoidable, and therefore can be deemed unfair or unjust (WHO). **Policies to tackle health inequities** largely lie outside the health sector (WHO, 2019).

CONCEPT 2: FOOD SAFETY

Food borne diseases comprise a broad range of diseases, usually infectious or toxic, ranging from diarrhoeal diseases to various forms of cancer. They are caused by microorganisms (bacteria, viruses, parasites, fungi, prions) or chemicals, toxins, radioactivity or even physical agents. (WHO, 2017)

23 million people are falling ill from unsafe food each year in Europe (WHO, 2017) (*note that the WHO European region is much bigger than EU*).

- Salmonellosis and campylobacteriosis are the most commonly reported foodborne diseases.
- Other foodborne diseases transmitted by animals, such as brucellosis, are a significant public health problem in some areas.
- Diseases from animal parasites, such as trichinellosis and echinococcosis, are also of concern.
- Antimicrobial resistance, which is partly related to usage of antimicrobial agents in animals, is an increasing public health problem.
- Various chemical hazards, such as persistent organic pollutants (POPs), acrylamide, pesticides and dioxin, also represent a public health risk.

Food-borne outbreaks in the EU

EU food safety policy is concentrated in 4 main areas of protection

1. Food hygiene
2. Animal health
3. Plant health
4. Contaminants and residues

In 2017, there were **over 5.000 reported food-borne outbreaks** in the EU, corresponding to nearly 100 outbreaks per week, on average. Outbreaks involve 43,400 cases, 4.541 hospitalisations and 33 deaths (EFSA & ECDC, 2018). **Most food-borne diseases are zoonotic of origin**.

> *A foodborne disease outbreak is defined as an incident in which two or more persons experience a similar illness resulting from the ingestion of a common food (CDC). So this does not represent by far the full burden food borne diseases.*

CONCEPT 3: NUTRITION

Nutrition refers to the act or process of nourishing or being nourished. To have good nutrition means getting appropriate amounts of nutrients, which is needed to maintain and improve all aspects of health.

Diet refers to the food and drinks one regularly consumes. It is the pattern of food consumption, which can be described at the level of individuals or whole societies.

The three faces of malnutrition

1. **Undernutrition**
   Linked to a lack of energy and nutritious foods intake, resulting in severe nutritional deficiencies leading to wasting, stunting and underweight.

2. **Micronutrient deficiencies**
   Refers to the inadequate intake of vitamins and minerals.

3. **Overweight, obesity and diet-related non-communicable diseases (NCDs)**
   Overweight and obesity result from an imbalance between energy consumed (too much) and energy expended (too little). Abnormal or excessive fat accumulation can impair health and act as a risk factor for NCDs.

   Unhealthy diet is a top risk factor for NCDs, such as cardiovascular diseases, cancers and type 2 diabetes. This both linked to obesity as risk factor, but also directly.
   (WHO)

1. Undernutrition

— **Probably not a widespread public health issue in the EU.**

— Nevertheless, stunting among children may occur in some European countries and among population groups exposed to socio-economic vulnerabilities.

— Also, undernutrition is reported in people of older age and people in (health)care facilities.

2. Micronutrient deficiencies

- **In the EU there is significant evidence of lower intakes of various micronutrients than the recommended levels.** These include vitamins C, D and B12, calcium, folate, iron and iodine.

- **This may or may not have adverse health effects,** depending on the importance of the micronutrient not adequately supplied in a certain stage of the life cycle. There is not much research on the effects of lower than recommended micronutrient intake before clinical symptoms occur.

- **There might be a harmful impact in particular during pregnancy and early childhood,** other risk ages include adolescents and elderly.

Hans & Jana (2018)

3. Obesity and NCDs

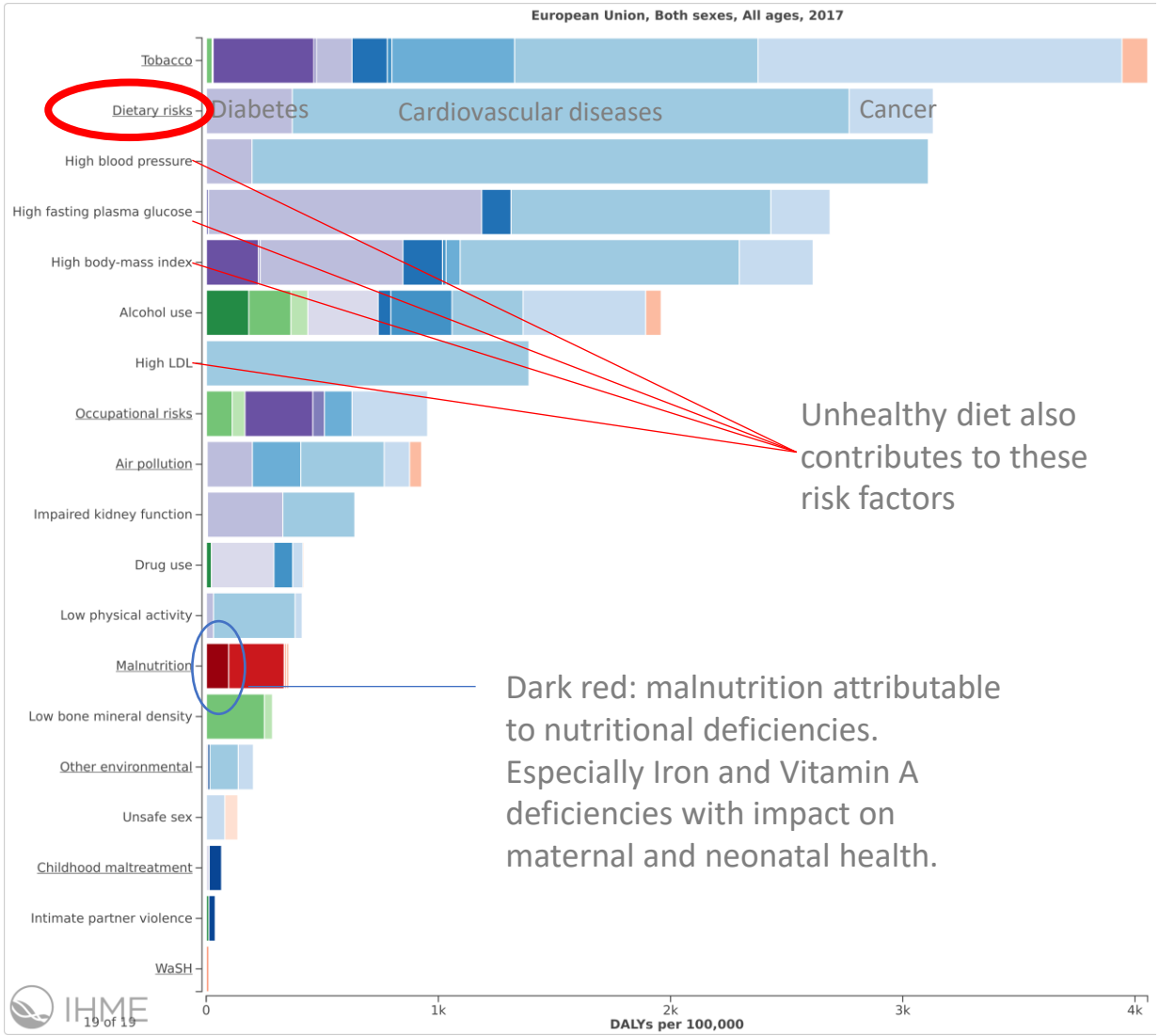
- **By far the most significant health impact related to malnutrition**.

- **Over 50% of the EU population** is overweight or obese (Eurostat).

- **Child overweight and obesity** is very widespread:
  - Around 1/3 of 11-year-olds in Europe are overweight or obese (WHO).
  - In some EU countries, over 40% of 6-9 year-olds are overweight or obese (WHO) (WHO).

- **Unhealthy diet increases the risk of non-communicable diseases (NCDs)**, the main causes of death and disease in the EU, such as cardiovascular diseases, type 2 diabetes and cancers.
  - For instance, dietary risks are responsible for 49% of the healthy life years lost to cardiovascular diseases (CVD) in the EU, at an estimated annual cost of €102 billion (EHN). CVD is the single largest killer in the EU.
  - 80% of heart diseases and diabetes and 40% of cancers can be prevented (WHO).

Unhealthy diet is a main risk factor for all premature deaths and diseases in the EU



Unhealthy diet also contributes to these risk factors

Dark red: malnutrition attributable to nutritional deficiencies. Especially Iron and Vitamin A deficiencies with impact on maternal and neonatal health.

IHME, Global Burden of Disease

Key nutrition recommendations

Recommendations		Comments
Energy	Women: 2000 cal/day Men: 2500 cal/day	Dependent on age (EFSA)
Salt	max 5 gram/day	(WHO)
Free sugars	max 10% of daily energy intake, preferably 5%	Free sugars refer to sugars added to food, not those that are naturally present in foods. (WHO)
Fat	max 30% of daily energy intake	This refers to total fat intake. Industrially produced trans fats should be avoided, and trans fats from ruminants should be less than 1% of total energy intake. There is ongoing debate about the role of saturated fat vs unsaturated fat etc. Although this may appear as a fundamental disagreement, it boils down to relatively limited adaptations in recommended shares for each. (WHO)
Fibre	25-29 gram/day	Reynolds et al. (2019)
Protein	0.8 gram per kg of body weight/day	(WHO)
Vitamins & Minerals	[multiple recommended levels]	(WHO)

What does this roughly mean in terms of food consumption, based on current average intakes?

More	Less
Vegetables and fruit (at least 400 gram/day)	Salt
Whole grains	Sugar
Legumes	Refined grains
Nuts	Processed meat
Seeds	Ultra-processed foods
Breastfeeding (exclusive breastfeeding at least during first 6 months)	Meat (and dependent on intake: dairy)

What are ultra-processed foods?

— **Foods derived form industrial ways of processing typically with five or more and usually many ingredients** and substances not commonly used in culinary preparations.

— **The main purpose** of industrial ultra-processing is to create products that are ready to eat, to drink or to heat, liable to replace both unprocessed or minimally processed foods.

— **Common attributes** of ultra-processed products are hyper-palatability, sophisticated and attractive packaging, multi-media and other aggressive marketing to children and adolescents, health claims, high profitability, and branding and ownership by transnational corporations.
(NOVA)

Multiple studies find associations between the consumption of ultra-processed foods and harm to health. See here and here for examples.

However, the question whether ultra-processed foods are unhealthy per definition, or whether this depends on their nutritional content (which can be improved), is not settled.

Notes on the role of meat & animal products in nutrition

— **Sensitive, somewhat confusing and (purposefully?) polarised** area.

— **Animal products are not unhealthy**, they contain many important micronutrients in a bioavailable form (processed meats, however, are probably better minimised or avoided). But the **nutritional importance of any particular food in the diet will depend upon what else is or is not eaten** – i.e. the overall quality and diversity of the diet.

— Standard healthy dietary guidelines **recommend eating meat, dairy, eggs and fish in 'moderation'.** Reducing intake from high levels of consumption should not be controversial and not be confused with entirely stopping to eat animal products.

— Standard dietary advice is usually to eat from all food groups. But the current average diet, which includes many animal products, tends to be quite unhealthy. At the same time, there is significant evidence that vegetarian diets can be healthy. Likewise, vegan diets can be nutritionally adequate, but more reliant on good planning. So, importantly, **all types of diets – omnivore, flexitarian, vegetarian, pescatarian, vegan etc. can (probably) be both nutritionally healthy or unhealthy: it really depends on the quality of the diet.**

How to change eating patterns?

Eating patterns cannot be imposed on people.

Trying to **convince people** to change eating habits will not work at a large scale.

In practical terms, given that **'food environments'** shape what food we buy and eat, changing diets means – changing food environments.

— **Food environments** are the physical, economic, political and socio-cultural context in which consumers engage with the food system to acquire, prepare and consume food.

The food environment consists of: "food entry points", i.e. the physical spaces where food is obtained; the built environment that allows consumers to access these spaces; personal determinants of food choices (including income, education, values, skills, etc.); and the political, social and cultural norms that underlie these interactions.

The key elements of the food environment that influence food choices, food acceptability and diets are: physical and economic access to food (proximity and affordability); food promotion, advertising and information; and food quality and safety. (HLPE)

Many similar recommendations for policy action

Table 2: Typology of interventions

	Approach	Examples
1	Disincentivise or incentivise choices through fiscal measures	Fiscal measures – taxes, subsidies, trading
2	Change the governance of production or consumption	Macroeconomic policies and agreements, national public procurement and planning policies, other regulations
3	Encourage collaboration and shared agreements	Voluntary industry agreements, certification schemes
4	Changing the context, defaults and norms of production or consumption	Changing the choice architecture, nudge, store layouts, catering provision etc.
5	Inform, educate, promote or empower through community initiatives, labelling and other means	Labelling, gardening or cooking projects, media or other campaigns, education programs

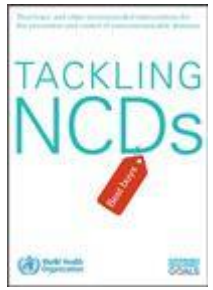
FCRN & Chatham house, 2015

3.3. Combine regulatory, financial, behavioural, information, communication, and education measures

Use the complete policy mix
Focus on regulatory and fiscal measures as the main drivers of change
Consider voluntary means only as supplementary drivers

Evidence is clear that binding ('coercive') policy measures, such as regulation and fiscal measures, tend to be the most effective in achieving change towards food sustainability (SAPEA 2020a: 5). A number of such binding measures are possible.

EU SAM, 2020



WHO (2017) "Best buys" and other recommended interventions for the prevention and control of noncommunicable diseases

EPHA (2019) Policies for healthy living environments I Food environments

CONCEPT 4: SUSTAINABLE FOOD

Sustainable food could either mean everything, or nothing.

7 components of food (system) sustainability could be identified:

1. **Environmental** (e.g. climate change; biodiversity; quality of water, air and soil; availability of water; land and resource use; chemicals use);
2. **Health** (e.g. diets and nutrition; food safety; antimicrobial resistance (AMR); occupational safety; chemicals use; environmental health);
3. **Economic** (e.g. economic viability, income across the supply chain; employment; added value);
4. **Social** (e.g. access to good food for all; cultural adequacy; inequities in production and consumption; labour standards)
5. **Ethical** (e.g. animal welfare; bioengineering);
6. **Quality** (e.g. organoleptic qualities; taste);
7. **Resilience** (e.g. maintaining and increasing diversity in the system; enhancing capacities to create knowledge, innovate and anticipate change).

(EPHA & HCWH, 2019)

Referring to sustainable diets?

Sustainable diets are “those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future 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 & Bioversity Int.)

— Sustainable diet is a **difficult concept**, which when applied risks becoming either too broad, or too narrow (FCRN Food Source).

— A few countries have introduced **sustainable dietary guidelines** (FAO & FCRN, 2016).

— Global **guiding principles for sustainable healthy diets** have been published (FAO & WHO, 2019).

Sustainable diets & co-benefits

— There seems to be a broad scientific consensus that in high-income countries, **dietary change towards more plant-rich diets in line with healthy eating guidelines** can both improve environmental outcomes and nutrition (Nelson et al., 2016)

— If the need to **reduce the intake of meat, dairy and eggs** may be less pronounced and more confused when seen from a nutritional perspective only (except arguably for processed meat), this need is far more obvious from a 'sustainable healthy dietary' / 'planetary health diet' perspective (EAT-Lancet, 2019).

— **For agro-ecology to be viable** a significant reduction in animal protein (meat, fish and dairy products) is needed alongside a sharp increase in fruit and vegetables (IDDRI, 2018).

— Important to note, that from a public health perspective, **both the nutritional, environmental and socio-economic health dimensions** are important: nutrition is not the only health consideration when speaking about food and diets.

— There may however be **conflict** between the nutritional health benefits of **fish** and the limitations imposed by wider sustainability needs.

Food waste

Apart from food loss across the supply chain and consumer waste, it has also been suggested that food overconsumption, especially linked to nutrient poor, energy dense 'junk food' is a form of food waste.

— Take the case of soft drinks: their production uses land to grow sugar crops, fair amounts of water, as well as plastics to produce a product that is associated with harm to health.

— This view has been supported by the recent EU Scientific Advice Mechanism report on food systems:

> "For example, overconsumption and malnutrition should not only be viewed from a public health perspective by EU policy makers. Instead it should also be approached as a form of food waste detrimental to the environment" (SAM,2020)

CONCEPT 5: ANTIBIOTICS USE

High and persistent levels of antibiotics use in animal farming contributes to the spread of drug resistant bacteria, or antimicrobial resistance (AMR) (AMR Review, 2015). The rise of AMR is attributable to antibiotics overuse in both human and veterinary medicine, as well as environmental contamination.

Intensive livestock systems and antibiotics use are closely linked (FAO, 2015).

Definitions (ECDC)**:**

- **Antimicrobial resistance (AMR)** is the ability of a microorganism (e.g., a bacterium, a virus, or a parasite) to resist the action of an antimicrobial agent.
- **Antibiotic resistance** is the ability of bacteria to resist to the action of an antibiotic.
- **Multidrug resistance** corresponds to resistance of a microorganism to multiple antimicrobials

→ While AMR is broader than antibiotic resistance, the terms are often intermingled as the antibiotic component is the most important.

What are the issues with AMR?

— **Drug resistance implies** that common infections and routine surgeries could become life-threatening, putting in peril the last century's advances in healthcare.

— AMR is identified among the **top 10 global threats to human health** (WHO).

— Around **33.000 people die** of AMR in the EU each year (probably an underestimate), costing 1.5 billion EUR per year in healthcare costs and in losses to the economy (EC).

— **If no action is taken**, AMR can kill 10 million people per year globally, or 700.000 in Europe, by 2050 (AMR Review, 2016).

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What should be done?

EU initiatives:

- EU One Health Action Plan against AMR (EC)
- Veterinary Medicines Regulation (EU) & Veterinary Feed Regulation (EU)

Needs:

- Reduce the overall quantity of antibiotics used in agriculture. This could be done by a major shift from group treatment to individual treatment.
- Prohibit and restrict the use in animal agriculture of different antibiotics that are medically important for humans.
- Ensure the collection of relevant antibiotics use data, not just sales data.
- Ensure equivalence of standards for imported animal products.
- Review the residue limits for antimicrobials in food products.
- Address the use of substances other than antimicrobials that may compensate for poor animal husbandry practices

(EPHA)

Antibiotics vs other veterinary products: an important distinction!

— An amendment adopted in the European Parliament's AGRI Committee, adds an indicator on **limiting the use of veterinary products**, next to the indicator on antibiotics.

Impact indicator	Result indicator
I.26a Sustainable use of veterinary products in livestock: Sales and use of veterinary products in food producing animals	**R.36a Sustainable use of veterinary products: Share of livestock affected by support measures to limit the use of veterinary products (prevention/reduction) to reduce the risks and adverse effects of these products**

Amendment adopted by COMAGRI Report

— **This is important**: substances not currently classified as antimicrobials, like ionophores and other coccidiostats, and therefore not covered by the Veterinary Medicines and Medicated Feed Regulations may be used in animal agriculture (e.g. poultry) in high quantities for preventative use. These substances could be used in a way so as to **compensate for poor animal husbandry conditions**, may contribute to pharmaceutical pollution in the environment and could be associated with horizontal transfer of resistance.

CONCEPT 6: ANIMAL WELFARE

Various (indirect) links can be identified between animal welfare and human health:

— Most **infectious diseases** have a zoonotic origin. Stress and distress associated with intensive farming conditions heightens animals' vulnerability to disease. Close contact of animals facilitates the exchange and evolution of pathogens which may transfer to humans (Akhtar, 2013).

— **Antibiotics overuse** is often linked with poor animal husbandry conditions.

— **Intensive animal farming**, with associated welfare stresses, is associated with environmental, socio-economic and nutritional issues. Low prices allow for the availability of cheap highly processed animal products – i.e. 'junk food'.

— **Exposure to animal abuse** can have mental health implications (EC).

— **Grass-fed meat and milk**, which could be associated with higher welfare systems, consistently show superior nutritional profiles (Daley et al., 2010) (Benbrook et al. (2018)

CONCEPT 7: PESTICIDES

Pesticides use will have multiple adverse health effects, but pesticides' overall public health impact has proven difficult to quantify.

— Analyses of food samples find that the overwhelming majority of food in the EU contain no pesticide residues or contain traces that **fall within legally permitted levels**, and are therefore presumed to be safe (EFSA).

— At the same time, there are mounting concerns about the impacts of persistent **low-dose exposures** to pesticides, notably their endocrine-disrupting effects, and cocktail effects (Hayes & Hansen, 2017).

— There are **occupational risks** of working with pesticides extending to farmers and farm workers (Bourguet & Guillemaud, 2016). Also inhabitants of **areas exposed to application** may run risks, including for foetal development (Petit et al. ,2010).

— There are general health threats related to biodiversity loss, and more specific ones related to **pollinator decline**, which are vital for food and nutrition security (Sluijs & Vaage, 2016).

CONCEPT 8: FOOD QUALITY

Food quality is a difficult to define concept which involves multiple components and often subjective judgments about user value (FAO).

Components of a more limited view on food quality include:

- food safety
- sensory characteristics
- nutritional value

(Dairy tech blog)

Components of a more holistic view on food quality include:

- sensory value
- suitability value
- health value
- psychological value
- cultural value
- political value
- ecological value

(Leitzmann)

Thoughts on food quality

At least two food quality aspects are directly linked to health:

1. **Food safety**: see earlier discussion.

2. **Nutrition**: this relates to the nutritional composition of a product.

    A. Nutritional quality of 'raw' products
    B. Nutritional composition of processed & ultra-processed products

→ In public health there is always a **certain tension between looking at the quality of an individual products vs the quality of the diet overall**. While diet is the most important indicator, diets of course consist of products. Products are either conducive, or not conducive to healthy eating. Industry often exploits this by saying: 'this product *can be part* of a healthy diet'. But this is nonsense. Better to ask: 'can this product *be a cornerstone* of a healthy diet?'

A. Nutritional quality of ‘raw’ products

Some points on the **nutritional quality of raw products**:

- Differences in meat and dairy nutritional profiles dependent on feed systems (Daley et al., 2010) (Benbrook et al. (2018)
- Declines in nutrient content of various vegetables and fruit (?) (Marles, 2017) (Davis, 2009)
- Differences in certain nutrient content of organic products (Barański et al., 2014), (Średnicka-Tober et al., 2016)

→ Important to note that while differences exist, the overall public health implications of these difference are not clear.

B. Nutritional composition of processed & ultra-processed products

Nutrient profiles are used to make a distinction between foods in terms of their nutritional characteristics. Nutrient profiles take evidence-informed nutritional recommendations (see above) as the basis of the calculations used to make these distinctions (WHO).

Different nutrient profiles can be used for different purposes, e.g.:

- To limit marketing of foods to children (WHO, 2015)
- To determine which products can receive health and nutrition claims (NPSC).
- For front-of-pack nutrition labels (Nutriscore), (UK Traffic Light).

When it comes to nutrient profiling, **any borders drawn will always raise some questions**. Nutrient profiles are however a logical necessity in the current food system.

CONCEPT 9: ORGANIC FOOD

Organic food is popularly being equated with 'healthy'.

This view is neither correct as such, nor entirely false. STOA, 2016 provides a comprehensive discussion of the links between organic and health.

- **Health effects of organic food in humans**. Few long-term studies on this. Some indications about a potential lower risk of childhood allergies and a lower risk of adults to be overweight or obese. But no conclusive evidence when it comes to a link between organic food as such and health.

- **Organic food consumption and sustainable diets**. Consumers who regularly buy or consume organic food have healthier dietary patterns, such as a higher consumption of fruit, vegetables and wholegrain products and a lower consumption of meat, compared to other consumers. These dietary patterns are associated with various health and other sustainability benefits.

The question is: do health-conscious people choose organic food, or does organic food promote healthy & sustainable consumption patterns?

Summary of links between organic and health (continued)

- **Exposure to pesticides**. Organic food significantly decreases exposure to pesticides residues, and wider pesticide application. On the health benefits – see above.

- **Composition of plant foods**. There are some differences in composition in plant foods between organic and conventional products, but it is not currently possible to translate such differences into specific health effects. There may be indications that organic has lower cadmium concentrations, which is a heavy metal hazardous to health.

- **Composition of animal-based foods**. Significantly higher concentrations of Oma-3 fatty acids have been reported, this due to feeding practices in organic based on grass and clover. Non-organic pasture-based feeding is likely to have the same benefits.

- **Antibiotic resistance**. Organic may reduce the risk of AMR given the strong antibiotic use standards employed.

Transition to organic seems to have many benefits, but only if diets change too

Planetary health: Organic food production can significantly decrease many environmental pressures (Reganold et al., 2015). But to make sure that lower yields do not entail that more land has to be taken into use, a transition to organic **has to be accompanied with a dietary transition.**

Potential next steps:

1. Assess how a health perspective could reinforce aims pursued under Objective 9 and other CAP objectives.

2. Set advocacy aims for topics of interest under Objective 9, including possible additional indicators.

3. Assess possible tools and interventions within the CAP (current and proposal) to promote selected items in CAP strategic plans.

4. Influence CAP strategic plan design by proposing certain interventions for CAP objective 9, including in relation with other CAP objectives and the wider aim of a sustainable food system transition.

EPHA's vision of how the CAP can contribute to better health beyond Objective 9

EPHA (2019)

For any questions, pleaser refer to nikolai@epha.org