Towards a healthier, more sustainable CAP

European Public Health and Agriculture Consortium (EPHAC) position on "The Future of the Common Agricultural Policy"

European Public Health & Agriculture Consortium

Summary

Towards a healthier, more sustainable CAP

Health is prerequisite for economic growth and inclusive societies. What we eat and how our food is produced is important for our health. The challenge for food policy in this century is how to sustain the earth's physical, living and human resources, while producing enough food to feed a growing world population. Agriculture, food and good nutrition are about healthy people, healthy communities and the future well-being of our planet.

Food and agriculture policy should be based on equity, the universal right to safe, affordable, nutritious food, and good governance and transparency in the food supply chain. The Common Agriculture Policy (CAP) can contribute to strategies aimed at reducing health inequalities and preventing chronic disease, producing enough food to feed a growing world population and a "greener" agriculture policy that reduces green house gas emissions from food production and transportation.

Chronic Non-Communicable Disease – the big challenge

Chronic non-communicable diseases (NCDs) pose one of the greatest threats to public health and economic growth at local, national and global levels. In addition to health care costs, NCDs contribute substantially to costs associated with lost productivity. Obesity, cardiovascular diseases (CVD), cancer, and diabetes are responsible for 35 million deaths and 60% of all deaths every year globally. In Europe, these conditions play an even more substantial role, accounting for 70 % of all deaths.

- Cardio-vascular diseases are the cause of 52% of deaths in Europe and is estimated to cost the EU economy €192 billion annually.
- Projections suggest that in 2020 3.4 million Europeans will develop cancer and over 2.1 million will die as a result of the disease.
- An estimated 22% of children aged 5-9 years are overweight (of which 6% are obese) and 16% of children aged 13-17 years are overweight (of which 4% obese) in Europe

This is particularly alarming because NCDs are largely preventable. An estimated 80% of heart disease, stroke and diabetes type II, and 40 % of cancer could be avoided if major risk factors were eliminated, among them, low intake of fruits and vegetables rang high.

Recently, efforts have been made by the Commission to find synergies between agriculture policy and stimulating healthier food choices. The post 2013 debate is a window for major change in European agriculture policy.

Converging Agendas

Policies and instruments must address changing production and consumption patterns to meet the challenges of:

- Chronic Non-Communicable Disease
- Climate Change
- Feeding a growing world population

Diet is not only one of the primary determinants of chronic non-communicable diseases, but consumption patterns also play a role in climate change, global food security and limited land and water resources. Provision and consumption of food have a complex relationship with health and the environment. Current production, distribution and consumption patterns favouring highly processed foods, increased food miles, and food swaps plus excessive consumption of red meat and dairy products have a detrimental effect on the environment.

- In EU, it is estimated that 16 % of CO2 emissions come from livestock, and shifting current dietary patterns towards plant based diets would have a larger impact on climate change than changing production methods.
- The global water crisis is already affecting some regions of the world and Europe. Agriculture is the greatest user of water worldwide, accounting for an estimated 70% of potable water use.
- Western diets place huge demands on production elsewhere, 97 per cent of the soy meal produced worldwide is used for animal feed, and exponential growth in the

developing world's demand for dairy and meat products will limit global capacity to feed a growing world population adequately.

To tackle these challenges, technological solutions will not be enough, but will require addressing current consumption patterns and moving towards more plant based diets.

The Common Agriculture Policy after 2013

The CAP is currently being debated. EPHAC and its members are committed to actively taking part in the discussions on the future of what is one of Europe's most powerful and far-reaching mechanisms for achieving our vision for a future Europe. The guiding principles for the future of the Common Agriculture Policy should be:

- **A Common Food and Agriculture Policy**

  A Common Food and Agriculture policy is essential in guaranteeing how food is produced, distributed and consumed and should guarantee a level playing field among actors in the food system, ensuring food and nutrition security in the EU without compromising food security in developing countries or markets.

- **Ensure access to healthy diets as part of a coherent strategy to address inequalities in health**

  Food and agriculture policy should be part of a coherent strategy to address inequalities in health. Diet related non-communicable diseases are a barrier to economic growth at EU, national and global levels. CAP should promote innovative policy instruments that create market access for small and medium size producers and improve access for most vulnerable groups.

- **Improve policy coherence**

  Improved coherence of policies, including food safety, trade, development, regional, environment, climate change, consumer and social polices is needed. CAP should contribute to the optimal functioning of the food system in relation to these policy areas.

- **Promote sustainable production and consumption**

  The sustainability of agriculture production includes economic viability, social inclusion and environmental protection. Both production and consumption patterns need to be addressed to encourage healthier more sustainable diets. Current patterns of production and consumption are not sustainable, and EU policies and instruments must provide incentives to create positive change, without compromising European agriculture ability to compete in the market.

- **Focus on nutritional quality**

  Quality of food is one of the prime drivers of what people eat and ensuring quality of the food we eat is important for maintaining consumer confidence. While quality is important in maintaining EU competitiveness in agriculture, this must not be at the expense of the affordability of a safe and nutritious diet for all layers of society.

- **Food as central element in agriculture policy**

  The primary role of EU agriculture is, and should remain on guaranteeing the production of safe, nutritious, affordable food. Pressure on land and water resources make it increasingly important to focus on production of food. Food should not only be viewed as a commodity, but as universal human right. CAP should not promote production and export of "crops" or products defined as public health damaging (such as tobacco) whilst the EU is increasing efforts and funding to encourage healthier lifestyles.

- **Price volatility and governance in the food system**

  The CAP should address extreme price volatility in food prices, not just to ensure the livelihood of farmers, but ensure that food is affordable for all layers of society. Instruments should be developed that not only manage crisis but work towards a more sustainable and fair food system, addressing concentration and power in the food system to prevent distortions and instability in prices or food availability.

- **Contribute to feeding a growing world population adequately**

  EU agriculture policy can and should contribute to meeting increasing global demand for

food. Meeting increasing demands for food, will not only require technology that increases food production, but will require addressing current consumption patterns and providing incentives to move production and consumption towards increasingly plant based diets.

- **Support long term investment in research and development in agriculture and food**
  CAP must support investment in innovation in agriculture and food, providing a balanced research agenda that not only invests in new technology, but agro-ecological and human ecological models of research.

- **Based on sound impact assessment**
  Future CAP should be based on a sound impact assessment, as a precondition for meeting future objectives. Health, social and environmental impact should be a central measure in any impact assessment process.

Chronic Non-Communicable Disease – the big challenge

"Chronic Non-Communicable Diseases are currently one of the greatest threats to public health in EU"

Chronic non-communicable diseases (NCDs) pose one of the greatest threats to public health and economic growth at local, national and global levels. In addition, to health care costs, NCDs contribute substantially to costs associated with lost productivity. Globally, obesity, cardiovascular diseases (CVD), cancer, and diabetes are responsible for 35 million deaths and 60% of all deaths every year. In Europe, these conditions play an even more substantial role, accounting for 70 % of all deaths. Fortunately, they are largely preventable. By targeting common risk factors such as unhealthy diet, physical inactivity, tobacco use and alcohol consumption, 80% of type 2 diabetes (T2D), coronary heart disease and stroke and 1/3 of cancers can be avoided. Without preventative measures, the number of deaths by NCDs will increase by 17% on a global scale over the next ten years according to estimates by WHO [(7)].

Improving population diets plays an important role in preventing Chronic Non-communicable diseases. Traditionally, strategies have focused on public campaigns and health education, despite these efforts, change has been slow. An increasing body of evidence shows that factors such as availability, accessibility and price play more predominant roles in food choice. It is increasingly argued improving diets will require change in the environments we live in and policy that supports making the healthy choice the easy choice [(8)].

The social and economic costs of NCDs merit serious policy response. NCDs pose great barriers to economic and social development, and needs to be tackled at local, national and European levels. Successful responses to tackle the growing burden of disease should involve all sectors: health policy cannot stand alone. Policy approaches need to be multi-sectoral promoting healthy lifestyles through a cohesive policy framework in all areas including agriculture, transport, competition policy and education.

The Common Agriculture Policy (CAP) currently accounts for approx. 40 % of EU spending. Although there is consensus that CAP affects what consumers eat, it is difficult to measure its impact on diet. Recently, efforts have been made by the Commission to find synergies between agriculture policy and stimulating healthier food choices. Ideally food, nutrition and agriculture policies should be joined up to provide healthier and more sustainable solutions. The post 2013 debate is a window for major change in European agriculture policy. One of the directions in which the CAP seems to be moving is towards the provision of public goods.

The aim of this position paper is to examine the rationale for including public health nutrition as one of the public goods that European agriculture policy delivers. Section one provides an overview of the burden of diet related non-communicable diseases in the EU, section two provides the main dietary determinants of these diseases, section 3 discusses convergence between healthier diets, climate change, protecting limited water and land resources and global food security. Section 4 provides an overview of how public health nutrition can be included as a public good in the post 2013 CAP.

The of Burden of diet related NCDs in Europe

Obesity, CVD, cancer and diabetes collectively pose the greatest burden of disease (77%) in the WHO European Region [9]. They are all interlinked as they share common risk factors and underlying determinants.

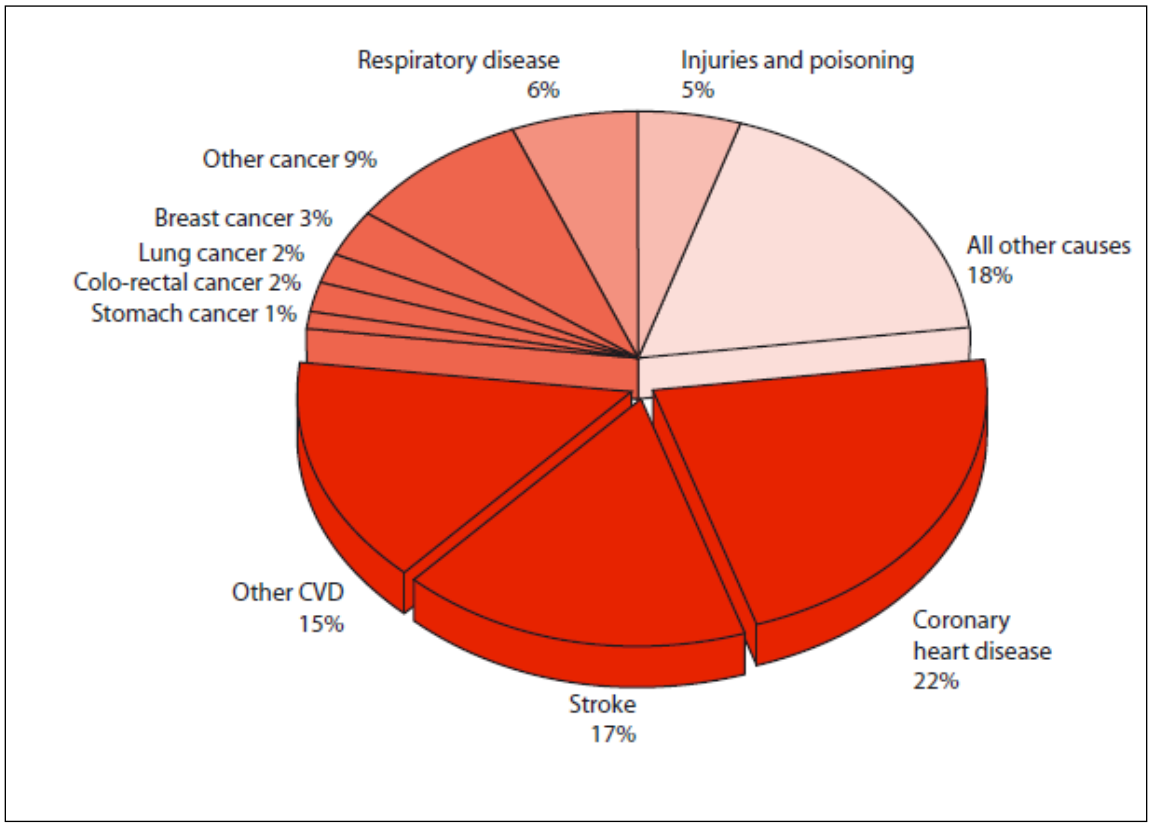

Figure 1 Deaths by cause, men and women, latest available year, Europe [10].

Obesity

Obesity and overweight are considered both non-communicable diseases and risk factors. Obesity and overweight increase the risk of Diabetes, Cancer and CVD. Obesity accounts for over 1 million deaths (10-13% of deaths) and 12 million ill health life-years each year in the WHO European Region, overweight is accountable for a substantial proportion of the total burden disease in Europe [11]. The increasing rates in children are especially worrying as children are not

fully developed and more vulnerable; childhood obesity can cause serious chronic complications further in life. Presently, an estimated 22% of children aged 5-9 years are overweight (of which 6% are obese) and 16% of children aged 13-17 years are overweight (of which 4% obese) in Europe [12]. Obesity prevalence among children 2-11 years will reach over 21% by 2010 increasing from 9.9% in 1995 to 13.7% in 2003; this means 26 million children in the EU will be overweight by 2010. Of the overweight, 6.4 million will be obese,increasing by over 350 000 per year [13,14,15,12,16]. Rates of obesity exhibit huge social inequalities between and within EU Member States. According to the WHO, 2006 BMI for-age-standards, the highest prevalence of obese children is found in Ukraine, Bosnia and Herzegovina, Spain and Portugal [17,18,19,20,21,22,23,24,25]. The serious effects of obesity results from its high prevalence across all age-groups; in Europe, 30-80% of adults are overweight with 1/3 of these being obese [26]. Obesity increases the risk of developing other NCDs significantly, adding to the total burden of overweight and obesity [26] with a long list of associated diseases such as CVD, cancer, T2D and insulin resistance, end-stage kidney disease and fatty liver disease [27]. Obesity and overweight in children cause illnesses, such as T2D, formerly limited to the adult population. In the EU, at least 27 000 children have T2D and 400 000 have impaired glucose intolerance; along with 1 million obese children showing CVD indicators and over 1.4 million with early stages of liver disorder [16]. This accumulating burden of disease results in extensive economic costs, both direct and indirect. The direct health care costs of obesity in the WHO European Region amounts in general to 2-4% but can be up to 8% of national health expenditures [28,29]; according to several studies, obese people cost 36% more than normal weight people due to increased need of medication [30,31,32]. An example from the Netherlands associates overweight with 2.0% of total health care costs which is the equivalent to €1 billion with the total health care budget amounting €59.5 billion [33] and in the UK, direct costs of treating obesity-related disorders accounted for 1-8% of the total health care costs in 2001; this amounted to €3.87 billion (£2.6 billion) in 1998 and €4.9-5.5 billion (£3.3-3.7 billion) in 2002 [29]. The International Obesity Task Force (IOTF) has estimated that the cost of obesity in the EU to be €150 billion per year.

Cardiovascular Disease

Cardiovascular diseases (CVD)are the main cause of death and disability in Europe, causing over 4.3 million deaths each year [10]. CVD causes accounts for nearly half (49%) of all deaths in

Europe including 30% of all premature deaths (before age 65) [10]. Eastern Europe and former Soviet countries have the highest rates of morbidity from CVD. Although mortality from CVD appears to be falling, the number of people living with chronic CVD and therefore reduced capacity is increasing. As a consequence, CVD is the main contributor to the disease burden in Europe with 23% of the overall disease burden. CVD costs the EU economy € 192 Billion each year representing a per capita annual cost of €391 [10]. This includes 57% in health care costs, 21% in productivity losses and 22% in informal care of CVD patients [10]. CVD is a major barrier to economic development with the major loss of production it costs the EU; in 2006, nearly €41 billion was lost with €26.9 billion (2/3 of total) due to death and €13.9 billion (1/3 of total) due to illness in the working age [10]. To quantify the burden of disease, injuries and risk factors, WHO calculated the Disability-Adjusted Life Year (DALYs), lost in Europe each year due to CVD [34]. The result was more than €34 million DALYs which is 23% of the total lost in Europe and €12 million (19% of total) lost in the EU. Considering developed countries in the EU, the loss of DALYs because of CVD added up to 17% of the total losses, representing the second largest single cause after neuropsychiatric disorders. In developing European countries, CVD exceeds the neuropsychiatric disorders in terms of percentage DALYs lost [34]..

Cancer

Cancer is the second largest cause of death after CVD in Europe, with 3 million new cases and 1.7 million deaths each year [35]. In 2002, 20% of all deaths in the European Region were caused by cancer, contributing with 11% of the disease burden; lung, trachea and bronchus cancers being the leading cases most common types of cancer [36]. In the EU 25, cancer caused 1.1 million deaths and 2.3 million new cases in 2006 [37]. Even though survival rates of cancer have increased, the disease is spreading to younger population groups with increasing incidence in children and adolescents [37]. The total number of new cases of cancer in developing world is predicted to increase by 73% and 29% in the developed world between 2000 and 2020 [38]. Cancer is most prevalent in Europe with one quarter of total global cancer cases and 3.2 million new patients/year even though Europe only comprises one eighth of total world population[35]. Also within Europe the cancer incidence and mortality rates are unevenly distributed with at least two-fold differences seen between countries and these are often even greater for specific cancers [35]. Differences in cancer mortality can however be difficult to document as it involves considering several causal factors, such as lifestyle, detection methods screening programs and

treatment, within and between Member States. In terms of social and economic impact of cancer in the EU, limited information is currently available. However, estimates from the US reveal considerable costs of cancer to national health systems; according to U.S. National Institutes of Health, the overall cost for cancer in 2004 amounted to $189.8 billion. Of this total, $69.4 billion was due to medical costs, $16.9 billion due to indirect costs (e.g. loss of productivity) and $103.5 billion due to indirect mortality costs [39].

Type 2 Diabetes

On a global level, Type 2 Diabetes (T2D) and related diseases resulted in 3.8 million deaths in 2007 which is over 6% of total world mortality [40]. The increasing European prevalence has been approximated by WHO in 2003 to be 7.8% involving more than 48 million adults aged 20-79 years with diabetes (23 million in EU) where Central and Eastern Europe represent still higher rates [10,41]. Malta (7.6%) and the Czech Republic (7.2%) have the highest diabetes prevalence; deaths attributed to diabetes occur mainly in developing countries [42]. Even so, it is likely that prevalence is underestimated as 50% of diabetes in the population goes undiagnosed [41]. International Diabetes Federation expresses costs associated with Diabetes in International Dollars (ID); these amounted to at least 82 billion in Europe in 2007 [40]. According to the International Diabetes Federation (IDF), this number will exceed ID 92 billion by 2025. Like other NCDs, diabetes includes both direct and indirect costs; an example from Germany in 2001 shows that indirect costs of diabetes add up to €1,328 per person [40]. Yet, little is spent on prevention; low- and middle-income countries spend resources mainly on medical care treating immediate life-threatening complications from diabetes (e.g. high blood sugar) instead of dominant causes of death (e.g. CVD) [40].

Dietary determinants of non-communicable disease

Diet is one of the major modifiable risk factors for NCDs. WHO Europe has estimated that seven risk factors; tobacco, alcohol, low fruit and vegetable intake, physical inactivity, high blood pressure, high cholesterol, overweight and obesity account for 60 % of the disease burden in Europe [43], 5 of these are directly related to diet (see figure 2) .

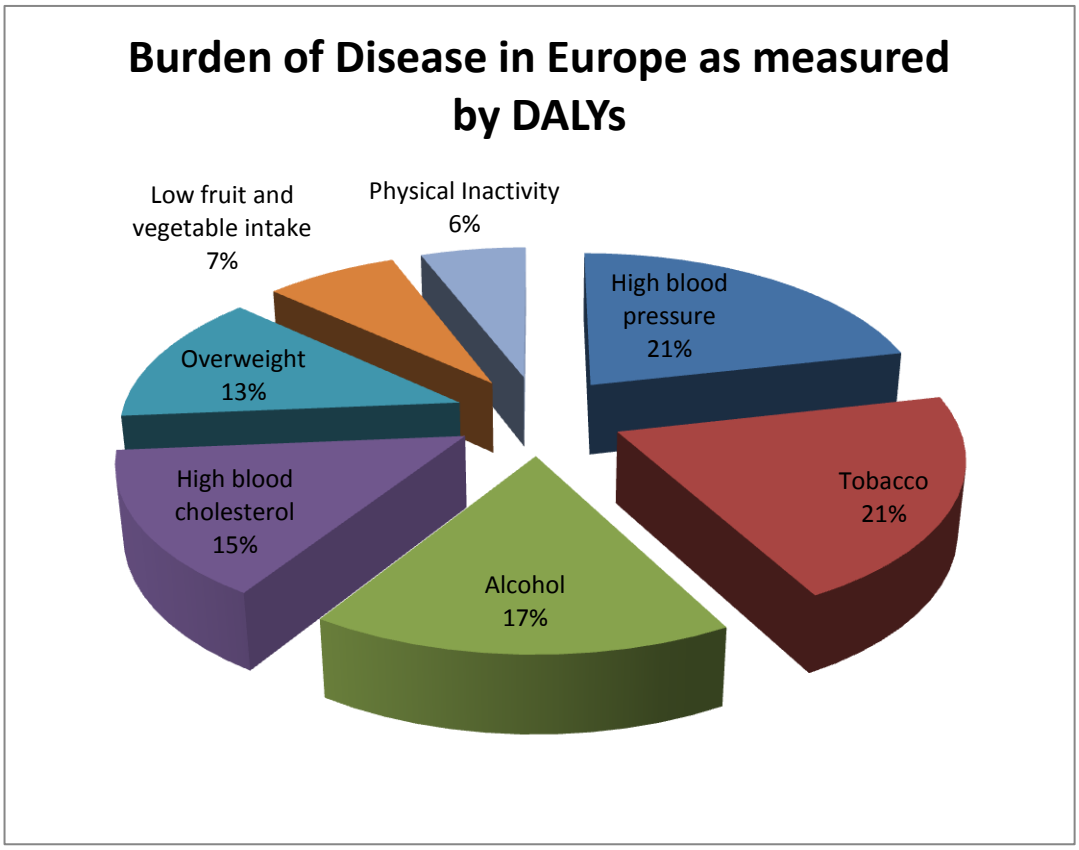

Figure 2 Burden of Disease in Europe as measure by DALYs

The dietary determinants of NCD are interrelated with associated co- morbidity. Figure 3 provides an overview of dietary determinants.

Fruit and vegetables

A number of MS have developed recommendations for fruit and vegetable consumption from 400 g / day upward to10 portions/day. The WHO recommendation of 400 g/day is the most

commonly accepted [44]. Low fruit and vegetable intake has been estimated to *account for* 4.4% of the burden of disease [45,34].and 3.5% for EU-15 [46]. Fruit and vegetables have a high content of vitamins, minerals, antioxidants and phytochemicals and play a positive role in preventing CVD, Diabetes and specific cancer types [47,48]. Fruit and non-starchy vegetables are also very low in energy-density; contributing with increased satiety to maintain normal weight [49]. It is estimated that fruit and vegetable intake of recommended levels (400 or 600 g/d) would reduce CHD and stroke incidences by 7% and 4% in EU-25 respectively along with 23 000 deaths from CVD in EU-15 [50,46].

Whole grains and fibre

Whole grains and fibre have a protective effect against NCDs due to their bulky texture which ensures a limited time period within the digestive system, inhibiting development of tumours and malignant transformation[51]. In addition, whole grains are rich in nutrients and phytochemicals. Although no causal link has been established between consumption of whole grains and obesity, whole grains can contribute to maintaining normal weight by being relatively low in energy density. A number of epidemiological studies have shown the whole grains are protective against cancer, CVD, diabetes and obesity [52].

Red and Processed meats

Red meat and highly processed meats i.e. meats which have been smoked, salted or added preservatives are convincingly associated with increased risk of NCDs especially CVD and several cancers [48]. Red meats are together with dairy products the main source of saturated fat in the diet, and have negative effects on blood cholesterol levels. Red meats might also strain the digestive system by staying in the body longer time. 12% of colorectal cancers in the US would be prevented by avoiding processed meat [53]. Salt and salt-preserved foods are related to increased blood pressure, cholesterol levels and risk of cancer [48]. Although no MS have official recommended daily intakes for meat, the WCRF, has recommended that population consumption cut to 300 g/week [48,53]. Current average consumption in EU Member states is approx. 2 times higher than recommended [54].

Fats

Dietary fats, although a necessary constituent in diets, especially in relation to neural development, are also a risk factor for NCDs. Reduction of total fat in diet plays a role in reducing the energy density of diets, and lowering consumption of saturated and trans fats is an important strategy for reducing risk of CVD and diabetes. Current population goals are less than 10 % of energy requirements should come from saturated fats and less that 2 % from trans fats (Eurodiet core report). In contrast, polyunsaturated and monounsaturated fats can play a protective role in relation to CVD (see good fats, bad fats).

Good Fat, Bad Fat

Fats can have both harmful and protective effects against NCDs depending on the source and type of fat. **Poly- and monounsaturated fats** are generally viewed as having protective effects against NCD especially CVD, while trans and saturated fats have negative effects.

Polyunsaturated, monounsaturated fatty acids from fish and plant sources exert protective effects by lowering the harmful and total blood cholesterol. This group includes the essential omega 3 and 6 fats which improve blood flow, stabilize blood sugar levels, inhibit inflammation and plaque formation in the arteries [(1,2)].

Trans and saturated fatty acids mostly originating from animal sources and partially hydrogenated vegetable oils increase risk of NCDs by causing high levels of the harmful type of cholesterol. They stay in blood stream for longer resulting in higher fasting insulin concentrations and lower insulin sensitivity [(3,4,5,6)]. Trans fats are not essential in the human diet. Trans fat increases the risk of CVD and abdominal fat distribution; recent research suggests that the most efficient improvements in risk of CVD are seen by replacing trans fat with polyunsaturated fat as opposed to eliminating trans fat [(4)]

Sugar and high energy density

Sugar contributes to the energy-density of foods and contains no essential nutrients (i.e. “empty calories”) and increases the risk of weight gain [48]. Sugar is not causally related to CVD or cancer, however high sugar consumption is increasingly linked to obesity and Type 2 Diabetes. Most international recommendations, suggest that sugar should not exceed more than 10 % of total energy intake.

Dairy Products

Dairy products are generally seen as a good source of essential nutrients vitamin A and calcium. However, dairy products, together with red meat are the primary dietary source of saturated fat. There is some evidence suggesting that milk probably protect against some cancers, whereas, cheese and diets high in calcium have been shown to increase risk of disease. Dairy products high in saturated fat are furthermore convincingly linked to NCDs [48].

Body mass index and energy density

Energy density is an important factor in relation normal weight and BMI maintenance. BMI is a common measure of overweight and obesity. Energy-dense foods are usually processed, hydrogenated, refined, fermented, containing additives, preserved with high levels of fat, sugar and salt and low in fibres and nutrients. These foods are very likely to cause weight gain and obesity whereas foods high in fiber and water content may cause weight loss and normal BMI [48] Body mass index (BMI) of more than 21 kg/m2 is an important risk factor of NCD [27,34]. Normal BMI levels results in improved insulin sensitivity and more stable blood sugar levels which can prevent the progression from impaired glucose intolerance to T2D. Globally, overweight and obesity is estimated to cause 20% of cancer mortality [55,48,44] along with one third of CHD and stroke and 60% of hypertensive disease in developed countries [27,34]. . However, the position of fatty tissue also determines the risk of disease where excess body fat around the waist increases risk of disease more compared to fat around the hip by surrounding vital central organs. Therefore, waist-to-hip measurements are also important to consider when determining risk of NCD.

Changing behaviour - changing environments

"Policies are the primary mechanism for making environmental changes and include formal and informal rules, laws and regulations. Both governmental and industry policies control food environments"

Currently European diets are moving from traditional diets i.e. Mediterranean diet characterized by higher amounts of whole grains, vegetables, fruits and lower amounts of meat and processed foods to less healthy diets. Societal and cultural trends in both, older and newer member states are moving towards converging diets characterized by energy dense, highly processed, nutrient poor foods [56]. This combined with lower levels of physical inactivity play an important role in increasing rates of chronic non-communicable diseases.

Traditional approaches focus on individual behaviour as the problem and seek to change it.
However, behaviour change depends on a sequence of changes: changes in information, of attitudes, in motivation, changes in skills and resources, access and availability, changes in social norms and cultural expectations. Purchases are strongly influenced by what is available, by price, by past experience and by marketing messages.

Food environments are increasingly characterized by higher prices of fruits and vegetables, low prices of processed industrialized foods, access and availability of fast food shops, increasing trend of eating outside the home and larger portion sizes. [57]. Food environments are not conducive to healthier eating habits and often promote less healthy diets (i.e. obesenogenic) [58] Healthier food environments play a crucial role in changing behaviour, by making the healthy choice, the easy choice.

Converging Agendas

Diet is not only one of the primary determinants of chronic non-communicable diseases, but consumption patterns also play a role in climate change, global food security and limited land and water resources. Provision and consumption of food have a complex relationship with health and the environment. In the UK, it is estimated that production, distribution and consumption of food accounts for 22% of total greenhouse gas emissions [(59)] Current production, distribution and consumption patterns favouring highly processed foods, increased food miles, and food swaps plus excessive consumption of red meat and dairy products have a detrimental effect on the environment.

Livestock, both meat and dairy production, has been estimated to account for as much as 18 % of total global CO2 emissions [(60)]. In the EU, it is estimated that 16 % of CO2 emissions come from livestock. (Eurostat 2009), and shifting current dietary patterns towards plant based diets would have a larger impact on climate change than changing production methods.

The enormity of the global water crisis is gaining political importance, and is already affecting some regions of the world [(61)]. Agriculture is the greatest user of water worldwide, accounting for an estimated 70% of potable water use. Agricultural water has increased during the last two decades; reasons for this include CAP subsidies for water intensive crops tended by inefficient techniques which results in farmers not paying the full price of the water used in production [(62)]. Livestock production also plays a significant role [(63)]. Globally, livestock uses 70 per cent of all available agricultural land, and uses 8 per cent of the global human water supply [(64)]. Estimates suggests that between 15 – 23% of the world's water is used for livestock [(61)].

The global spread of intensive farming has led to a major increase in the use of high protein animal feeds, comprising cereals and vegetable proteins such as soy, and is affecting global food security. It is estimated maximum world grain capacity at 3300 million tonnes per annum, only 60% more than today, and suggests that a looming gap between food production capacity and a growing global population [(65)]. Western diets place huge demands on production elsewhere, 97

per cent of the soy meal produced worldwide is used for animal feed, and exponential growth in the developing world's demand for dairy and meat products will exacerbate global food security[60]. Production of meat requires far more feedstock than the production of a legume, grain product, fruit, or vegetable and thus exacerbates increases in food price [61].

Moving towards plant based diets, doesn't mean strict vegetarian or vegan diets, but reducing the amount of animal based dietary constituents, and increasing plant based constituents such as grains, legumes, fruit and vegetables. The current global average meat consumption is 100 g per person per day, with about a ten-fold variation between high-consuming and low-consuming populations. 90 g per day is proposed as a global target, with not more than 50 g per day coming from red meat[66].

Future Directions

The current debate on the future of the Common Agriculture Policy provides an opportunity to rethink food, nutrition and agriculture policy in Europe. Past reforms of the CAP have mitigated the negative health effects of certain policies, but health should be a central element in agriculture and food policy. The CAP's original purpose was to ensure the availability of safe, adequate food at reasonable prices; however current and future challenges, require redefining food security to include nutritional quality, sustainability, equitability and health through access and availability of food.

Food security is no longer only a matter of providing calories, but ensuring the nutritional quality in diets, without compromising other societies food security or the environment. Current policy favours the production, availability and consumption of cheap calories, but needs to move towards increasing the availability and accessibility of nutrient dense foods like fruit, vegetables, pulses and whole grains.

Ensuring high intakes of plant-based foods compared to meat and animal source foods is not only important in relation to disease prevention. The environment would benefit equally as much through sustainable food systems, reducing GHG emissions and limiting water use. With present concerns of climate change posing several global threats such as loss of biodiversity, land resources and fertility along with living standards within Europe, policies that encourage moving population diets toward plant-based diets.

The Common Agriculture Policy should not merely pay farmers, but ensure the delivery of public goods. The transfer of funding from direct payments to rural development and environmental protection has continued (Modulation and cross-compliance) in reform processes. Food and farming are central to health, and health is central to sustainable development; therefore, food and agriculture policy should deliver public health nutrition as one of these public goods. Policies supporting the production and consumption of fruit, vegetables, pulses, legumes and whole grain over meat and dairy provide public value, not only in terms of chronic disease

prevention, but also provides a more sustainable food system that limits production's negative impact on climate and global food security.

The EU School Fruit Scheme (EU SFS) and Food Aid to The Most Deprived Persons Scheme (MDP) are both examples agriculture policy that moves from "pure" agriculture policy to policy that is interlinked with social, health and education policies with explicit health goals. Both schemes focus on the accessibility of healthy foods and target reducing inequalities in access to healthier food choices, and at the same time provide access to new markets for farmers.

An integrated European Food and Agriculture Policy can play a substantial role in moving population diets in a healthier, more sustainable direction, less meat and saturated fat and more fruit, vegetables and whole grains.

The Common Agriculture Policy after 2013

The common agriculture policy is currently being debated. EPHAC and its members are committed to actively taking part in the debate. The guiding principles for the future of the Common Agriculture Policy are as follows:

- **A Common Food and Agriculture Policy**

  A Common Food and Agriculture policy is essential in guaranteeing how food is produced, distributed and consumed and should guarantee a level playing field among actors in the food system, ensuring food and nutrition security in the EU without compromising food security in developing countries or markets.

- **Ensure access to healthy diets as part of a coherent strategy to address inequalities in health**

  Food and agriculture policy should be part of a coherent strategy to address inequalities in health. Diet related non-communicable diseases are a barrier to economic growth at EU, national and global levels. CAP should promote innovative policy instruments that create market access for small and medium size producers and improve access for most vulnerable groups.

- **Improve policy coherence**

  Improved coherence of policies, including food safety, trade, development, regional, environment, climate change, consumer and social polices is needed. CAP should contribute to the optimal functioning of the food system in relation to these policy areas.

- **Promote sustainable production and consumption**

  The sustainability of agriculture production includes economic viability, social inclusion

and environmental protection. Both production and consumption patterns need to be addressed to encourage healthier more sustainable diets. Current patterns of production and consumption are not sustainable, and EU policies and instruments must provide incentives to create positive change, without compromising European agriculture ability to compete in the market.

- **Focus on nutritional quality**

  Quality of food is one of the prime drivers of what people eat and ensuring quality of the food we eat is important for maintaining consumer confidence. While quality is important in maintaining EU competitiveness in agriculture, this must not be at the expense of the affordability of a safe and nutritious diet for all layers of society.

- **Food as central element in agriculture policy**

  The primary role of EU agriculture is, and should remain on guaranteeing the production of safe, nutritious, affordable food. Pressure on land and water resources make it increasingly important to focus on production of food. Food should not only be viewed as a commodity, but as universal human right. CAP should not promote production and export of "crops" or products defined as public health damaging (such as tobacco) whilst the EU is increasing efforts and funding to encourage healthier lifestyles.

- **Price volatility and governance in the food system**

  The CAP should address extreme price volatility in food prices, not just to ensure the livelihood of farmers, but ensure that food is affordable for all layers of society. Instruments should be developed that not only manage crisis but work towards a more sustainable and fair food system, addressing concentration and power in the food system to prevent distortions and instability in prices or food availability.

- **Contribute to feeding a growing world population adequately**

  EU agriculture policy can and should contribute to meeting increasing global demand for food. Meeting increasing demands for food, will not only require technology that increases food production, but will require addressing current consumption patterns and providing incentives to move production and consumption towards increasingly

plant based diets.

- **Support long term investment in research and development in agriculture and food**
  CAP must support investment in innovation in agriculture and food, providing a balanced research agenda that not only invests in new technology, but agro-ecological and human ecological models of research.

- **Based on sound impact assessment**
  Future CAP should be based on a sound impact assessment, as a precondition for meeting future objectives. Health, social and environmental impact should be a central measure in any impact assessment process.

References

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