

Transforming European food and drink policies for cardiovascular health **2017**

A European Heart Network paper¹

The paper's vision

Every European – irrespective of the place or socio-economic circumstances into which they are born – has a right to a life free from avoidable diet-related cardiovascular disease

Why a new European Heart Network paper

Since the European Heart Network (EHN) published its last paper on *Diet, Physical Activity and Cardiovascular Disease Prevention in Europe* in 2011 there have been several major developments in both the scientific arena and the policy landscape.

Food and drink policies matter for prevention of heart disease and stroke

Despite considerable progress in tackling cardiovascular disease (CVD), it remains the leading cause of death and a major cause of illness and disability for men and women in Europe.

Dietary risks are a major contributor to CVD,² responsible for 56% of all the years lost to disability or death from CVD in the European region. In the EU, dietary risks are responsible for 49% of the CVD burden, at an estimated annual cost of €102 billion.

- CVD accounts for 45% of all deaths and 23% of the years lost to death or disability in Europe.³
- More than 85 million people live with CVD across Europe, of which almost 49 million in the EU.³
- CVD costs the EU economy €210 billion a year in healthcare, lost productivity and informal care costs.³
- The burden of death and disability due to CVD is very unevenly spread, both between and within countries in the European region.³
- Across Europe retirement ages are rising, but in many countries average healthy life expectancy – how long people can expect to live without any disability – is lower than new or proposed statutory retirement ages.^{4,5}

Food, drink and cardiovascular disease – what the science says

Reviews of recent scientific developments, which we commissioned for our paper, show that, generally speaking, the evidence on the links between diet and cardiovascular disease has strengthened, rather than weakened, in the last few years.

- A cardiovascular health-promoting diet means a shift
 from an animal-based diet to a more plant-based diet. It
 includes vegetables, fruit and berries in abundance. Whole
 grain products, nuts and seeds, fish, pulses, low-fat dairy
 products are also important, as are non-tropical vegetable
 oils in modest amounts. This everyday dietary pattern also
 limits consumption of red meat, processed meat products
 and foods or drinks with low content of vitamins, minerals
 and dietary fibre and/or a high content of free sugars,
 saturated/trans fats or salt.
- Apparent controversies about dietary recommendations
 often stem from a limited understanding, or
 misrepresentation, of the science or methodological issues.
 Careful unpicking of two apparent controversies relating
 to salt and saturated fat reveals that there is still robust
 evidence for the messages to limit salt consumption and
 to replace saturated fat with unsaturated fats or fibre-rich
 complex carbohydrates.
- There is growing evidence about the importance of nutrition early in life – before and during pregnancy, infancy and early childhood – on later health outcomes.

Taken together, the population goals proposed in the table overleaf should translate to a cardiovascular health-promoting diet that has a low energy density⁶ which is important for weight maintenance, and for the prevention of overweight and obesity. A diverse and balanced diet covers the need for nutrients and food supplements are rarely needed.



Summary of EHN's proposed population goals

FOODS AND OTHER RELATED GOALS	
Fruit and vegetables	Intermediate: More than 400 g/day Long-term: More than 600 g/day
Sugar-sweetened drinks	Intermediate: Decrease as much as possible Long-term: Virtually zero
Body mass index (BMI)	Intermediate: Average BMI of less than 23 for adults Long-term: Average BMI of 21 for adults
NUTRIENTS AND OTHER COMPONENTS	
Saturated fat	Intermediate goal: Less than 10% of calories for the general population and less than 7% of calories for a population at a high risk for heart disease, less than one-third of total fat. Long-term goal: 7% of calories, and less than one-third of total fat. Replaced with unsaturated fats, particularly polyunsaturated fats, and fibre-rich complex carbohydrates.
Trans fats	Not more than 0.5% of calories from TFA, of which 0% should be from industrially-produced TFA
Total fat	About 25% of calories
Total carbohydrate	Intermediate: More than 55% of calories Long-term: Up to 65% of calories
Free sugars	Intermediate: Less than 10% of calories Long-term: Not more than 5% of calories
Fibre	At least 12.6 g dietary fibre per 1000 kcal (3 g per MJ energy)
Salt	Less than 5 g of salt (2 g of sodium) per day

Notes to table:

Population goals: These goals represent a recommended average intake or level for the population as a whole; they are not dietary guidelines for individuals. The goals refer to a desirable everyday diet and should not be taken to mean that individuals should *never* deviate from them. These goals do not take account of genetic variations in how individuals respond to dietary risk factors or individual susceptibility to disease.

Intermediate and long-term goals

In some cases, two different sets of population goals are proposed:

Intermediate targets based on an assessment of current dietary patterns in Europe and including pragmatic considerations of what might realistically be aimed for in the next five to 10 years.

Ambitious longer-term goals which highlight the levels we should ultimately be aiming for, if the pragmatic constraints that feed into the intermediate targets can be overcome.

In other cases, it is considered so important to start working towards the long-term goal immediately that no intermediate target is proposed.

Percentage of calories (energy): When the goals are expressed as a percentage of calories (food energy), this represents the proportion of the total calorie intake from all food and drink consumed excluding alcohol.

Other points:

Protein: Although no goal is strictly necessary for CVD prevention, from 10% up to 20% of calories should come from protein of reasonable quality.

Total calories: Intake should be adequate to support growth and development, as well as physical activities, and to reach and maintain desirable body weight and micronutrient intakes should be adequate to ensure health, according to existing recommendations for people of different age, gender, etc.

Saturated fat: There is considerable media interest in whether some types of saturated fat – such as dairy fat or coconut oil – are less 'unhealthy' than others, but there is not currently enough evidence to justify goals for individual fatty acids.

Breastfeeding: No population goal for breastmilk or breastfeeding is included in the table. WHO recommends exclusive breastfeeding for six

months followed by complementary feeding and continued breastfeeding for up to two years or beyond, and countries in the European region have signed up to WHO's global target to increase rates of exclusive breastfeeding for six months up to at least 50% by 2025. Some national authorities in Europe advise that complementary feeding can sometimes be introduced at four months, while acknowledging the importance of ideally complying with the WHO guideline.

Water: Adequate total water intakes (from food and drinks) should be 2 litres for women and 2.5 litres for men. Requirements will be higher in hotter climates or for people involved in vigorous physical activity, and are more critical for children and older people. It is important that supportive policies are in place to ensure easy access to drinking water.

Folate: No population goal is proposed for folate from food. Inclusion of any recommendations for particular foods specifically because of their folate content or for folic supplements is not warranted for CVD prevention and optimal vitamin B status can be achieved with a cardiovascular health-promoting diet.

Antioxidants and polyphenols: No population goal is proposed for antioxidants and polyphenols. A cardiovascular health-promoting diet provides abundant antioxidants and that there is not enough evidence to justify specific recommendations and EHN does not recommend taking supplements.

Phytosterols (plant sterols and stanols): No population goal is proposed for phytosterols (plant sterols and stanols), because these are only meant for people with high blood cholesterol levels.

Alcohol: Moderate alcohol consumption (one or two drinks per day) has been associated with a lower risk of CVD than in people who drink no alcohol at all, but the possibility that this is due to other factors cannot be excluded and recent research has shed doubt on this association. We cannot recommend that people consume alcohol for cardiovascular benefit.

Pulses: Regular consumption of dietary pulses (the dried seeds from the legume family such as beans, chickpeas, lentils and peas) is recommended by some authorities. There is some emerging evidence that daily consumption of a $130~{\rm g}$ serving of pulses can reduce LDL cholesterol levels and that higher pulse intakes are associated with lower risk of heart disease, reduced blood pressure and obesity.

Colonic flora: While there is a lot of interest in microorganisms in the gut and the possible implications for nutrition, there is not enough evidence to make any firm recommendations.

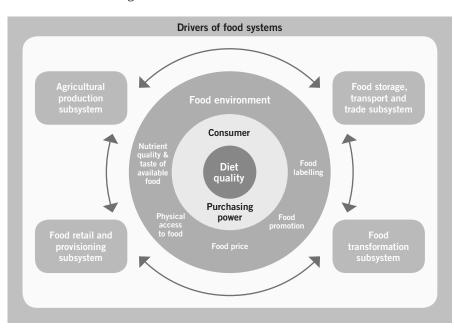
Sustainable food systems for cardiovascular health

In a perfect world people would, on the basis of this evidence, buy and eat different foods to reflect the latest advice and markets would respond to the changes in demand. In today's complex food systems, however, the 'market' does not function perfectly and there are many other forces driving the food supply in addition to consumer demand.

- Today's food systems are intricate with long food chains that involve many different actors – and powerful external factors influence what is produced, how it is sold and at what price (the 'food environment').
- This complexity presents both challenges and opportunities for policymakers. While many of the external drivers are beyond the control of national or regional authorities, there are many entry points along the food chain where policymakers can take action.
- The EU's Common Agricultural Policy (CAP) has helped shape current dietary patterns, and radical rethinking of the CAP could enable positive dietary changes.
- Trade and investment agreements can impact on the food environment and there is a need to take nutrition into account in trade negotiations.

- Current approaches to restricting marketing of unhealthy foods to children are inadequate, particularly given the shift towards online marketing, and decisive policy action is needed.
- Food system activities have considerable environmental impact, including on climate change, land use and water use. Climate change is likely to have a negative impact on diet-related health overall.
- There is considerable overlap between consuming healthier diets and achieving higher levels of sustainability, and an integrated health and environment approach to food systems is needed.
- Health-environment win-wins need to be promoted through dietary guidelines and broader policy approaches are also required.

Major economic and policy drivers determine what food is produced, what is imported and how foods are marketed (see figure below). Many of these global and external factors are well beyond the reach of individual governments – let alone individuals.

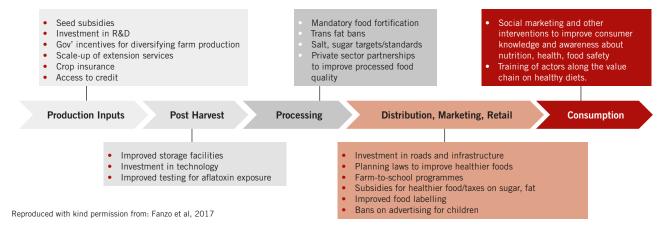


Links between the quality of food and food systems.

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Effective policies for promoting healthy dietary patterns

On the other hand, the complex situation also means that there are many different points along the food chain where policy makers can take action to improve diets (see figure below).



Indeed, recent years have seen significant global commitments on diet and nutrition, reflecting greater awareness of the need to tackle diet-related NCDs.

- Progress on policy to improve European diets, however, has been patchy and inadequate over the last six years.
- At the EU level, the lack of progress on nutrient profiles (for regulating use of health and nutrition claims) and food marketing to children is disappointing. There have been some promising initiatives at EU-level in relation to trans fats, reformulation and healthy procurement of food served in schools.
- Some European countries have made progress food taxes, reformulation, trans fats, labelling, food in schools and marketing to children – but much more governmentled action is needed.

A population-based approach that aims to reduce the whole population's exposure to dietary risk factors offers the greatest promise. Most interventions to improve diets are good value for money and some actually result in net cost savings. 8

EHN recommendations for food and drink policies for cardiovascular health

In order to realise the vision of every European being able to live free from avoidable diet-related CVD, EHN calls for rapid and full implementation of a comprehensive package of recommendations. The package is underpinned by three

overarching recommendations. It also includes three clusters of specific recommendations relating to policies to influence what food is supplied, to impact on consumer demand for foods and to alter the composition of foods.

Implement policies to tackle cardiovascular health inequalities in Europe

Ensure that robust mechanisms for nutrition governance are in place and fit-for-purpose

Develop an integrated health and environment approach to food systems and promote health-environment win-wins in food-based dietary guidelines



Food supply-side recommendations

- Establish a global food convention
- Reform agricultural and food policy to align with public health priorities
- Ensure trade and investment policies protect and promote public health



Food demand-side recommendations

- Use taxes and/or subsidies
- Implement regulatory controls on marketing of unhealthy foods
- Adopt a nutrient profile for regulation of claims, mandatory simplified front-of-pack nutrition labelling and menu labelling



Food composition recommendations

- Set legal limits for levels of industrially-produced trans fats
- Establish nutrition standards for food in schools, hospitals and other public institutions
- Implement wide-reaching ambitious food reformulation programmes
- 1. The full paper and the summary are available from http://www.ehnheart.org/publications-and-papers/publications.html
- 2. Global Burden of Disease database (2015) https://vizhub.healthdata.org/gbd-compare/
- 3. Wilkins, E. et al. European Cardiovascular Disease Statistics 2017. European Heart Network. (2017)
- 4. OECD. Pensions at a glance 2015. OECD and G20 indicators. (2015)
- 5. Healthy life expectancy data, 2015, from Eurostat. (http://ec.europa.eu/eurostat)
- 6. Energy density is the amount of energy (calories) per gram of food.
- 7. Rose, G. Strategy of Preventive Medicine. 171 (2008). doi:10.1093/acprof:oso/9780192630971.001.0001
- 8. Cobiac, L. J., Veerman, L. & Vos, T. The role of cost-effectiveness analysis in developing nutrition policy. *Annu. Rev. Nutr.* 33, 373–393 (2013); Cecchini, M. *et al.* Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness. *Lancet (London, England)* 376, 1775–1784