



**EGEA** edition 8  
International conference

# EGEA 2018 STATEMENT

## NUTRITION & HEALTH : FROM SCIENCE TO PRACTICE

Scientific Committee

E. Riboli, M. Laville, MJ. Amiot-Carlin, M. Caroli,  
ML. Frelut, J. Halford, P. James, JM. Lecerf,  
L. Letrilliart, K. Lock, A. Martin, T. Norat, D. Weghuber

Scientific Coordinator

S. Barnat

The World Health Organization defines healthy diets as:

- Adequate, comprising sufficient food for a healthy life.
- Diverse, containing a variety of foods, including plenty of fruits and vegetables, legumes and whole grains.
- Low in food components of public health concern such as sugar and salt which should be consumed in moderation, saturated fats that should be replaced by unsaturated fats and trans fats that should be completely eliminated from industrial food products.

### Low consumption of F&V: a universal health issue

Adopting a healthy lifestyle i.e. healthy diet and physical activity, could substantially reduce premature mortality and prolong life expectancy. The energy-balance is a two-sided spectrum in which both nutrition and physical activity should be addressed. However the statement will focus mainly on nutrition.

Despite numerous actions deployed and the prospect of a global obesity epidemic, a high proportion of the world population, mainly in the so-called "Western countries", does not meet the WHO dietary recommendations in terms of F&V consumption. Numerous campaigns have been launched on a global level to promote public awareness of the need for better nutrition, but even so, new initiatives with more innovative methods are needed both to make F&V more accessible and to promote their consumption.

In France, the National Nutrition and Health Program (PNNS), launched in 2001, is a public health plan aimed at improving the health status of the population by acting on one of its major determinants: nutrition. The growing awareness of the health issues of nutrition has led in recent years to strong government mobilization for the establishment of a real nutrition policy, which relies on the action of multiple actors involved in prevention: health care professionals, public institutional partners, associations, media and economic actors. One of the main objectives is to increase F&V consumption to at least 5 portions per day.

### Consuming F&V from early age to prevent non-communicable diseases - NCDs

Health authorities are facing significant challenges posed by changes in food availability and eating habits and a parallel increase in the incidence and prevalence of the NCDs, especially those related to diet and obesity. There is a broad consensus on the health benefits of regularly consuming F&V: eating F&V daily helps reducing the risk of obesity, heart attack, high blood pressure, stroke, diabetes and numerous cancers and many other chronic diseases as well. So WHO considers low F&V consumption as a modifiable risk factor for population health.

Boosting the consumption of F&V from the earliest possible age is a key pillar of a healthy diet for preventing many NCDs. Evidence shows that a healthy diet is needed in the preconception phase to facilitate early foetal development and growth, and to facilitate optimum growth throughout fetal life. With this in mind, it is crucial to formulate behaviour change approaches for the prevention of non-communicable diseases through public health initiatives to boost health standards in the young as well as adolescents and young adults – a time when they are traditionally less concerned about NCDs.



WITH THE SUPPORT OF



CAMPAIGN FINANCED  
WITH AID FROM  
THE EUROPEAN UNION

ENJOY  
IT'S FROM  
EUROPE



However, public health authorities alone cannot establish healthy eating habits among EU citizens. We need a health-in-all-policies and multi-stakeholder approach to effectively address the challenges. We need commitment from those sectors and those stakeholders that often have the largest influence on the health of our children. One of those sectors is the agriculture sector. It is vital that we move towards a nutrition sensitive agriculture and towards a food production that is increasingly in line with international and national governmental dietary guidelines.

The United Nations General Assembly has declared the period “2016/2025 – A Decade of Action on Nutrition” as part of efforts to turn their previous commitments into concrete action with a special emphasis on the need for an optimum healthy diet for mothers and babies during the first 1,000 days of life i.e. from conception to 2 years of age.

Parents need assistance for making appropriate consumption choices, particularly in terms of fruit and vegetables intakes: they are facing a perpetual challenge to provide their children with this healthy diet day in, day out, in a remarkably unhealthy marketing and food environment that insidiously promotes inappropriate foods so that children prefer unhealthy foods and shun healthy food, especially F&V.

We already know that maternal risk factors for childhood obesity include excess preconception maternal weight and excessive weight gain during pregnancy as well as the impact of increased birth weight and excessively rapid weight gain before the age of two. So this underlines the need to emphasize prevention throughout all stages of life.

---

## Healthcare professionals have a key role to play

---

Healthcare professionals and mainly general practitioners and paediatricians are usually in the front line for initiating preventive measures which include practical and specific personal advice and emphasizing the patient's role in promoting healthy nutrition policies - locally at home as well as at school and in the community. Health professionals have a unique role given their confidential and open relationship with their patients.

Patients usually feel that physicians are their most authoritative and credible sources for information on diet and nutrition so this places a great responsibility on health professionals; a recent European meta-analysis showed an increase of 59.3% in fruit and vegetable consumption following the nutritional advice provided by a health professional.

Despite its effectiveness, nutritional counselling remains a difficult topic for doctors to address. The main hurdles are:

- The lack of knowledge, training and confidence of many physicians in advising on healthy dietary patterns,
- The limited time they have with each patient,

- The lack of a visible short-term impact of nutrition changes, given the current sub-optimal European environment of intense marketing with the promotion of inappropriate foods and food systems.

An ideal doctor-patient dialog for prevention and treatment of NCDs should be part of every medical check and would incorporate advice on lifestyle modification, including dietary counselling since this can also often improve the impact and choice of optimal medical therapy.

Personalized, participatory, sustained, information-technologies supported, life style accessible to patients is an innovative approach and research area for the prevention of NCDs, especially during the preconception period, pregnancy and early infancy.

---

## Globally limited nutrition education in medical courses and training

---

University medical courses globally assign very few hours to nutrition knowledge and still less for nutritional education of patients. Improving the nutritional knowledge of primary healthcare professionals is one of the objectives of the WHO action plan for diet and nutrition policy from 2015 to 2020.

A European study initiated in the framework of EUROPREV evaluated the knowledge and attitudes of European doctors about primary prevention (patient counseling for overweight and tools used for eating practices). 58% of physicians felt they could help only a little or not at all when attempting to assist patients in achieving or maintaining their normal weight even if they were convinced of the relevance of helping patients in this endeavour.

Now some medical schools are changing their policies on nutrition as they become aware of the need for effective nutritional education for medical students. For example, some American medical schools are ensuring that the public health message of “5-9 portions of F&V a day” is followed by more and more doctors themselves. They also recommend actually prescribing F&V for those patients who can then follow the rule that this is “Just what the doctor ordered for themselves”.

More medical schools are also advocating the incorporation of practical kitchen teaching into their curricula to help train the next generation of doctors. Medical schools have traditionally had anatomy labs but what about developing teaching kitchens so that doctors understand the practicalities of achieving a nutritious diet?

Teaching nutrition by giving people lists of facts is not the same as inviting students into the kitchen and having a clinician, a dietitian and chef talk to them collectively about how to advise patients about the variety of food choices, appropriate shopping and cooking, plating and portion control

as well as matching the cost constraints of some patients by producing a varied, pleasurable and high nutritional quality meal at affordable cost.

In the United Kingdom, things are beginning to change in some medical schools. University of Cambridge plans to double the amount of core course content on nutrition. Similarly, Bristol medical school has sought input from students to redesign its curriculum.

In France, the French Ministers of Solidarities and Health, and Higher Education, Research and Innovation on February 26th 2018, presented a new project: the establishment of a three-month course in all preventive health issues. The system aims to familiarize future health professionals with prevention issues and will concern 47,000 students in the fall of 2018, and then will be generalized in September 2019. They will intervene particularly in schools and universities, in order to promote healthy behaviors, focusing on priority public health themes, including nutrition.

There are also already internet accessible continuing medical education courses for qualified health professionals e.g. the annual "Healthy Kitchens, Healthy Lives" conference that teams the Harvard School of Public Health with the Culinary Institute of America to help bridge nutrition science, health care, and the culinary arts.

---

## Doctor and dietitian collaboration to be strengthened

---

Dietitians are educated in nutritional science and its practical details in relation to health and wellbeing. So they are well placed to help make effective interventions or policy decisions to improve nutritional health and wellbeing at local, regional and national level. They work with all age groups and across diverse cultures, socioeconomic conditions, clinically, in public health and in food supply and catering.

GPs usually consider dietitians as a suitable health care provider for the dietary treatment of patients who need a nutritional support as part of the therapy and refer patients when regular contact with a dietitian is needed. However, high costs of dietitian consultations and the limited number of dietitians are often a reasonable barrier for not referring patients for dietetic help and considering other suitable community weight management groups.

Suitable reimbursement systems for medical nutrition therapy vary widely between countries. For example, in the USA, reimbursement for dietetic services depends on the patient's disease and the terms of their medical insurance policy. In Australia, only patients with chronic conditions and complex care needs can claim reimbursement for a limit of five consultations each year with an allied health care professional. Canada also has limitations on reimbursement.

In most European countries, dietician consultations are not reimbursed. In the Netherlands, in 2006, the basic insurance

coverage included reimbursement for dietetic treatment in primary health care, and covered up to 4 hours per year on condition that the patient had a medical indication and was referred by a physician.

However, in 2012, insurance with reimbursement was restricted to only include patients with specific chronic diseases (type 2 diabetes, cardiovascular risks, or chronic obstructive pulmonary disease) who are receiving interdisciplinary coordinated care, as part of a disease management program. However, dietetic involvement in these programs is not an absolutely intrinsic component of these care programs. This proved to be a difficult and costly issue so, in 2013, remuneration of dietetic treatment changed again: dietitians are now reimbursed for up to a maximum of 3 hours per year for all medical conditions. On the other hand, the National Health Systems in Portugal and the UK provide dietetic advices by dietitians for all medical conditions within interdisciplinary teams in primary care.

Despite a clear need for new policies to reimburse dietitians, neither insurance companies nor national health systems see nutrition as a preventive and therapeutic tool. To strengthen interdisciplinary collaboration between GPs and dietitians with increased supportive nutritional and dietary advice for patients, the reimbursement could be made either by an insurance system or by local, regional or national authorities.

---

## Current nutrition situation highlights a failed food system which is both unhealthy for humans and for the planet's sustainability

---

Food systems are continuing to undergo rapid transformation which is affecting our food choices and consumption patterns. Drivers of this transformation include the changing buying power of consumers due to inflation and income inequality, as well as the emergence of digital food marketing techniques that deliver personalized, behaviorally targeted, location-based promotions directly to the individual's smartphone or tablet at the times when they are most vulnerable to the marketing messages. Increased consumption of energy-dense, processed and heavily marketed products is occurring alongside, and contributing to, household food insecurity in families, particularly those of lower socioeconomic status, who do not have consistent access to healthy, nutritious foods. There appears to be growing political and public acceptability of government interventions such as taxes on sugary drinks or restrictions on marketing of unhealthy foods to children.

Currently, signals sent in many food environments do not encourage choices that are consistent with healthy diets and good nutrition outcomes.

In UK, the Government published, in 2013, a recommended voluntary front-of-pack (FOP) nutrition labelling scheme using traffic lights to indicate low, medium or high levels of energy, fat, saturated fat, salt and sugar. In France, the government also proposed in 2017 to use Nutri-Score scheme, a voluntary traffic light FOP labelling providing an overall assessment of the nutritional quality of a product. The nutrition criteria for the scheme are based on the nutrient profile model developed by the Food Standards Agency in the UK for regulating advertisement on television to children of “unhealthy foods”. The Finnish Heart Symbol scheme indicates which foods in product categories are healthier in terms of quantity and quality of fat and salt, and, in some product groups, sugar and fiber.

In France, doctors consider campaigns to raise awareness of the need for better nutrition among the general public as a cornerstone of their work as such public campaigns tend to facilitate their own medical efforts to convey the right practical nutritional information.

Unfortunately, national information campaigns (via posters, TV, radio...) highlighting the importance of a healthy diet rich in fruit and vegetables continue to be too sporadic, under-developed and lack impact compared with the overwhelming marketing of highly processed foods..

---

## **Helping school children eat healthily: Pediatricians and GPs as a vital force for education and impact assessment**

---

Schools should be a protected setting where children can learn and experience healthy dietary habits. A range of tools and measures are available that could be joined up for optimum school food provision. Health-minded food procurement would ensure that school meals meet nutrition standards defined in school food policies. In addition, Member States can enroll in the European Commission-funded school fruit, vegetable and milk scheme designed to help promote the

benefits of healthy eating to children and encourage them to increase their consumption of fruit, vegetables and milk. Research shows that successful interventions to promote fruit and vegetable intake in school children combine actions at the educational, environmental and family level, thus creating positive and engaging settings in which the healthy choice becomes the easy choice. As doctors are a trusted source of nutrition information, they can greatly support these educational efforts. Moreover, monitoring and evaluation is key to understanding which practical approaches work best in a given context; general practitioners are a vital force in assessing related health impacts.

---

## **Translating science into daily practice**

---

Following this Egea conference, advice sheets based on recommendations issued by stakeholders will be developed and shared with health professionals within the coming two years. These sheets will help them translate science into their daily practice.

# EGEA 2018 STATEMENT

AGUDO, A., ET AL. 2002. "Consumption of vegetables, fruit and other plant foods in the European Prospective Investigation into Cancer and Nutrition (EPIC) cohorts from 10 European countries", *Public Health Nutrition*, 5: 1179 -1196.

BARKER D ET AL 2013. "Developmental Biology: Support Mothers to Secure Future Public Health", *Nature*. 504: 209 - 211.

« Baromètre santé médecins généralistes 2009 - Prévention, éducation pour la santé et éducation thérapeutique en médecine générale - prevention-EPS-ETP.pdf »,

<http://inpes.santepubliquefrance.fr/Barometres/Barometre-sante-medecins-generalistes-2009/pdf/prevention-EPS-ETP.pdf>

BROTONS, C, ET AL. 2005. "Prevention and Health Promotion in Clinical Practice: The Views of General Practitioners in Europe", *Preventive Medicine*, 40 (5): 595 - 561.

CHUNG, M V, ET AL 2014. "Nutrition Education in European Medical Schools: Results of an International Survey", *European Journal of Clinical Nutrition*, 68 (7): 844 - 846.

CONROY, M B, ET AL 2004. "Impact of a Preventive Medicine and Nutrition Curriculum for Medical Students", *American Journal of Preventive Medicine*, 27 (1); 77-80.

KLOEK CJ ET AL. 2014. "Dutch General Practitioners' weight management policy for overweight and obese patients", *BMC Obesity*, 1(2).

"EFAD". 2017. "Strategic Plan", <http://www.efad.org/en-us/about-efad/strategic-plan/>.

"Enquête SFMG Cdp\_Résultats de l'enquête2306 - FD373FF9-4087-44c4-9598-53CDD8460A2F.PDF", <http://www.observatoire-dupain.fr/images/produits/FD373FF9-4087-44c4-9598-53CD-D8460A2F.PDF>.

"Etude ORS - Nutrition\_2004.pdf", [http://www.ors-rhone-alpes.org/pdf/Nutrition\\_2004.pdf](http://www.ors-rhone-alpes.org/pdf/Nutrition_2004.pdf)

HANSON MA, GLUCKMAN PD. "Developmental origins of health and disease-global public health implications", *Best Pract Res Clin Obstet Gynaecol*, 2015 ; 29:24-31.

"Healthy Kitchens, Healthy Lives", <http://www.healthykitchens.org/>

KUSHNER RF. 1995. "Barriers to providing nutrition counseling by physicians: a survey of primary care practitioners.", *Prev Med*, 24:546-52.

LAMBE B, COLLINS C. 2010. "A qualitative study of lifestyle counselling in general practice in Ireland.", *Fam Pract*. 2010, 27:219-23.

LIM SS, VOS T, FLAXMAN AD. 2012. "A Comparative Risk Assessment of Burden of Disease and Injury Attributable to 67 Risk Factors and Risk Factor Clusters in 21 Regions, 1990-2010: A Systematic Analysis for the Global Burden of Disease Study 2010.", *Lancet*, 380:2224-60. Erratum in: *Lancet*.2013; 381:628 and 1276.

MADERUELO-FERNANDEZ JA, ET AL. 2015. "Effectiveness of Interventions Applicable to Primary Health Care Settings to Promote Mediterranean Diet or Healthy Eating Adherence in Adults: A Systematic Review.", *Preventive Medicine*, 76 Suppl: 539 - 555.

"MangerBouger.", *PNNS - Programme national nutrition santé*. <http://www.mangerbouger.fr/PNNS>.

MINISTÈRE DES SOLIDARITÉS ET DE LA SANTÉ, 2018. "Service sanitaire - Formations en santé au service de la prévention", <http://solidarites-sante.gouv.fr/actualites/presse/dossiers-de-presse/article/dossier-de-presse-le-service-sanitaire>.

PIÑEIRO R, ET AL. 2005. "Healthy Diet in Primary Care: Views of General Practitioners and Nurses from Europe", *European Journal of Clinical Nutrition*, 59 Suppl 1: S77-80.

"Thèse LABBE Lucie", <http://dune.univ-angers.fr/fichiers/20107124/2016MCEM5274/fichier/5274F.pdf>.

TOL J, ET AL. 2015. "Dietetics and weight management in primary health care", [https://pure.uvt.nl/ws/files/8727409/ToL\\_Dietetics\\_06\\_11\\_2015.pdf](https://pure.uvt.nl/ws/files/8727409/ToL_Dietetics_06_11_2015.pdf).

"Transforming European food and drink policies for cardiovascular health - Chapter 4: Effective policies for promoting healthy dietary patterns", *EHN paper 2017*, <http://www.ehnheart.org/publications-and-papers/publications/1093:transforming-european-food-and-drinks-policies-for-cardiovascular-health.html>