



**Barilla**  
Center  
FOR FOOD  
& NUTRITION

people, environment, science, economy

# SUSTAINABLE DIETS

GOOD FOR YOU, GOOD FOR THE ENVIRONMENT







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The Barilla Center for Food & Nutrition Foundation (BCFN) is a multidisciplinary centre for the analysis of the major global issues related to food, nutrition, agriculture and environment.

Created in 2009, the BCFN bridges science and society, bringing experience and expertise to the debate in an effort to end the paradoxes of our planet, where obesity and food waste happen despite widespread hunger and malnutrition.

Awareness raising and continuous dialogue within economic, social, environmental and scientific spheres represent critical first steps towards achieving long-term change. The BCFN delivers concrete recommendations and proposes solutions to respond to these urgent challenges and improve food system along the food supply chain – from farm to people. We are convinced that these issues must become priorities in the agendas of decision makers and opinion leaders around the world. We are eager to play an important role and to propose sustainable solutions for the future of our planet.

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For more information: [www.barillacfn.com](http://www.barillacfn.com)



# & SUSTAINABLE DIETS



The concept of a 'sustainable diet' encompasses an intricate web of nutritional, economic, environmental, social and cultural issues that concern the whole supply chain, where farmers and consumers only represent two pieces of the puzzle.

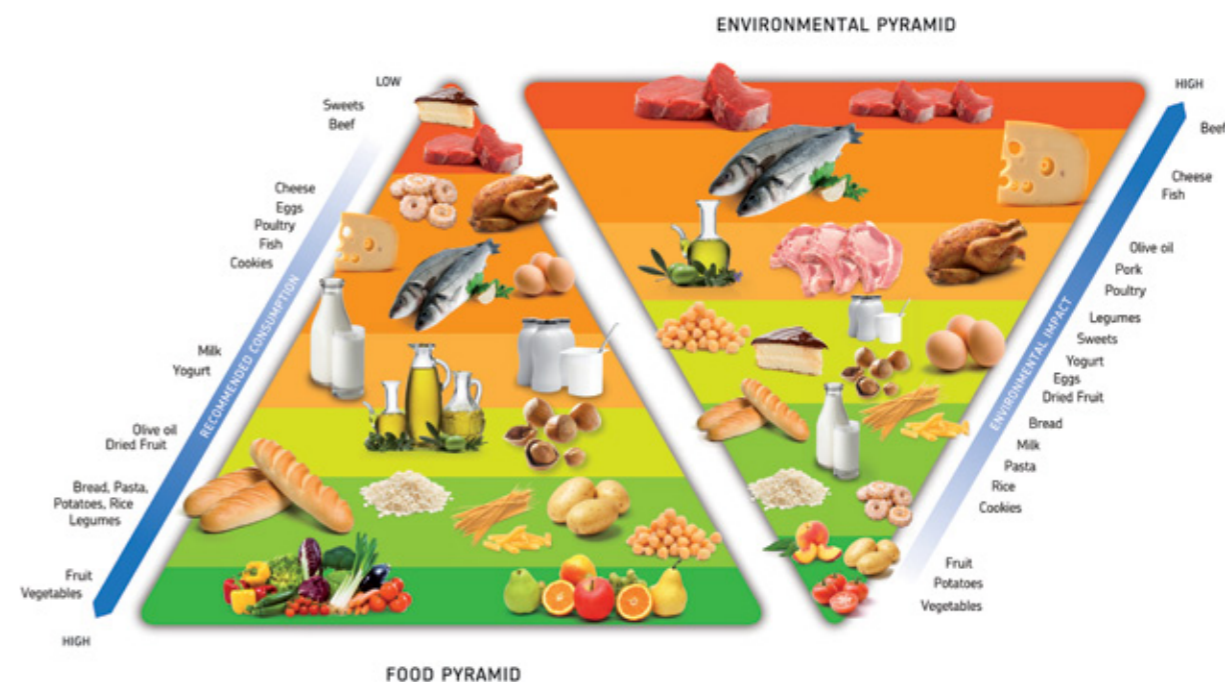
According to the Food and Agriculture Organization of the United Nations (FAO), sustainable diets are "those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources."<sup>1</sup>

Food production and consumption models have a massive impact not only on health and the environment, but also on the socio-economic system as a whole. Therefore, sustainable diets are a strong foundation for a viable economy, which the European Union institutions and Member States should strive to achieve through a pan-European strategy.

The Barilla Center for Food & Nutrition Foundation (BCFN) wishes to share its contribution to this possible strategy by providing an optimum model to achieve sustainability goals: the Food and Environmental Double Pyramid, a cornerstone for a greener and healthier economy in Europe.

# & THE BCFN APPROACH

## FOOD AND ENVIRONMENTAL DOUBLE PYRAMID



The BCFN Foundation created the Food and Environmental Double Pyramid as a model for assessing both the nutritional aspects and the environmental impact of foods. The model places food products along an upright pyramid (the Food Pyramid) and a reversed one (the Environmental Pyramid). In the Food Pyramid, foods at the base should be consumed more frequently, while recommended consumption decreases gradually closer to the top of the pyramid. This is opposed to the Environmental Pyramid, where foods with the greatest impact on the environment are at the base.

The Double Pyramid model suggests a simple principle: foods that are recommended in higher quantities for health also have a lower impact on the environment. Human health and environmental protection are therefore two sides of the same coin that fit into a single sustainable food model, the Mediterranean diet.





## THE MEDITERRANEAN DIET

Taking stock of the Double Pyramid findings, the BCFN Foundation believes that Europe is home to a unique nutrition model that enshrines all the elements of the definition provided by FAO. The Mediterranean diet is widely recognized as an outstanding example of sustainable diet, as it combines healthy eating, biodiversity and culture.

Scientific evidence shows that the Mediterranean diet helps reduce the risks of developing chronic diseases such as cardiovascular diseases, cancer, hypertension, type 2 diabetes, Parkinson's disease and Alzheimer's disease<sup>2</sup>.

The BCFN Foundation's research underpinning the Double Pyramid model shows that the Mediterranean diet not only brings significant health benefits, but also contributes to environmental sustainability and economic affordability.

## ENVIRONMENTAL SUSTAINABILITY OF THE MEDITERRANEAN DIET

The BCFN Foundation collected and analysed publicly available data on the ecological footprint of foods, using the life-cycle assessment (LCA) method taking into account GHG emissions, water consumption and land regeneration. Conclusions show that the Mediterranean diet has an environmental impact 60% less than that of the typical Western diet, heavy in animal products and sugar. The average ecological footprint<sup>3</sup> of the Mediterranean diet is 25 global square meters, as compared to 45 for a meat-based diet<sup>4</sup>.

## AFFORDABILITY

The economic value of the Mediterranean diet is still largely debated. It is however an essential aspect considering the economic crisis affecting Europe and the impact of food prices on food security. Food habits are strongly related to socio-economic conditions: poorer people present higher rates of obesity and food-related diseases, showing a close relationship between food insecurity and obesity, which can be 20% to 40% higher than for individuals with affordable access to healthy food<sup>5</sup>.

The BCFN Foundation maintains that the Mediterranean diet is more cost-effective than the typical Western diet. The initial data released reveals that meat-based diets cost consumers approximately 45 euros per week, while diets that incorporate fresh products like fruits, vegetables and cereal grains, as well as fewer animal products correspond to a weekly cost of approximately 38 euros<sup>6</sup>.



The BCFN Foundation believes that more decisive EU action is needed, as food production and consumption models have a massive impact not only on health and the environment, but also on the socio-economic system as a whole. Some figures help understand the magnitude of the issue:



Accounting more than 300.000 businesses, the European food and drink industry is the largest manufacturing sector in the EU in terms of turnover and employment<sup>7</sup>.



Food production and consumption generate 20% to 30% of all EU environmental impacts<sup>8</sup>.



The high obesity rate in children and youth is alarming<sup>9</sup> and may soon put a strain on national healthcare systems. Already today, around 7% of national health budgets across the EU are spent on diseases linked to obesity each year<sup>10</sup>.

In the light of the above, the BCFN recommends possible solutions for addressing the sustainability of European food systems. The BCFN is keen to put the Food and Environmental Double Pyramid at the disposal of the EU institutions as a policy framework and a benchmark for sustainability and progress.



# OUR RECOMMENDATIONS

## EUROPEAN COMMISSION

The new European Commission should consider sustainable food a keystone of the European green economy. Together with other crucial avenues such as renewables, sustainable transport and energy efficiency, embracing sustainable diets and improving the viability of food systems can substantially contribute to achieving the EU growth agenda.

1

*The BCFN calls upon the new Commission to follow up on the 2013 Consultation on the Sustainability of the Food System<sup>11</sup> to demonstrate its political commitment on the issue. The BCFN urges the Commission to develop an ambitious, long-term programme to promote and spread sustainable diets across Europe, as part of the Europe 2020 strategy and feeding into the EU Environment Action Program and Health Strategy for the years to come.*

We believe that a comprehensive sustainable diet programme should comprise the following elements:

- Encompass the whole supply chain, from land to fork, and sectors that have a direct or indirect impact on food habits, i.e. public sector, producers, farmers, households, retailers, restaurants and catering, schools, advertisers, NGOs;
- Assess the existing sustainable diet promotion programmes and projects in Member States and measure their results, in order to build a publicly available EU-wide database that can better inform policymakers in charge of developing the EU programme and players who will implement it;
- Require Member States to develop national policies on sustainable diet with country-specific targets, with the European Commission in charge of monitoring and measuring periodically the progress towards these goals;
- Envisage a combination of regulatory and awareness-raising measures that involve all relevant actors, and rely on adequate budgetary resources that make extensive social programs and economic incentives to sustainable diet projects possible.



# OUR RECOMMENDATIONS

## COUNCIL OF THE EUROPEAN UNION

Although the Double Pyramid model builds upon the Mediterranean diet, the BCFN Foundation acknowledges that sustainable diets are not a 'one size fits all' concept; they should rather take into account the specific eating habits and traditions of each Member State.

In the same vein, in June 2014, the Council of the European Union invited member countries and the Commission to "promote healthy eating, emphasizing health promoting diets, such as the Mediterranean diet or any other diet following relevant national dietary guidelines/nutrition recommendations."<sup>12</sup>

2

*The BCFN Foundation calls for the Italian Presidency of the Council of the EU to steer a political debate on sustainable diets such as the Mediterranean diet, based on the conclusions on nutrition and physical activity of June 2014. We ask Member States to issue a more wide-ranging conclusion that also recognize the environmental and economic viability of sustainable diets.*

## EUROPEAN PARLIAMENT

The European Parliament can play a pivotal role in supporting the EU initiatives for sustainable diets and sustainable food systems. Members of the European Parliament are more than simple legislators; they are key opinion leaders who can inspire people to change their behaviour. The Parliament is crucial in spreading the awareness of the benefits of sustainable diets among EU citizens.

3

*The BCFN Foundation encourages the new European Parliament to engage in awareness raising initiatives on the benefits of sustainable diets and the Mediterranean diet, for instance by promoting an 'EU Mediterranean diet Week' in Brussels and at national level.*



## THE BCFN RECOMMENDATIONS FOR A SUSTAINABLE PLANET

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In the light of the above, the BCFN recommends possible solutions for addressing the sustainability of European food systems. The BCFN is keen to put the Food and Environmental Double Pyramid at the disposal of the EU institutions as a policy framework and a benchmark for sustainability and progress.

### NOTES AND REFERENCES

1. [www.fao.org/food/sustainable-diets-and-biodiversity](http://www.fao.org/food/sustainable-diets-and-biodiversity)
2. For more information on the relationship between the Mediterranean diet and diseases, we refer to the findings of EPIC (the European Prospective Investigation into Cancer and Nutrition): <http://epic.iarc.fr/>
3. Measurement of the planet's ability to regenerate resources required to produce a given food item
4. More information on the scientific basis and indicators of the Double Pyramid are available at [www.barillacfn.com/en/bcfn4you/la-doppia-piramide/](http://www.barillacfn.com/en/bcfn4you/la-doppia-piramide/)
5. [http://ec.europa.eu/health/nutrition\\_physical\\_activity/docs/childhoodobesity\\_actionplan\\_2014\\_2020\\_en.pdf](http://ec.europa.eu/health/nutrition_physical_activity/docs/childhoodobesity_actionplan_2014_2020_en.pdf)
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12. <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2010122%202014%20INIT>





## OUR RECOMMENDATIONS

### EUROPEAN COMMISSION

1

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