

The Mediterranean diet Foundation: scope and activities

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The Mediterranean Diet Foundation

established in December 2010

in Ostuni

a little city in Apulia in the Southern Italy

also called

“The White City”

and

“The Queen of the olive trees”



Scope of the Foundation

- 1) Prevention and therapy of chronic diseases associated with wrong dietary patterns
- 2) Research on the main components of the Mediterranean Diet
- 3) Studies for the improvement of the diet components quality
- 4) Dietary education
- 5) Contribution of the Mediterranean diet to a less environmental impact of agriculture
- 6) Contribution of the Mediterranean diet to the promotion of Mediterranean products





United Nations
Educational, Scientific and
Cultural Organization



Intangible
Cultural
Heritage

The Mediterranean diet

inscribed in 2010 on the Representative List of the
Intangible Cultural Heritage of Humanity

According to the UNESCO description

«*The Mediterranean diet constitutes a set of skills, knowledge, practices and traditions ranging from the landscape to the table, including the crops, harvesting, fishing, conservation, processing, preparation and, **particularly, consumption of food.** The Mediterranean diet is characterized by a nutritional model that has remained constant over time and space, consisting mainly of olive oil, cereals, fresh or dried fruit and vegetables, a moderate amount of fish, dairy and meat, and many condiments and spices, all accompanied by wine or infusions.*

*The Mediterranean diet (from the old Greek **diaita**, or way of life) encompasses more than just food. It promotes social interaction, since communal meals are the cornerstone of social customs and festive events.*

The system is rooted in respect for the territory and biodiversity, and ensures the conservation and development of traditional activities and crafts linked to fishing and farming in the Mediterranean communities.

Women play a particularly vital role in the transmission of expertise, as well as knowledge of rituals, traditional gestures and celebrations, and the safeguarding of techniques.»

The father of the Mediterranean diet



Ancel Keys (1904 – 2004) was an American physiologist who studied the influence of diet on health.

His interest in diet and cardio-vascular disease was prompted, in part, by seemingly counterintuitive data: American business executives, presumably among the best-fed persons, had high rates of heart disease, while in post-war Europe, cardio vascular diseases rates had decreased sharply in the wake of reduced food supplies.

Keys postulated a correlation between cholesterol levels and CVD and initiated a study of Minnesota businessmen (the first prospective study of CVD), culminating in what came to be known as the Seven Countries Study.

He concluded that saturated fats as found in milk and meat have adverse effects opposite to the beneficial effects of the unsaturated fats found in vegetable oils.

He also showed that an individual's risk can be changed following a correct diet.

The seven countries study - *key findings*

Started in **1958**

12763 men (40-59 years old)

16 cohorts,

7 countries (United States, Finland, The Netherlands, Italy, Yugoslavia, Greece and Japan)

Main findings:

- increased cholesterol levels increase cardiovascular risk
- increased cholesterol and being overweight or obese increase mortality from cancer
- Mediterranean diet is healthy
- coronary deaths in the United States and Northern Europe greatly exceed those in Southern Europe, even when normalized for age, cholesterol, blood pressure, smoking, physical activity and weight
- slowly changing habits of a population in the Mediterranean region, from a healthy, active lifestyle and diet, to a not so healthy, less active lifestyle and a diet slowly influenced by the western pattern diet, significantly increases risk of heart diseases

EPIC project

Started in 1992 to investigate the relationships between diet, nutritional status, lifestyle and environmental factors and the incidence of cancer and other chronic diseases.

520.000 people recruited.

10 European countries involved: Denmark, France, Germany, Greece, Italy, The Netherlands, Norway, Spain, Sweden, United Kingdom.

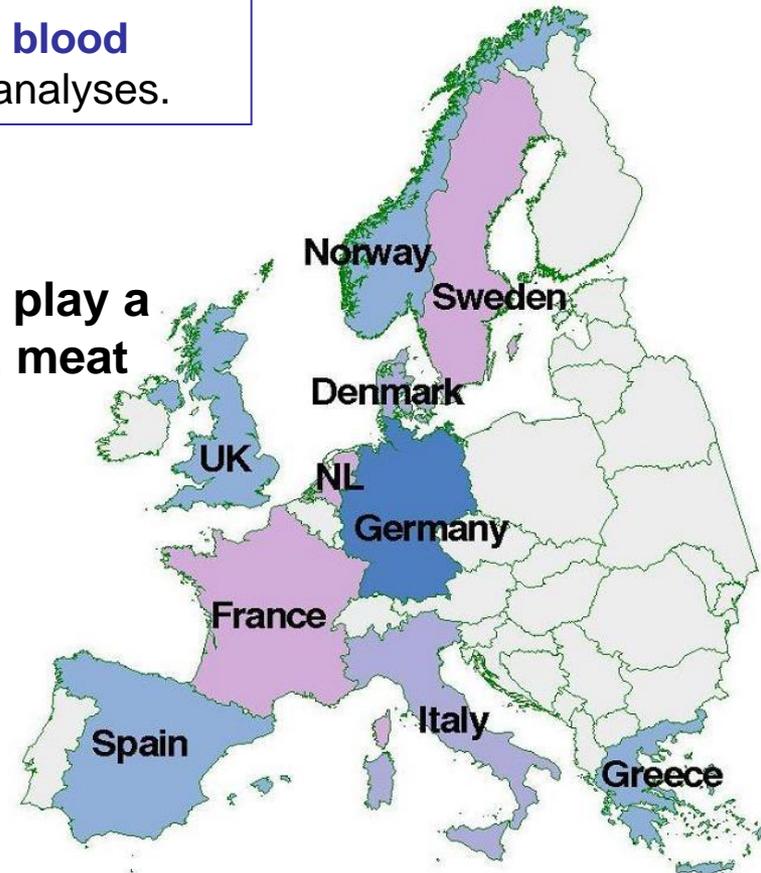
Detailed information on diet and lifestyle was obtained by **questionnaire** and **anthropometric measurements** and **blood samples**. The blood is stored in liquid nitrogen for future analyses.

Key findings

i.e. colorectal cancer aetiology: 4 dietary factors play a major role: fibre and fish have beneficial effects, meat and processed meat have adverse effects.

Future research activities

The role of complex interactions between genetic, metabolic, hormonal and lifestyle factors, including diet, overweight, weight gain over lifetime, with particular focus on the "**metabolic syndrome**" hypothesis.



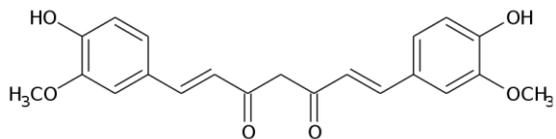
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Some antitumoral phytochemical compounds



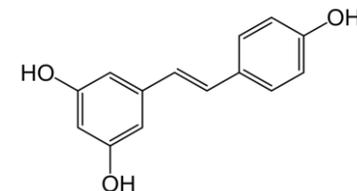
Turmeric



curcumin



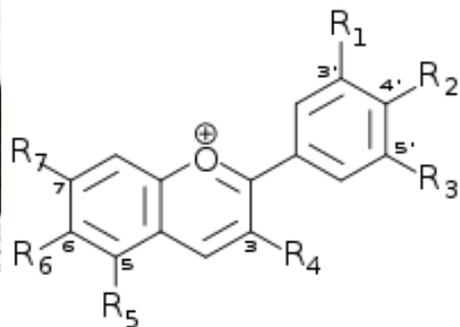
Grapes



resveratrol



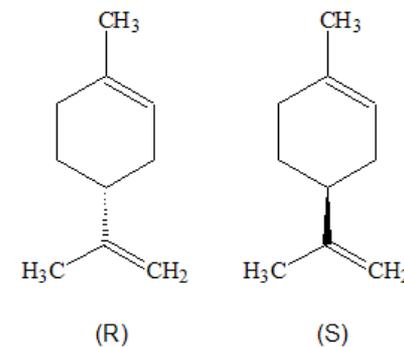
Blueberry



delfinidine



Citrus



(R)

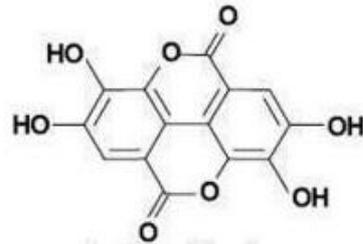
(S)

limonene

Some antitumoral phytochemical compounds



Strawberry



Ellagic acid



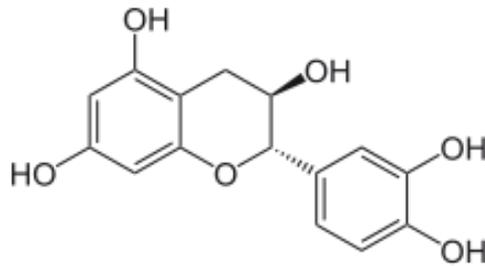
Garlic



Diallyl-solphure



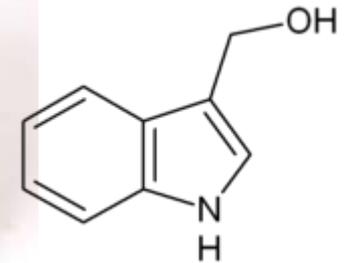
Green tea



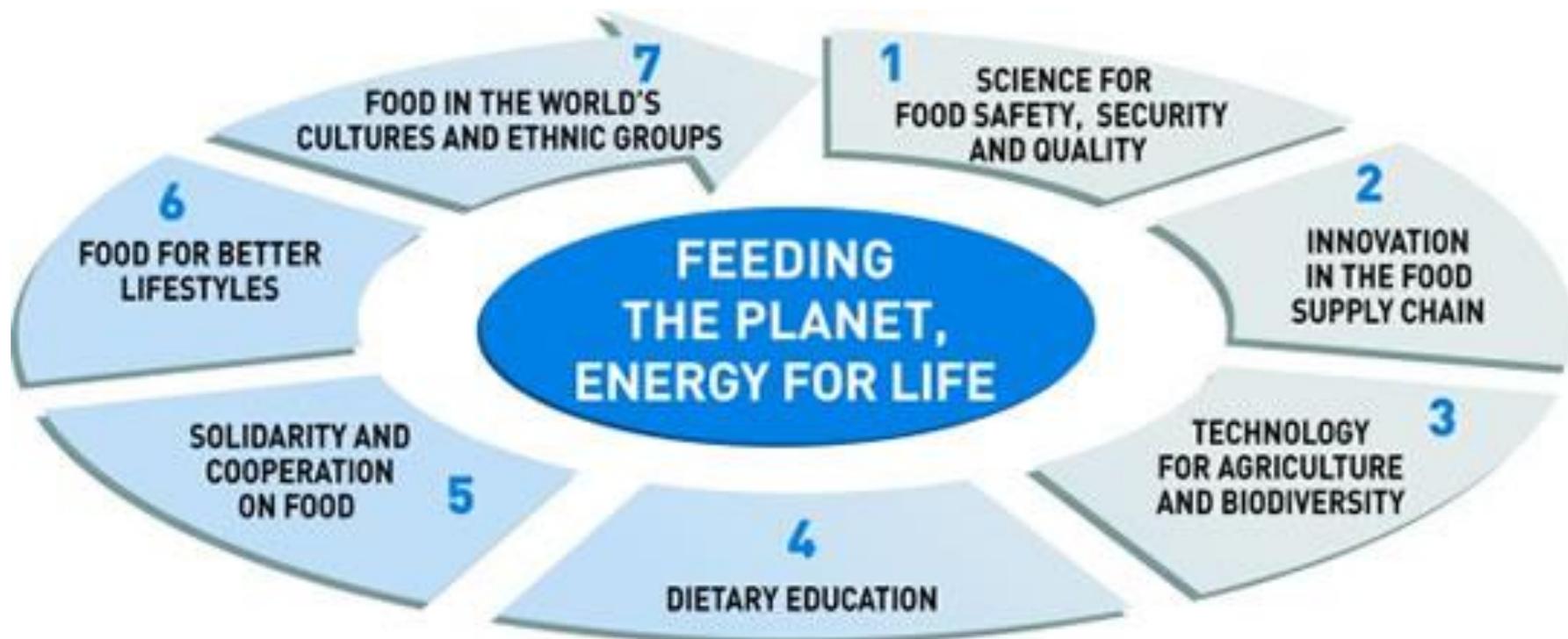
Epigallocatechin-3-gallate



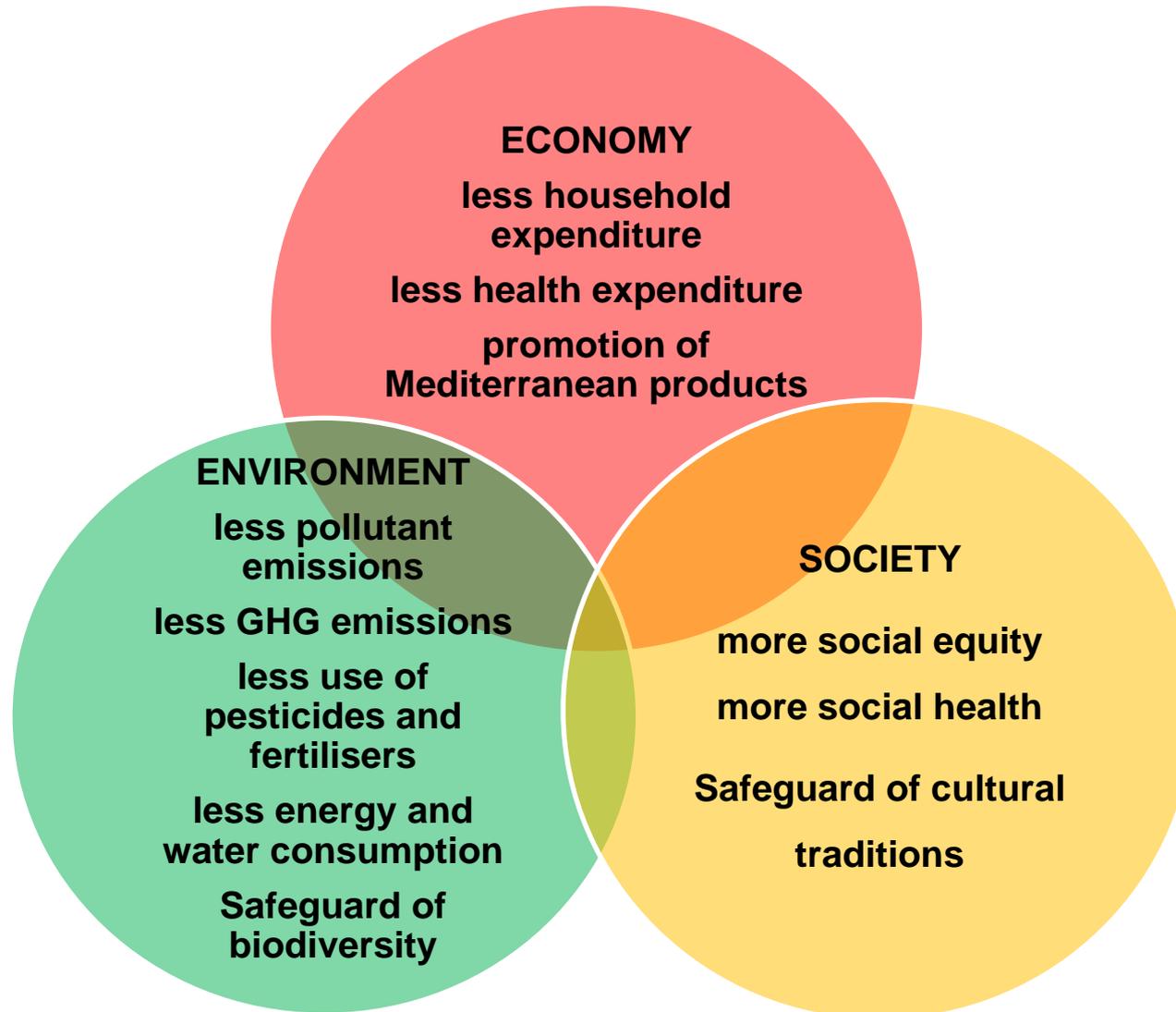
Savoy cabbage



Indole-3-carbinole



The Mediterranean diet as a sustainable development policy



The BCFN index

1. "Psycho-physical wellbeing"

2. "Behavioural wellbeing"

3. "Material wellbeing"

4. "Environmental wellbeing"

5. "Educational wellbeing"

6. "Social wellbeing"

7. "Political wellbeing"



**Lifestyle
sub-index**

**Wealth and
Sustainability
sub-index**

**Social and
Interpersonal
sub-index**

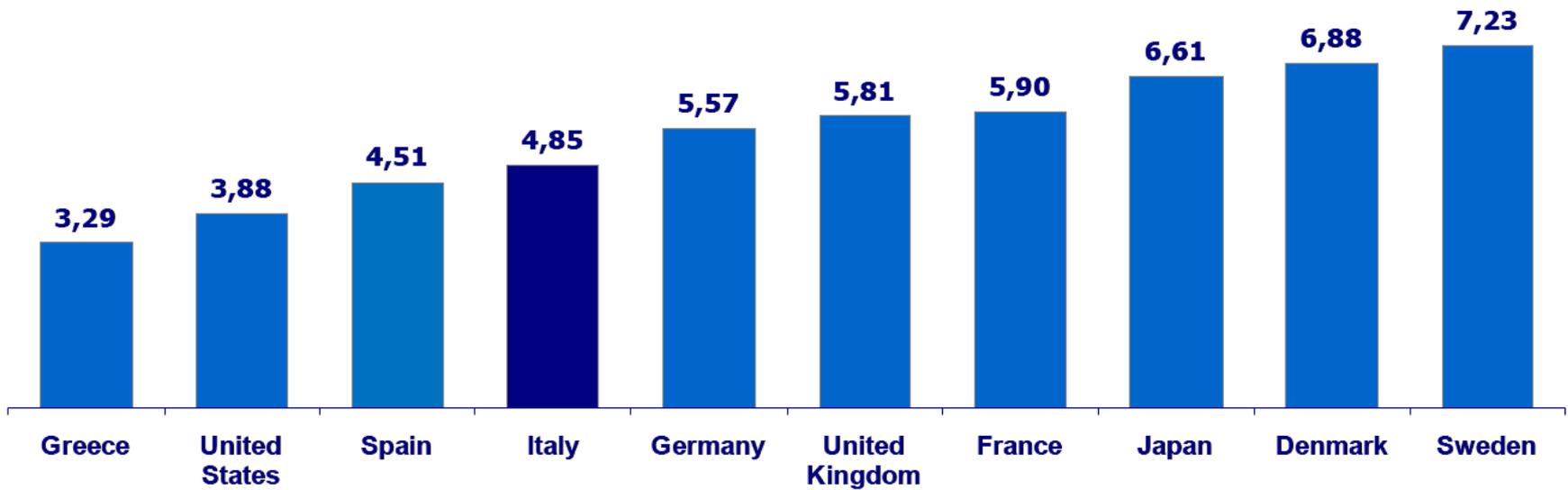
The BCFN index

41 KPIs and relative weights

		Relative weighting	
Psycho-physical wellbeing	1	Life expectancy	10%
	2	Healthy life expectancy	30%
	3	Mortality rate for circulatory diseases	15%
	4	Mortality rate for malignant neoplasms	15%
	5	Mortality rate for diabetes mellitus	10%
	6	Mortality rate for suicides	10%
	7	Consumer expenditure on anti-depressants	10%
Behavioural wellbeing	8	Obese and overweight adult population	20%
	9	Obese and overweight youth population	10%
	10	Physical activity	20%
	11	Consumer expenditure on fruit and vegetables	10%
	12	Adult population smoking daily	20%
	13	Alcohol consumption	5%
	14	Average consumption of calories	10%
15	Eating time on average day	5%	
Material wellbeing	16	Real median income	50%
	17	Net wealth of households	30%
	18	Gross fixed capital formation	20%

		Relative weighting	
Environmental wellbeing	19	Adjusted Net Saving	25%
	20	Ecological Footprint	5%
	21	Water Footprint	5%
	22	Contribution of renewables to energy supply	15%
	23	CO2 emissions from fuel combustion	20%
	24	PM10 country levels	15%
	25	Municipal waste	15%
Educational wellbeing	26	P.I.S.A. score	20%
	27	Average annual number of new graduates	35%
	28	Foreign students enrolled in the university system	15%
	29	Unemployment rate of university graduates	10%
	30	Annual number of daily newspapers published	10%
	31	Fixed broadband subscribers	10%
Social wellbeing	32	At risk of poverty rate	25%
	33	Inequality of income distribution	10%
	34	Number of weekly hours of children care	5%
	35	Unemployment rate	25%
	36	Unemployment rate among young people	10%
	37	Old-age dependency ratio	5%
	38	National Institution Index	10%
	39	Interpersonal Trust Index	10%
	Political wellbeing	40	The Economist Intelligence Unit's index of democracy
41		Corruption Perceptions Index	25%

The BCFN index



Score:
Min 1
Max 10