

Proceedings of

9<sup>th</sup> Euro-Global Summit & Expo on

# Food & Beverages

July 11-13, 2016 Cologne, Germany



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## Supporting Journals



*Euro Food 2016*

## Supporting Journals

### Journal of Food Processing & Technology

[www.omicsonline.org/food-processing-technology.php](http://www.omicsonline.org/food-processing-technology.php)

### Journal of Nutrition & Food Sciences

[www.omicsonline.org/nutrition-food-sciences.php](http://www.omicsonline.org/nutrition-food-sciences.php)

### Fermentation Technology

[www.omicsgroup.org/journals/fermentation-technology.php](http://www.omicsgroup.org/journals/fermentation-technology.php)

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## Mediterranean nutrition as the best source of functional food in Montenegro

Dijana Durovic<sup>1</sup>, B Mugosa<sup>1</sup> and M M Vrvic<sup>2</sup><sup>1</sup>Institute of Public Health of Montenegro, Montenegro<sup>2</sup>University of Belgrade, Serbia

It is well known that the so-called Mediterranean food rich in vegetables, fruits and olive oil has a beneficial effect in terms of prevention of cardiovascular diseases; the Eskimos do not suffer from the cardiovascular diseases due to abundant  $\omega$ -3 fat acids because they feed with fish. Also some African tribes do not have colon cancer because they do not eat meat, only plants, meaning they eat food rich in dietary fibers. The advantage of Mediterranean diet ("five times a day") is in using and implementation of functional food concept in nutrition. Based on the evidence of relationship between food and health nowadays there are more and more discussions about food. Everyday new evidence is coming on specific food or food components that have a beneficial effect on health. Functional food-containing components have a favorable impact on the health and to general condition of the human body. This designation as the most general dates back about 25 years ago, when this term began to circulate, especially among nutritionists medical profession and in public, when it has become 'modern' consuming functional food, which food market "wholeheartedly" supported. Functional food may be similar to conventional food and be consumed as part of common food, providing not only basic nutrition functions to organism but also some physiological benefits and/or reduce the risk of chronic diseases i.e. containing a biologically active components (BAC). Functional food have an optimal effect on the digestive system, has a beneficial effect on the immune system, blood vessels, usually has great antioxidant potential, which is important against free radicals formation that are produced daily in the body depending on the environment and lifestyle. Functional food contains one or more bioactive components. Also, functional food is a food with some added or removed components in terms of improving its effects (vitamins, minerals, saturated fat, sugar, salt). There are several different resources in Montenegro as a Mediterranean country, that can be used as a source of functional food. Some vegetables and spice plants are well known from the past such as: Green collard (*Brassica oleracea* var. *acephala*) containing diindolylmethane and sulphorafane as a confirmed cancerostatics, Green Purslane (*Portulacasa oleracea*) containing BAC as a confirmed antidiabetics, Swiss chard (*Beta vulgaris* subsp. *cicla*) containing antioxidants and dietary fibers. (*Ziziphus jujube*), (*Arbutus uredo*), (*Morus nigra*) and (*Pinus pinea*) are some typical Mediterranean plants that can be found in Montenegro. Although today people still choose food according to price and taste, people of the future will dial the "functional food" with a desire to feel better after eating (Let your food be your medicine, and the medicine your food (460-377 BC) Hippocrates.

### Biography

Dijana Djurovic presently working at Institute of Public Health, Podgorica, Montenegro. She studied from University of Belgrade, Serbia (1989-1995)

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### Notes:

# Food & Beverages

July 11-13, 2016 Cologne, Germany

## INDEX

Ahlam Badreldin El Shikieri	43	Marzieh Seyhoon	41
Alexander Sulakvelidze	28	Mohammad Kamal	72
Alexander V Sirotkin	39	Nammi Kang	71
Ana Lucia Vasquez Caicedo	47	Nirhy Lanto Rabibisoa	66
Andre Senecal	30	Oya Bozdog Dundar	63
C Ranaivoson	65	Pieter Debrauwer	48
Carola Seybold	60	Reinhard Kohlus	51
Christoph Glanser	46	Richard G Zytner	37
Daeun Lee	68	Romaine Ramanarivo	40
Dijana Durovic	70	Romdhane Karoui	59
El-Sayed M Abdel-Aal	24	S C S Lannes	73
El-Sayed M Abdel-Aal	74	S Ramanarivo	62
Felix Schmollgruber	61	Salima Varona Iglesias	50
Ingegerd Rosborg	54	Samira Berenji Ardestani	42
Joelle Woolston	31	Sara Nasseredine	64
Jose S Torrecilla	38	Suzana Caetano da Silva Lannes	58
Julia Steinhoff-Wagner	69	Suzana Caetano da Silva Lannes	75
Lawrence D Goodridge	25	Sveinung Grimsby	57
Lawrence D Goodridge	29	Vicenc Puig	49
Lucía Valverde-Som	78	Zengqi Peng	34

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# MEDITERRANEAN NUTRITION AS THE BEST SOURCE OF FUNCTIONAL FOOD IN MONTENEGRO

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<sup>1</sup>Institute of Public Health of Montenegro, Montenegro

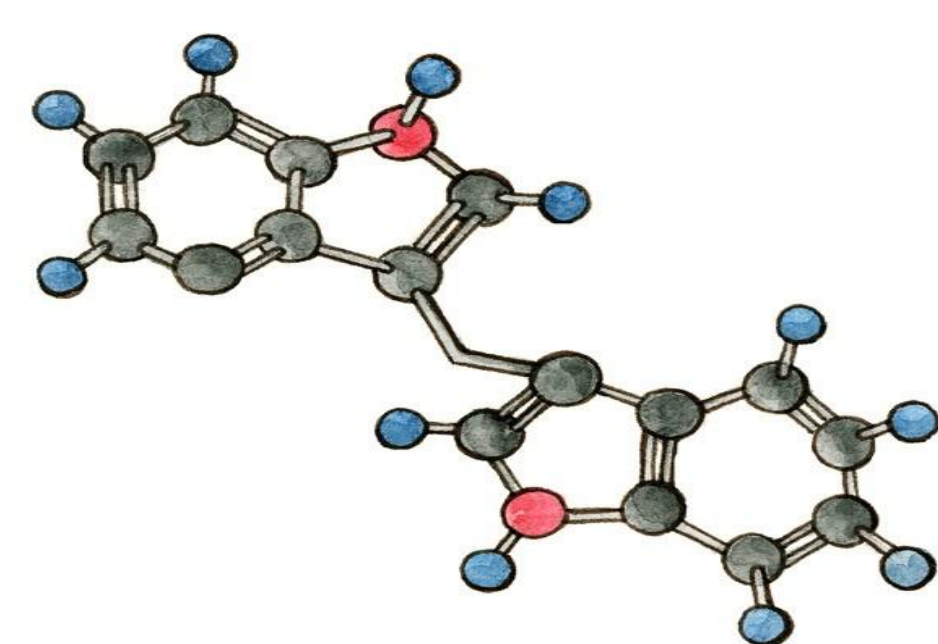
<sup>2</sup>Faculty of Chemistry, University of Belgrade, Serbia

It is well known that the so-called Mediterranean food rich in vegetables, fruits and olive oil has a beneficial effect in terms of prevention of cardiovascular diseases; the Eskimos do not suffer from the cardiovascular diseases due to abundant  $\omega$ -3 fat acids because they feed with fish. Also some African tribes do not have colon cancer because they do not eat meat, only plants, meaning they eat food rich in dietary fibers. The advantages of Mediterranean diet ("five times a day") is in using and implementation of functional food concept in nutrition. Based on the evidence of relationship between food and health nowadays there are more and more discussions about food.

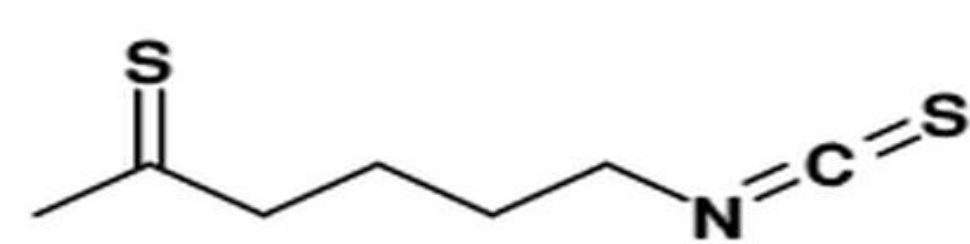


Every day new evidence coming in on specific food or food components that have a beneficial effect on health. Functional food-containing components that have a favorable impact on the health and to general condition of the human body. This designation as the most general, dates back about 25 years ago, when this term began to circulate, especially among nutritionists medical profession and in public, when it has become 'modern' consuming functional food, which food market "wholeheartedly" supported.

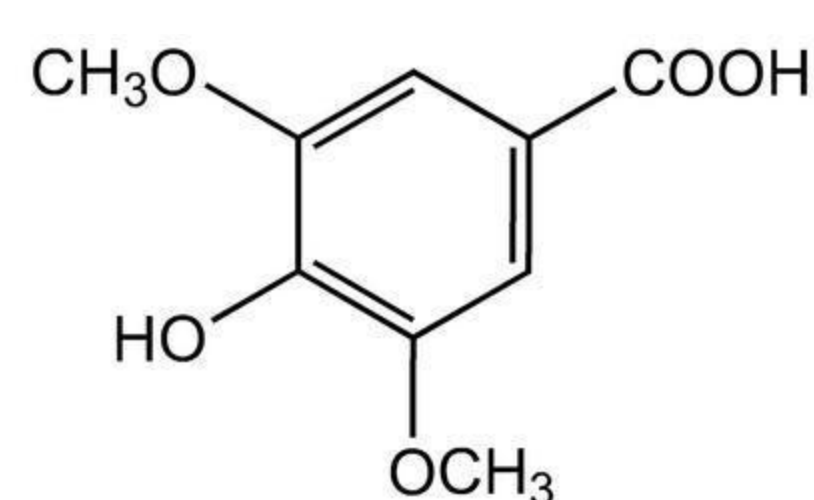
There are several different resources in Montenegro as a Mediterranean country, that can be used as a source of functional food. Some vegetables and spice plants are well known from the past such as: Green collard (*Brassica oleracea* var. *acephala*) containing diindolylmethane and sulphorafane as a confirmed cancerostatics, Green Purslane (*Portulacasa oleracea*) containing biological active components (BAC) as a confirmed antidiabetics, Swiss chard (*Beta vulgaris* subsp. *cicla*) containing antioxidants and dietary fibers. *Ziziphus jujube*, *Arbutus uredo*, *Morus nigra* and *Pinus pinea* are some typical Mediterranean plants that can be found in Montenegro.



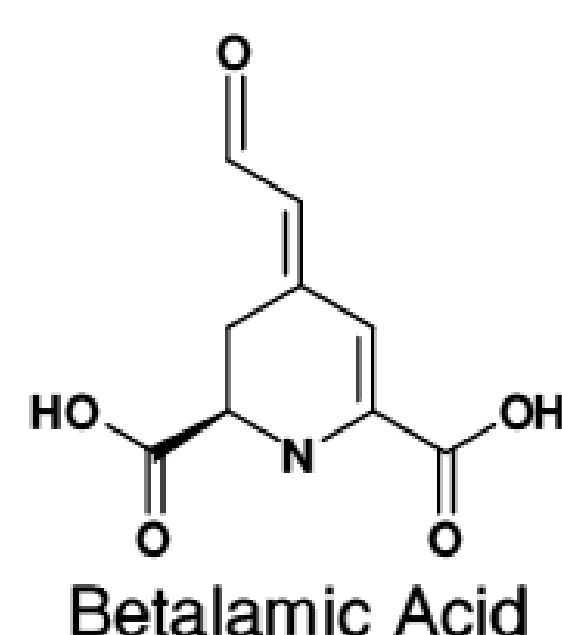
Diindolylmethane



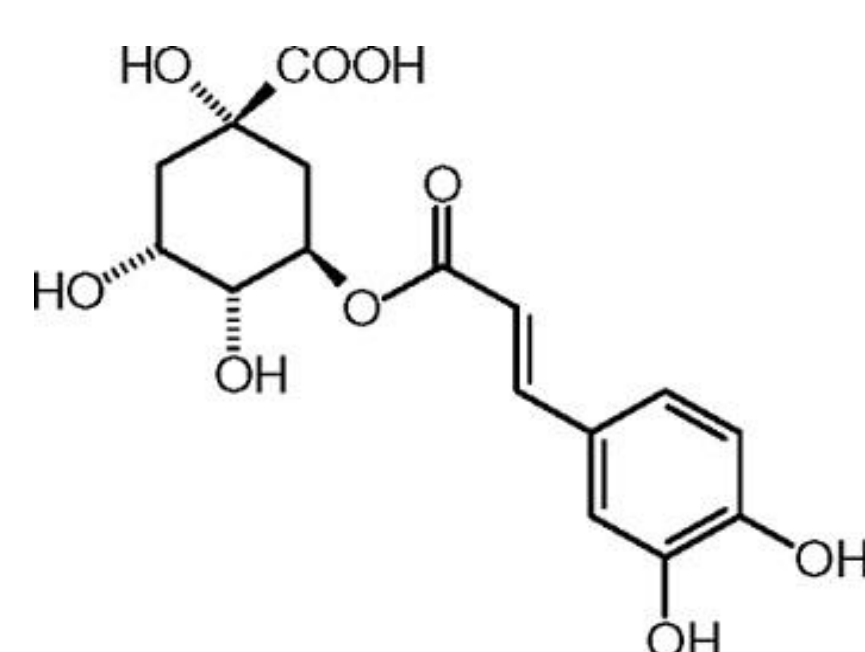
Sulforaphane



Syringic acid



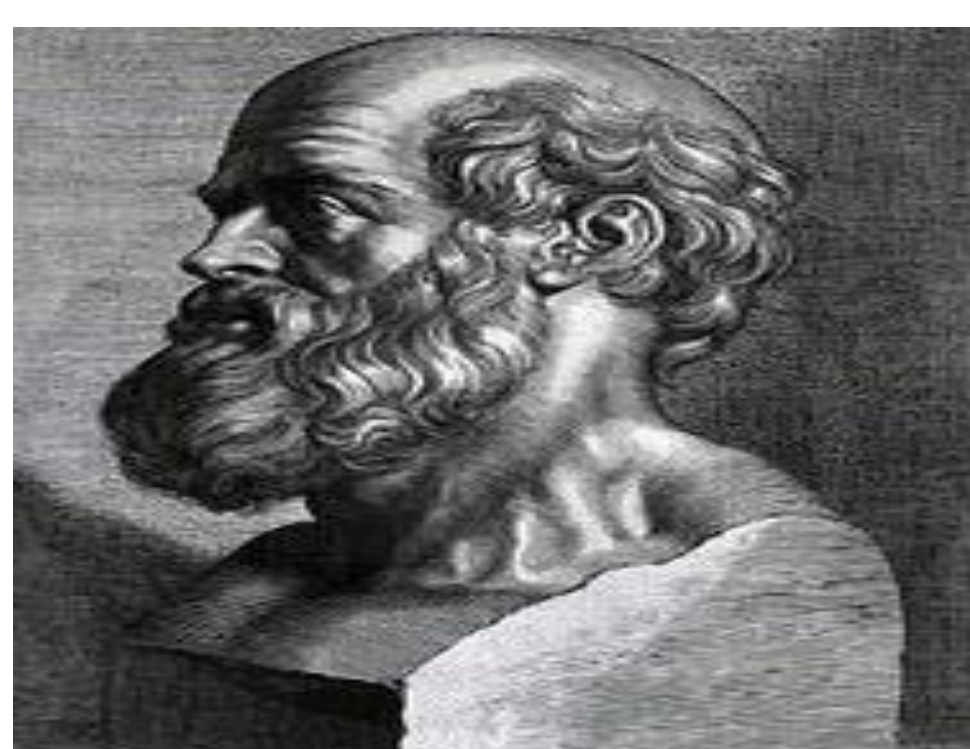
Betalamic Acid



Chlorogenic acid

Functional food have an optimal effect on the digestive system, has a beneficial effect on the immune system, blood vessels, usually has great antioxidant potential, which is important against free radicals formation that are produced daily in the body depending on the environment and lifestyle. Functional food contains one or more bioactive components.

Today people still choose food according to price and taste, people of the future will dial the "functional food" with a desire to feel better after eating .



"Let food be thy medicine  
and medicine be thy food"  
– Hippocrates