



9 > 10 MAIO 2017  
UNIVERSIDADE DO ALGARVE  
GRANDE AUDITÓRIO  
CAMPUS DE GAMBELAS  
FARO

CONFERÊNCIA  
INTERNACIONAL

## A HERANÇA CULTURAL DA DIETA MEDITERRÂNICA

### **International Conference: The Cultural Heritage of the Mediterranean Diet 9<sup>th</sup> May 2017 | University of Algarve | Gambelas | Portugal**

#### **Seafood: a key feature of the Mediterranean Diet**

Jaime Aníbal

Universidade do Algarve, Portugal

The Mediterranean Diet is based on three pillars: bread, olive oil and wine. These food products supply carbohydrates and lipids to the diet, but they lack proteins. Traditionally, in the Mediterranean Diet three meals per week should include seafood to contribute to the specified protein dietary requirements. Seafood is “any form of sea life regarded as food by humans”, and prominently includes fish, shellfish, and edible sea plants. In some countries, the term also includes freshwater organisms. Seafood is a good source of essential amino acids, such as phenylalanine and tryptophan, and of essential fatty acids, particularly omega-3 and omega-6.

The scientific research that merges seafood and Mediterranean Diet has focused on the determination of the nutritional composition of several species commonly consumed as part of the Mediterranean Diet, in order to promote consumers’ informed and best choices. Concurrently, studies about the quality of seafood and its relation to spoilage provide data to predict accurately the storage times of each product prior to its consumption.

Looking at the focus of the future research, a paramount issue is the sustainability of seafood resources, compromised by overfishing and ineffective fisheries management worldwide, while providing high quality, healthy and safe food to the consumer. Aquaculture of traditionally high-valued seafood species, like sea bass and sea bream, using alternative but environmentally sensible production procedures and the valorisation of novel and less consumed species, like catshark, mullet, blue whiting and triggerfish, are undoubtedly valuable strategies to address that issue.

Recently, a multidisciplinary approach to the analysis of paleodiets of the last 8000 years, is trying to understand the evolution of the dietary preferences of historical populations that lived in the Mediterranean basin and possibly determine the contribution of seafood to the origin and development of the Mediterranean Diet.

## **Pescado: uma característica fundamental da Dieta Mediterrânica**

Jaime Aníbal

Universidade do Algarve, Portugal


A Dieta Mediterrânica é baseada em três pilares: pão, azeite e vinho. Esses produtos alimentares fornecem glúcidos e lipídios à dieta, mas eles carecem de proteínas. Tradicionalmente, na Dieta Mediterrânica, três refeições por semana devem incluir pescado, de forma a contribuir para as necessidades proteicas de uma dieta equilibrada. O pescado pode ser definido como "qualquer forma de vida marinha considerada como alimento pelos seres humanos", incluindo peixes, mariscos e plantas marinhas comestíveis. Em alguns países, o termo pescado também inclui organismos de água doce. O pescado é uma boa fonte de aminoácidos essenciais, como fenilalanina e triptofano, e de ácidos gordos essenciais, particularmente omega-3 e omega-6.

A investigação científica que combina pescado e Dieta Mediterrânica tem-se focado na determinação da composição nutricional de várias espécies normalmente consumidas como parte desta dieta, a fim de promover a melhoria das escolhas pelos consumidores. Paralelamente, estudos sobre a qualidade do pescado e sua relação com a deterioração têm fornecido informação para prever, com maior precisão, os tempos de armazenamento de cada produto, antes de seu consumo.


Considerando o foco da pesquisa futura, uma questão primordial é a sustentabilidade dos recursos marinhos, comprometida pela pesca excessiva e a gestão ineficaz das pescarias em todo o mundo, ao mesmo tempo em que fornece alimento de alta qualidade, saudável e seguro ao consumidor. Esta questão pode ser abordada recorrendo a duas importantes estratégias: a aquicultura de espécies de alto valor comercial, como o robalo e a dourada, utilizando métodos de produção sensíveis ao ambiente; e a valorização de novas espécies pouco consumidas, como a pata-roxa, a tainha, o verdinho ou o peixe-porco.

Recentemente, uma abordagem multidisciplinar, para a análise das paleodietas dos últimos 8000 anos, está a tentar compreender a evolução das preferências dietéticas das populações que historicamente viveram na bacia do Mediterrâneo, e possivelmente determinar a contribuição do pescado para a origem e desenvolvimento da Dieta Mediterrânica.

**Seafood:**  
a key feature of the  
Mediterranean Diet

Jaime Anibal  
  
UNIVERSIDADE DE AVEIRO

CONFERÊNCIA INTERNACIONAL-A HERANÇA CULTURAL DA DIETA MEDITERRÂNEA | 9 DE MAIO DE 2017



**3 topics**

Seafood & Mediterranean Diet

Past research

Ongoing and future perspectives



Topic #1

**Seafood & Mediterranean Diet**



**Seafood:**

Any form of sea life regarded as food by humans





**Seafood:**


fish  
shellfish  
sea mammals  
edible sea plants



**3 pillars of Mediterranean Diet**

**Bread** (wheat) 

**Olive** (oil) 

**Wine** (grapes) 

### 3 pillars of Mediterranean Diet

Supply **carbohydrates** and **lipids** to the diet...  
...but lack **proteins**

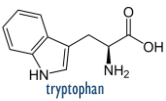
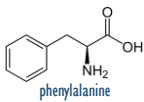


Traditionally, in the Mediterranean Diet

**3 meals** per week should include **seafood** to contribute to the **protein** dietary requirements



**Seafood** is a good source of essential **amino acids** and essential **fatty acids**



Topic #2

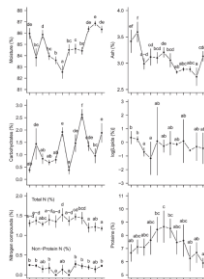
Past research



Determination of the **nutritional composition** of several species or products commonly consumed as part of the Mediterranean Diet

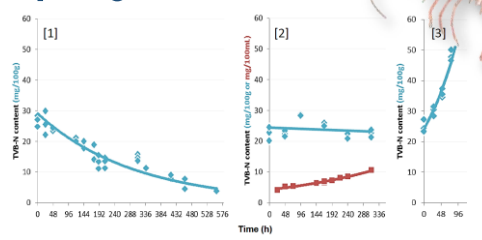


Promote **consumers'** information and awareness



Source: Archol, Esteves & Rocha (2011). J. Shellfish Res. 30: 17-23

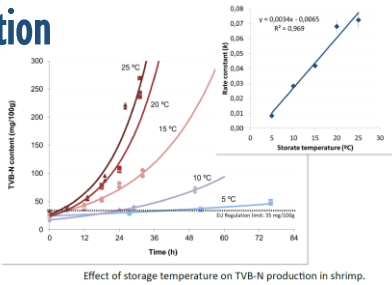
Studies about the **quality** of seafood and its relation to **spoilage** ...



TVB-N changes in shrimp (blue) and melted ice (red) during chilled storage.

Source: João Laguarda (2010) MSc Thesis

...provide data to predict accurately the **storage** times of each product prior to its **consumption**

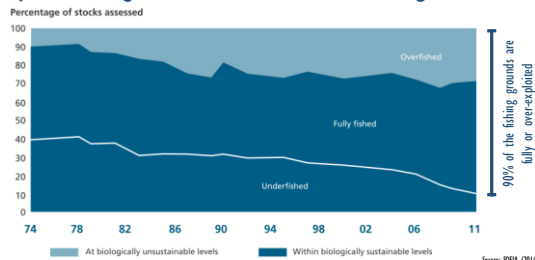


Topic #3

Ongoing and future perspectives



**Sustainability** of seafood resources, compromised by overfishing and ineffective fisheries management...



...while providing high quality, healthy and safe food

**Aquaculture** of traditionally high-valued seafood species using alternative but **environmentally** sensible production procedures

- sea bass
- meagre
- sea bream



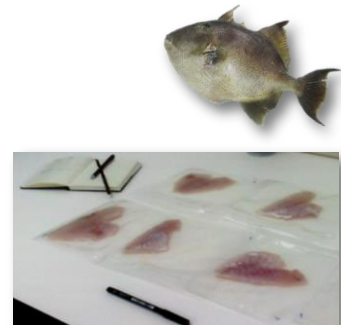
**Valorisation** of novel and less consumed species

- catsharks
- mullet
- blue whiting
- triggerfish




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- catsharks
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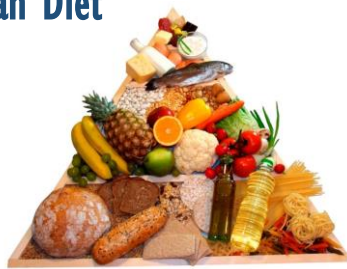


**Evolution** of the dietary preferences of historical populations that lived in the Mediterranean basin

Archaeology of **paleodiets** of the last 8000 years




Possibly determine the contribution of **seafood** to the origin and development of the **Mediterranean Diet**



**Thank you for your attention!**



**Seafood:** a key feature of the Mediterranean Diet

Jaime Aníbal  
 UNIVERSIDADE DE ALGARVE

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