

**CENTRO EUROPEU DE DIETA ATLÂNTICA**

**STRATEGIC PLAN**



Developed for  
**Instituto Politécnico de Viana do Castelo**

by  
**Sociedade Portuguesa de Inovação, S.A.**

**October 2001**

## EXECUTIVE SUMMARY

Having as one of its strategic objectives the creation of the Centro Europeu de Dieta Atlântica (CEDA) in Alto Minho, the Instituto Politécnico de Viana do Castelo (IPVC) considered promoting the development of a strategic plan and the elaboration of an economic and financial viability study. Sociedade Portuguesa de Inovação, S. A. (SPI) was the organisation selected by IPVC to carry out the “Plano Estratégico e Estudo de Viabilidade Económica e Financeira para o Centro Europeu de Dieta Atlântica”.

The main objectives of the work carried out under the scope of the proposal “Plano Estratégico para o Centro Europeu de Dieta Atlântica” were defined to be:

- (i) The role of the Centro Europeu de Dieta Atlântica as an element of regional development in Alto Minho, taking into consideration:
  - ?? Its geographical location;
  - ?? The economic environment in the Region (Alto Minho);
  - ?? The social and cultural reality of the Region;
  - ?? The existing human potential, particularly the one stimulated by the Instituto Politécnico de Viana do Castelo;
  - ?? The potential of the Casa do Outeiro site.
  
- (ii) The role of the Centro Europeu de Dieta Atlântica as a key element, at an international level, in the coordination of scientific studies concerning Atlantic Diet, taking into consideration:
  - ?? The reality of the food sector in the Atlantic regions, particularly in what concerns the consumer habits, industrial and R&D practices;
  - ?? The potential to become an international reference in issues concerning Atlantic Diet.

- (iii) The structure and model of management of the Centro Europeu de Dieta Atlântica more suitable for the initial phase of development and for the future full exploitation of Casa do Outeiro's potential:
- ?? The organizational model;
  - ?? The management structure;
  - ?? The role of Instituto Politécnico de Viana do Castelo within the management structure of the Centro Europeu de Dieta Atlântica;
  - ?? The main responsibilities of the management structure of the Centro Europeu de Dieta Atlântica.
- (iv) The relationships to be established in Portugal and abroad, particularly with:
- ?? The local economic, social and cultural development agents;
  - ?? The scientific, technological and cultural organizations linked with the food sector, in the Atlantic regions.

The here presented work had as main support the information gathered through interviews with staff of the Instituto Politécnico de Viana do Castelo and Câmara Municipal de Paredes de Coura, and other persons and organizations in the Region that have some type of relationship with the project or its outputs. Additional information was gathered through other sources, such as universities, R&D institutions and organizations similar to the CEDA concept.

The analysis carried out during this work revealed the need to extend the study's focus and aim towards providing an answer to a broader objective: the revitalization of the Casa do Outeiro site. In order to accomplish this, the work team understood the need to adopt a model for the Casa do Outeiro that clearly separates the suggested scientific activities of the CEDA from the suggested entertainment and cultural activities. The following structure for the report reflects this option:

1. The Centro Europeu de Dieta Atlântica and its environment;
2. The model to be adopted to revitalize Casa do Outeiro;
3. The implementation of the CEDA and Fundação Casa do Outeiro.

The first section of the report presents an example of the Mediterranean Diet that is scientifically and popularly developed. How this concept was developed and the main topics considered in scientific

studies are described in detail. A preliminary analysis of the concept of Atlantic Diet is also presented and, through a short SWOT analysis, the relevance of the creation of the Centro Europeu de Dieta Atlântica is discussed.

The second section, accounting for most of the work effort, is the main section of the Strategic Plan. This section takes into consideration the potential role of the Casa do Outeiro, not only as an element of regional development and as a key element, at an international level, in the coordination of scientific studies concerning Atlantic Diet, but also as an entertainment, cultural and educational agent. This led to defining an appropriate concept of organization. The envisioned concept for the Casa do Outeiro, conceives the existence of two different structures: Centro Europeu de Dieta Atlântica, responsible for scientific activities, and Fundação Casa do Outeiro designed to manage entertainment, cultural and educational activities. The following is defined for both structures: mission, activities and services, organizational model, management structure, human and physical resources, partnerships to be established and price strategy.

The third section of the report includes the main steps for the implementation of the Centro Europeu de Dieta Atlântica and of the Fundação Casa do Outeiro, as well as promotion activities to be carried out.

The annexes provide, a list of potential partners such as universities and R&D organizations participating in European projects in the food area and the prices currently used in Portuguese museums and “living museums”.

Porto, October 2001

Sociedade Portuguesa de Inovação, S.A.

## **ACKNOWLEDGEMENTS**

We would like to thank all the individuals and organizations that kindly have given us the opportunity to discuss the relevant issues concerning the creation of the Centro Europeu de Dieta Atlântica and Fundação Casa do Outeiro. Their views and experience gave Sociedade Portuguesa de Inovação, S.A. important inputs to analyze the different relevant issues having in consideration different perspectives. Those inputs have facilitated the definition of what we consider to be the most adequate strategic guidelines, which are presented in this report.

Porto, October 2001

Sociedade Portuguesa de Inovação, S.A.

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## 1. THE CENTRO EUROPEU DE DIETA ATLÂNTICA AND ITS ENVIRONMENT

### 1.1. Mediterranean Diet

As the studies concerning Atlantic Diet are in an embryonic step of development, it seems opportune and appropriate to use as model of development for the Atlantic Diet, other kinds of diets which knowledge is currently more developed and widely spread. The Mediterranean Diet seems to be a valid model for this purpose as it has similarities with the Atlantic Diet and has developed significant knowledge, particularly at the scientific level, in the last decades.

#### 1.1.1. What is the Mediterranean Diet?

The Mediterranean Diet Pyramid (Figure 1) was developed based on the dietary traditions of Crete, much of the rest of Greece and southern Italy circa 1960, and it is structured in light of current nutrition research. The selection of these regions and this time period as a basis for the presented Pyramid arises from three major considerations:

- ?? The recognition that the rates of chronic diseases were among the lowest in the world and adult life expectancy was among the highest for these populations at that time (1960), even though medical services were limited;
- ?? The availability of data describing the character of food consumption patterns of the areas at that time;
- ?? The convergence of the dietary patterns revealed by these data and the current understanding of optimal nutrition based on epidemiological studies and clinical trials worldwide.

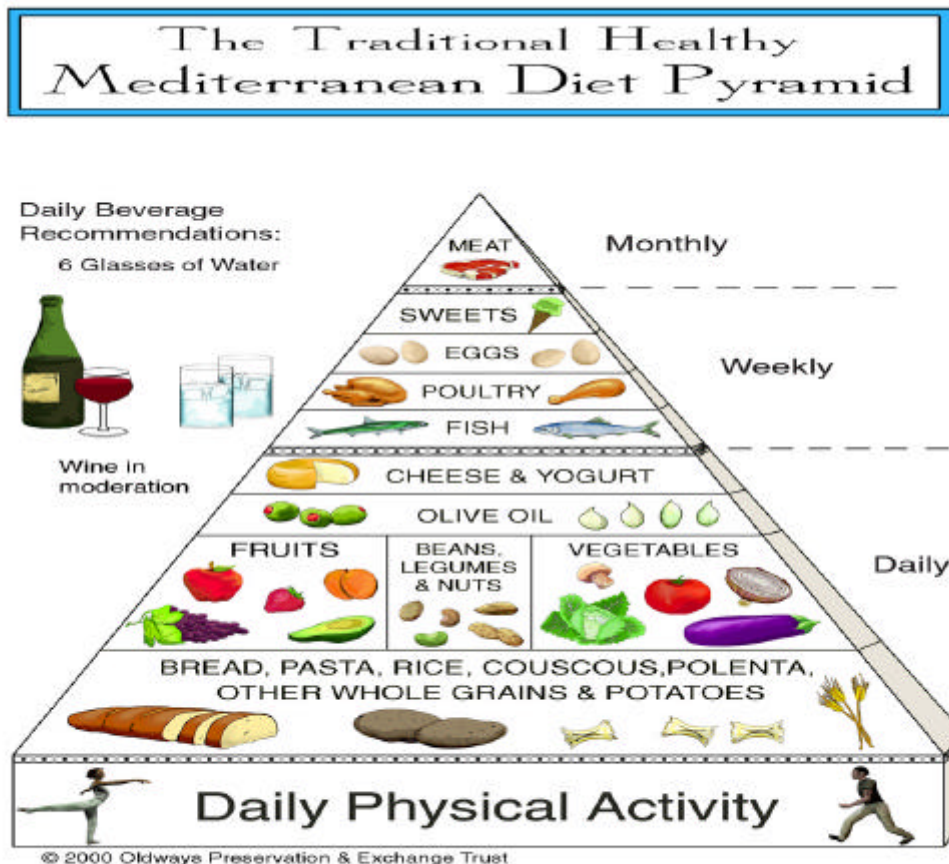


Figure 1 - The Traditional Healthy Mediterranean Diet Pyramid

Source: 2001 Oldways Preservation & Exchange Trust ([www.oldwayspt.org](http://www.oldwayspt.org))

Variations of this diet have traditionally existed in other parts of Italy, parts of Spain and Portugal, southern France, parts of North Africa (especially Morocco and Tunisia), parts of Turkey, other parts of the Balkan region, as well as parts of the Middle East (especially Lebanon and Syria). The diet is closely tied traditionally to areas of olive oil cultivation in the Mediterranean region.

The Mediterranean Diet Pyramid is not based solely on either the weight or the percentage of energy (calories) that ingredients account for in the diet, but on a blend of these, that is meant to give relative proportions and a general sense of frequency of servings-as well as an indication of which food intakes to favor in a healthy Mediterranean-style diet. The Mediterranean Diet Pyramid describes a diet for most healthy adults. Whether changes would need to be made for children,

women in the reproductive years, and other special population groups is an issue that needs further consideration.

Researchers have been quick to point out that there may be other factors that influence the effectiveness of the Mediterranean Diet. Receiving plenty of physical exercise is important as it reduces stress. Although Mediterranean attitude towards eating and mealtimes may be a factor contributing to good health as well; meals are regarded as important and joyful occasions, are prepared carefully and tastefully, and shared with family and friends. In many Mediterranean countries, people generally relax or take a short nap after lunch, the largest meal of the day.

For Americans, northern and eastern Europeans and others who want to improve their diets, this model provides a highly palatable, healthful framework for change. Equally positive results can be obtained either by entirely adopting a Mediterranean-style diet, or by alternating meals based on this Mediterranean model with meals inspired by healthful dietary traditions of other cultures in other parts of the world. For those living in the Mediterranean region, this Pyramid provides a basis for preserving and revitalizing, within a modern lifestyle, centuries-old traditions that contribute to excellent health and a sense of pleasure and well-being, while preserving a vital part of our collective cultural heritage.

### ***Characteristics of the Mediterranean Diet***

The Mediterranean region is warm and sunny, and produces large supplies of fresh fruits and vegetables almost year round, that people eat many times per day. Wine, bread, olive oil, nuts and legumes (beans and lentils) are other staples of the region, while the Mediterranean Sea has historically yielded abundant fish. The preparation and sharing of meals are a very important and festive part of Mediterranean culture, adding the special flavor for which the Mediterranean cuisine is popular and known all around the world.

Dietary data from the Mediterranean regions that, in the recent past, benefit from the lowest recorded rates of chronic diseases and the highest adult life expectancy, show a pattern like the one illustrated in the list below. The healthfulness of this pattern is corroborated by epidemiological and experimental nutrition research. The average amounts given are in most cases intentionally nonspecific, since variation is known to have been considerable within this pattern. The historical pattern includes the following:

1. An abundance of food from plant sources, including fruits and vegetables, potatoes, breads and grains, beans, nuts, and seeds;

2. Emphasis on a variety of minimally processed and, wherever possible, seasonally fresh and locally grown foods (which often maximizes the health-promoting micronutrient and antioxidant content of these foods);
3. Olive oil as the principal fat, replacing other fats and oils (including butter and margarine);
4. Total fat ranging from less than 25 percent to over 35 percent of energy, with saturated fat no more than 7 to 8 percent of energy (calories);
5. Daily consumption of low to moderate amounts of cheese and yogurt (low-fat and non fat versions may be preferable);
6. Weekly consumption of low to moderate amounts of fish and poultry (recent research suggests that fish is somewhat favored over poultry); from zero to four eggs per week (including those used in cooking and baking);
7. Fresh fruit as the typical daily dessert; sweets with a significant amount of sugar (often as honey) and saturated fat consumed not more than a few times per week;
8. Red meat a few times per month (recent research suggests that if red meat is eaten, its consumption should be limited to a maximum of 12 to 16 ounces, 340 to 450 grams, per month; where the flavor is acceptable, lean versions may be preferable);
9. Regular physical activity at a level which promotes a healthy weight, fitness and well-being;
10. Moderate consumption of wine, normally with meals; about one to two glasses per day for men and one glass per day for women (from a contemporary public health perspective, wine should be considered optional and avoided when consumption would put the individual or others at risk).

### **1.1.2. How the Mediterranean Diet concept developed?**

#### ***History***

In the 1950's no one knew the term 'Mediterranean Diet' but now the concept is well established. This dissemination of the Mediterranean Diet may be found not only in the Mediterranean countries, but also outside that Region. This leads to the obvious question - Which were the major steps that made the Mediterranean Diet so popular?

The interest in the Mediterranean Diet qualities arose at the time when professionals' concerns about diet and its role in chronic disease were on the upswing in the late 1950's. Dr. Ancel Keys developed an epidemiological analysis called the 'Seven countries'. This study is considered as one

of the greatest epidemiological studies ever performed. He gathered data on heart disease and its potential causes from nearly 13000 men in Greece, Italy, Croatia, Serbia, Japan, Finland, the Netherlands and the United States. The study was conducted over decades. It concluded that the Mediterranean people in the study enjoyed some significant health advantages. The Mediterranean groups had lower mortality rates in all brackets and from all causes, particularly from heart disease. The study also showed that the Mediterranean Diet is as high or higher in fat than other diets, obtaining up to 40% of all its calories from fat. It has, however, different patterns of fat intake. Mediterranean cooking uses smaller amounts of saturated fat and higher amounts of unsaturated fat, mostly in the form of olive oil.

Keys was the precursor of studies concerning Mediterranean Diet. In the 1970's, a study by the British epidemiologist and Nobel Laureate Sir Richard Doll and others suggested that in ecological studies across countries, fat and incidence of certain cancers were related. Since then, different researchers began recognizing a number of nutrients and other food constituents as being somehow related to certain types of cancer, originating or preventing them. These new findings further focused attention on the notion that diet could increase the risk of cancer.

In spite of all these findings and although the fact that Keys suggested that the food intakes in the Mediterranean region constituted the "good" diet, it was not until the 1990's that a critical mass of scientific evidence providing support findings was developed.

The Mediterranean Diet gained more notice when Doctor Willett, head of the nutrition department at Harvard University, began to recommend it. Although, low-fat diets were recommended for heart disease, Mediterranean groups in his studies had very high intakes of fat, mainly from olive oil. Willett and others suggested that increasing one type of dietary fat could reduce the risk of heart disease: the monounsaturated fat. This proposal went against conventional recommendations to reduce all fat in the diet.

The idea of health-promoting Mediterranean Diet received widespread international publicity with the *International Conference on the Diets of the Mediterranean* in 1993. The Harvard School of Public Health, the World Health Organization, the Oldways Preservation and Exchange Trust sponsored this conference. The conference addressed the accelerating interest on the part of the international scientific and public health communities, food professionals, food industry and food and health communicators in the traditional diets of the Mediterranean. Most importantly, the conference evaluated, in light of current research, the potential role of these diets to deter the development of chronic diseases and the desirability and feasibility of their preservation and widespread adoption. The data from a variety of epidemiological studies describing the dietary traditions from the Mediterranean area, which may be connected to low rates of chronic disease, was reviewed. As one

of the results from the conference, the Mediterranean Diet Pyramid (see Section 1.1.1) was proposed. This Pyramid, which became quite famous, is a helpful visual aid for nutrition teaching, suggesting the relative proportions of specific food intakes recommended, which stimulates thinking with regard to one's personal diet. A main objective of this graphic illustration is to foster a dialogue within the international scientific, public health, food and agricultural, governmental and other communities as to what specific elements and configuration of the traditional diets of the Mediterranean should be regarded as healthful.

### ***Analysis of the Mediterranean Diet factors for success***

There are several factors that explain the success of the Mediterranean Diet concept:

The first factor is a **solid science**. A clear worldwide scientific and public policy consensus that says that a traditional diet based on Mediterranean models is healthier than western or affluent diets has emerged. This consensus is thoroughly credible, since it results from the work of researchers worldwide and is independent from any industrial interest group or any particular country. Without this scientific and public policy consensus, there would have been no surge in attention, no press reports, no increase in purchases of Mediterranean diet foods.

The second factor is the **Mediterranean Diet itself**. It is friendly, familiar, and fun. The ingredients in the Pyramid are readily available to most people in the developed world and few people are not familiar with names such as pasta, minestrone, pilaf, gazpacho, paella, etc. On the other hand, the traditional healthy Mediterranean Diet is, largely, natural and environmentally friendly; aspects increasingly important in public perceptions.

There is also the **education** factor. Education programs about cultural models for healthy meals have been developed in order to make the language of the scientists more accessible to nonprofessional audiences. This task involved different professionals as nutrition educators, chefs and scientists. Moreover, journalists were asked to write or broadcast reports of symposiums and congresses dealing with Mediterranean Diet that brought together nutritionists, chefs, and experts on tradition and culture, improving the awareness regarding this issue.

A fourth factor is **credibility**. In order to work successfully with journalists and writers who have participated in educational programs and organizations, such as Oldways, the journalists and writers had to be persuaded that the programs were unbiased, accurate, and independent of any trade or industrial influence. If these programs were trade promotions, or even if they appeared to be trade promotions, then the journalists would probably ignore them, since they would be seen as

advertisements. An example of the successful collaboration between scientists, other specialists and journalists is the healthy traditional Mediterranean Diet Pyramid.

To some extent, it is due to these four factors that the Mediterranean Diet became so famous. Therefore, when establishing a strategy of action for the Centro Europeu de Dieta Atlântica, **solid science**, **education** and **credibility** should be taken into account.

### 1.1.3. Topics of scientific studies concerning the Mediterranean Diet

Four main areas of study dealing with Mediterranean Diet can be identified. Here are some examples of studies concerning the Mediterranean Diet.

#### *First Area - Characterization of the Mediterranean Diet*

- Dietary surveys made in order to characterize the food intake and dietary habits in different Mediterranean countries;
- Evolution of the food consumption and dietary habits in the Mediterranean countries;
- Comparison of the average diet in various European countries;
- Eating habits in Mediterranean countries for some particular categories of the population: children, adolescents, adults, elderly people, men, women, etc;
- Changes to the traditional Greek diet 1962-1997;
- The intake of various dietary constituents in Italy compared with their intake from northern European diets;
- Characteristics of the Mediterranean type diet of the Maghreb region of Northwest Africa (Algeria, Libya, Morocco, Tunisia);
- Types and amounts of fats consumed; fat consumption in the Mediterranean in comparison with northern European countries;
- Evolution of the food supplies in Mediterranean countries. These data provide insight on how Greek and Mediterranean dietary patterns have evolved during the past years;
- Effects of changes in the contemporary Mediterranean Diet (less olive oil, more dairy products) on the health of the indigenous populations;
- Changing food habits in Mediterranean countries;

- Dietary trends in Italy, Spain and Malta from 1981 to 1991. These indicate both positive and negative changes in dietary patterns;
- National nutrition policies in all Mediterranean European countries. General problems associated with nutrition or health policies in Mediterranean European countries (lack of commitment, unrealistic goals, focus on medical aspects, policy fragmentation, regional inconsistencies, overconfidence, EU restrictions, and outdated food legislation).

### **Second Area: The relation between health and Mediterranean Diet**

The interest of nutritionists and epidemiologists in Mediterranean dietary profiles derives from a large body of evidence relating them to a substantially reduced risk of cancer and heart disease.

#### **Coronary heart disease**

- Epidemiological studies suggesting that reductions in dietary saturated fat reduce risk of coronary heart disease;
- Clinical trials indicating that dietary intervention can prevent coronary heart diseases;
- The Lyon Diet Heart Study tested the hypothesis that coronary recurrence after a first myocardial infarction is reduced by a Mediterranean-type diet rather than a prudent Western-type diet;
- Relationship between components of the Cretan Mediterranean Diet and the prevention of cardio heart disease and cancer;
- Omega-3 fatty acids in the Mediterranean Diet and their association with cardio heart disease risk;
- Role of monounsaturated fatty acids in prevention of cardiovascular disease;
- Therapeutic nutrition;
- An alternative approach to coronary heart disease management: Management of coronary heart disease through diet; therapeutic approach to nutritional control of coronary heart disease; approach to coronary heart disease by the Mediterranean Diet.

#### **Cancer**

- Epidemiology of diet and cancer;

- The role of olive oil, fat, meat, fish, fiber, wine, vegetables and fruit, food additives and contaminants, anti-carcinogens, and other nutritional factors in the incidence of cancer and mortality from cancer;
- Effects of the Mediterranean Diet on cancer risk; Protective aspects of the Mediterranean Diet;
- Feasibility of dietary changes to reduce the risk of breast cancer (energy, fat and fiber intake);
- Incidence of colorectal and breast cancer in various countries in Europe;
- Mediterranean epidemiological evidence on tomatoes and the prevention of digestive-tract cancers.

### **Other topics of health studies**

#### ***Longevity***

- Epidemiological studies revealed that Mediterranean Diet correlated with the increased longevity seen in these populations.

#### ***Obesity***

- The Mediterranean Diet, though not a low fat diet, may contribute to the prevention and treatment of obesity because of its variety and palatability, provided it is controlled in calories.

#### ***Diabetes***

- High carbohydrate diets (based on cereal grains, vegetables and fruit that are also high in fiber) and diets that emphasize vegetable oils, predominantly monounsaturated (along with the same food), can be used to improve blood cholesterol, glucose and the lipid profile.

### ***Third area: Properties of characteristic ingredients of the Mediterranean Diet***

#### ***Olive oil***

- The role of olive oil in relation to health benefits of the Mediterranean Diet;
- The effects of minor constituents of olive oil on cardiovascular disease (phenolic compounds, squalene...);

- Antioxidant and other activities of phenolics in olives and olive oil;
- Comparison between an olive oil enriched diet and a low fat diet;
- Evidence that olive oil has greater beneficial effects on blood lipid profiles than polyunsaturated lipids or carbohydrates;
- Olive oil in relation to obesity.

### **Vegetables**

- The importance of a high intake of fruit, vegetables and cereals;
- Evidence that folic acid, found mainly in vegetables, may reduce cardio heart disease risk;
- Evidence that antioxidants (flavonols and flavones) from plant foods in the Mediterranean Diet may be important in reducing the risk for cardio heart disease;
- Nutritional composition and flavonoid content of edible wild greens and green peas: a potentially rich source of antioxidant nutrients in the Mediterranean Diet;
- Influence of trypsin inhibitor and phytic acid on in vitro digestibility of proteins in vegetables used in the Mediterranean Diet.

### **Wine**

- Components of wine which appear, in moderate consumption, to contribute to protection against coronary heart disease and possibly against some cancers;
- Possible protective constituents in wine (ethanol, glycerol, phenolic compounds, etc);
- Bioavailability of flavonoids from wine.

### **Meat, dairy products**

- The relation of meat and dairy products to cardiovascular health.

### **Garlic**

- Possible links of garlic with health benefits of the Mediterranean Diet.

***Fourth area: Transferability of the Mediterranean Diet to other populations: the development of the Mediterranean Food Guide***

- The development of the Mediterranean Food Guide, the Greek column, based on nutrition and dietary habits of the Mediterranean region before 1960;
- The Mediterranean-style diet as a good example of a palatable and healthy alternative to typical Northern and Western European diets;
- Food-based dietary guidelines have been formulated in many countries to improve eating habits and nutritional status. Potential of food-based dietary guidelines for transferring the Mediterranean Diet to populations living in regions far from the Mediterranean.

**1.2. Characterization of the Atlantic Diet**

The precise characterization of the Atlantic Diet is not the objective of this section, but rather to draw an overview of the different dietary intake patterns found in the European Atlantic countries. The study of the diet is focused in the following European Atlantic countries: Iceland, Norway, Denmark, Netherlands, Ireland, United Kingdom, Belgium, France, Spain and Portugal (Figure 2). A first section contains descriptions of the eating habits, the main ingredients used and the typical dishes found in each country. A second section establishes a comparison between diets in Central Europe, Mediterranean and the Atlantic regions, allowing the identification of some general features regarding the Atlantic Diet.



Figure 2 - Map of Europe

### 1.2.1. Description of the diet in the European Atlantic countries

#### ***Iceland***

In Iceland, the cuisine has a very old tradition associated with very hard winters and with limited possibilities to preserve the meat. The fish, captured in the clean waters of the Atlantic Ocean, is the main element of the Icelandic diet. Enjoying a very good reputation at international level for its quality and its taste, the fish and other sea products account for 70% of the national exports. Besides the fish, the Icelandic diet includes other ingredients; the meat of lamb, pork and beef are important examples. Lamb is particularly popular as its production has a very old tradition. Horse and reindeer meat, although less popular, can be found in the Icelandic diet. Butter and cheese represent an important portion of the food intake of the Icelandic's.

Regarding traditional dishes and specialties, the “skyr” and “mysa”, backed by several centuries of history, are famous. Classified similar to a fresh cheese, the “skyr” is prepared with milk and looks more or less like a yogurt. Bread, dry fish, “chouriço”, smoked meat of lamb are eaten in large quantities throughout the year.

#### ***Norway***

The Norwegian diet is characterized by the consumption of livestock and grain products as milk, butter, cheese, meat and bread but also by supplies of fish from the coastline. According to the Food and Agriculture Organization, in 1999, a Norwegian consumed 50.1 kg of fish per year versus 55.8 kg of meat per year. The main fish species present in Norwegian cuisine are salmon, herring, prawns, mussels, codfish, catfish, saithe, haddock, halibut and mackerel, mainly salted, pickled and smoked. The codfish and herring fisheries are very important in the Norwegian economy.

In what beverages are concerned, the Norwegians drink more beer than wine. The reason is probably a historic one: there has never been wine production due to the cold climate whereas beer has always been available.

Breakfast is a very important meal in Norway, as most people do not have a hot meal at lunch: the whole wheat bread with cheese and ham or with jam generally accompanied by milk, but cereals are a popular alternative to bread. In winter, warm oatmeal porridge sprinkled with sugar or raisins is common for breakfast. At lunch they eat sandwiches with a fruit or a sweet spread or chocolate. Popular spreads on sandwiches range from different cheeses, ham, caviar, sardines, egg, among others. Dinner, the only warm meal of the day, is taken early in the afternoon. Usually boiled

potatoes are present at a Norwegian dinner table and occasionally, meatballs made of meat, onions, bread and gravy can be found in the menu.

### **Denmark**

The Danish cuisine still contains elements before the time of industrialization (1860), the age of storage housekeeping with a cuisine based on beer and rye bread, and salted and smoked pork. In the second half of the 19th century, milk and potatoes played a prominent part, and the stove, the mincer and the developing retail trade provided new possibilities for dishes such as roast pork and gravy, boiled cod with mustard sauce, consommé with meat, bread or flour dumplings, rissoles, minced beef patties and other dishes based on minced meat. The same period saw the emergence of many fruit dishes and the range of vegetable dishes was expanded with boiled cabbage in white sauce, red cabbage, pickled beetroot, cucumber salad, and peas and carrots in white sauce. Today, the most common dish is meatballs made of pork, lamb or beef, with potatoes. It is important to observe that Danish eat almost four times more meat than fish.

Concerning eating habits, most people have their midday meal in the form of a packed lunch with sandwich. A hot meal is taken at evenings.

### **Netherlands**

The main ingredient in old-fashioned Dutch dinners is potato, mostly in the form of French fries, usually taken with meat and boiled vegetables. A Dutchman eats about five times more meat than fish and seafood. The most popular fish is the herring, the main basis for a typical Dutch delicacy: raw herring with raw onions. An interesting observation is that Dutch are very fond of pouring gravy onto everything. Another important feature in the Dutch diet is the extremely high consumption of dairy products that, according to some scientists, accounts for the high average height of Dutch men and women.

In what concerns the meals, Dutch have a copious breakfast composed of cereal, bread with salted or sweet accompaniment. For lunch, bread is the central ingredient. Dinner is the only hot meal of the day. As an hors d'oeuvre, fish cooked different ways with vegetables and fruits are very appreciated, along with vegetable soup. The main dish consists of the trio meat, potatoes, and vegetables. The most famous typical dish named 'Boerenkool' is a mix of potatoes, cabbage and sausages. A sweet dessert comes after to end the dinner.

While appreciating the Dutch cuisine, the external influence cannot be neglected. Due to their old colonies, especially Indonesia, the Dutch also have a very internationally orientated cuisine.

### **United Kingdom and Ireland**

English, Welsh, Scottish and Irish diet have more or less the same characteristics. This diet consists mainly on meats, dairy products, wheat and root vegetables. The two main ingredients present are meat and potatoes. Apart from gravy, the sauces that accompany the meat are a mix of sweet and salted tastes (apple chutney, mint sauce, blueberry sauce). The national drink is tea normally accompanied by cakes.

Breakfast includes eggs, bacon, sausage with tomatoes, and buttered toasts with tea or coffee. For lunch, there is no warm meal and usually people have sandwiches. Among typical dishes found for dinner there are soups with meat and vegetables, pies, fish and chips, and corned beef hash (corned beef, potatoes, butter, eggs, onion). The most English typical dinner is roasted meat cooked in an oven with vegetables and served with gravy. The Scottish typical dish is the 'haggis' made with the stomach brebis, the heart, the liver and the lungs of the same animal. Typical desserts are apple pie with fresh cooked custard, apple crumble pie or pudding.

It is perceptible that there is a foreign influence in the English diet. For instance, India provided the English language with curry, chutney and kedgeree while ketchup came from the Dutch East Indies (Indonesia). Moreover, Indian cuisine, which is adapted to British tastes, is the second main cuisine in UK.

### **Belgium**

Belgium's national cuisine revolves around meat, seafood and potatoes. Belgian menus also feature a number of meat dishes where beer is used as a prominent ingredient. The main seafood includes mussels, shrimps, oysters, while most popular fishes are codfish, sole, herring and eel. Belgians appreciate soup, usually onion or fish. Among the traditional dishes can be found "waterzooi" (a creamy stew featuring chicken, fish or scallops), eel with green sauce, "carbonnade flamande" (beef cooked with beer, carrots and onions and seasoned with thyme), and French fries. For the dessert, Belgians have chocolates based items or waffles.

Every meal normally goes with beer, the national drink.

Belgian cuisine is a mingling of foreign influences from the many countries that invaded Belgium: France, Germany, Italy, Holland, Spain and Scandinavia.

### **France**

France is a good example to study the differences in the dietary patterns within a country, as it can be divided in three somehow different regions: the Atlantic Corridor, the Mediterranean region and the Center and mountains. A 1995 study showed some East-West gradients of consumption of certain ingredients: the Atlantic region accounts for a lower consumption of cheese and a higher consumption of butter, fish, seafood, eggs and yogurts when compared to the central and mountainous regions. The Mediterranean people have a diet close to the one described in the Mediterranean Diet Pyramid presented in Section 1.1.1.

Even if, in each region, it is possible to find different specialties and diets, some ingredients are common: butter, garlic, onion, parsley, salt and potatoes. The main dishes (fish or meat) often go with vegetables; namely cabbage, mushrooms, potatoes or lettuce. The most popular seafood includes mussels, oysters, lobsters, crayfish and fish, among them the eel, cod, lamprey, bass, sole, tuna and sardines are the most important.

Concerning eating habits, French have three meals per day, two of them served hot: lunch and dinner.

### **Spain**

The Spanish have three or four meals per day. For breakfast, they eat bread with butter or ham, cheese, biscuits, fruits, usually taken with a drink: milk, chocolate, coffee or orange juice. The lunch is the more important meal of the day and traditionally the entire family has lunch together. The typical meal along the Spanish Atlantic coast is based on fish. Among all the fish species found, there are salmon, sardines, cod, octopus, and tuna. There is also a wide range of seafood such as crayfish, mussels, oysters and crab. In terms of meat, the pork is the most often cooked. Fish or meat goes normally with potatoes or vegetables (tomatoes, onions, beans, etc.). The preparation of the meal is relatively simple consisting of grilled fish or meat mixed with salt, pepper, parsley, onion, herbs, and olive oil. Dinner is lighter than lunch and normally consists of salad, soup or fish.

## **Portugal**

The long Atlantic coastline of Portugal, guides the gastronomy towards the sea products. Codfish is the symbol of the Portuguese cuisine and Portuguese say that there is more than one thousand different ways to cook it. Apart from the codfish, the main fish or seafood in the Portuguese diet are octopus, sardine, tuna, mackerel and mussels cooked in several different ways: grilled, fried or cooked with oil, onion and tomatoes. Portuguese also appreciate meat, as a large number of traditional recipes can testify. The meat is cooked using ingredients such as olive, garlic, onion, pepper, and lemon. The fish and meat usually go with three ingredients: potatoes, rice and salads, although many meals include beans. Vegetable soup is of great importance in Portuguese cuisine as it is traditionally taken at lunch and dinner. As dessert, a wide range of cakes is always available.

Portugal is a country rich in good wines. There exists more than one hundred types of wine. So, not surprisingly, wine is considered a national drink.

Table 1 – Comparison of food diets in European Atlantic countries

	BREAKFAST	LUNCH	DINNER	DESSERT	DRINKS
<b>Norway</b>	Very important meal, wheat bread with cheese or ham accompanied with milk, cereals	Sandwiches of cheese, ham, caviar, sardines, eggs, milk, fruit	Boiled potatoes, meat balls with onion, bread and sauce, salted fish, in brine, smoked fish: salmon, cod, shrimp, mussel	Cakes, sweets	Beer
<b>Denmark</b>	Rye bread, milk	Sandwiches of scrambled eggs and ham, of roasted pork with cabbage, of steak with pickles	Roasted pork, meat balls (pork, sheep, cow), boiled cod with mustard sauce, rissoles, minced meat, boiled cabbage, beetroot in brine, cucumber, pea and carrot salad, boiled potatoes	Apple, pear and plum	Beer
<b>Netherlands</b>	Cereals, bread with sweet or salted, dairy products	Sandwiches with different kinds of bread	Boiled fish in different ways with vegetables and fruits, potatoes salad, cabbage and sausage, vegetables soup	Sweets	Beer
<b>United Kingdom And Ireland</b>	Eggs, bacon, sausage and tomato, toasted bread with tea or coffee, dairy products	Sandwiches	Meat and vegetables soup, fish and French fries, pies, cow meat with potatoes, butter, eggs and onion, roasted meat with vegetables and sauce	Apple pie with cream, pudding	Tea
<b>Belgium</b>	Bread with jam or fruit in syrup, cheese	Meat, seafood (mussel, shrimp, oysters), cod, eel, onion and fish soup, chicken, French fries, cow meat with beer, onion and carrot, mayonnaise		Waffles, chocolate preparations	Beer (used like an ingredient too)
<b>France</b>	Milk with chocolate, cereals, coffee, bread with butter or jam	Mussels, oysters, crayfish, crab, eel, cod, tuna and sardines, eggs, potatoes, cabbage, mushrooms, salads, butter, garlic, onion, salt		Cakes, apple, pear, peach, cheese, yogurt	Wine
<b>Portugal</b>	Milk, coffee, bread with butter, cheese or jam, fruit, yogurt	"Caldo verde", vegetable soup, cod, sole, swordfish, squids, sardine, crab, mussels, meat cow with wine sauce, roasted and stew meat with olive oil, garlic, bay leaf, parsley, pepper		"pão-de-ló", fruit: grapes, apple, orange, banana, cream cakes, almond cakes	Wine
<b>Spain</b>	Bread with butter and ham or cheese, biscuits, "churros", fruit, milk, coffee, chocolate, fruit juice	Grilled fish, salmon, sardines, cod, octopus, tuna, seafood: lobster, crab, mussels, oysters, pork meat with potatoes and vegetables: beans, mushrooms, tomato, spinach, pimientos	Light food: soups, salads, fish	Almond cake	Wine, cider
<b>Iceland</b>	Milk, coffee, yogurt, bread and croissants with smoked fish, cereals	Dry and fresh fish, crustaceans, sheep, cow, meat sausage, butter		Cheese	

### 1.2.2. Comparison of the diet in different European countries

The objective of this section is to compare the consumption of a few categories of food in different European countries in order to verify if Atlantic countries dissociate themselves from the other European countries in some dietary intake patterns. The food categories selected for this analysis were: fish, molluscs and crustacean, meat, wine, potatoes, vegetables, beans, cereals, and milk.

The countries chosen represent three regions of Europe: Atlantic, Mediterranean and Central European. These three regions each have different types of climates, geographic environments and lifestyles.

- Atlantic region: Portugal, Spain, France, Ireland, United Kingdom, Belgium, Netherlands, Denmark, Norway and Iceland. The results concerning Spain and France have to be taken with precaution because they belong to Atlantic countries but also to Mediterranean countries;
- Mediterranean countries: Italy and Greece;
- Central European countries: Germany, Czech Republic, Poland, Austria and Switzerland.

The source for the data used in this section is the nutrition database (1999) of the Food and Agriculture Organization of the United Nations.

The consumption of fish is higher in the Atlantic countries than in the Central European countries (Figure 3). Countries close to the sea are higher consumers of sea products than landlocked countries because of the easy availability of fish. Concerning the two Mediterranean countries, their consumption of fish is more or less the same as Denmark, Netherlands, Belgium, United Kingdom and France. The northern and southern Atlantic countries dissociate themselves from all the other countries by their very high consumption of fish.

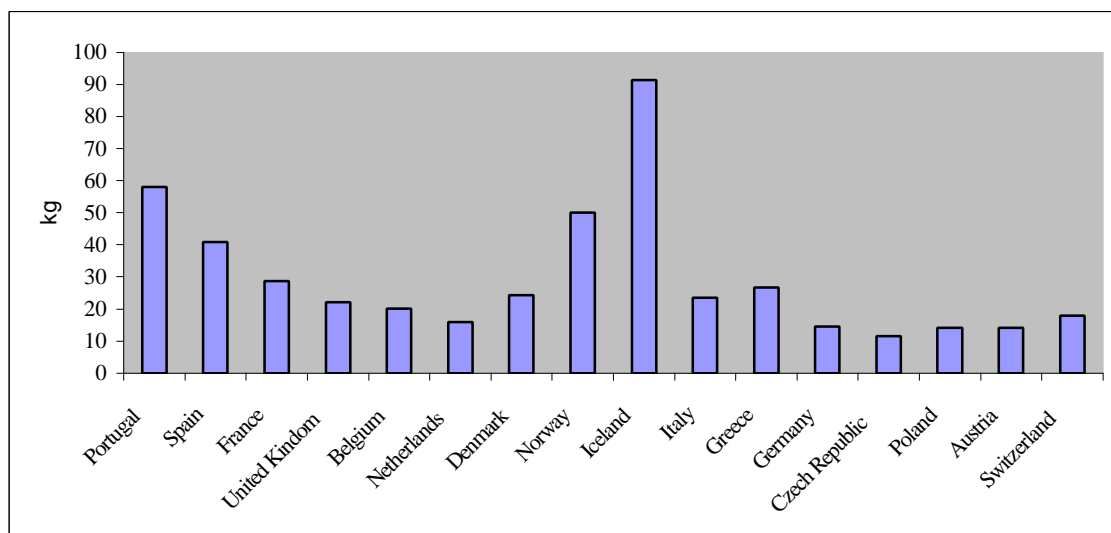


Figure 3 – Fish consumption (kg/(cap\*year))

The consumption of seafood follows almost the same schema as the fish (Figure 4). In general, Atlantic countries consume more seafood than Mediterranean or Central European countries. Iceland has a rate of consumption four to ten times higher than other countries. The justification for this fact can reside on the unpolluted waters of the North Atlantic that give a high number of very good quality and safe sea products. After Iceland, come the southern and northern countries of the Atlantic: Spain, France, Denmark and Norway (with an exception for Portugal).

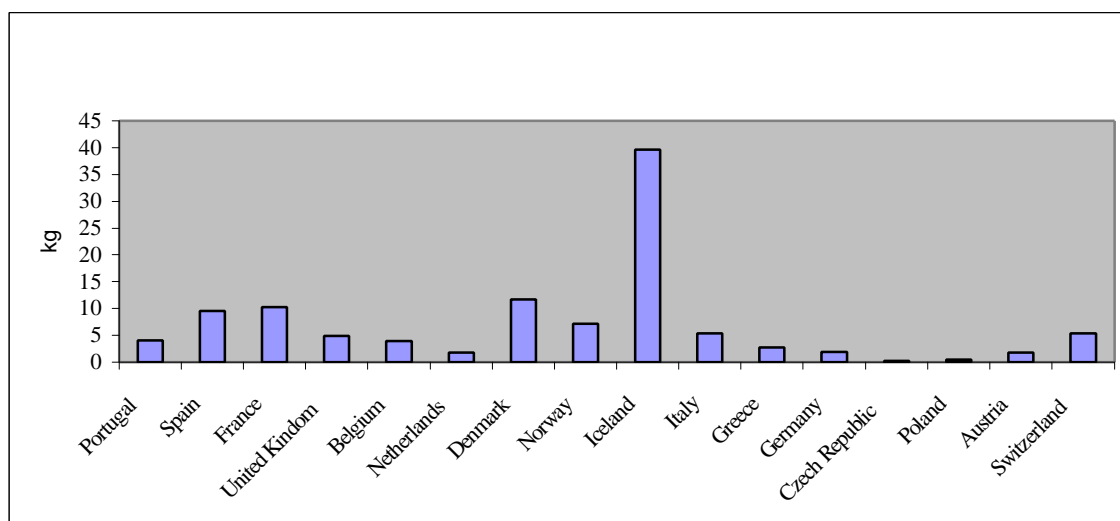


Figure 4 – Molluscs and Crustacean consumption (kg/(cap\*year))

It can be observed that the countries in the center of Europe have the largest difference in the consumption of meat and fish; they eat much more meat than fish (Figure 5). Their physical environment is more favorable to the breeding of livestock than to the access of fish.

A second observation is that the Atlantic countries in the central region of the Atlantic Corridor (Spain, France, United Kingdom, Belgium, Netherlands, and Denmark) have more or less the same meat/fish ratio than the countries representing the Mediterranean countries. The three extremities of Atlantic European countries (Portugal, Norway, Iceland) have a different ratio from the other countries. For Iceland, fish is more important in the diet than meat and one of the reasons can be the limited capability of producing and preserving the meat. Concerning Portugal and Norway fish is almost eaten in the same quantity as meat.

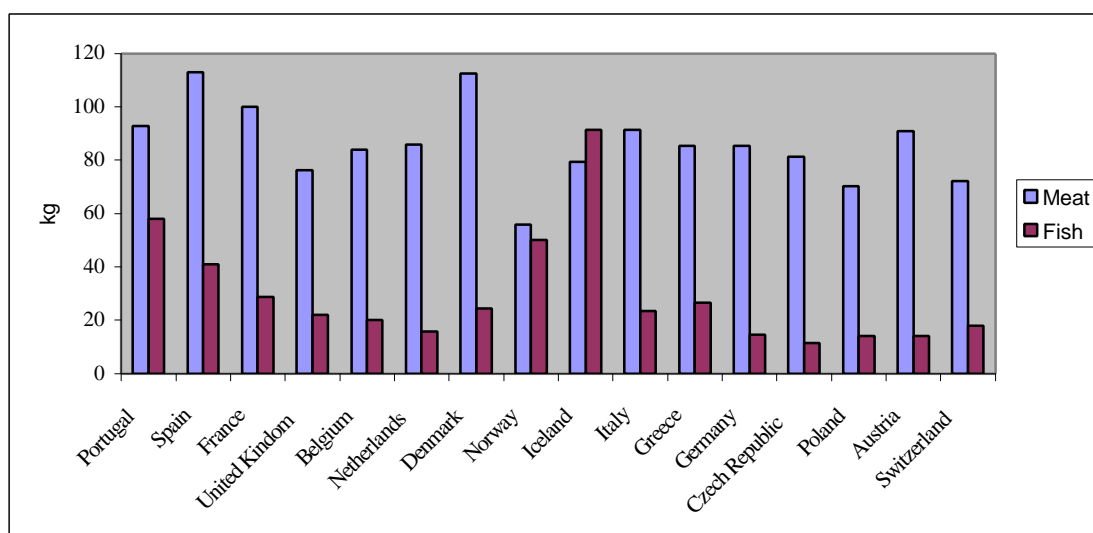
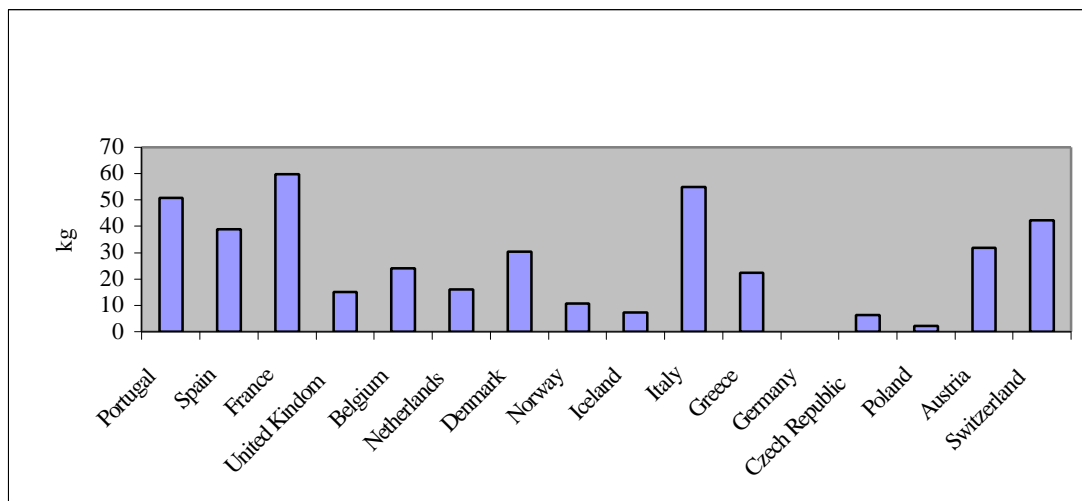


Figure 5 – Comparison between meat and fish consumption (kg/(cap\*year))

The consumption of wine is a good example of the influence of the climate in the culture (Figure 6). Indeed, southern countries like Portugal, Spain, France, Italy and Greece have a consumption of wine higher than central countries where the climate does not encourage grape cultivation. Switzerland is an exception to this observation.

Figure 6 – Wine consumption (kg/(cap\*year))



There is a large difference in the consumption of potatoes (Figure 7) and vegetables (Figure 8) between Mediterranean and Atlantic countries. In Atlantic countries, people eat in general more potatoes and fewer vegetables than in Mediterranean countries. This follows the assumption that potatoes are one of the characteristics of an Atlantic Diet.

Comparing the Central region of Europe and the Atlantic region, the difference is not so marked. Nevertheless, it can be noticed that southern Atlantic countries are larger consumers of vegetables than Central regions. There is a gradient 'South North' for the consumption of vegetables: countries that are located in the South region eat more vegetables than the North. The natural conditions, due to the sunnier climate of the southern Atlantic countries favors the cultivation of vegetables.

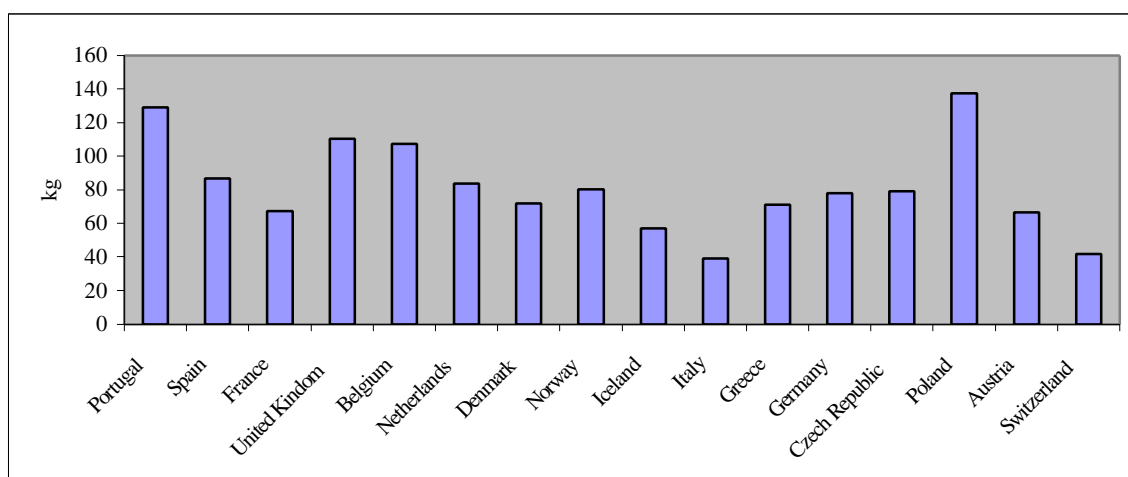


Figure 7 – Potato consumption (kg/(cap\*year))

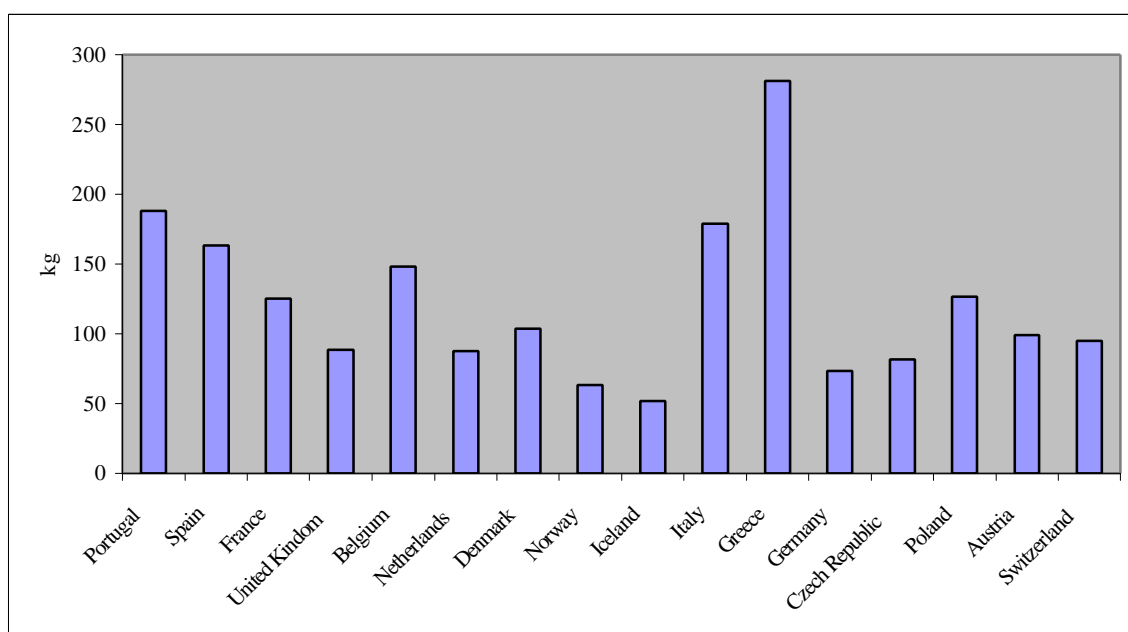


Figure 8 – Vegetable consumption (kg/(cap\*year))

The consumption of beans (Figure 9) is very high in the southern Atlantic countries as it is in the Mediterranean countries. But in the northern Atlantic countries (Denmark, Norway, and Iceland), the consumption is very low comparing to the southern Atlantic countries. This is due to the conditions of growth of the beans, better adapted to hot climates. Taking into consideration that Spain is also a

Mediterranean country and that Portugal still has some of the climatic characteristics of that region, it is more reasonable to identify the consumption of beans to the Mediterranean Diet.

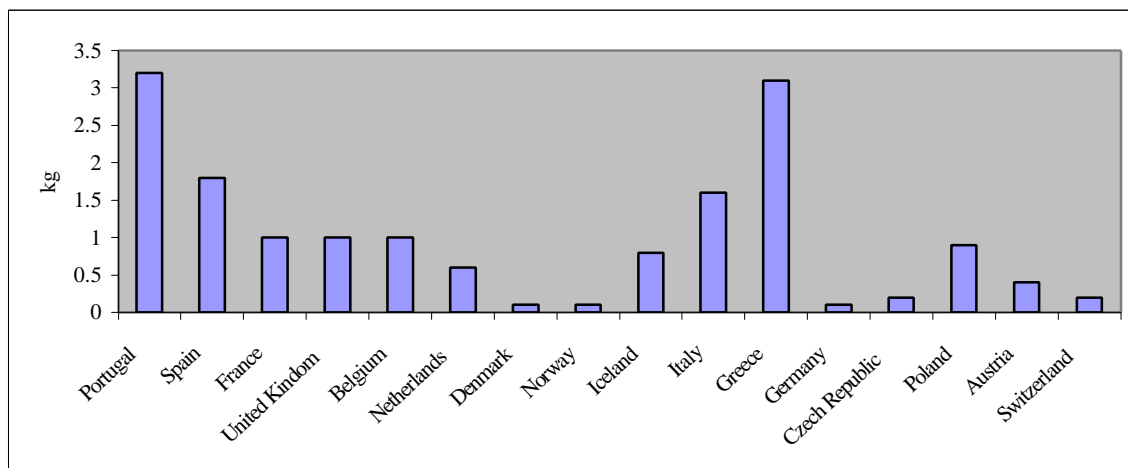


Figure 9 – Bean consumption (kg/(cap\*year))

Mediterranean countries have a consumption of cereals a little higher than the others countries (Figure 10). However, there are no significant differences between Atlantic countries and central European countries: they eat more or less the same quantity of cereals.

Although this general conclusion can be drawn, it is necessary to take into consideration the fact that in this food category is included a variety of cereals with very different growing characteristics, which can present different consumption trends in different countries and regions.

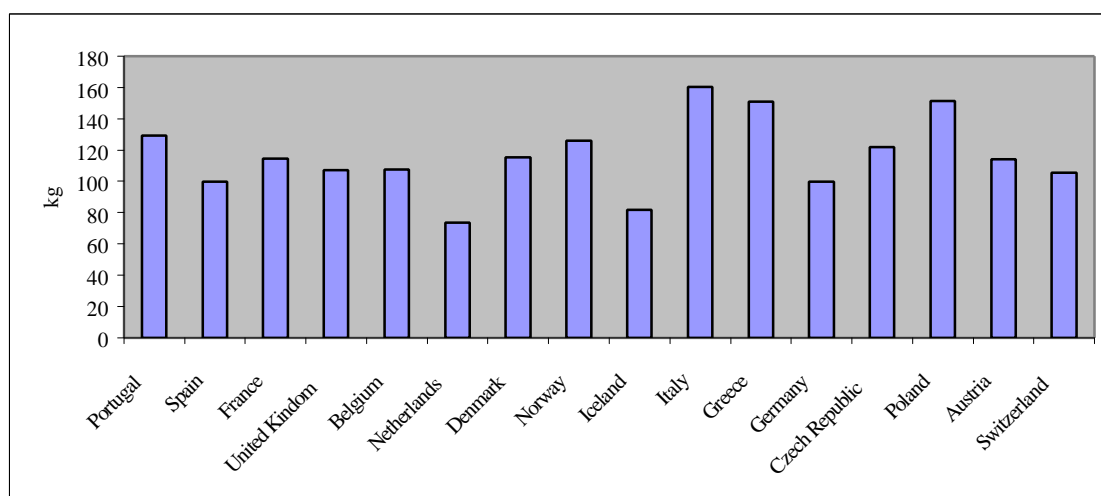


Figure 10 – Cereal consumption (kg/(cap\*year))

There are no big differences in the consumption of milk among the three regions: Atlantic, Mediterranean and Center (Figure 11). The Netherlands can be distinguished by its high consumption of milk. This fact is not a surprise having in consideration the nutritional characteristics of this product and the European Agricultural Policies. Europe has an excess of milk production and the consumption has been promoted throughout the European Union. Other types of milk rather than cow milk can be more specific to some regions, however the consumption of other types of milk is very low when compared with cow milk.

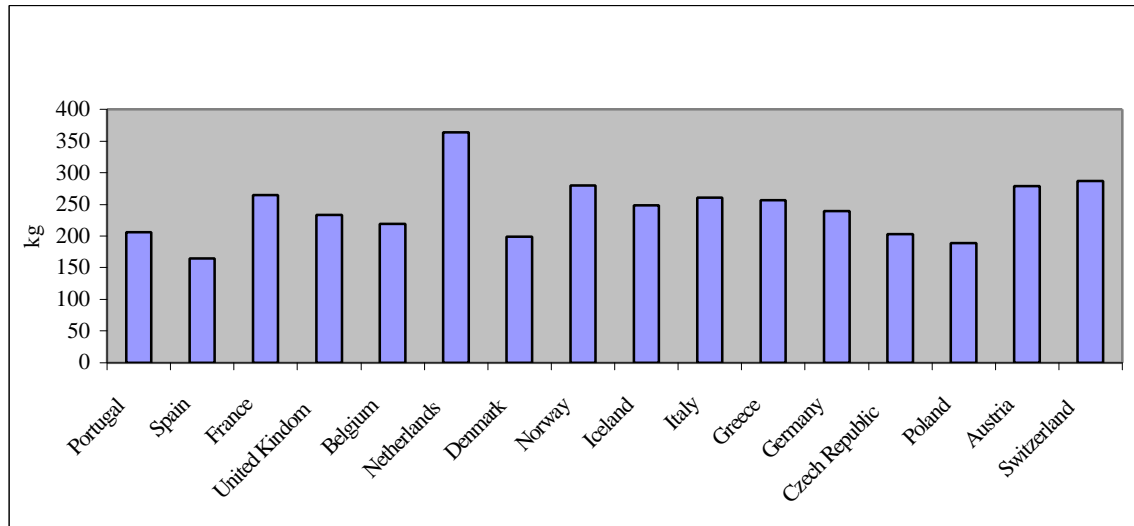


Figure 11 – Milk consumption (kg/(cap\*year))

### 1.3. SWOT analysis for the creation of the Centro Europeu de Dieta Atlântica

Thanks to the information gathered, a SWOT analysis was carried out. This allowed an analysis of the strengths and weaknesses of the CEDA, as well as the opportunities and threats revealed by the information specific to the external environment of the CEDA.

The goal of the SWOT analysis was to support the development of a plan for the CEDA that takes into consideration many different internal and external factors, and maximizes the potential of the strengths and opportunities, while minimizing the impact of the weaknesses and threats.

#### 1.3.1. Strengths

- Food and dietary intake patterns are very different, as one considers the populations from Iceland to Portugal. This makes the Atlantic Corridor, with its wide diversity of climates, cultures,

sun exposure, agricultural practices and others a region **ideally suited to comparative studies** of nutritional intakes versus lifestyle and environment factors.

- Moreover, food and dietary intake patterns are more pronounced and meaningful on a 'North-South' axis, rather than on an 'East-West' axis. The hotter climate in the South of Europe compared to the colder northern regions brings more variation to agriculture and hence food and dietary intakes. This **axis 'North-South'** appears to be an **interesting guideline** for the studies concerning the Atlantic Diet.

### 1.3.2. Weaknesses

- The studies concerning Atlantic Diet are quasi non-existent in the current environment. The **scientific knowledge about the Atlantic Diet is very limited**. Although this can be considered a weakness, it also represents an opportunity for CEDA to play a key role in the development of the concept of the Atlantic Diet.
- As the Atlantic Corridor is a large physical space, there are a lot of differences concerning the climate conditions and the lifestyles. Diets in the different regions are, therefore, very different and **it is hard to find some common features for the Atlantic Diet**.
- The Casa do Outeiro site **does not have an easy access** for tourists and it **is not located near one of the major towns** (e.g. Porto), although it is located near the main North-South axis between the North of Portugal (Porto, Braga) and Galiza (Vigo, Santiago de Compostela and Corunha).

### 1.3.3. Opportunities

- The growth of the processed food industry, the number of large retail stores, the research of easy-to-cook products and the gradual evolution of lifestyles make the diet of the **European population rapidly becoming more homogenous**. It appears that comparative studies of different Atlantic regional diets must be progressed soon, before the homogenization makes this impossible. Moreover the creation of the Centro Europeu de Dieta Atlântica could preserve the culture and the identity of the dietary patterns in the different Atlantic regions.
- Because of the recent **accidents** occurring in food industries concerning **public health**, people are becoming more and more concerned with regard to their diet and food. The Atlantic Diet appears to be a currently interesting topic of study for the European citizens.
- The Center could be a good catalyst to unite the Atlantic countries around a common topic: the Atlantic Diet. The scientific cooperation, the technology transfer, the promotion of innovation and

the management of common projects could create a **European network** of scientists, organizations and companies. In its domain, the CEDA could reach an **international level**.

- The Centro Europeu de Dieta Atlântica is an opportunity to **revitalize the Casa do Outeiro** site by making it the coordinator center of the CEDA and by giving it an entertainment and cultural dimension.
- With its implementation at the Casa do Outeiro site, the CEDA could **benefit the local community** of the region Alto Minho by increasing employment, giving added-value to the local products, adding tourism, attracting other investors in the area, and attracting financial support from National, EU and Foundation sponsors.
- Relevant Research Proposals addressing Food, Health and Nutrition are within one of the **thematic priorities** to be addressed by the European Commission under the 6<sup>th</sup> Framework Programme. This priority area, "Food Safety and Health Risks" is aimed at assuring the health and well-being of European citizens through a better understanding of the **influence of food intake and environmental factors on human health** and to provide them with safer and healthier promoting foods, including seafood, relying on fully controlled and integrated production systems originating in agriculture and fisheries. Priority will be given to integrated research approaches in the following research priorities:
  - Epidemiology of food related diseases and genetic susceptibilities;
  - Impact of food, and in particular products containing genetically modified organisms, on health;
  - Traceability processes, in particular relating to genetically modified organisms, including systems based on recent biotechnology developments;
  - Methods of analysis and detection of chemical contaminants and pathogenic micro-organisms;
  - Safer production methods and healthier foodstuffs, including those based on biotechnologies, and organic farming processes;
  - Impact of animal feed, and the use of sub-products of different origins for that feed, in human health;
  - Environmental health risks.

The creation of a new instrument, Networks of Excellence, should be explored to establish the partnerships and the networking with other organizations in issues concerning the Atlantic Diet. The purpose of the creation of a **Network of Excellence** should be to strengthen the European scientific and technological system by assembling a critical mass of skills. Targeted towards long

term objectives, the activities concerned, often multidisciplinary, are not aimed at precise predefined results in terms of products, processes or services but the progressive and lasting integration of research capacities existing or emerging in Europe at both the national and regional levels. To this end, in order to create a virtual Center of Excellence the members of the network would implement a joint programme of activities integrating a substantial proportion or even the entirety of their activities in the area concerned.

- The existence of a **previous experience** concerning the study and development of the concept of a regional diet, the Mediterranean Diet, provides a good example of a strategy and methodology that represents an **opportunity for benchmarking**.

#### 1.3.4. Threats

- The Mediterranean Diet required a significant period to be scientifically and publicly recognized. The time between the first discoveries concerning the health benefits of Mediterranean Diet and the first conference that made the Mediterranean Diet famous is about 40 years. It should be the same for the Atlantic Diet, the concept of the Atlantic Diet and the public awareness of the CEDA would **need time to be developed** and spread in Europe and worldwide.
- The **incapacity to attract other organizations** such as universities and R&D centers to be involved in the development of the Atlantic Diet concept is a major risk. The **involvement of local economic, social and cultural development agents** is also **critical** to assure an appropriate development of the project and to create the conditions to attract visitors.

## 2. THE MODEL TO BE ADOPTED TO REVITALIZE CASA DO OUTEIRO

### 2.1. CEDA and Fundação Casa do Outeiro

The project of revitalizing the Casa do Outeiro site should assume two components:

- ✍ The establishment of the Centro Europeu de Dieta Atlântica as a structure of the IPVC, located at the Casa do Outeiro site and oriented towards the development of scientific activities related to the Atlantic Diet.
- ✍ The establishment of an entertainment, cultural and education space, oriented to the public in general, where visitors can experiment and live the Atlantic Diet. This component would be managed by the Fundação Casa do Outeiro in which the IPVC would participate along with the main regional agents in socio-economic and cultural areas, particularly the Câmara Municipal de Paredes de Coura.

For this reason, the remaining sections of this chapter will focus on CEDA and on the Fundação Casa do Outeiro as two different, but complementary entities, located at the Casa do Outeiro site.

### 2.2. Missions

Considering what has been said before, two separate missions regarding the two different components of this project, Centro Europeu de Dieta Atlântica and Fundação Casa do Outeiro, should be established.

The mission of the Centro Europeu de Dieta Atlântica can be expressed as follows:

The CEDA should position itself as an institution capable of assuming scientific leadership for the studies related to the Atlantic Diet through its establishment as a core supporter of scientific networks.

Likewise, the mission of the Fundação Casa do Outeiro can be expressed as follows:

The Fundação Casa do Outeiro should position itself as an institution capable of revitalizing the Casa do Outeiro site by converting it to an entertainment, cultural and educational location where visitors could come to 'live' the Atlantic Diet.

### **2.3. Activities and services at the Casa do Outeiro**

As a result of the prior sections, the different activities, which would be developed at the Casa do Outeiro site can be divided in two main areas:

- Scientific activities aimed at establishing the CEDA as the core of a research network in Atlantic Diet;
- Living and entertainment activities open to public visitors who want to learn about Food and Nutrition in a fun environment.

In each of these two areas, several activities would be implemented as described in Figure 12.

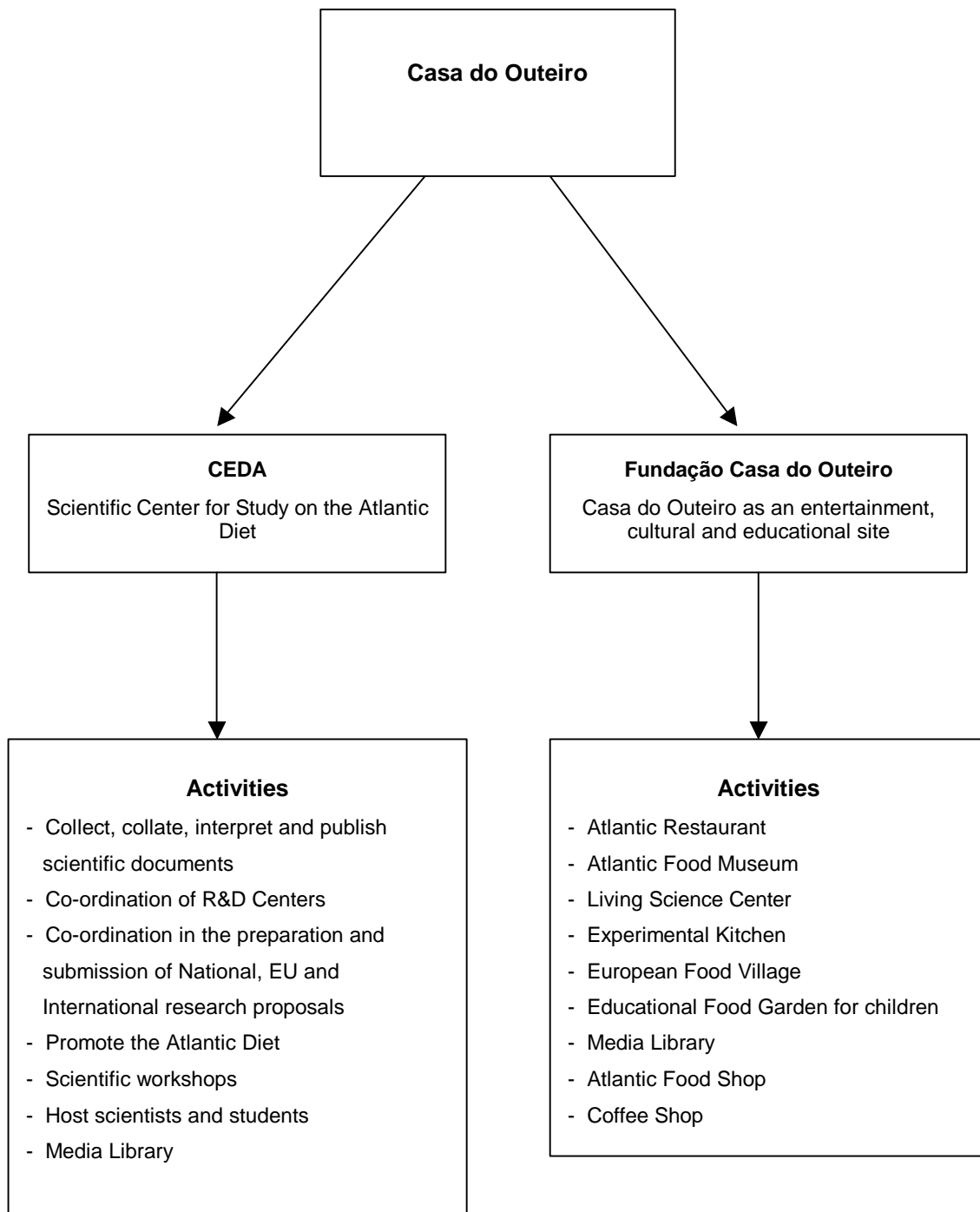


Figure 12 - Activities at the Casa do Outeiro

### 2.3.1. Scientific activities – The CEDA as a promoter of scientific networking

#### Objectives

- To become the 'Coordinating Center' for the studies dealing with Atlantic Diet;
- To promote European cooperation in the scientific study of Atlantic Diet;
- To encourage research and the exchange of scientific information dealing with Atlantic Diet;
- To become the European Center of Excellence for focusing interest and commitment to the scientific study of the Atlantic Diet.

#### Description

The Center, located at the Casa do Outeiro site, would be involved in a wide range of complementary activities, all related to scientific development and general awareness of the Atlantic Diet. CEDA would, for example progress the following:

- Act as a Coordinating Center by becoming the hub of a number of R&D Centers involved in food, health and nutrition research in the Atlantic Corridor. The aim of the CEDA would be to coordinate across the Atlantic countries activities that stimulate and consolidate the scientific community in fields connected to the Atlantic Diet.
- Act as a Research Center in its own right, particularly using modern information technology systems to **collect, collate, interpret and publish** scientific and general public **articles** about the Atlantic Diet.
- Act as a **coordinator for the preparation and submission** of National, EU and International **research proposals** related to the Atlantic Diet, in both the narrow nutritional context and the broader socio-economic-cultural-lifestyle context. The CEDA would be dedicated to act as a catalyst for the development of science by bringing together leading scientists and research funding agencies to debate, plan and implement research propositions.
- Act as an **awareness builder for the benefits** of the Atlantic Diet, both in the scientific community and in the general public. To this end, the executive in charge of the scientific activities of the center should try to maintain a good relationship with the media and

should try to be active in the domain of public relations. It is important to highlight that this was one of the key successes for the awareness of the health benefits of the Mediterranean Diet.

- Act as the main source and **archive information** about the Atlantic Diet. This function would be under the responsibility of the Media Library (see Section 2.2.2.1). CEDA could be able to diffuse the information concerning Atlantic Diet through different services:
  - enabling the access to its resources: books, audiovisuals, kits, games, hands-on material, journal articles...;
  - providing reliable information through a web site.
- Act effectively in the **development and presentation of actual food products** highlighting the **nutritional benefits** of elements of the **Atlantic Diet** in the context of a wide range of product formats (eg. Local, regional specialties, and more universal Europeanized products).
- Act as a **host** of a limited number of **visiting research workers or students**.
- Act as a host of **high-level scientific workshops** dedicated to address the scientific underpinning of the Atlantic Diet. These workshops could enable scientists from different organizations and countries to work together examining issues and agree whether those issues should be addressed on a long-term basis.

### **Anticipated studies about the Atlantic Diet**

Some ideas about possible studies to realize for the Atlantic countries could be suggested thanks to the study of the Mediterranean Diet and the overview of the Diet in the Atlantic countries presented in the first part of this report. The possible areas of study for the Atlantic Diet could be the following:

- ***First Area: Dietary characterization of the Atlantic Diet***

A systematic study of dietary intake patterns, covering both the categories of food eaten (fish, meat, dairy, vegetables...) and then progressively considering specific dietary nutrient intakes (e.g. Calcium, Vitamin D, conjugated linoleic acid, phytoestrogens) would be of very high value and nutritional interest. One possible outcome could be the production of a document similar to the Mediterranean Diet Pyramid in order to characterize the Atlantic Diet, to make it approachable by anyone and to serve as a reference for the Atlantic Diet.

- ***Second Area: Relation between Atlantic Diet and Health***

The success of the Mediterranean Diet comes in part due to the low rate of heart diseases and the long life expectancy found in the Mediterranean population. Thus the aspect of health could be a good opportunity to develop the Atlantic Diet. The Atlantic Corridor specifically provides interesting opportunities to compare dietary intake patterns to important health consequences like cardiovascular disease, cancer, obesity, diabetes, and bone health.

- ***Third Area: Influence of the socio-economic and lifestyle factors on the Atlantic Diet***

The socio-cultural-economic aspects of the Atlantic Diet are high in terms of possible studies to be done. For instance, in the past, a lot of European Atlantic countries like Portugal, The Netherlands, United Kingdom, France and Spain owned colonies. These colonies provided the European countries with new ingredients and new dishes. It could be interesting to study these influences and their impact on the Atlantic Diet.

- ***Fourth Area: Study of the possibility for the transferability of the Atlantic Diet to other populations (long term)***

In the long term, if the studies with regard to the health consequences of the Atlantic Diet show advantages for the Atlantic Diet, a research concerning the transfer of the Atlantic Diet to other populations would be justified.

To summarize, the desired outcomes of the anticipated studies are described in Figure 13.

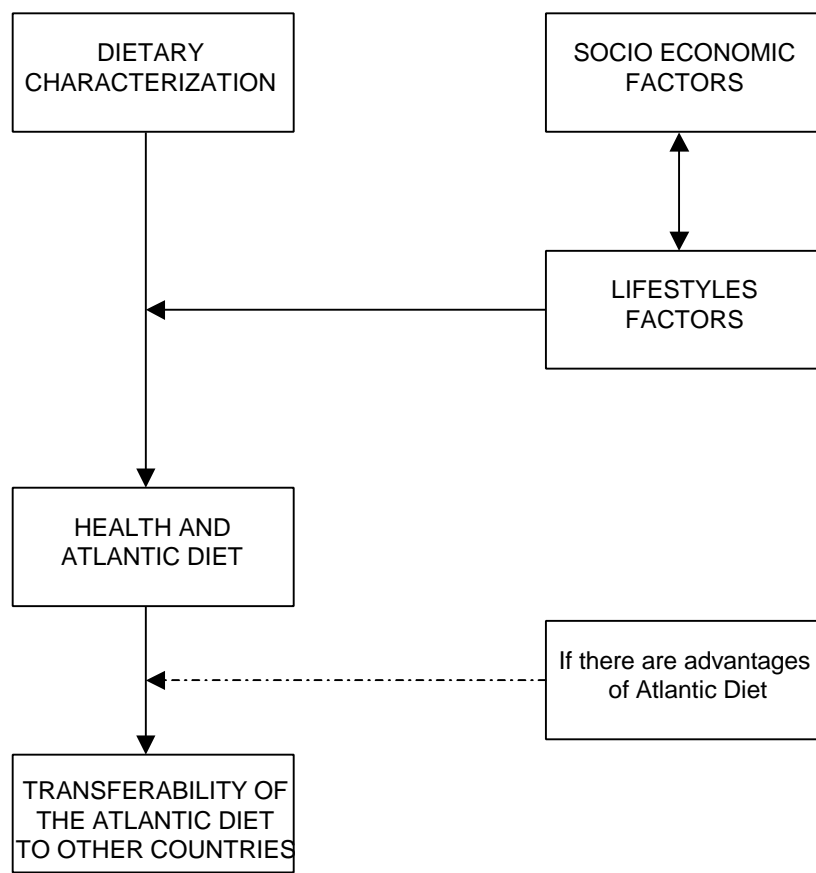


Figure 13 – Anticipated studies about the Atlantic Diet

## 2.3.2. Casa do Outeiro as an entertainment, cultural and educational site

### 2.3.2.1. Media Library

#### Objectives

- To act as a main source and archive of information regarding the Atlantic Diet, with good databases appropriate to different potential user groups: researchers, students, non scientist people, and children;
- To equip the Casa do Outeiro site with modern technologies.

## Description

This media library could contain different tools to learn and search information. Here are some suggestions of possible support areas for information:

- Library: scientific books, journals, etc;
- Computers: connection to Internet, educational software dealing with food, diet or health;
- Photo Library: negatives or photos on slides with the required viewing equipment;
- Video Library: televisions with a range of videos concerning different subjects connected to the Atlantic Diet.

The concept of this Media Library is to accumulate through the ages the highest number of documents dealing with the Atlantic Diet.

The users could be scientists as well as ordinary people who want to discover things in the Media Library. To attract the second kind of visitors, the Media Library should have some programs throughout the year that are promoted outside the Media Library. For instance, the films available on television could be related to the temporary exhibition in the Museum or could be on another theme, which changes quarterly.

### 2.3.2.2. Atlantic Food Museum

#### Objectives

- To learn about different historical aspects of the Atlantic Diet;
- To preserve the traditions, the differences and the culture of the Diets in the Atlantic countries in a period where all the diets become more homogenous;
- To make people aware of the culinary heritage of their country.

## **Description**

### **Themes**

On visiting this museum, visitors could see the evolution through the ages of numerous topics dealing with the food in the Atlantic Corridor. Some examples of possible themes are suggested:

- The evolution through the ages of:
  - Fishing,
  - Harvesting,
  - Food preservation,
  - Selling food products,
  - Food preparation,
  - Place and the role of meals in the family,
  - Role of food in the society and in the culture,
  - Food in the art;
  
- The role of European navigators and explorers in transferring food to different countries.

The themes could be organized in different areas. These exhibitions could be permanent or temporary and a function of the themes developed.

### **Support of information**

The instruments used to diffuse the information could be the following:

- Photos on the walls;
- Real objects displayed;  
Example: old harvest machine, fishing equipment, old packaging of food products, etc;
- Billboard with written information;
- Video films;
- Documentaries or games on computers.

## **Visitors**

The information contained in the museum could be accessible by the general public from scientists to non-scientists and adults to children.

In each area, different billboards should be utilized to enable every foreign visitor to understand: billboards written in Portuguese, English, and Spanish with billboards of drawings and schemes for the children.

Some guided visits could be organized for groups of students or associations.

### **2.3.2.3. Living Science Center**

#### **Objectives**

- To stimulate interest in sciences connected to the Diet, Nutrition and Health;
- To help people of all ages to increase their understanding of science;
- To provide an enjoyable learning experience through presenting scientific activities in an exciting and entertaining way;
- To encourage people to ask questions and search their own answers.

#### **Description**

Through use of interactive, 'hands-on' exhibits, demonstrations, and educational programming the Living Science Center could be a place which mixes education and entertainment.

The different activities and materials proposed in this center should be elaborated by a common work of scientists, educators and architects.

The concept of the Living Science Center is to involve visitors and encourage them to participate in the different activities.

Here are some examples of activities that could be developed:

- Living laboratory: view samples through microscopes, simple analyses of food or plants, etc;

- Experimental Miniature Field: learn the optimal conditions to stimulate plant growth, to plant seeds, etc;
- Puzzle reflecting the human dimension: develop the human digestive system through building the puzzle, etc;
- Computer games: different software connected to the food science;
- "Guess a smell": a game structured to guess the smell of an ingredient or a food before looking at it.

#### **2.3.2.4. Experimental Kitchen**

##### **Objectives**

- To preserve the culinary traditions of the Atlantic countries;
- To learn, "by doing", how to cook different typical plates which come from Portugal and from countries of the Atlantic Corridor;
- To taste the different Atlantic dishes;
- To have an opportunity to discover new dishes, tastes and smells.

##### **Description**

This activity could be conducted in the kitchen of the restaurant during closed hours of the restaurant in order to avoid building a kitchen.

Two kinds of culinary workshops could be organized:

##### **1. Training courses of cooking**

People who spend a weekend or holiday in the region could register to attend culinary courses at the Casa do Outeiro. In this case, their motivation of going to Casa do Outeiro would be to attend these culinary courses. They could have several lessons during the weekend or in the week. It could be an occasion for them to learn the way of cooking of foreign countries or the cooking of Portugal if they are not Portuguese.

## **2. Culinary workshop included in the visit of Casa do Outeiro**

If there are no lessons programmed, visitors of Casa do Outeiro could participate in a culinary lesson. In this case, a session should not be too long to permit a maximum of people to practice this activity. Visitors and the chef could prepare a dish together during 30 minutes to one hour and let the dish cook. Visitors who would have participated in the preparation of a dish could come back when the dish is ready to taste their dish in the restaurant/coffee shop.

In these two cases, culinary workshops should enable the visitors to participate in the elaboration of some typical dishes. Visitors should be the actors in the preparation of the dish. To this effect, the chef is responsible for managing and guiding the visitors in the preparation of the dish.

For this activity to succeed, the number of people admitted per session would need to be limited (not more than 15 persons) in order that everybody could participate and learn in good conditions.

### ***Dish themes***

There are a lot of possible themes that can be chosen for these culinary workshops. Here are some examples:

- 'The past': The traditional plates of Atlantic countries;
- 'The countries': The typical dishes of the Atlantic countries;
- 'Portugal' : Portuguese cuisine;
- 'Typical Atlantic ingredients': fish, meat, potatoes, etc;

### 2.3.2.5. European Food Village

#### Objectives

- To preserve and spread gastronomic traditions and practical ways of cooking characteristic of Portugal and other Atlantic countries;
- To show different food specialties, ingredients and eating habits of all the Atlantic countries through visiting a little village of national huts.

#### Description

A village of 10 little huts representing all the Atlantic countries could be built outside (or inside). On entering in a hut, visitors could discover a typical kitchen, which appear the typical ingredients and dishes eaten by the inhabitants of the country represented by the hut. The décor and elements should be in plastic or in another resistant material in order to preserve it. The different elements of the décor could be the following ones:

- A table on which there is a typical meal;
- Shelves with some food with a long life span (wine, food with packaging...);
- A refrigerator with fresh food;
- Walls decorated with photos (scenes of families at mealtime, landscapes of the country...).

Table 2 presents some examples of the ingredients and food that could be displayed in these huts.

Table 2 - Décor of the National Huts

HUTS	TABLES	SHELVES	FRIDGE	WALLS
<b>Norway</b>	Boiled potatoes with meatballs, wheat bread	Ham, onions	Milk, cheese, fish, beer	Photos showing some typical plates eaten in the past but nowadays forgotten, some billboards giving explanation about the traditional food  Photos showing some typical plates eaten in the past but nowadays forgotten, some billboards giving explanation about the traditional food
<b>Denmark</b>	Roast pork and gravy, glass of beer and rye bread	Flour, smoked pork, potatoes	Mustard and white sauce,	
<b>Netherlands</b>	Vegetables soup, potatoes with meat, boiled vegetables and gravy	Onions, cereal, bread	Milk, cheese, yogurts	
<b>United Kingdom and Ireland</b>	Roasted meat cooked in a oven with vegetables served with gravy, cup of tea	Apple pie, cakes, coffee	Milk, eggs, bacon	
<b>Belgium</b>	Fish soup, mussels with French fries, beer	Waffles, onion	Eel, cod, chocolates	
<b>France</b>	Bread, glass of wine, mussels, meat and vegetables	Cereal, garlic, jam, wine, garlic, onion, fruits	Salt butter, cheese, sweet pie	
<b>Portugal</b>	Soup, dish of cod with rice and French fries, glass of wine	Different kind of wines, box of tremoços, olive oil, garlic, fruits	Octopus, butter, eggs	
<b>Spain</b>	Grilled salmon with potatoes and beans	Ham, cookies, fruits, olive oil, sauce	Milk, juice, cheese	
<b>Iceland</b>	Rye bread, fish with potatoes	Smoked lamb meat, dry fish	Fresh cheese (skyr), butters	

For the children, games could be handed out at the entrance of the circuit. For instance, children would have to find some clues relating to food in each hut in order to solve an enigma. This is a way to entertain them and to encourage them to learn while having fun.

### 2.3.2.6. Atlantic Restaurant

#### Objectives

- To allow the visitors to discover the cuisine of different Atlantic countries, some typical Atlantic dishes and drinks;
- To be a service for members of the CEDA (visitors, employees and scientists) and for general visitors (e.g. inhabitants of the region, travelers who want to have a break during their trip, etc);
- To be a source of income.

#### Description

The visitors could choose their food among different menus like:

- Typical menu of Alto Minho region;
- Portuguese menu;
- "National menu" - specialties from the hors d'oeuvre to the dessert of one of the Atlantic countries.

A special menu connected with the theme of the current exhibitions or activities made in the Center could be elaborated during the exhibition.

The recipes of the specialties eaten and some information about the dish eaten (history, ingredients...) could be given to the consumer in the form of a brochure.

A special menu could be prepared for kids. Moreover, in order to enjoy the experience, a little 'learning-present' connected to the country of the meal that the child orders can be offered (e.g. games like crosswords).

### 2.3.2.7. Educational Food Garden for Children

#### Objectives

- To encourage children to have fun while discovering educational games dealing with topics connected to the food area;
- To provide a supervised area outside for children to play;
- To offer parents a free moment through the possibility of utilizing the child supervised play area.

#### Description

These games would have two purposes: entertain the children and allow them to discover new things.

Here are some examples of activities that could be installed in the garden:

- Toboggans, swings and other games in the form of fruits or vegetables;
- Cross a 'mini-bridge' under which there is a little basin with fish;
- Actual gardens of fruits and vegetables;
- A human dimension puzzle whose pieces are all the European countries.

Some Portuguese classes of children could come to the Casa do Outeiro to learn about Sciences connected to the Atlantic Diet. For this occasion, the garden could welcome more activities managed by educators. For instance different workshops of painting or music could be installed.

### 2.3.2.8. Coffee Shop

#### Objectives

- To provide a service for visitors offering them a place where they can rest and take a drink during the day;
- To be a revenue generator.

## Description

The Coffee Shop could be connected to the Atlantic Diet. Visitors could have the choice to order drinks and cookies typical of the different Atlantic countries. With this concept, the Coffee Shop is at the same time a service and a 'discovery' for the visitors.

### 2.3.2.9. Atlantic Food Shop

#### Objectives

- To enable visitors to buy souvenirs of their visit and to buy typical food products of the Atlantic countries;
- To be a revenue generator.

#### Description

The shop could sell different kinds of products:

- Souvenirs of the Casa do Outeiro visit (e.g. presents, tee-shirts, photos, books, cassettes, postal cards, etc);
- Objects dealing with the topics of the exhibitions and conferences held (e.g. scientific books about food or health accessible for everybody, educational games for children dealing with the themes hosted by the Casa do Outeiro, etc);
- Typical products of the region Alto Minho and Portugal;
- Typical products of the different Atlantic countries.

The international food products sold have the constraint of having a long shelf life. Indeed, fresh products of other countries cannot be sold because of problems of preservation. Nevertheless some typical products with a long shelf life can be sold (wine, bottled food, packaged cakes, etc).

## 2.4. Organizational model

Although different organizational models can be regarded, the one that is considered the most appropriate for revitalizing the Casa do Outeiro is the following:

**Project with two components:**

- the Centro Europeu de Dieta Atlântica managed by the Instituto Politécnico de Viana do Castelo and
- the Fundação Casa do Outeiro managed by Câmara Municipal de Paredes de Coura and other agents of local development, including IPVC, capable of converting the Casa do Outeiro into an entertainment, cultural and educational site.

The Centro Europeu de Dieta Atlântica – the Scientific Center – should be an initiative of the Instituto Politécnico de Viana do Castelo. IPVC should be the sole proprietor of CEDA and links with other European universities and R&D organizations should be promoted for the creation of a Scientific Committee or an Advisory Board, where the most important organizations should be represented by their most important scientists involved in studies in areas directly related with the issues with which CEDA will be concerned. The Scientific Committee should have a reasonably large number of elements to be able to include the most relevant organizations and scientists: 12 would be a number that can fulfill this objective while keeping the meetings possible to manage in an efficient way.

In a second phase, through this Scientific Committee it would be possible to consider the creation of an international association of universities and R&D organizations, a Network of Excellence (see Section 1.3.3) in the Atlantic Diet field, that could have its headquarters within the CEDA facilities in Paredes de Coura.

Concerning the Casa do Outeiro site as an entertainment, cultural and educational location, the management should be the responsibility of Câmara Municipal de Paredes de Coura and other agents of local development that could establish a Foundation for this purpose (Fundação Casa do Outeiro). Although Instituto Politécnico de Viana do Castelo should be one of the promoters, IPVC does not have the profile to carry this initiative on its own. Nevertheless, it can have an important role to play concerning the educational activities to be developed. Câmara Municipal de Paredes de Coura has the most suitable profile to assume the leadership role of this component of a global project to revitalize the Casa do Outeiro site. Other economic, social and cultural development agents in the Alto Minho Region that should be involved in the project are:

- Câmara Municipal de Viana de Castelo,
- Câmara Municipal de Ponte de Lima,
- Câmara Municipal de Valença,
- Câmara Municipal de Ponte de Barca,
- Câmara Municipal de Arcos de Valdevez,
- Câmara Municipal de Caminha,
- Câmara Municipal de Melgaço,
- Câmara Municipal de Monção,
- Câmara Municipal de Vila Nova de Cerveira,
- Associação de Municípios do Vale do Minho,
- Associação de Municípios do Vale do Lima,
- Conselho Empresarial do Vale do Lima,
- União Empresarial do Vale do Minho,
- Associação Empresarial de Caminha,
- Associação Empresarial de Monção.

The major advantages of the adoption of this model for revitalizing the Casa do Outeiro are:

- A stronger focus of Instituto Politécnico de Viana do Castelo in its core competences: the scientific and educational competences;
- A higher degree of autonomy of Instituto Politécnico de Viana do Castelo in the promotion and development of scientific activities;
- A clearer understanding of Instituto Politécnico de Viana do Castelo as the key promoter of a Network of Excellence of organizations in the Atlantic Diet field;
- A full exploitation of the Casa do Outeiro potential;
- The exploitation of the Casa do Outeiro site as a facility for economical, social and cultural development in the Region;

- A stronger involvement of the main economic, social and cultural development agents in the Alto Minho Region in the Casa do Outeiro project;
- A stronger integration of the project in the local and regional environment;
- A higher degree of awareness in the region, in the country and among the scientific community;
- A higher capacity of attracting resources for the project development and the development of its activities.

## 2.5. Management Structure

In terms of Management Structure, in order to assure an appropriate development of this initiative it is possible to define the following strategy:

The Casa do Outeiro site, although including two independent organizations (Centro Europeu de Dieta Atlântica and Fundação Casa do Outeiro), should be managed with an integrated perspective, with the use of common resources: facilities and staff. Both activities: i) scientific and ii) entertainment, cultural and educational, should be developed in a self sustained perspective, with continuous attention on the attraction and generation of income that would support the social, cultural, educational and scientific role that characterizes the missions of CEDA and of the Fundação Casa do Outeiro.

In the above mentioned context, the Fundação Casa do Outeiro should have a professional structure, with an Executive Director responsible for the general management of the Casa do Outeiro facilities and of the entertainment, cultural and educational components of the project. For the scientific component, Instituto Politécnico de Viana do Castelo should designate a Scientific Officer to manage the area. This Scientific Officer, in direct interaction and coordination with the Executive Director should assist in the definition of the scientific and educational components of Casa do Outeiro site as an entertainment, cultural and educational project.

This structure should have financial autonomy. The management activities should be carried out in accordance with plans of activities and budgets annually defined and approved by a Management Board, composed of IPVC representatives and members of the Fundação Casa do Outeiro. The scientific plan of activities and budget, proposed by the Scientific Officer, would be approved by the Instituto Politécnico de Viana do Castelo. The Executive Director should propose the plan of activities and the budget required to support the Casa do Outeiro entertainment, cultural and educational activities and general facilities maintenance. The Executive Director also has the following annual responsibility: i) develop and implement the marketing plan, ii) manage the activities, the facilities and the resources (including sub-contracts and contracts), iii) establish partnerships; iv) propose additional staff. Figure 14 shows a scheme of the Management Structure

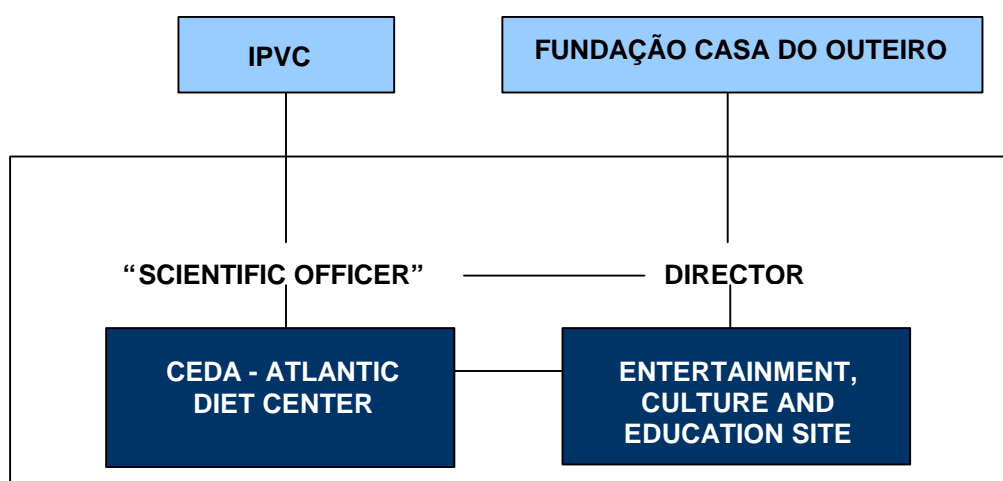


Figure 14 – Management Structure

## 2.6. Human Resources

Concerning the human resources, in order to assure proper support of the Centro Europeu de Dieta Atlântica and the Casa do Outeiro site, it is possible to define the following strategic guideline:

The Centro Europeu de Dieta Atlântica and Fundação Casa do Outeiro should have a limited number of human resources with highly qualified management staff in order to assure a high quality standard.

The Centro Europeu de Dieta Atlântica human resources are mainly those currently at the Instituto Politécnico of Viana do Castelo. A Professor of IPVC should become the Scientific Officer or, alternatively, a person with strong qualifications in the food area and management skills should be hired for this position. An administrative staff should also be hired although in a first phase it should be considered the option of sharing this person with the entertainment, cultural and educational activity areas.

Concerning the entertainment, cultural and educational activity areas, the Executive Director should be supported by one Assistant and one Administrative/Accounting. Additional staff is necessary to manage the different facilities/activities, ticket sales and the restaurant/coffee-shop. Table 3 presents a possible human resources structure for the Casa do Outeiro when opening and starting its activities.

Table 3 – Casa do Outeiro Human Resources Structure

AREA OF ACTIVITY	HUMAN RESOURCES
Management of Casa do Outeiro site – Entertainment, cultural and educational activities	1 Executive Director 1 Administrative
Management of the Scientific Center	1 Scientific Officer 1 Administrative
Media Library	1 Administrative <sup>a)</sup>
Atlantic Food Museum Living Science Center European Food Village	3 Managers, 1 for each of these activities <sup>b)</sup>
Educational Food Garden for Children	1 Managers
Experimental Kitchen	1 Chef <sup>c)</sup>
Atlantic Restaurant and Coffee-Shop	1 Chef and 3 employees working in the restaurant and in the coffee-shop <sup>d)</sup>  or Contract with external entities for the exploitation of these services
Atlantic Shop	1 person
Ticket office/entrance	1 person <sup>e)</sup>

- a) Can be the same Administrative mentioned in the management of the Scientific Center
- b) Can be reduced if video cameras are installed in the rooms and controlled from a central location
- c) Part-time, eventually working in the Restaurant
- d) The number of employees should be adapted according to changing needs
- d) Tickets could be sold in the Atlantic Shop. The person at the ticket office/entrance could be eliminated if an automatic entrance control is installed

The main responsibilities of the Management Structure, the Executive Director and Scientific Officer, can be described as the following:

#### **Executive Director**

- Elaboration of the activities plan for the entertainment, cultural and educational areas and support in their execution;
- Elaboration and management of the annual financial budget for the entertainment, cultural and educational activities of the Casa do Outeiro site and maintenance of all the facilities;
- Current management of the 5 entertainment, cultural and educational activities: the Atlantic Food Museum, The Living Science Center, The Experimental Kitchen, the European Food Village and the Educational Food Garden for children;
- General co-ordination of the services for the visitors: the Atlantic Restaurant, the Coffee Shop and the Atlantic Shop of the Casa do Outeiro site;
- Management of resources and contracts with regard to the Casa do Outeiro activities.

#### **Scientific Officer**

- Manage the Scientific Center;
- Establish partnerships and coordinate the network of partners;
- Manage the submission of National, European and International research proposals;

- Manage the scientific workshops;
- Organize the collection and dissemination of information;
- Manage resources and contracts related with the Scientific Center activities;
- Support the Executive Director in the elaboration of the plan of activities in the educational area and support in its implementation;
- Support the Executive Director in the elaboration and management of the annual financial budget for the educational activities;
- Manage the Media Library.

## 2.7. Physical Resources

The definition of the space per activity, both in terms of dimension and location, is crucial to make an appropriate exploitation of the existent space at the Casa do Outeiro site and to explore the opportunities to create unique environments for the different activities to be held in Casa do Outeiro.

The work presented in this section does not intend to be the final version to be implemented, but to create a detailed working basis in order to promote the discussion of solutions and the development of new ideas that will lead to determine the final space allocation plan. Figure 14 presents different views of the Casa do Outeiro site that would facilitate the visual perception of the physical spaces in the plans presented in Figures 15 and 16. The room numbers indicated in the legend of Figure 14 correspond with Figures 15 and 16.

The two proposals developed are presented in Figures 15 and 16. In order to facilitate a comparative analysis between the two proposals, Table 4 is included. In this table, the areas linked to the different activities, in both proposals, are also included.

The space available and its characteristics are very interesting for the different use of space required by the different activities. As it can be seen in Figures 15 and 16 and Table 4, the proposals presented are able to explore the potential of the Casa do Outeiro site and the solutions achieved are well balanced and able to create different areas with environments adequate for its specific use.





Figure 15 a) – Plan of Casa do Outeiro – ground floor: Proposal No. 1

Figure 15 b) – Plan of Casa do Outeiro – 1<sup>st</sup> floor: Proposal No. 1

Figure 16 a) – Plan of Casa do Outeiro – ground floor: Proposal No. 2

Figure 16 b) – Plan of Casa do Outeiro – 1<sup>st</sup> floor: Proposal No. 2

Table 4 – Comparative analysis of the proposals for space allocation according to the different activities

	PROPOSAL No. 1	AREA (m <sup>2</sup> )	PROPOSAL No. 2	AREA (m <sup>2</sup> )
<b>Scientific Center</b>	Positioned in the 1st floor of the house, becomes a more calm place. It presents several divisions well illuminated that will give place to excellent work offices, where scientists could do their studies.			
	(-) without a big room	124	(+) more space (+) room for workshops	215
<b>Media Library</b>	(-) smaller (+) more peaceful (+) direct connection with the Scientific Center (+) more natural light (+) separate entrance	59	(-) windows very small, not much natural light (-) more noise due to the activities (+) more space	98
<b>Atlantic Food Museum</b>	It will occupy the more noble rooms of the house that will be reconstructed, and a museum is the most optimal function. It is a space with several divisions favoring the exhibition of different subjects.			
		214	(+) one more room	259
<b>Living Science Center</b>	Situated on a less illuminated space on the ground floor of the house, because it's an activity that doesn't need much natural light.			
	(-) separate rooms, problem to check entrances (-) small rooms (+) located at the entrance, more strategic	94	(+) continuous rooms, better control (+) more space	117
<b>Experimental Kitchen</b>	Positioned near the restaurant's kitchen in order to use it during closed hours of the restaurant.			26
<b>European Food Village</b>	Can be exterior or interior. Exterior it will have to construct little huts characteristic of each country, while if it is interior it will use the spaces already existent.			
	(-) not much light (+) nice during all the year (+) more economic	259	(-) unpleasant in bad weather days (-) more costly (+) more attractive, more pretty	Open air
<b>Atlantic Restaurant</b>	It's a very spacious, illuminated room. It has enough space to construct a kitchen, a store room and a bath room that will be used by the clients of the restaurant and the Coffee Shop. Far away from the other activities, it is very accessible to people who come to the Casa do Outeiro just to have a meal.			213
<b>Educational Food Garden</b>	It's the most appropriated location for the children to play, it has a lot of trees that provide shadows during the hotter days and it's a very spacious place.			Open air
<b>Coffee Shop</b>	Located in the old kitchen of Casa do Outeiro to preserve the characteristics of this space. It will be a very welcoming and interesting place. It will have a terrace with a great view to the surroundings and the Educational Food Garden where parents could pass very pleasant moments watching their children play. As occurs with the Atlantic Restaurant, the Coffee Shop has a single entrance that is free for everyone.			106
<b>Atlantic Food Shop</b>	Located near the entrance/exit to attract all visitors.			38

	PROPOSAL No. 1	AREA (m <sup>2</sup> )	PROPOSAL No. 2	AREA (m <sup>2</sup> )
<b>Management Building</b>	(+) with natural light (+) positioned in the center of the Casa do Outeiro facility (+) more peaceful	45	(-) without windows, not much natural light (-) noise from the entrance	61
<b>Residence/Rooms</b>	Spacious location that allows the construction of several rooms, reserved because is situated far away from the entertainment activities of the site.			119
<b>Ticket Office</b>	Located at the entrance, it is the first place where people will be oriented.			
	(-) without own location (+) if it's in the Atlantic Food Shop doesn't need employee	---	(+) with own space (+) strategic place to give information about the site and to influence people to buy tickets	36
<b>WC</b>	(+) WC at the entrance/exit (+) good distribution	94	(-) bad distribution	103

## 2.8. Partnerships

The strategic guidelines concerning the partnerships of the Centro Europeu de Dieta Atlântica and the Fundação Casa do Outeiro can be expressed as the following:

The CEDA and Fundação Casa do Outeiro should develop strong partnerships within different organizations. To reach this objective:

- The CEDA would have to establish a relevant network of scientific organizations interested in working in areas connected to the Atlantic Diet,
- The Fundação Casa do Outeiro would have to establish partner relationships with Portuguese and international institutions providing the same activities found at the Casa do Outeiro site and
- Both organizations would have to manage the partnerships established through a strategic policy giving advantages to all the entities of each partnership.

Regarding the partners of the CEDA, organizations such as the following should be identified:

- Scientific and technologic organizations in the food and nutritional sector in all the Atlantic Corridor;

Regarding the partners of the Fundação Casa do Outeiro, different kinds of organizations can be identified:

- Economic, social and cultural development agents in the Alto Minho Region;
- International cultural organizations providing some similar services to the Casa do Outeiro: Museums and Living Science Centers.

For each of these groups, some examples are provided.

### ***Scientific and technologic organizations in the food and nutritional sector in all the Atlantic Corridor***

*R&D Centers and Universities:* The CEDA needs to be connected to relevant R&D Centers and Universities to play its role of networking. These R&D Centers and Universities will provide scientific staff to help the CEDA to define the strategic studies relevant and will carry out the research dealing with the Atlantic Diet.

In Annex I, is presented a list of R&D Centers and Universities which participated in European projects related to food, nutrition and health research that are potentially interesting partners to be considered by CEDA. This list was established with a database of the European Community (CORDIS) that provides the entities actually involved in scientific projects dealing with food, health or nutrition at the European level.

### ***Economic, social and cultural development agents in the Alto Minho Region***

A list of these potential agents were enumerated in Section 2.4., when discussing the best model for the project, particularly in what is concerned with the Casa do Outeiro site as an entertainment, cultural and educational location.

### ***International organizations in the cultural and educational sector***

The organizations listed below are examples of possible partners and are not all from a European Atlantic country. It would be interesting to have contacts with them due to the similar activities to the

future Casa do Outeiro site. For instance, a visit of several of them could be very relevant to see what exists abroad.

### **Museums**

- The International Council of Museums - ICOM ([www.icom.org](http://www.icom.org));  
The ICOM is dedicated to the development of museums and the museum profession, and operates globally for the preservation of cultural heritage. Committed to the promotion and facilitation of professional cooperation, ICOM is a worldwide network for museum professionals of all disciplines and specializations;
- Le Musée de l'Alimentation – Fondation Nestlé Alimentarium ([www.regart.ch/alimentarium](http://www.regart.ch/alimentarium));
- COPIA - The American Center of Wine, Food and the Arts, USA ([www.americancenter.com](http://www.americancenter.com));
- The Food Museum, USA ([www.foodmuseum.com](http://www.foodmuseum.com));
- Exploratorium, USA ([www.exploratorium.edu](http://www.exploratorium.edu));
- Experimentarium, Denmark ([www.experimentarium.dk](http://www.experimentarium.dk)).

### **Living Science Center**

- Visionarium, Portugal ([www.visionarium.pt](http://www.visionarium.pt));
- La Vilette: Cité des Sciences et de l'Industrie, France ([www.cite-sciences.fr](http://www.cite-sciences.fr));
- The Great Lake Science Center, USA ([www.glsc.org](http://www.glsc.org));
- The Imaginarium Science Discovery Center, USA ([www.imaginarium.org](http://www.imaginarium.org));

## **2.9. Price Strategy**

This section is dedicated to identifying different activities that could be a source of revenue for the Casa do Outeiro site in what is related to the entertainment, cultural and educational activities. There

is also an approach towards the strategy for identifying prices to be established. Table 5 here below shows the activities that generate income for the site.

Table 5 – Activities that can generate income

CONDITION OF ENTRANCE	ACTIVITIES OR SERVICES	INCOME
<b>Free Entrance</b>	- Atlantic Restaurant - Coffee Shop - Atlantic Food Shop	Yes
	- Media Library	No
<b>Paying Entrance</b>	- Atlantic Food Museum - Living Science Center - Experimental Kitchen - European Food Village - Educational Food Garden for Children	Yes

The price strategy depends on what types of people are expected to visit the Casa do Outeiro site. Different types of visitors can be anticipated:

- Visitors who are interested in visiting the entire Casa do Outeiro and doing all the activities proposed. In this case, they could buy a ticket that would give them access to all the activities;
- Visitors who come to Casa do Outeiro in order to take advantage of a particular activity. In this case, the price should depend on the activity considered:
  - Educational Food Garden for Children:

The price policy should be inexpensive entrance fee to access this garden. Comparing to the other activities, children could come several times a week or a

month to do this fun filled activity. If the price is high, parents will not bring their children often.

Moreover, as the children are supervised by a childcare professional, parents could go to the coffee-shop, which is an income generated indirectly by the children garden.

- Experimental Kitchen:

As it was previously described (see Section 2.3.2.4), classes could be organized for tourists or Portuguese people to enable them to learn how to cook different dishes. In this case, they would pay a specific price that just allows them to attend culinary courses.

- The other activities:

If people come to learn about the Atlantic Diet and to be entertained, they will probably want to explore all the activities. Nevertheless, if visitors just want to do one of these activities, they could have the possibility to buy a ticket valued for the specific activity. The price of this ticket should not be the all-inclusive price divided by the number of activities. It should be more expensive and proportionally priced in order to encourage people to buy the all-inclusive ticket.

### ***Determination of the different entrance prices***

The prices of the different activities will be adjusted in accordance with the costs of the activities and the approximate number of visitors. In Annex II, a table is presented containing the prices of some Portuguese museums and “living museums” to help in the identification of the prices for the Casa do Outeiro site. It shows the price practices in Portugal for similar activities to the Casa do Outeiro site. Some discounts should be available for different kinds of people. Table 6 presents a proposal concerning the type of visitors.

Table 6 - Examples of discounts associated to types of visitors

ACTIVITY	TYPES OF VISITORS RECEIVING DISCOUNT PRICES
All Activities: All-inclusive Price	<ul style="list-style-type: none"> <li>- Children and old people</li> <li>- European Students</li> <li>-School Groups</li> <li>-People of the region</li> <li>-Groups, Associations (Retired people...)</li> </ul>
Educational Food Garden for Children	<ul style="list-style-type: none"> <li>-School Groups</li> <li>-Children of the town or of the Alto Minho region</li> </ul>
Experimental kitchen	<ul style="list-style-type: none"> <li>- Groups, Associations</li> </ul>
One of the following activities: <ul style="list-style-type: none"> <li>- Atlantic Food Museum</li> <li>- Living Science Center</li> <li>- European Food Village</li> </ul>	<ul style="list-style-type: none"> <li>- Children and old people</li> <li>- European Students</li> <li>-School Groups</li> <li>-People of the region</li> <li>-Groups, Associations (Retired people...)</li> </ul>

### **3. THE IMPLEMENTATION OF THE CENTRO EUROPEU DE DIETA ATLÂNTICA AND FUNDAÇÃO CASA DO OUTEIRO**

#### **3.1. Implementation steps**

The implementation and development of the CEDA and Fundação Casa do Outeiro over the next four years can be described in three main phases:

- Pre-Installation;
- Installation;
- Development.

The actions to develop in these three phases are detailed in this section and the implementation schedule for these steps is presented in Table 7.

##### **3.1.1. Pre-Installation**

In this first phase, the following activities should be completed:

- Presentation of the project to economic, social and cultural development agents in the Alto Minho Region;
- Negotiation with the potential members of the Fundação Casa do Outeiro to be created;
- Definition of the status of entities supporting the Casa do Outeiro site – entertainment, cultural and educational component;
- Definition and creation of the organizations;
- Recruitment/selection of the first collaborators - The Executive Director and the Scientific Officer.

### 3.1.2. Installation

In this stage several aspects of the installation of the CEDA and the Fundação Casa do Outeiro should be considered. The renovation required at the Casa do Outeiro site and the installation of the necessary equipment would be completed. During this period of work, the two executives would have to develop the first tasks for the implementation of the activities, which will be located at the Casa do Outeiro site.

Below, are the different steps in this stage of installation for each activity. Table 7, describes the implementation schedule for these steps.

#### 3.1.2.1. CEDA

- Establishment of the Research Program for the Atlantic Diet. A small Expert Group of Food, Nutrition and Health professionals should be brought together to discuss and develop a general research strategy appropriate to the Atlantic Diet. This same group could become the Scientific Committee of an International Conference in Atlantic Diet to take place when the Casa do Outeiro site starts its activities, becoming the opening event.
- Identification of the equipment needed especially for the Media Library and the Scientific Center.
- Definition of the organization of the scientific activities - Once the scientific Research Program is established, the Scientific Officer would be able to begin to implement the different scientific activities.
- Identification of the strategic entities and researchers committed to realize the scientific studies. The list of potential partnerships (Annex I) would help to find these relevant organizations. This activity is intended to build a scientific network initiated in this stage but the research of partners would always been necessary to achieve the scientific studies. The participation of these organizations in the Atlantic Diet International Conference would be a key opportunity to select among them the most interesting organizations to participate in an Atlantic Diet Network of Excellence.
- Examination and exploration of the direction and method for establishing the required relationships to build a solid network of scientific research dealing with the Atlantic Diet. During the International Conference in Atlantic Diet, working groups could be organized

in order to promote the discussion of the future steps and strategy to develop the studies concerning the Atlantic Diet.

### **3.1.2.2. Fundação Casa do Outeiro**

The ideas related to the entertainment, cultural and educational activities of the Casa do Outeiro site, would be detailed. Internal detailed discussions involving the IPVC, Câmara Municipal de Paredes de Coura and the other economic, social and cultural development agents of the Region interested in the project should take place. The inputs from external individuals should be considered and the invitation or visit to some of the “living museums” mentioned in Section 2.8 might be opportune. For each activity, the main steps of implementation are discussed below.

#### ***Atlantic Food Museum and Living Science Center***

- Visits of other Museums connected with food or health and Living Science Centers - These visits would enable the executives to see firsthand what exists abroad and how these activities are organized. This could be a good source of relevant additional ideas to apply to the Casa do Outeiro site. In Section 2.8 are suggested Museums connected with Food and Living Centers interesting to visit;
- Identification of the strategy and the organization of the Atlantic Food Museum and the Living Science Center with the executive in charge of this activity and with other specialists in the field of Museums and Sciences;
- Apply to the concurs *Ciência Viva* of the Ministério da Ciência e da Tecnologia in order to have subventions for the activity Living Science Center. All the details concerning the application can be found in the following web-site:  
<http://www.cienciaviva.mcp.pt/concurso/informacoes;>
- Definition of the space arrangement for the Museum and the Living Science Center with the support of an architect;
- Definition of the different themes exposed in the two activities with the collaboration of scientists from IPVC;

- Research of partnerships to provide the scientific information that could be exhibited in the Museum (nutritionists, doctors, sociologists, etc). The information should be conveyed at a level that could be understood by the general public;
- Identification of the equipment needed for this activity and especially the different supports of information and the “hands-on” exhibits of the Living Science Center;
- Research of providers for the equipment needed;
- Acquisition of the equipment.

### **Experimental Kitchen**

- Develop the strategy and the organization of the Experimental Kitchen and its integration with the activity of the Atlantic Restaurant;
- Identify a chef who would work part time or full time for the experimental kitchen;
- Define the different themes and programs of culinary courses that could be taught to the visitors;
- Research relevant partnerships for the Experimental Kitchen. For instance, partnerships between the Fundação Casa do Outeiro and a National and European culinary school could be established. The idea of this partnership is to bring some students to the Casa do Outeiro site to give lessons in cooking for the visitors.

Advantages for the students of the cuisine schools:

- To focus on the tradition of their countries in the preparation of the dishes;
- To receive experience cooking for the visitors and showing their know-how.

Advantages for the Casa do Outeiro:

- To give an additional cross-culture feeling to the Casa do Outeiro experience;
  - To develop awareness of the Atlantic Diet within the cooking profession;
  - To profit by the experience of different foreign cooking students.
- Establish partnerships with the inhabitants of the Alto Minho who practice rural tourism. Agreements between the Fundação Casa do Outeiro and rural tourism hotels could be

established providing benefits to the two entities. Tourists who stay in the region in a rural tourist hotel could have this activity of Experimental Kitchen suggested by the tourist hotel. Inversely, visitors who are interested in the training culinary lessons at Casa do Outeiro site could be directed to the rural tourism hotels as a place to stay during their lessons. These collaborations would generate Casa do Outeiro visitors and would strengthen the notion of tradition to the Casa do Outeiro experience.

### ***Atlantic Restaurant, Coffee Shop and Atlantic Food Shop***

As described before, two ways of managing these three activities and services can be envisaged. The main steps of implementation for these two scenarios are described below:

#### ***Option 1 - Management by an external entity***

- Definition of the strategy and the rules for the cooperation between the Fundação Casa do Outeiro and the exploiting entity;
- Research and selection of the external entities for the exploitation of the Atlantic Restaurant, the Coffee Shop and the Atlantic Food Shop;
- Allocation of the space at each of the three locations with an architect;
- Definition of the equipment needed - For the restaurant, this work would be done taking into consideration the needs of the Experimental Kitchen, in order to build a kitchen that is appropriate to the two activities;
- Acquisition of the equipment needed.

#### ***Option 2 - Activities entirely managed by the Fundação Casa do Outeiro***

- Identification of the strategy and the organization of these three activities;
- Research and selection of the employees needed to ensure the ongoing success of these three activities;
- Allocation of the space at each of the three locations with an architect;

- Definition of the equipment needed - For the restaurant, this work would be done taking into consideration the needs of the Experimental Kitchen, in order to build a kitchen that is appropriate to the two activities;
- Acquisition of the equipment needed;
- Research for the food and merchandise suppliers for the shop.

### **Educational Food Garden for Children**

- Identification of the strategy and organization of the Educational Food Garden for Children activities;
- Study of the legislative constraints concerning the installation of the entertainment activities involving children;
- Definition of the materials needed with specialist of outside activities for children;
- Acquisition of the material needed.

### **European Food Village**

- Identification of the strategy and the organization of the European Food Village activities, with the assistance of specialists in the field of nutrition;
- Definition of the space arrangement for the different huts;
- Definition of the huts decoration and equipment needed for this activity;
- Research of suppliers for the objects inside the huts and for the other equipment needed;
- Acquisition of the equipment;
- Identify a company qualified to build the huts and to install the equipment.

### **3.1.3. Development**

The Casa do Outeiro will open its doors when the entertainment activities will be available for visitors. The activities required at this stage of development are the following ones:

- Recruitment of new employees for the functioning of the site (Table 8);
- Opening of the entertainment activities at the site;
- To make corrections and adjustments to the activities as they are introduced;
- Beginning of the scientific planning elaborated by the experts in the installation stage.

Table 7 - Schedule for the different implementation steps

STEPS OF IMPLEMENTATION	Year 1	Year 2	Year 3	Year 4
<b>1- PRE-INSTALLATION</b>	■			
<b>2 – INSTALLATION</b>		■	■	
<b>Scientific Center</b>				
Establishment of the research program for the Atlantic Diet		■	■	
Identification of the equipment needed		■		
Definition of the organization of the scientific activities		■	■	
Identification of the scientific entities to contact for partnerships		■	■	
<b>Museum and Living Science Center</b>				
Visit to foreign and Portuguese museums and Living Centers		■		
Definition of the organization and strategy of these activities with specialists		■		
Definition of the space arrangement			■	
Definition of the different themes exhibited			■	
Research for providers of the information disseminated in the two activities			■	
Identification, research and acquisition of the equipment needed			■	
<b>Experimental Kitchen</b>				
Definition of the organization and strategy of this activity		■		
Identify a chef for the management		■		
Define the culinary themes and programs			■	
Research of partnerships (cuisine schools, rural tourism houses of the region, etc)			■	

STEPS OF IMPLEMENTATION	Year 1	Year 2	Year 3	Year 4
<b>Restaurant, Shop, Coffee Shop</b>				
<i>Option 1 - Management by an external entity</i>				
Definition of the cooperation with an external entity				
Research and selection of the external entity				
Definition of the space arrangement				
Definition and acquisition of the equipment needed				
<i>Option 2 - Management by the Fundação Casa do Outeiro</i>				
Definition of the organization and strategy for these activities				
Research of providers for the food and merchandise (for the shop)				
Definition of the space arrangement				
Research and selection of employees				
Definition and acquisition of the equipment needed				
<b>Educational Food Garden for Children</b>				
Definition of the organization and strategy of this activity				
Study of the legislative constraints				
Definition and acquisition of the equipment needed				
<b>European Food Village</b>				
Definition of the organization and strategy of this activity				
Definition of the space arrangement for the different huts				
Definition of the huts decoration and equipment				
Research and acquisition of the equipment and the huts				
<b>3 – DEVELOPMENT</b>				

Table 8 – Evolution of the Human Resources

	PRE-INSTALLATION	INSTALLATION	FIRST YEAR OF DEVELOPEMNT
<b>Management of the Casa do Outeiro site – Entertainment, cultural and educational activities</b>	1 Executive Director	1 Executive Director 1 Administrative	1 Executive Director 1 Administrative
<b>Management of the Scientific Center</b>	1 Scientific Officer	1 Scientific Officer 1 Administrative	1 Scientific Officer 1 Administrative
<b>Media Library</b>	---	---	1 Administrative <sup>a)</sup>
<b>Atlantic Food Museum Living Science Center European Food Village</b>	---	---	3 managers, 1 for each of these activities <sup>b)</sup>
<b>Educational Food Garden for Children</b>	---	---	1 manager
<b>Experimental Kitchen</b>	---	---	1 Chef <sup>c)</sup>
<b>Atlantic Restaurant and Coffee-Shop</b>	---	---	1 Chef and 3 employees working in the restaurant and in the coffee-shop <sup>d)</sup>  or Contract with external entities for the exploitation of these services
<b>Atlantic Shop</b>	---	---	1 person
<b>Ticket office/entrance</b>	---	---	1 person <sup>e)</sup>

<sup>a)</sup> Can be the same Administrative mentioned in the management of the Scientific Center

<sup>b)</sup> Can be reduced if video cameras are installed in the rooms and controlled from a central

<sup>c)</sup> Not in full-time, eventually working in the Restaurant

<sup>d)</sup> The number of employees should be adapted according to the growth of the needs

<sup>e)</sup> Tickets could be sold in the Atlantic Shop. The person on the ticket office/entrance could be eliminated if an automatic entrance control is installed

### **3.2. Promotion Actions**

The CEDA and Fundação Casa do Outeiro will need to carry out a promotional campaign with the following main objectives:

- To disseminate information about the CEDA;
- To attract visitors to the Casa do Outeiro;
- To create notoriety and fame of the CEDA and the Casa do Outeiro, their services and its activities;
- To create the loyalty of the visitor, especially for the Atlantic Restaurant, Coffee Shop and Educational Food Garden for Children.

The target of the promotional activities are the potential visitors of the Casa do Outeiro, the European scientists who could be interested to work with the CEDA and to establish a Network of Excellence and all institutions that could be potential founders or partners of CEDA.

Some actions could be intended to promote the CEDA and the Casa do Outeiro in general and others could be intended to advertise specific activities.

#### **3.2.1. Promotion of the CEDA and the Casa do Outeiro site**

##### ***Brochure for the potential founders***

In the pre-installation stage, potential founders and partners should be informed about the project to revitalize Casa do Outeiro. A brochure is an excellent way to present this kind of information during the pre-installation period.

##### ***Web Site***

A web site with general information concerning the Casa do Outeiro site and the CEDA should be developed. The appropriate moment to put it on-line is the opening of the Casa do Outeiro when all the activities will be available.

### ***Tourism Office***

One brochure promoting the activities of the Casa do Outeiro should be prepared for the tourists. This brochure should be made available in the tourism offices of the towns of the Alto Minho Region, other regions of Portugal and some regions of Spain (e.g. Galicia).

### ***Journals***

There are different kinds of press in which some advertisements of the CEDA and the Casa do Outeiro could be placed: daily national press, daily regional press, periodic specialized press (health, nutrition, family, food) and free press. Press releases should be prepared for the International Conference on Atlantic Diet, for the opening of the Casa do Outeiro site and every major event to be held or organized by CEDA and the Fundação Casa do Outeiro. For the Casa do Outeiro's opening day, founders and major Portuguese personalities such as mayors, the Minister of Science and Technology, the Minister of Culture and others related with science and culture should be invited.

### ***Television and Radio***

These advertisement channels are efficient but more expensive than the others. If the CEDA and Fundação Casa do Outeiro have enough money to realize a promotional campaign, this would be a good way to stimulate interest within the Portuguese people to visit the Casa do Outeiro.

## **3.2.2. Promotion by services**

### ***Scientific Center***

Mailers with brochures - The mailer is not an appropriate mean of reaching the target groups of the entertainment, cultural and education activities because the potential visitors are not identified and are too numerous. But this method fits very well with the promotion of the scientific activities. Indeed, a mailer including a brochure of the Scientific Center of Casa do Outeiro site could be sent to the universities and other organizations dealing with nutrition and health. The development of the International Conference in Atlantic Diet could be an interesting starting point for this promotion.

### ***Atlantic Restaurant***

It is easy to promote the restaurant by providing a brochure at the entrance or by advertising on billboards inside the facility. The problem is to attract people who do not intend to come to the Casa do Outeiro for its scientific and entertainment dimension. The restaurant should invite some people who work for tourism or culinary guides in the different Atlantic countries in order to develop advertising through articles in some culinary guides. The dissemination through Tourism offices in the region and local advertisement should also be explored.

### ***Activities accessible to children (Living Science Center, Museum, Educational Food Garden, European Food Village)***

Mailers intended for the schools of the Alto Minho Region - In order to encourage class visits to the Casa do Outeiro site, some discounts for the entrance of student groups could be proposed. The contacts with the school boards should be a key element in the strategy of attracting this specific target group of visitors. This also has the advantage of increasing visits during weekdays, when less visitors are expected when compared with the weekends.

### ***Experimental Kitchen***

Brochures to the tourism offices and rural tourism hotels of the region - The aim of this action is to encourage tourists (Portuguese and foreigners) who are spending a few days in the region to experience the activities of the Experimental Kitchen.

All these actions described hereunder would be developed in a strategic moment of the life of the CEDA and Casa do Outeiro site. Table 9 describes the schedule of these different promotional actions.

Table 9 - Schedule of the promotional actions

STEPS OF IMPLEMENTATION	Year 1		Year 2		Year 3		Year 4	
	PRE	INSTALLATION		DEVELOPMENT				
<b>Promotion of the CEDA and Casa do Outeiro site</b>								
Brochures for potential founders								
Web site								
International Conference on Atlantic Diet Inauguration of the site								
Journals								
Tourism Office								
<b>Scientific Activities</b>								
Mailers to potential partners								
<b>Restaurant</b>								
Contact with culinary guides								
<b>Activities for Children</b>								
Mailers to schools								
<b>Experimental kitchen</b>								
Mailers and brochures to tourism rural hotels								

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- The Imaginarium Science Discovery Center, USA - <http://www.imaginarium.org>
- The International Council of Museums - <http://www.icom.org>
- Visionarium, Portugal – <http://visionarium.pt>

## **ANNEXES**

**ANNEX I – Examples of Universities and R&D organizations involved in European projects in food related areas**

COUNTRY	ORGANIZATION	TYPE OF ORGANISATION	AREAS
<b>Norway</b>	NORCONSERV Department: Institute of Fish Processing and Preservation Technology	Research	Food
	Universitetet i Bergen [The University of Bergen] Department: The Department of Public Health and Primary Health Care	Research Education	Health
	University of Tromsøe Department: Dept of Medical Physiology/Inst.of Medical Biology Faculty of Medicine	Research Education	Health
	Agricultural University of Norway Department of Economics and Social Sciences	Research Education	Food Health Agriculture
	Danish Agricultural Council	Industry	Food Agriculture
<b>Denmark</b>	The Royal Veterinary and Agricultural University Department of Dairy and Food Science	Research Education	Food Nutrition Agriculture
	University of Southern Denmark	Research Education	Health
	TNO - Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO Corporate Communications Department	Research	Nutrition Food Prevention and health
<b>Netherlands</b>	Agrotechnological Research Institute ATO B.V. Marketing & Communicatie	Research	Food Agriculture
	Maastricht University	Research Education	Food
	The Graduate School VLAG, Wageningen Agricultural University	Research Education	Food Agriculture
	University of Utrecht (UU)	Research Education	Food

COUNTRY	ORGANIZATION	TYPE OF ORGANISATION	AREAS
<b>United Kingdom</b>	Central Science Laboratory Department: Food Safety and Quality Cellular and Molecular Sciences	Research	Agriculture Food
	Rowett Research Institute  Department: Gut Microbiology and Immunology	Research	Human nutrition
	Institute of Food Research	Research	Food
	FRPERC, University of Bristol	Research	Food
	Food Science and Technology Research Centre  Department: Food Physics	Research	Food
	University of Plymouth Department: Applied Food Research Faculty of Land, Food and Leisure	Research Education Technology transfer	Food Nutrition Agriculture
	University of Reading  Department: Food Science and Technology	Research Education	Food
	Manchester Metropolitan University Food and Consumer Technology Department	Research Education	Food
	<b>Belgium</b>	Test-Aankoop  Department: Testing and research	Other
European Commission Joint Research Centre-IRMM		Research	Food
Katholieke Universiteit Leuven Department of Agro-Engineering and Economics		Research Education	Food Agriculture
University of Antwerp		Research Education	Food

COUNTRY	ORGANIZATION	TYPE OF ORGANISATION	AREAS
France	Archimex	Research	Food Health
	ECOZEO	Research	Agro-food
	Institut Pasteur de Lille Department: Water and Environment	Research Education	Food Health
	Institut National de la Recherche Agronomique	Research	Food Agriculture
	ENSAIA Ecole National Supérieure d'Agronomie et des Industries Agroalimentaires	Research Education	Food Agriculture
	ENSBANA Ecole National Supérieure de Biologie Appliquée à la Nutrition et à l'Alimentation	Research Education	Food Nutrition Health
	ENSIA Ecole Nationale Supérieure des Industries Agricoles et Alimentaires	Research Education	Food Agriculture
	ENITIA Ecole Nationale des Ingénieurs des Techniques des Industries Agricoles et Alimentaires	Research Education	Food Agriculture
Portugal	INETI Department: Biotechnology	Research	Food
	Universidade de Aveiro [University of Aveiro]	Research Education	Food Nutrition Health
	Universidade de Trás-os-Montes e Alto Douro	Research Education	Food
	Escola Superior de Biotecnologia [Portuguese Catholic University]	Research Education	Food Biotechnology

COUNTRY	ORGANIZATION	TYPE OF ORGANISATION	AREAS
<b>Spain</b>	Instituto Tecnológico de Aragón	Research	Food
	Instituto de Agroquímica y Tecnología de Alimentos (IATA)	Research	Food
	Consejo Superior de Investigaciones Científicas Department: Instituto de Estructura de la Materia	Research	Food Nutrition Health
	Universidad Miguel Hernandez Department: Departamento Salud Publica	Research Education	Diet/ nutrition Food Health
	CENEMES - Universidad de Alicante OTRI	Research Education	Food
	Universidad de Cadiz Department: Office for European Programmes Vicerrectorado de Investigacion	Research Education	Food Health
	University of Granada Department: Pharmacology	Research Education	Food Health
	Escuela Andaluza de Salud Publica (EASP)	Research Education	Health
	<b>Iceland</b>	Technological Institute of Iceland Department: Chemistry and Environmental Department	Research
Environmental and Food Agency of Iceland		Research	Food
University of Iceland Department of Food Science		Research Education	Food Nutrition Public health
University of Akureyri		Research Education	Food

COUNTRY	ORGANIZATION	TYPE OF ORGANISATION	AREAS
<b>USA</b>	Oldways	Information Education	Food Health Nutrition
	National Cancer Institute	Research	Health
	The Produce for Better Health Foundation	Information	Health Prevention
	American Institute for Cancer Research	Research	Health Diet Nutrition
	American Heart Association	Information Education	Health Prevention
<b>International</b>	World Health Organization	Management Assistance Information	Health Prevention
	Food and Agriculture Organization	Information Assistance	Food Agriculture Nutrition

## ANNEX II – Prices of some Portuguese Museums and “living museums”

MUSEUM	PRICE	OPENING HOURS
MUSEU DO CARRO ELÉCTRICO DO PORTO	Entrance - 350\$00 Child (4-12, inclusive) - 175\$00 More than 65 years - 250\$00 Family - 1000\$00 Scholar and 3 <sup>rd</sup> age groups (each person) - 150\$00	Tuesday to Sunday - 09h30 - 13h00 and 15h00 - 18h00 Close at – Monday
PALÁCIO NACIONAL DE SINTRA	Entrance - 600\$00 Discount of 60% - “Cartão jovem” Discount of 50% - youngs between 15 and 25 years, retired people and older than 65years Free - until 14 years and Sunday morning	10h - 17h30 (last entrance at 17h) Close at - Wednesday
MUSEU DO PALÁCIO NACIONAL DA AJUDA	Entrance - 600\$00 Free - until 14 years Discount of 50% - Youngs until 25 years Free - Sunday and holidays until 14h	10h - 17h Close at - Wednesday
PALÁCIO NACIONAL DA PENA	Entrance - 600\$00 Discount of 50% - Youngs (between 14 and 25 years) Free - Sundays and holidays (10h - 14h) Free - Youngs until 14 years, journalists	16 <sup>th</sup> of September to 30 <sup>th</sup> of June - 10h - 17h 1 <sup>st</sup> of July to 15 <sup>th</sup> of September - 10h - 18h Close - Monday Close – 1 <sup>st</sup> of January, Holy Friday, Easter, 1 <sup>st</sup> of May and 25 <sup>th</sup> of December
MUSEU MILITAR DE LISBOA	Entrance - 400\$00 Discount of 50% - Youngs between 10 and 18 years and older than 65 years Scholars Groups until 25 students, with reserve - 1000\$00	10h00 – 17h00 Close at Mondays and Public holidays
MUSEU DA GRACIOSA	Entrance- 200\$00 Free - Youngs up to 12 years and adults older than 65 years	Summer – 1 <sup>st</sup> of May to 30 <sup>th</sup> of September - 9h - 12h30 and 14h - 17h30 Weekend - 14h - 17h Winter – 1 <sup>st</sup> of October to 30 <sup>th</sup> of April - 9h - 12h30 and 14h - 17h30
MUSEU DO VIDRO	Entrance - 300\$00 Discount of 50% - Students, retired people and handicapped people	June to September from Tuesday to Sunday - 10h - 19h October to May from Tuesday to Sunday - 10h - 18h Close - Monday, 1 <sup>st</sup> of January, Easter and 25 <sup>th</sup> of December
MUSEU DO RIO	Entrance - 200\$00 Free - Youngs until 14 years, born in Alcouthim	Tuesday to Sunday - 9h – 12h30 and 14h - 17h30 Close – Monday
PALÁCIO DE FRONTEIRA	Workdays - 1000\$00 Gardens - 500\$00 Saturday - 1500\$00 Students - Call to reserve	June to September - 10h30, 11h, 11h30 and 12h October to May - 11h and 12h Close - Sunday and public holidays

MUSEUM	PRICE	OPENING HOURS
MUSEU NACIONAL DE MACHADO DE CASTRO	Entrance - 600\$00 Free - Sunday morning and public holidays	Tuesday to Sunday – 9h30 - 12h30 and 14h - 17h30 Close - Monday, 1 <sup>st</sup> of January, Easter, 1 <sup>st</sup> of May, 25 <sup>th</sup> of December
MUSEU DO AUTOMÓVEL ANTIGO - OEIRAS	Entrance - 350\$00 "Cartão jovem" - 250\$00 More than 65 years - 200\$00 "Cartão jovem" from Oeiras - 175\$00 Guided visits for groups of 20 persons - 1500\$00 Free - Children up to 10 years	Monday to Friday – 10h - 13h and 15h - 18h Weekend and public holidays - 10h - 18h Close – 1 <sup>st</sup> of January and 25 <sup>th</sup> of December
MUSEU DA HISTÓRIA DA MEDICINA PROF. MAXIMIANO LEMOS	Entrance - 600\$00 Students discount - 400\$00	Monday to Friday - 9h - 12h30 and 14h - 17h Close - Weekend and public holidays
AQUÁRIO VASCO DA GAMA	Entrance - 500\$00 Between 6 and 17 years and older than 65 years - 200\$00 Free - children up to 6 years (group from 1 to 5 accompanied by adults) Schools (groups of 25 students accompanied by 2 teachers) - 2.500\$00 Free - Soldiers, Navy civvies and friends of Navy museum	Open every days - 10h - 18h
MUSEU DA CAÇA - CASTELO VILA VIÇOSA	Entrance - 500\$00 Free - Children until 10 years Discounts - Schools, Cultural Institutions (with previous contact)	October to Mars - 9h30 - 13h and 14h - 17h April to September - 9h30 - 13h and 14h30 - 17h30 Weekends - 9h30 - 13h and 14h30 - 18h Close - Monday and public holidays
MUSEU BOTÂNICO - MUSEU DE HISTÓRIA NATURAL - FAC. DE CIÊNCIAS E TECNOLOGIA DA UNIV.COIMBRA	Entrance- 350\$00 Students and adults older than 65 years - 250\$00 Free - Children until 6 years	Monday to Friday - 9h -12h and 14h - 17h Close - Weekend and public holidays
MUSEU ZOOLOGICO - FAC. CIÊNCIAS E TECNOLOGIA - UNIV. COIMBRA	Entrance - 500\$00 Students and adults older than 65 years - 350\$00 Group until 30 persons - 7500\$00 Familiar ticket of 5 entrances (adults and children) - 1700\$00	Monday, Wednesday, Friday and Sunday – Sessions at 14h30 and 16h
MUSEU DO AR	Entrance - 300\$00 More than 65 years - 150\$00 Students and minors than 18 years - 100\$00 Free - Minors than 12 years, soldiers and Armed Forces Civvies, groups Free - Sunday morning	Tuesday to Friday - 10h - 17 h Close: Monday, 1 <sup>st</sup> of January, Easter, 24 <sup>th</sup> and 25 <sup>th</sup> of December
MUSEU DE OVAR	Entrance - 300\$00 Free - Study Visits, minors than 12 years	Monday to Saturday - 10h - 12h and 14h - 18h Close - Sunday and public holidays

