CHAPTER 6

THE "MEDITERRANEANISATION" OF FOOD FASHIONS IN THE WORLD

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Mention of Mediterranean food can be found in all kinds of information at international level. You only have to look at any of the almost 3,500 sites on Google to be convinced of this. If a commercial, political, or scientific language is built upon the many benefits of such food, is that really an opportunity for the Mediterranean Diet? There is a disturbing paradox here, given the explosion of food-related communicable diseases in the Mediterranean countries, yet this same diet is supposed to prevent obesity and safeguard health. The Mediterranean way is sold not only as "healthy living" but also as a way of "living well" and a promise of well-being, just at a time when the situation is deteriorating. Is this a major threat to the image trumpeted around the world and a threat to the producers who make their living from it?

The influence of this idea is so powerful that it is easy to talk of the phenomenon of identification or imitation or even "Mediterraneanisation" of food in other parts of the world. This article examines the reality of the diffusion of Mediterranean food within and beyond the Mediterranean, and who benefits from this: are the beneficiaries the Mediterranean producers or have those outside the region found ways of profiting from these market trends? The fact is that the agri-food multinationals have developed marketing strategies which capture the benefits of the capital represented by the "Mediterranean Diet"? And what, do they promote: products, nutrients, tradition, skills, nature, the environment…? In a nutshell, is the Mediterranean Diet an opportunity or a threat to the development of the region?

The "Mediterraneanisation" of food: what does it mean?

How can you define *Mediterraneanisation* when the Mediterranean Diet is characterised by such great diversity? You can pick out common elements in the different models which constitute their basic characteristics. In the main, this means the products: cereals (wheat and rice), fruit and vegetables and pulses, fish, fermented milk (yoghurt, cheeses) and olive oil. The meal is constructed around vegetables: many dishes are composed solely of food of vegetable origin (vegetables or pulses), form the heart of the meal. Meat (lamb, veal, cured pork products) and fish are used to add flavour. Salads seasoned with olive oil and fruit are present at all the main meals, while cheeses are frequently mixed in dishes: feta, ricotta… These are preparations which consist essentially of skilled blends which bring out flavours rather than laborious cooking. They are acid flavours, with abundant use of vinegar, lemon or citrus fruit juices, enhanced and flavoured with garlic, onions, spices and aromatic herbs. Drinks, consisting of wine (often diluted with water) are consumed during the meal or aperitifs (pastis, raki, arak, anisette), accompanied by appetisers. Apart from the culinary aspects, the Mediterranean Diet can be described as structured (three main meals) and convivial: you sit down to a meal which follows a certain ritual, respecting, indeed paying homage to, a cult of food. That is how the diet is included in UNESCO's intangible heritage.

What evidence is there of the Mediterraneanisation of food habits? In the United States, where an unbalanced diet has long had consequences in terms of the spread of obesity and communicable diseases (diabetes, cardio-vascular conditions, etc.), the Mediterranean Diet is highly attractive, above all because of its health benefits. Initially promoted by Ancel Keys and his famous "Seven Countries Study", the Mediterranean Diet became a benchmark for a balanced diet when, in 1992, the United States Department of Agriculture (USDA) published the Food Guide Pyramid as an educational tool. In 1993, Oldways, a non-profit organisation which promotes health and healthy living, created the first Mediterranean food pyramid. Following the example of the United States, which adopted the health aspect, how did other countries in the Mediterranean and elsewhere take ownership of the Mediterranean Diet? Our study covers three levels: 1) trends in consumption, which are the immediately visible element, reflected in the convergence of diet with the benchmark model; 2) trends in local production and/or imports; and 3) the appropriation of certain characteristics of the Mediterranean model by professionals in the agri-food sector as a vector for marketing their products.

Is the convergence towards the Mediterranean Diet a fact?

The analysis that follows is based on the observation of 22 countries, of which 13 are Mediterranean and are part of CIHEAM, and the other 9 are outside the Mediterranean area. The latter were chosen for their representativeness of the various geographical zones and for their entry, either as producers or as consumers, into the market for typically Mediterranean products. Japan, Chile, South Africa, Argentina, Sweden, Canada, Australia, the United Kingdom and the United States were therefore selected. Four of these countries possess a Mediterranean type bio-climatic region, namely: the Californian coast, central Chile, the Cape region of South Africa and the coastal areas of Perth and Adelaide in Australia. A touch of the Mediterranean outside the Mediterranean, but with totally different human development, historical and cultural processes.

The first measure of imitation of the Mediterranean model involves overall quantities consumed. With a reputation for frugality, the typical ration would be around 2600 final kcalories and 6500 initial kcalories[1], the latter reflecting moderate consumption

1 - Initial kcalories represent final kcalories in vegetable equivalent, where 7 kcal of vegetables are necessary on average to obtain 1 animal kcalorie in the ration.

of animal products. In all the Mediterranean countries, with the exception of France and Cyprus, energy from vegetable sources is at least 50% of total energy. In the Maghreb countries, the proportion rises to around 80%, primarily due to the high consumption of cereals (FAOSTAT).

With regard to the quantitative evolution of the ration, the situation is becoming a possible cause for concern both in the North and the South. The evolution of available kcals in the Mediterranean countries between 1960 and 2007 shows a very marked increase in all the countries studied. In some of them, especially the countries of North Africa, such as Algeria (82%), Tunisia (58%), Egypt (51%) and Morocco (47%), the increase reached record levels which place them today at levels close to the countries of the North. Among the countries of the northern Mediterranean, Portugal also shows a significant increase in kcals (44%). This has been accompanied by a rise in kcalories of animal origin; while fairly low in the 60s, the percentage of energy of animal origin in the diet of the peoples of Mediterranean Europe almost doubled in 40 years in Italy, Greece and Spain, to make up 30% of the ration (Vareiro, 2009).

On the other hand, contrary to what might be expected, outside the Mediterranean, in the nine countries selected, there has been little change, except in the United States and Canada, where available kcals rose by 30% and 26% respectively, over the same period of time.

As regards the Mediterranean countries, a change in diet can be seen, reflecting a trend which is common to by several countries around the world. The causes may be identified primarily as growing urbanisation, globalisation in all its aspects, the feminisation of work and organisation of working time, which leads to an increase in consumption of food outside the home. All these factors translate into a decrease in the diversity of diet, a loss of local culinary traditions, and an increase in the consumption of industrialised, ready-cooked products, as well as fats, sugars and animal products.

Let us take a closer look at the changing patterns of food consumption. To measure the adherence of countries to the Mediterranean Diet, we have the "Mediterranean Adequacy Index" (MAI), proposed by Alberti-Fidanza and colleagues (Alberti-Fidanza *et al.*, 2004). This index calculates the ratio of kcalories provided by various so-called "Mediterranean" food groups to those provided by so-called "non-Mediterranean" foods. More recently, Da Silva and colleagues (Da Silva *et al.*, 2009) used the same index, slightly modifying the selected groups of foods. This study showed the evolution of diet in 41 countries in all the geographical area of the world between two time periods: 1951-1965 and 2000-2003. We propose here to update the results.

In these studies, "Mediterranean foods" are defined as olives, olive oil, cereals, roots and tubers, herbs and spices, fruit, vegetables, nuts, fish and shellfish, pulses, and wine. "Non-Mediterranean foods" include all oils other than olive oil, sugar and sweeteners, alcoholic beverages (other than wine), meat, offal, stimulants, and animal fats. Unlike the authors, we decided to exclude roots and tubers from the "Mediterranean foods", as they are not emblematic of the *Mediterranean Diet*. This changes the results significantly. For example, Spain, Egypt, Morocco, Chile and, above all, Japan have a lower MAI if roots and tubers are excluded.

Da Silva's study showed that in the last 40 years, the countries of bordering the Mediterranean basin moved away from the typically Mediterranean Diet and progressively incorporated the food habits of other cultures. This phenomenon is particularly true of the younger generations, as underlined by the Baldini study (Baldini *et al.*, 2008) which analyses the eating habits of Spanish and Italian university students, who do not eat enough vegetables and eat too much fat. Even so, the Italian students kept up the Mediterranean culinary tradition more than the Spanish. It is interesting to see how certain Mediterranean foods, such as fish and leguminous vegetables, are more often found in the diet of the Spanish students while certain others, such as cereals, fruit and vegetables, are eaten more by the Italians.

On the other hand, according to da Silva and colleagues (Da Silva *et al.*, 2009), several countries seem to be moving closer to the typical diet: in order, these are Iran, the United Kingdom, Sweden, Denmark, Norway, Canada, Australia and the United States. These are exclusively non-Mediterranean countries, while the Mediterranean countries are moving away from their traditional diet. The study by Van Diepen and colleagues (Van Diepen *et al.*, 2011) confirms this, since it shows that Dutch university students ate more unrefined cereals, green vegetables and, surprisingly, more olive oil than Greek students. On the other hand, the latter consumed more pulses.

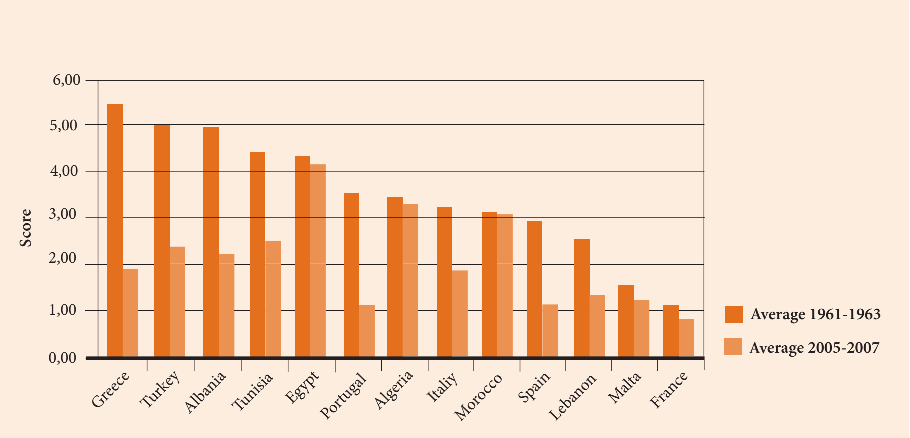
Indeed, if one considers the evolution of the dietary availability of certain food groups in Mediterranean Europe and northern Europe, since 1960, we find that the greatest changes have taken place in the Mediterranean countries. While olive oil, fish, fruit and green vegetables are still widely available, wine and pulses are less so, while non-Mediterranean products (animal fats, vegetable oils, sugar and meat) show a marked increase. On the other hand, the latter products are more available in the markets of the non-Mediterranean countries, while at the same time the availability of olive oil and fruit is increasing (Vareiro *et al.*, 2009).

To ascertain the most recent trends, we recalculated the MAI for the years 2005-2007 (the latest years available in the FAOSTAT database) for the 22 countries. We point out that our calculations, like those for the two studies cited above, are based on Fao food availability data. To simplify the results, we grouped the various MAI values for each country into different levels: 0-0.99 *very low*, 1-1.99 *low*, 2-2.99 *average*, 3-3.99 *high*, 4-5 *very high*. A high MAI shows strong identification with the Mediterranean.

If we focus on the most recent years, we find highly contrasting situations. While Egypt has the highest MAI, France has the lowest. Is France still Mediterranean? Although it has two regions bordering the Mediterranean, the French diet as a whole is hardly Mediterranean. Moreover, it is revealing that France did not participate in the candidature of the Mediterranean Diet for registration in the UNESCO intangible heritage, but only campaigned for its culinary tradition. The European Mediterranean countries similarly distanced their emblematic diet: Spain, Portugal, Italy and Greece also have a *low* MAI. Has Europe unified its dietary patterns? This is highly likely, with the intensification of intra-European trade and the expansion of wholesale distribution. Two South Mediterranean countries (Malta and Lebanon) stand out for their scant adherence to the Mediterranean Diet. While this situation is understandable for Malta, where the Anglo-Saxon culture has long reigned, the situation in Lebanon is surprising, since it still has a strong food culture. The other South Mediterranean countries (Tunisia, Turkey, Albania) have an average MAI, (Algeria and Morocco) high MAI and or (Egypt) very high MAI.

Of the non-Mediterranean countries, almost all (Canada, Australia, United States, Sweden, United Kingdom, Argentina) have a very low MAI, and three (Japan, South Africa and Chile) have a low MAI. Does this mean that the *Mediterraneanisation* of food habits can be ruled out in these countries? Not necessarily, since the average level does not always reflect trends which are still too marginal to be visible. We shall now look at the trends in the MAI from the early 1960s to the late 200s in the different countries, i.e. over 40 years.

Chart 1 - Trends in the MAI in the Mediterranean over 50 years

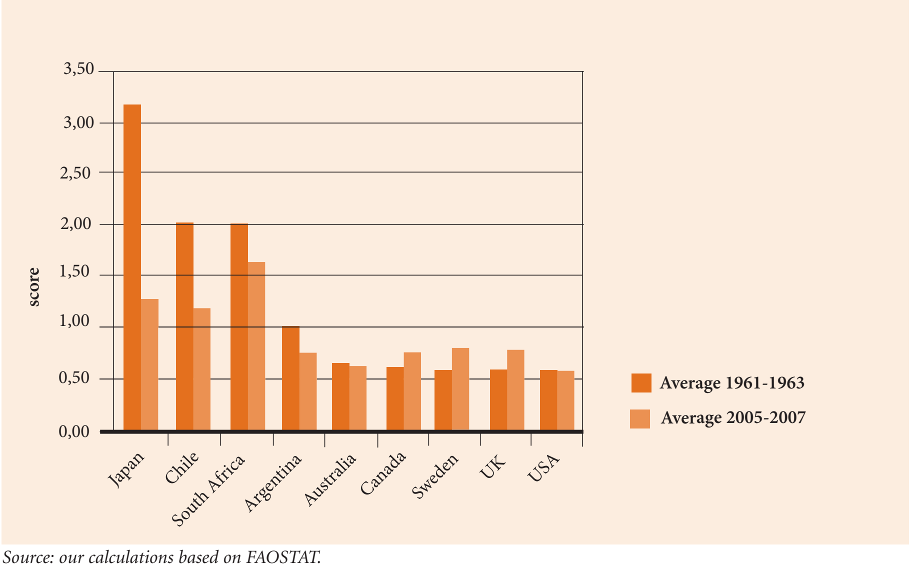


Source: our calculations based on FAOSTAT.

In the Mediterranean, all the countries, with the exception of Morocco, are moving away from the Mediterranean Diet. This phenomenon is particularly marked in Greece, the country which symbolises the "ideal diet". This symbolism is now history, which does not make it any easier to promote. "Dietary modernity", first affecting the European Mediterranean countries (Spain, Portugal) is spreading to Albania, Turkey and Tunisia. France, albeit with a very low MAI, is holding up better, probably thanks to its strong culinary tradition. Egypt, Algeria, Morocco show the same resistance, but this is probably linked to the lack of availability of modern foods. However, if we look at the trends in the last decade (2000-2003 and 2005-2007),some positive signs can be seen, since in Egypt, Italy, Spain, France and, above all, in Algeria, the MAI is rising.

In the non-Mediterranean area, over the last 50 years, the MAI declined in five countries, especially in Japan, where the negative variation is very large. The reason is the strong increase in consumption of oil, sugars and meat (which in 1960 was almost non-existent) and alcoholic drinks. At the same time, the consumption of cereals and roots and tubersis less than what it was 50 years ago. Is another food myth about to be exploded? The MAI is also declining in Chile, South Africa and Argentina. In Australia and the United States, there has been no change and in Canada, Sweden and the United Kingdom, a slight improvement can be seen.

Chart 2 - Trends in the MAI in non-Mediterranean countries over 50 years



Source: our calculations based on FAOSTAT.

Overall, the Mediterraneanisation of the diet is declining everywhere and the decline is much more intense in the Mediterranean countries. If we rank the 22 countries by their level of Mediterraneanisation, the top countries on the list are all Mediterranean countries. As we indicated earlier, this chiefly affects Greece (-3.6) Albania and Turkey (-2.7), followed by Portugal (-2.4), Tunisia (-2.0) and Spain (-1.8). On the other hand, in the non-Mediterranean countries that we considered, the MAI is declining much more slowly, or even rising slightly in some countries: United Kingdom, Sweden and Canada, while Japan, which had an MAI similar to that of the Mediterranean countries is losing its characteristics which are regarded as equally beneficial as those of the Mediterranean Diet.

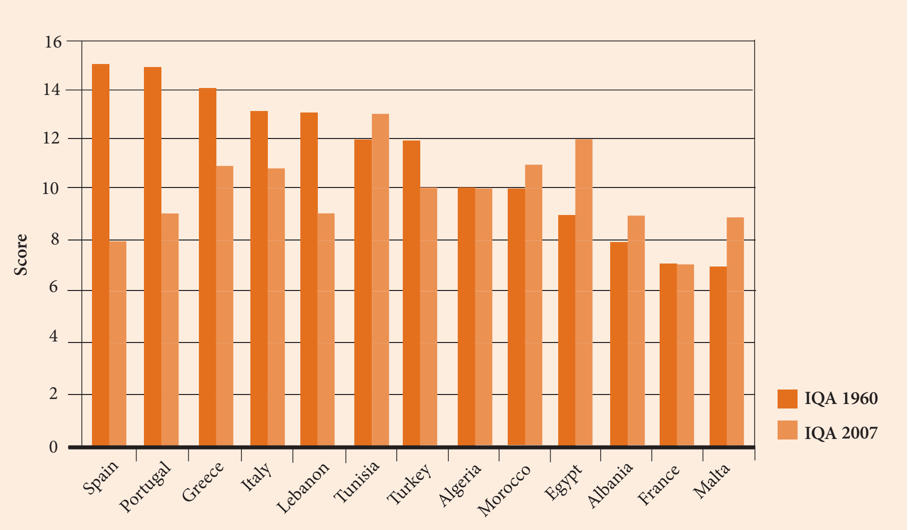
The MAI is certainly an interesting index in ascertaining the general trends in people's food consumption, but it has certain limitations, such as the fact that it assigns the same weighting to each food group and does not take into consideration the different proportions of the ration. That is why we have added another indicator, the food quality indicator (FQI), which allows us to evaluate not only the Mediterraneanisation but also the quality of the daily diet in terms of health recommendations

A marked decline in food quality, especially in the Mediterranean

The DQI (diet quality indicator) is a diet quality indicator calculated by adding scores attributed according to the level of consumption of certain foods, in relation to minimum or maximum recommended levels of consumption ceilings of recommended consumption. Based on WHO and USDA recommendations on amounts to be eaten for five major products (meat, fish, olive oil, cereals, and fruit and vegetables) and proportions of four nutrients (lipids, saturated fats, complex sugars and proteins) in the daily ration, a score is attributed for each level of consumption. A high score is the sign of high diet quality.

An analysis of the evolution of the DQI between 1960 and 2000 (Padilla, 2008) had already shown a clearly worsening trend in the quality of the diet in the 13 CIHEAM member Mediterranean countries. We updated these data with 2007 data, and analysed trends over almost 50 years and compared them with th enon-Mediterranean countries. The comparison of the scores obtained in 1960 and 2007 for the Mediterranean countries shows that only five countries (Albania, Egypt, Malta, Morocco and Tunisia) saw a slight improvement in their DQI. Among the other countries, six had a lower score in 2007 than in 1960 and two had not changed. In Greece, Spain, Lebanon, Italy, Portugal and Turkey, food quality has greatly declined. Finally, in France and Algeria, the situation has remained stable.

Chart 3 - Trends in the DQI in the Mediterranean countries (1960-2007)



Source: our calculations based on FAOSTAT.

We grouped the different scores by level of diet quality: 0-4 very low, 5-7 low, 8-10 average, 11-13 high, 14-18 very high. While in 1960, three countries (Spain, Portugal and Greece) had a very high score, in 2007, no country achieved this. Spain, which in 1960, together with Portugal, had the highest DQI (with a score of 15) among the 13 Mediterranean countries, was second to last in 2007, with an DQI of 8. This highly negative trend also applies to Portugal.

Finally, if we look at the latest trends, while in 2000 no country had a low DQI, one country, France, fell into that category in 2007. The recent general trend is downwards, since between 2000 and 2007, only one country out of the Mediterranean 13, Morocco, saw an improvement in its DQI. Although the situation is not yet catastrophic, it is equally true that the results give pause for thought.

If one analyses in a little more detail the results for each food group and for each country, we realise that the final score is the result of simultaneous positive and negative trends. For example, while in all the 13 countries, the score attributed to proteins in the ration is declining, several countries show improvements for other food groups, such as consumption of fruit and vegetables which is increasing, as well as fish in several countries (Egypt, France, Italy, Malta, Tunisia). On the other hand, however, there is increasingly excessive consumption of meat and lipids. Consumption of olive oil and, above all, complex sugars, is declining.

We can observe that the countries where the consumption of meat is increasing (Spain, Greece, Italy, Malta and Portugal) are, in general, also concerned by the increase in lipids and saturated fats in the ration, accompanied by a decline in complex sugars. The fact that these five countries are countries with a higher economic level than the others confirms that, in general, above a certain threshold, an increase in economic well-being is accompanied by a deterioration in diet quality.

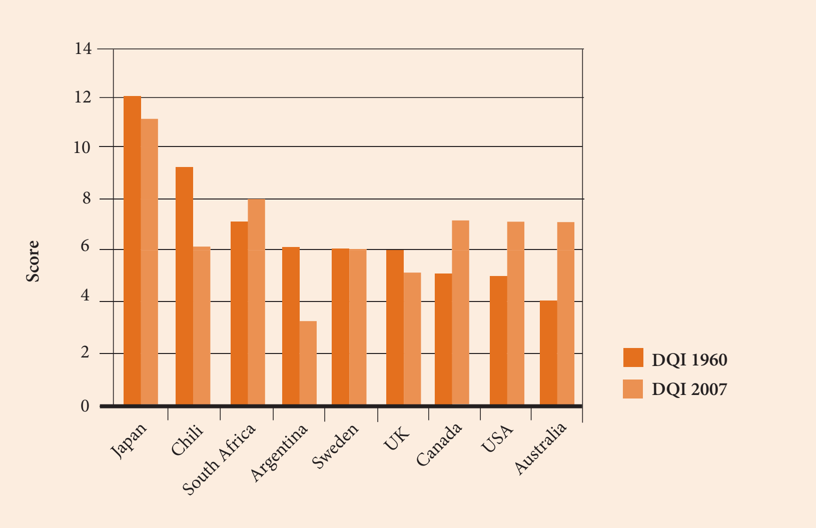
The decline in complex sugars is also visible in Albania and Lebanon, the latter experiencing concerned a simultaneous fall in olive oil consumption, as are Portugal, Tunisia and Turkey. However, positive signs can be seen in Albania, Egypt and Lebanon, where the fat content in the diet is falling.

These sadly pessimistic results are confirmed by a study recently carried out among children in Greece (Angelopoulos *et al.*, 2009). The DQI was used in that study to determine the quality of the diet of children aged 10-12 years. The great majority (84.5%) had a low quality diet, 12% a very mediocre diet and only 3.5% of the children had a good diet. An overall excessive consumption of total and saturated fats is the main cause.

Does the decline of diet quality only concern the Mediterranean, or is it rather a global phenomenon? If we go back to our nine non-Mediterranean countries, between 1960 and 2007, the DQI rose in four countries (South Africa, Canada, Australia and the United States), while in four others it fell (Japan, Chile, United Kingdom, Argentina) and remained unchanged in Sweden. While the direction of the trend is important, the level of the DQI is even more so. However, although going in the right direction, the quality of the ration in the Anglo-Saxon countries is still low (scoring around 6) while the Mediterranean countries, albeit with a strong decline in their DQI, are still at satisfactory levels (scoring close to 8).

We must, nevertheless, recognise the efforts which the Anglo-Saxon countries are making in the right direction. Consumption of fruit and vegetables is rising in Sweden, Canada, Japan and Australia. In the latter country, there is also increased consumption of olive oil and fish, as in the United States. Moreover, consumption of cereals is increasing in the USA and Canada. However, adverse trends can be seen in Sweden, the United Kingdom and Chile, where increasing quantities of meat are being consumed. Furthermore, in the two Latin American countries, Argentina and Chile, people were eating less fruit and vegetables in 2007 than in 1960. Chile has seen a considerable deterioration in its diet, because of the increased proportion of saturated fats in the diet and the decline in complex sugars. In Argentina, cereal consumption is falling, while that of lipids is rising (as in Japan).

Chart 4 - Trends in the DQI in the non-Mediterranean countries (1960 – 2007)



Source: our calculations based on FAOSTAT data.

To conclude, in almost 50 years, out of the total of 22 Mediterranean and non-Mediterranean countries, diet quality has been deteriorating in 10 countries, has remained unchanged in 3 and is improving in 9 countries (Morocco, Malta, Egypt, Albania, Tunisia, South Africa, Canada, Australia and the United States).

It must be said that although the Mediterranean countries are still, in general terms, the countries with the highest DQI, apart from Japan which is ranked among the Mediterranean countries, and France which is identified more with the non-Mediterranean countries, the situation seems to be deteriorating more rapidly in the Mediterranean zone than in the countries in other parts of the world analysed here. In addition, we find that in certain non-Mediterranean countries, the consumption of products emblematic of the Mediterranean Diet is increasing, for example, fruit and vegetables, fish, cereals and olive oil. Even if that merely reflects the analysis of current trends, we can say that we are witnessing a change in the eating habits of the non-Mediterranean countries which is in an indication of their *Mediterraneanisation*.

Australia and the "Mediterraneanisation" of the diet

Long known for a cuisine which in every respect resembled that of the English and Irish, Australia in the last decade has developed its own original and specific cuisine, namely what is known as "modern Australian cuisine". This cuisine is the result of the merging of culinary influences, of the various population groups which live in the country today, both in cooking methods and ingredients used. Since the occupation by the British in 1788, Australia has always been a land of immigrants, so that now it includes among its inhabitants people from some 200 different countries and in 2009, a quarter of its population had been born outside Australia (Australian Government, Department of Immigration and Citizenship). While a large part of today's immigrants come from Asia (China, India, Thailand, Vietnam, Malaysia, the Philippines), after the Second World War, Italians, Greeks, Turks and Yugoslavs flocked to Australia. "Modern Australian cuisine" is thus a mixture of Asiatic and Mediterranean culinary influences (Italian, Greek, Turkish and Yugoslav, and also French). In urban areas, it is common in the supermarkets to find *ricotta, feta* and *humus.*

It is indisputable, then, that immigration and the diasporas have had an influence on the spread of the Mediterranean Diet in the world thanks to restaurant catering and marketing of typical products. You only have to look at Italian and Greek immigration in the United States of America and Australia, as well as the Jewish, Palestinian and Lebanese diaspora. This last, the first wave of which occurred during the First World War, continued because of the civil war (1975-90) and continues today, disseminated among five and eight million Lebanese around the world, especially in North America, South America and Australia (Lebanese Emigration Research Centre). Another example is represented by the Italian immigrants in the United States, who took with them their culinary tradition, which has now become American's favourite (Mariani, 2011). From the end of the 19th century, and throughout the next 60 years, the United States took in a large number of Italians, who began by managing grocery stores, then *pizzerias* and finally restaurants. If, initially, Italian cuisine was regarded as cheap cuisine, almost like "fast food", with little variety and poverty of ingredients, in the 80s, it attained the status of quality and fashionable cuisine (Mariani, 2011).

The beneficiaries of "Mediterraneanisation"

If the international diffusion of Mediterranean Diet is confirmed, several scenarios are possible:

- Consumers are particularly sensitive to the territory of the production zone and demand products of Mediterranean origin. A formidable market would then open up, but the temptation to generate wealth by intensification at the expense of depleting local land and water resources would be great. Moreover, it is well known that excessive intensification alters the intrinsic quality of products.
- Consumers are attached to the structure of the Mediterranean Diet, the great diversity of foods and their combination. The origin of production is then of little importance and some may start producing in new areas to satisfy demand. That is how crops previously regarded as exclusively Mediterranean such as the olive, can appear in suitable areas in other continents (United States, Argentina, Chile). Cultivation of fruit and legumes is possible, and vegetables can be grown under glass, and fish farms proliferate. The rest of the world can rapidly become a serious competitor of the Mediterranean region.
- Consumers are sensitive to the authenticity of products and their specific nature. Mediterranean industries and artisans must then organise rapidly to protect their recipes and specific products by patents and labels. Multinationals on the lookout for any market niche to increase their turnover can use the Mediterranean image to

create a market and copy the typical recipes of these regions. Thus, for example, you can find so-called Greek feta manufactured in Aveyron in France. In that case, should we protect the origin of the raw ingredients or the origin of the know-how? Should it be done by geographical indications (GI)? The GI does have a number of advantages: it does not create anything, it recognises, it is an important driver of rural development with the integration of agro-tourism which encourages rural SME. Promoting a product means promoting a territory. GI is not without dangers, and the choice of protecting the primary product or the know-how is not without consequences. This question will be discussed in chapter 13.

To try and shed a little light on this debate, let us look at which actors profit the most from this enthusiasm for the Mediterranean Diet: Mediterranean producers through exports? The new producers in the non-Mediterranean countries? Multinational companies?

The evolution of production and exports in the Mediterranean

With regard to trends over the last decade, exports of two typically Mediterranean products, olive oil and fruit and vegetables have increased considerably. Olive oil is a good illustration, with exports rising between 1998 and 2008 by 631% in Lebanon, 60% in Spain and Italy, 50% in Portugal and 36% in Tunisia.

It is significant that exports have increased proportionally more than production: in Lebanon, olive oil production rose by 71%, in Spain by 23%, in Italy by 20%, in Portugal by 31%, and actually declined slightly in Tunisia. Thus, exports are growing faster than production. This means that the Mediterranean is highly attractive outside the region and Mediterranean peoples do not benefit from the increased local production, which is mainly exported. They can benefit indirectly in economic terms, provided that local farmers are also the exporters. Nothing is less certain, given that we are seeing more and more foreign investors setting up in business the Mediterranean (Spanish investors in Morocco).

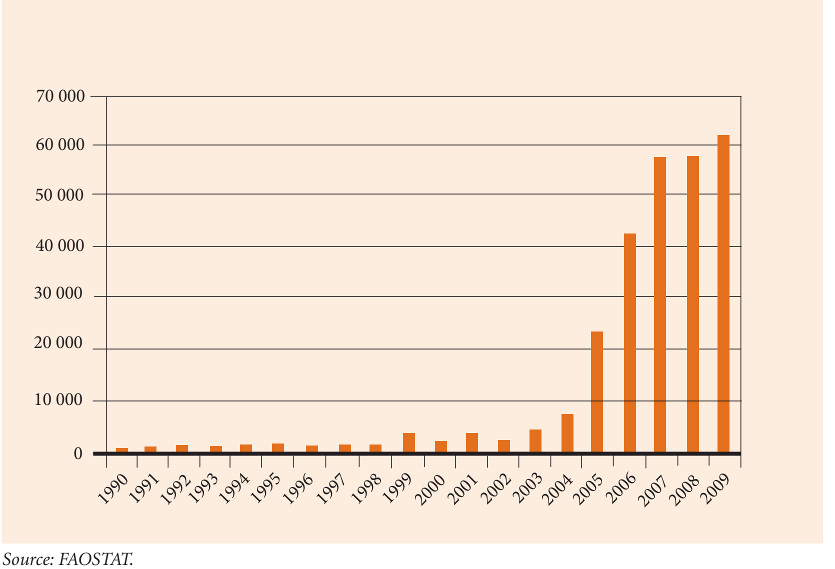
As regards fruit and vegetables, the same phenomenon can be observed: in Algeria and Egypt, exports doubled between 1998 and 2008 (105% and 100% respectively), while at the same time production rose by only 63% and 52% respectively. The same observation applies in Tunisia where production rose by 43% while exports increased fourfold (216%). And again in Turkey, 18% against 59%, Morocco, 28% against over 40% of exports. Lebanon has the most extreme situation, since, while production declined, exports, for their part, rose by 84%. In conclusion, we can say that we are witnessing a contradictory phenomenon, whereby the peoples of the southern Mediterranean are "deprived" of their production to the benefit of the importing countries.

The production and imports of Mediterranean products outside the Mediterranean

To ascertain whether a change of this kind has taken place outside the Mediterranean, it is worth seeing whether the increase in consumption is reflected either in increased production of the same products in the non-Mediterranean countries, or by an increase in imports of these products.

We therefore analysed the evolution of production and imports of certain emblematic products such as olive oil, olives, wine and grapes between 1990 and 2009 in seven countries: Argentina, Australia, Chile, South Africa, Japan, China and the United States. The most significant results relate to olive oil and olives in general. In almost all the countries, a clear trend can be seen towards an increase in production and/or imports, with striking situations such as in Australia. Nil in the 90s, almost non-existent until 2002, olive production in Australia rose by 45 times between 2000 and 2009. This olive production is almost entirely destined for the production of oil and not table olives. Olive oil production reached 6000 tonnes in 2009. Of course, it represents only one per cent of local oil production, but it is rising rapidly and it is a sign in favour of Mediterranean products. Among the various factors, the "Mediterranean" climate of the country's southern coast (around Adelaide and Perth) has undoubtedly been favourable to the development of this industry.

Chart 5 - Olive production in Australia (1990-2009, in tonnes)



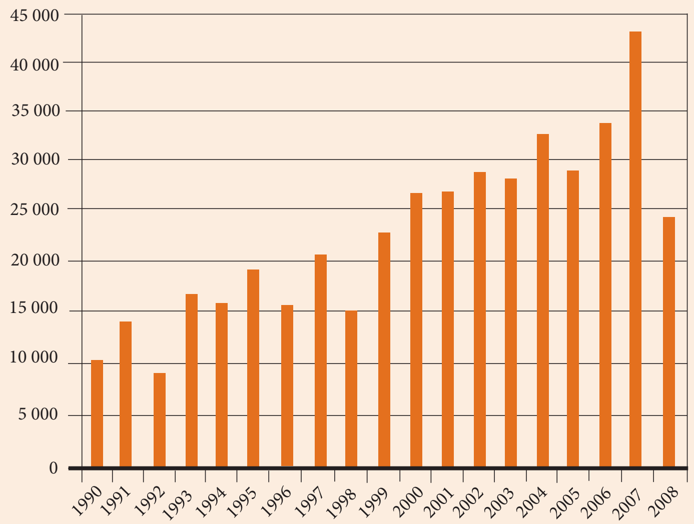
Source: FAOSTAT.

As the local market is far from being satisfied by local production, Australia imports olive oil on a massive and ever-increasing scale from the European Union (Italy, Spain), importing up to 45,000 tonnes per year. In the other non-Mediterranean countries, the trend is just as dramatic: imports of olive oil increased enormously in South Africa (700%) over the period 1990-2008, in the United States (152%), Japan (700%) and above all in China, where imports were 162 times higher in 2008 than in 1990.

Furthermore, in the olive oil producing countries, such as Argentina and Chile, production more than doubled between 2000 and 2009 in the former and rose by 50% in the latter.

As olive oil is chiefly consumed in the production zones, in other words, the countries of the Mediterranean region, foreign trade averages less than 20% of global production.

Chart 6 - Trends in olive oil imports in Australia (1990-2008, in tonnes)



Source: FAOSTAT.

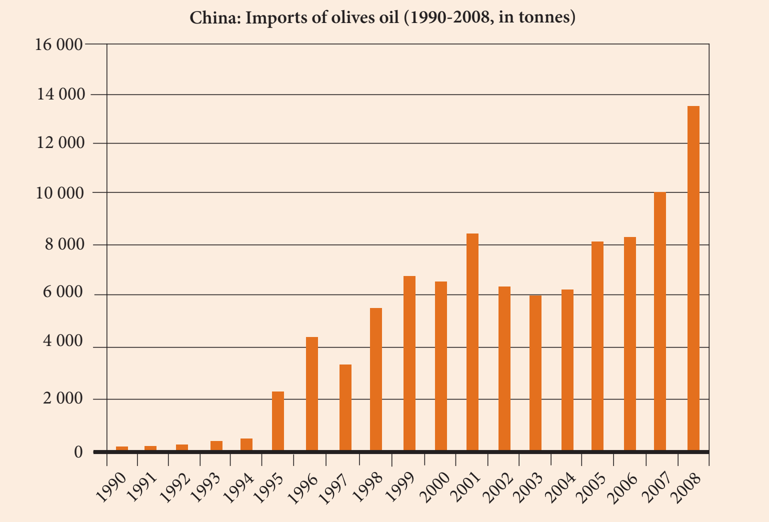
The United States, with consumption of over 220,000 tonnes (almost all imported) have become the second largest world market for olive oil. There has also been a notable increase in olive oil consumption in Australia, as we have seen, and in Japan, Canada and Brazil, with consumption ranging from 25,000 to 45,000 tonnes per year in each of these countries (UNCTAD). Demand is for quality products, since it is extra virgin olive oil which is most sought after in these new markets. Italy and Spain are the principal suppliers.

Olive oil, a Chinese Mediterranean product?

To get a clear understanding of the interest in this product, it is enough to note that since 2004, a Salon dedicated to olive oil is held each year in Shanghai.

Although olive oil represents only a marginal part of the oil consumed in China (soya and palm oil are predominant), it is increasingly appreciated by the Chinese, especially the urban middle class. Thanks to the improvement in living standards, the recent opening to international markets, and the demographic importance of the country, we can regard the olive oil market as growing strongly. Sales of olive oil increased steadily between 2004 and 2008, with an average annual increase of 35% (Lazzeri, 2011). Moreover, imports are rising strongly, as between 2000 and 2008, volumes of imported olive oil almost doubled.

Domestic production is still very modest and it can be expected that olive oil consumption will long remain dependent an imports, with Spain, Italy and Greece as the main suppliers, with 40%, 30% and 20% respectively of imports (COI, 2010). Turkey, Tunisia and France share the remainder of the market. Even though the Mediterranean countries remain the chief suppliers, it is noteworthy that new countries, which were not producers until recently, are becoming serious trading competitors. Such is the case of Australia, which is increasingly positioning itself in the top-of-the-range olive oil market and is beginning to compete with the Mediterranean countries, especially as Chinese consumption tends to be oriented towards quality branded products.



Source: FAOSTAT.

As far as wine is concerned, between 2000 and 2009, imports increased clearly in the United States (85%) and above all in Australia and China, where, in 2009, they were four times higher than in 2000. In the latter two countries, between 2000 and 2009, production also rose considerably: by 50% in China and 38% in Australia.

In the light of these few examples, we can see that international consumers have no soul: they demand more and more emblematic Mediterranean products but do not particularly care about their origins. Local production and imports increase at the same time. Driven by such powerful international demand, quality products are exported and become expensive on the local Mediterranean market. This has consequences for Mediterranean consumers who find themselves dispossessed of their traditional products.

Exploitation of the Mediterranean image by multinational companies

Companies use the Mediterranean image by identifying and using the elements which make Mediterranean food attractive to consumers. The more these elements elicit powerful motivational forces, the more effective they are. These elements can be classified in four themes related to identity, whence the power of the promises that Mediterranean food can convey:

The Mediterranean tuna to the benefit of Japan?

One example is the export of Bluefin tuna to Japan. While formerly the principal fishing area was the Atlantic, since the 1970s, this tuna has been fished primarily in the Mediterranean. Japan is almost the sole importer of this product, as it is the destination of 80% of production (Basurco, 2010). Like other fish, numbers of bluefin tuna have declined drastically since the 1970s, by two-thirds in the Mediterranean and 80% in the Atlantic. The EU sets fish quotas each year, but the restriction is not sufficient, especially as it does not allow for illegal catches. Imports of bluefin tuna by the Japanese result in over-exploitation of the Mediterranean's natural resources and deprives Mediterranean consumers of a product which has become inaccessible because of the price. However, it should be emphasised that this phenomenon is not a *Mediterraneanisation* of the eating habits of the Japanese, at least as far as this product is concerned, since they are traditionally great fish eaters.

Source: FAOSTAT.

- Linking pleasure and health: renewing contact with nourishing food, doing away with the "hygienism" of the American food culture, promoting sensory sensitivity, overcoming the dichotomy between what is good and what is good for you. The revisiting of the Mediterranean Diet for its health benefits is helping to create something new out of the old and enshrines the Mediterranean Diet, a reconciliation due to the recognition by the elite of an ancestral folk knowledge.
- Promoting the southern European culture, with its diversity of flavours, colours, and establishing a Mediterranean identity.
- Mobilising a desire for rebirth and "reassurance" by a return to the roots. This trend can be explained by the gap between the production chain and the consumption chain, which gives rise to anxiety among consumers who are no longer able to clearly identify their food. It brings a demand for authentic, regional products, old-fashioned recipes, and local products.
- Raising awareness of environmental problems, conditions of production and manufacture of products, and companies which are "politically correct".

Do non-Mediterranean agri-food companies profit from this trend in order to take advantage, perhaps to the detriment of the true character of Mediterranean food? We seem to be seeing an appropriation by multinational companies of the image of the Mediterranean Diet, which they exploit to add a certain appeal to their products.

To verify this hypothesis, we first analysed the websites of the top one hundred multinational companies in the world (in terms of turnover) to see whether and how they talk about *Mediterranean Diet* in relation to their specific products. The results do not match the preconceptions, since of the 100 companies, only seven offer, among their products, foods which have a connection with the Mediterranean Diet and actually refer to it in their marketing strategy. Even where health is the leading factor in their product promotion policy, it is not by the Mediterranean reference that their value is directly marked.

We therefore then decided to undertake a free web search to find companies in the world which mentioned the Mediterranean Diet, Mediterranean products, etc. on their website.

Finally, in total, we found and selected 34 companies in various countries[2]: 21 in the United States, 2 in Canada, 1 in Chile, 1 in Mexico, 1 in South Africa, 1 in the United Kingdom, 1 in the Netherlands, 1 in Belgium. In addition, we decided to include in the analysis, websites of companies in Lebanon (1), Greece (3) and Turkey (1) because, although belonging to the Mediterranean zone, these companies export worldwide and their websites seem rather to target potential customers outside the Mediterranean.

The questions to which we sought answers are the following:

- What products are offered?
- What do the messages highlight?
- What countries are associated with the Mediterranean?
- What images are used?

With regard to products marketed as Mediterranean, these are mostly transformed products, such as *tzatziki*, *baba ghanoush* (an aubergine puree from the Middle East), humus (chick pea paste), grilled vegetables in oil/vinegar, *tapenade* (olive and caper paste), dried tomatoes, *falafel* (chick pea or fava bean patties) or *dolmas* (stuffed vine leaves). These are *antipasti, meze, mezzeliks, tapas*, from various Mediterranean countries: Italy, Lebanon, Greece, Spain and especially the countries of the Mashrek.

Another important group of foods concerns, as might be expected, olives, especially olive oil. Among other products offered, we find pastas and tomato sauces, yoghurt, spices, rice and couscous, as well as nuts, avocados, and also anchovies and squid.

With regard to the messages which are conveyed and the arguments put forward, analysis shows that they are many but can be regarded as part of broader general themes. In analysing the websites, we retained five recurring features of the concept of *Mediterranean Diet*: The "health" argument; "good cuisine", "good eating"; culture; nature and the natural environment; lifestyle. Very often these messages are multi-dimensional and touch on the different aspects of the Mediterranean Diet at the same time.

It is hardly surprising that "health" is one of the arguments most commonly advanced by producers and manufacturers. We know how consumers are more and more careful about their health and their food, especially in response to the latest events concerning food safety, and that they are aware of the benefits of eating certain foods. Moreover, in scientific terms, the evidence of the health benefits of the Mediterranean Diet has been confirmed for a very long time (chapter 3). The number of studies on this subject is more than abundant. Furthermore, the fact that the media have widely disseminated these "discoveries" has built up a close association between the Mediterranean Diet and health. This link is now well known by the majority of consumers.

2 - Companies analysed: Olives for you, Manischewits, California Avocado Commission, California Walnuts, Peanut Institute, Pompeian Oil, Oikos, Cedar's, Foodmatch, Lindsay Olives, Mooney farms, Mediterranean meals, Mccormick, Sabra, Betty Crocker, Marrakesh express Mediterranean products, Peloponnese Greek Foods, Carbonell, Koipe, Sasso, Barilla Usa, Barilla Mex, Happy Camel, Mediterranean Flavours, Père Olive, Al Wadi Al Ahkdar, Olive to live, Gaea, Nestos, Mastihashop, 7 Cumbres, Bertolli, Spice land, Mediterranean delicacies.

In talking about the Mediterranean Diet, a considerable number of companies cite the famous "Seven Countries Study" by Ancel Keys, as well as the Mediterranean food pyramid suggested more recently by Oldways, which is derived from it. The focus here is primarily on the link between a specific type of consumption and the low rate of occurrence of cardio-vascular diseases and diabetes.

But they also talk about the Mediterranean Diet as a an aid to "keeping your figure", as well as a source of nourishing products, or else a varied and balanced diet.

Another frequently used message is that of "eating well": an excellent, creative cuisine, made from simple, quality ingredients, very fresh and homemade dishes, prepared with care, attractive in appearance, very tasty often with a strong, pronounced flavour. All this makes eating a "real pleasure". At the same time, especially for countries with a younger civilisation, such as the United States, Australia and Canada, the Mediterranean immediately evokes the concept of history, culture, tradition, ancestral know how. Yet the Mediterranean is also a specific natural environment: it is the seaside, nature, the land, fertile, unpolluted, basking in sunshine, which yields natural products of very high quality. Finally, the Mediterranean Diet is not a way of eating, but a lifestyle in itself. It is conviviality, sharing a good meal and the pleasure of eating with friends and family, taking your time, slowing down, but it is also about an active life, involving exercise and vitality. It is happiness, enjoying life. The Mediterranean also evokes the hospitality and generosity which is expressed by sharing a good meal even with a stranger.

On several websites, the words are accompanied by pictures, which simultaneously convey several messages with great immediacy and effectiveness. One element which is always present in the pictures is, predictably, the sun, and also the sea, small seaside villages and ports. Pictures also evoke a specific natural environment, with olive trees, pines, cedars. We also find pictures of daily life, like shopping in the fruit and vegetable market, and the meticulous care taken in preparing a meal. Again, conviviality seems to be a central element which is found on several websites: a family around the table, friends sharing a meal in the garden, in the countryside, elderly friends laughing together. In the majority of cases, the countries most often associated with the Mediterranean are Greece and Italy. Other countries include Morocco, Spain, France and, occasionally, Lebanon, Syria, Egypt and Israel.

Inverted dynamics

We are witnessing a complex phenomenon of cross-cutting food trends which may lead to a genuine convergence in the long run. The countries of the Mediterranean area, while still retaining certain characteristics (olive oil, fish, fruit and vegetables) are now going through great changes in their traditional diet (less pulses and marked increase in animal products and sugar). Conversely, in the Anglo-Saxon and developed Asian countries, we can see signs of a partial Mediterraneanisation with the increase in consumption of olive oil, wine, fruit, while at the same time preserving their previous characteristics. This means that non-Mediterranean consumers are essentially attached to the structure of the Mediterranean Diet, its emblematic products and its great diversity of foods. The wide diffusion of the Mediterranean pyramid and the influence of international nutrition debates have no doubt contributed to this attraction, just at a time when the Mediterranean countries are still adjusting to a northern diet. What creates problems is the pace and extent of this Mediterraneanisation of the non-Mediterranean world.

We asked the question, “Who benefits?”, the Mediterranean producers, the new non-Mediterranean producers, the multinational companies? As we suggested, the rest of the world is becoming a serious competitor of the Mediterranean region. If at present this favours production in the Mediterranean and its export (to the detriment of Mediterranean consumers) that can only be transitory, since production elsewhere is increasing rapidly.

In terms of multinationals, there is evidence of an appropriation of the image of the Mediterranean Diet by companies in the Mediterranean area, which they exploit to add a certain attractiveness to their products. They then link all the characteristics of the Mediterranean Diet to the lifestyle. Other multinationals, with a few exceptions, rather play on the general theme of health, nutrition, well-being, without specifically mentioning the Mediterranean.

Finally, the opening of global markets has contributed enormously to a fundamental change in the Mediterranean Diet. Somewhat paradoxically, it is through the northern countries that the Mediterranean model is seeking to recover lost ground. There is every reason to think that the Mediterranean Diet, a veritable social phenomenon, will most profit the non-Mediterraneans. Unless the recent recognition of the Mediterranean Diet by UNESCO as an intangible heritage upsets the apple cart once more.

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