The History, the Basics and the Benefits of the Mediterranean Diet
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The 2007-2013 ENPI CBC Mediterranean Sea Basin Programme is a multilateral Cross-Border Cooperation initiative funded by the European Neighbourhood and Partnership Instrument (ENPI). The Programme objective is to promote the sustainable and harmonious cooperation process at the Mediterranean Basin level by dealing with the common challenges and enhancing its endogenous potential. It finances cooperation projects as a contribution to the economic, social, environmental and cultural development of the Mediterranean region. The following 14 countries participate in the Programme: Cyprus, Egypt, France, Greece, Israel, Italy, Jordan, Lebanon, Malta, Palestinian Authority, Portugal, Spain, Syria, Tunisia. The Joint Managing Authority (JMA) is the Autonomous Region of Sardinia (Italy). Official Programme languages are Arabic, English and French.

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The European Union is made up of 27 Member States who have decided to gradually link together their know-how, resources and destinies. Together, during a period of enlargement of 50 years, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms. The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders.
MEDDITRANEAN DIET

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1. Mediterranean Diet Basics

1.1 History

Located in the crossroads of three continents, the Mediterranean area has been a hub of exchanges among cultures of ideas, knowledge and people, that has been catalyzing cultural progress for more than eight thousand years, shaping Western civilization as we know it today from our contemporary point of view.

The Mediterranean Sea physically separates several territories with specific characteristics, but also unifies them with a common food tradition, the Mediterranean Diet, the result of years of exchanges and joint growth.

The Mediterranean, throughout the centuries, managed to set an excellent food pattern for health and life. The rich cultural heritage of the traditional Mediterranean Diet which combines simplicity and local flavours, results in a dietary pattern that is balanced, varied and full of flavour, a diet completely compatible with gastronomic pleasure.

The ancient Greek word “diaita”, from which the word diet derives from, means lifestyle and that is exactly what the Mediterranean Diet is; much more than just a list of foods. In fact it is a cultural model which also involves the way foods are selected, produced, processed and consumed, such as the prioritization of fresh, local, and seasonal food; culinary activities and socialization at meals, regular physical activity, rest in the form of afternoon naps, and a whole way of life that is part of the cultural heritage of the Mediterranean countries. Thus, Mediterranean countries share a number of geographical and climatic factors that have favoured this common cultural and agri-food framework.

Professor Ancel Keys, the head of a team of international scientists in seven countries, conducted a study that scientifically postulated that the Mediterranean Diet was good for health, successful aging, and favoured longevity. Modern science has demonstrated during the second half of the twentieth century the exceptional nature of the Mediterranean lifestyle and its positive influence on health.

1.2 Culture

The Mediterranean Diet is a cultural, historical, social, territorial and environmental heritage. It is a set of skills, knowledge, practices, and traditions ranging from the landscape to the table, which ends up on our tables. It is also a living legacy promoting
respect for cultural diversity and an expression of sociability and local communication reinforcing a feeling of identity.

Out of this conviction, Spain, Italy, Greece and Morocco under the coordination of the Mediterranean Diet Foundation proposed the Mediterranean Diet to be included as mentioned in the UNESCO’s Representative List of Intangible Cultural Heritage of Humanity, while trying to always be open (including the extension) to the support and participation of the other Mediterranean countries who share this heritage. The objective of this initiative was to safeguard the enormous millennium old cultural heritage that represents the cultural value of the Mediterranean Diet, as well as to share and disseminate its values and benefits internationally.

Many of the Mediterranean Diet cultural elements are introduced as mentioned in the new pyramid. The most remarkable are those that foster social interaction. Plutarch’s words perfectly illustrate this with a simple phrase: "Men are invited not to eat and drink, but to eat and drink together." It is an extraordinary cultural corpus including all the peoples of the Mediterranean basin and consists of landscapes, crops, cultivation techniques, markets, spaces and gestures culinary innovations and traditions that has been transmitted from generation to generation throughout history.

The Mediterranean Diet also “promotes social interaction” and has given way to a considerable body of knowledge, songs, tales, and legends found beyond its many traditional culinary practices and products. The Mediterranean has evolved, embracing and incorporating wisely, new foods and techniques results of exchange of the Mediterranean peoples. The Mediterranean Diet has been, and remains, an evolutionary and dynamic cultural heritage, though also in danger. For this, it is stressed especially the applicability of a traditional Mediterranean lifestyle, in origin but adapted to modernity, to counteract the decline of traditional eating habits in this region. In fact, the new pyramid includes the terms “today, modern” to achieve this goal.

“MEDITERRANEAN DIET: CULTURE, HEALTH AND MUCH MORE...”

1.3 General Characteristics

The traditional Mediterranean Diet is the heritage resulting from millennia of exchanges within the Mediterranean basin region that has defined and characterized the eating habits of the countries in those regions until the mid twentieth century. It is not a homogeneous model throughout the Mediterranean as it has regional variations, the common features of the Mediterranean Diet is the abundance of plant-based foods such as cereals (in the form of bread, pasta, couscous, rice), vegetables,
legumes, fruits, nuts and seeds, the use of olive oil as the main source of fat, a moderate consumption of fish, shellfish, poultry, eggs, and dairy products (fermented milk products like yoghurt, kefir and cheese), a consumption of small amounts of red meat and in the case of adults a moderate daily intake of wine (in permitting cultures).

1.4 Monitoring Mediterranean Diet Adherence

Unfortunately, current diets in the Mediterranean countries are distancing from the traditional Mediterranean Diet pattern due to the widespread dissemination of the Western-type culture, an urban and technological society model. This ‘westernisation’ process of food habits is due to the effects of globalisation of production and consumption and other socio-economic and lifestyle factors that threaten the adherence to the pattern. In fact, these trends can be observed (Figures 1,2,3) over the last 40 years in the Mediterranean countries. The European Mediterranean area has experienced the greatest decrease in adherence meanwhile other southern Mediterranean countries show the highest adherence values during the same time frame. However, countries in Northern Europe and some other countries around the world are taking on a Mediterranean-like dietary pattern (Figures 1,2,3). This relates to the homogenisation of food behaviours in the modern era.

Mediterranean lifestyles have undergone considerable changes, among others:
- Increased consumption of energy-dense foods (high in fat and/or sugar) from the western and fast food culture based on meat, refined grains, potatoes, ice cream, candies and beverages high in sugar.
- Larger meals’ portion promotion.
- Increased sedentary lifestyles from the new technological and leisure aspects.

Currently the Mediterranean Diet is facing further threats due to the economic crisis which is affecting the most disadvantaged groups in particular, and affecting key food groups such as fruits, vegetables, virgin olive oil, nuts and fish, reducing their consumption.

We now know that eating habits, along with nutritional status, are indicators of the health determinants of the population. The lost of the Mediterranean Diet adherence due to all this socioeconomic and cultural factors have a visible impact at a level of health indicators, especially in cardiovascular diseases, in cancer incidence and XXth century epidemic called, obesity, both adult and child population. All of this, compromises seriously the cultural and sanitary legacy of the Mediterranean.

Therefore, it is necessary to warn society by informing, educating, and promoting the Mediterranean Diet and to prevent the erosion of this heritage, which would have
consequences for our health, our agriculture and our traditional landscapes. Thus, agricultural and health policy actions are urgently required to counteract this dietary westernisation, through active and imminent measures to maintain and increase efforts of promoting the Mediterranean Diet among citizens, especially children and youth.

**Figure 1. World Map of Adherence to the Mediterranean Diet between 1961-2004**

*Source: Da Silva et al. 2009*
Figure 2. Ranking of Countries by Mediterranean Adequacy Index (MAI) Values in between the periods of 1961-1965 and 2000-2003.

Source: Da Silva et al. 2009.

Figure 3. Variation of Mediterranean Adequacy Index (MAI) for all Countries Between the Periods of 1961-1965 and 2000-2003.

Source: Da Silva et al. 2009.
1.5 From Farm to Fork

Mediterranean Diet education should comprise the understanding of the “farm to fork” process, the foods and beverages, their proportions and characteristics as well as the interactions within and between all relevant biological, social and environmental systems.

**Figure 4. From Farm to Fork**

In the “value food chain” the goal is not the lowest price or fastest convenience but the most embedded value for the food provided to consumers which includes nutrition, celebratory values in food events, and local socio-economic community issues.

Practice has shown that dietary education when communicating information on what makes up a balanced nutritious diet is not necessarily conducive to improved nutrition and health since the targeted groups may not be able to put the acquired knowledge into practice for reasons that are often out of their control.

Therefore, this Mediterranean Diet lifestyle promotion framework should go beyond the theoretical and into developing practical skills and stimuli for creating supportive environments through constitutional, regulatory, fiscal or other types of actions in the public domain which operate throughout the food production and consumption chain.
To foster “memory” of our Mediterranean food heritage by engaging local food production, fighting against the pressures of modern life that are undermining social cohesion and causing the extinction of traditional customs and practices.

1.6 Mediterranean Diet Pyramid

History of the Mediterranean Diet Pyramids
One of the main goals of the MedDiet Project is to unify the different products and food groups of the Mediterranean Diet in one representation, in an easily understandable way.

The Mediterranean Dietary pattern has been popularized through a pyramid representation, which graphically highlights the frequency of the foods to be consumed. Many pyramids have been created since 1993 and in 2009, Oldways Preservation & Exchange Trust updated the Mediterranean Diet pyramid and copyrighted it. In response, the Mediterranean Diet Foundation together with the Forum on Mediterranean Food Cultures, with the involvement of other institutions such as the CIISCAM (International Inter-University Center for Mediterranean Food Culture Studies), launched a new revised Mediterranean Diet pyramid representation. This pyramid is the outcome of the internal dialogue within the scientific community and discussions at many meetings.

The new Mediterranean Diet pyramid is the result of an international consensus and is based on the latest scientific evidence in the field of health and nutrition and hundreds of published scientific papers in the last few decades, consequently contributing to the harmonization of educational tools used in the promotion of the Mediterranean Diet and responding to the need for a common framework among Mediterranean countries.

We recommend the unrestricted use and promotion of this pyramid (2010 edition) available in ten languages (English, Spanish, Catalan, Galician, Basque, French, Arabic, Italian, Portuguese and Greek).

Mediterranean Diet Pyramid
A broad group of experts in various disciplines such as nutrition, anthropology, sociology and agronomy agreed on a new pyramid that enriches previous designs with the incorporation of various social, cultural and environmental friendly aspects. The new Mediterranean Diet Pyramid entails this evolution of society and stresses the importance of physical activity, conviviality and the consumption of local, seasonal and traditional products.
Figure 5. The Mediterranean Diet Pyramid: a lifestyle for today.

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Please, visit the MedDiet Project website: www.med-diet.eu

“NEW PYRAMID: THE WAY OF SELECTING, COOKING AND EATING TO FOLLOW THE MEDITERRANEAN DIET”

The health benefits and protective effects against chronic diseases of the Mediterranean Diet have been well established by the scientific community. The pyramid includes all the food groups; a healthy or unhealthy diet relies on its proportions and frequencies. These consumption frequencies and servings expressed in the pyramid are for the healthy adult population (people between 18 and 65 years of age) and should be adapted to the specific needs of children, pregnant women and other health conditions.

Moreover, social and cultural elements characteristic of the Mediterranean lifestyle are also important. So, it is not just about prioritising some food groups over others, but also paying attention to the way they are selected, cooked and eaten. It also reflects the composition and number of servings per meals.

Foods that should sustain the diet are located at the base of the pyramid and foods to be eaten in moderate amounts are located in the upper levels. Plant-based foods,
positioned at the base of the pyramid, provide key nutrients and protective substances that contribute to general well-being and to maintain a balanced diet, and should be consumed in high proportions and frequency. Foods situated in the upper levels such as those from animal origin, rich in sugars and in fats should be eaten in moderation and left for special occasions. The pyramid establishes daily, weekly and occasional dietary guidelines in order to follow a healthy and balanced diet.

**Every day:**
The **three main meals** should contain three basic elements, which can also be found throughout the day:

- **Fruit.** One or two servings per meal. Should be chosen as the most frequent dessert.
- **Cereals.** One or two servings per meal in the form of bread, pasta, rice, couscous and others. Preferably whole grain, since some valuable nutrients (magnesium, phosphorus, etc.) and fibre can be lost during processing.
- **Vegetables.** Present at lunch and dinner; or more than two servings per meal, at least one of the servings should be raw. A variety of colours and textures provide a diversity of antioxidants and protective compounds.

- A daily intake of **1.5–2.0 litres of water** should be guaranteed. Good hydration is essential to maintain the corporal water equilibrium, although needs may vary among people because of age, physical activity, personal circumstances and weather conditions. Aside from water, non-sugar rich herbal infusions and broths (with low fat and salt content) may complete the requirements.
- **Dairy products.** Preference of low fat yoghurt, cheese and other fermented dairy products. They contribute to bone health, but can also be an important source of saturated fat.
- **Olive oil** is located at the centre of the pyramid and should be the **main source of dietary lipids** because of its high nutritional quality (**especially extra virgin olive oil**, which should be preferred for dressings and adding it raw to foods). Its unique composition gives it a high resistance to cooking temperatures and should be used for cooking as well as dressings (one tablespoon per person).
- **Spices, herbs, garlic and onions** are a good way to introduce a variety of flavours and palatability to dishes and contribute to the reduction of added salt. **Olives, nuts and seeds** are good sources of healthy lipids, proteins, vitamins, minerals and fibre. A reasonable consumption of olives, nuts and seeds (such as a handful) make for a healthy snack choice.
• Respecting religious and social beliefs, a moderate consumption of wine and other fermented beverages (one glass per day for women and two glasses per day for men, as a generic reference) during meals is recommended.

**Weekly:**
A variety of plant and animal origin proteins should be consumed. Traditional Mediterranean dishes usually use animal origin protein foods as a garnish instead of as a main ingredient.

• The combination of legumes (more than two servings) and cereals are a healthy source of proteins and lipids. Even daily dishes can be enriched by the vegetal proteins of the legumes. Thus, legumes can substitute cereals, grains and tubers but especially meat enriching meals.

• Fish (two or more servings), white meat (two servings) and eggs (two to four servings) are good sources of animal protein. Fish and shellfish are also a good source of healthy proteins and lipids.

• Red meat (less than two servings, preferably lean cuts) and processed meats (less than one serving) should be consumed in smaller quantities and less frequently. Potatoes are also included in this group, as they are a part of many traditional recipes with meat and fish (three or less servings per week, preferably fresh potatoes).

**Occasionally:**
Sugary and unhealthy fat rich foods (sweets) are found in the vertex of the pyramid. Sugar, candies, pastries and beverages such as sweetened fruit juices and soft drinks, should be consumed in small amounts and left for special occasions.

Together with the proportion and frequency recommendations of consumption, the incorporation of lifestyle and cultural elements is one of the innovations of the pyramid. Adopting a healthy lifestyle and preserving cultural elements should also be considered in order to acquire all the benefits from the Mediterranean diet. These elements are:

**Moderation:** Portion sizes should be based on frugality, adapting energy needs to urban and modern sedentary lifestyles.

**Socialisation:** The aspect of conviviality is important for the social and cultural value of the meal, beyond nutritional aspects. Cooking, sitting around the table and sharing food in company of family and friends is a social support and gives a sense of community.
Cooking: Cooking is an important activity that must be given the proper time and space. It can be a relaxing and fun activity that can be done with family, friends and loved ones.

Seasonality, biodiversity, eco-friendliness, traditional and local food products are presented at the bottom of the pyramid to highlight how the new revised modern Mediterranean Diet is compatible with the development of a sustainable diet model for the present and future Mediterranean generations. The preference for seasonal, fresh and minimally processed foods maximises the content of protective nutrients and substances in the diet.

Activity: Regular practice of moderate physical activity (at least 30 min throughout the day) is a basic complement to the diet for balancing energy intake, for maintaining a healthy body and for many other health benefits. Walking, taking the stairs vs. the lift, housework, etc., are simple and easy ways of doing exercise. Practising leisure activities outdoors and preferably with others makes it more enjoyable and strengthens the sense of community.

Rest: Resting is also part of a healthy and balanced lifestyle.

This pyramid is the result of an international consensus and is based on the latest scientific evidence on nutrition and health published in hundreds of scientific articles in the last decades.

“IF YOU LOVE YOURSELF, FOLLOW ME. THE MEDDIET”

Adopting a Mediterranean lifestyle also involves preserving traditional cultural elements and accordingly gaining all the benefits of the Mediterranean Diet.

“PRESERVE CULTURAL AND TRADITIONAL ELEMENTS TO ACQUIRE ALL THE BENEFITS OF THE MEDITERRANEAN DIET”
2. Physical Activity

“MEDITERRANEAN DIET LIFESTYLE = HEALTHY EATING + PHYSICAL ACTIVITY = YOU WIN!”

2.1 Current Situation

A considerable decrease in physical activity and consequently an increase in sedentary activities have been observed in recent years. This is attributed to technological development promoting more sedentary work and leisure. Watching television, playing computer games... more than two hours a day in childhood and adolescence is associated with a lack of exercise and unhealthy habits into adulthood.

The Mediterranean Diet is a balanced lifestyle, which incorporates the practice of regular, moderate physical activity. The region, known for its moderate climate, encourages outdoor physical activity and sports. Combined, these attributes of the Mediterranean Diet and lifestyle make it an excellent model for healthy living.

“BEING ACTIVE IS AS IMPORTANT AS EATING PROPERLY”

2.2 Recommendations

Physical activity is any body movement produced by the muscles resulting in energy expenditure. This includes all types of activities, such as sports, recreation, professional activities, housework, active transport (walking, cycling ...) and structured exercises.

These minutes can be accumulated during the day with a combination of activities of moderate to vigorous intensity. Activities of moderate intensity include a wide range of activities such as biking or any active play. More strenuous activity is when you get tired and feel short of breath, and include sports such as football and basketball, as well as activities like dancing, running and swimming. Any active play can include moderate activity.
Figure 6. Importance of Limiting Sedentary Activities

ACTIVE DAILY ACTIVITIES

LIMITING SEDENTARY ACTIVITIES

60 minutes/day for children
30 minutes/day for adults

“ADD PHYSICAL ACTIVITY BOTH AT HOME AND IN SCHOOL, LIMIT SEDENTARY LEISURE ACTIVITIES”

“STUDIES HAVE SHOWN THAT SMALL INCREASES IN PHYSICAL ACTIVITY CAN MAKE A BIG DIFFERENCE IN LONG-TERM HEALTH”

✓ Any increase in physical activity helps. Everything counts!
✓ Combine activities and add minutes during the day (sports, playing, walking and biking, etc...).
✓ Walk, bike and use the stairs instead of the lift.
✓ Make an active lifestyle a habit. Adults are role models for children and adolescents, both in active and sedentary activities.
✓ Choose activities you enjoy. Preferably in the company of others and outdoors.
✓ Avoid excessive sedentary activities: TV, video games and long hours in front of screens.
Figure 7. Recommendations for Children Regarding the Frequency of Practising Different Types of Physical Activity and Sedentary Leisure

- ≤2 hours (television, phone, tablet, PC)
- 2-3 times a week + flexibility + force activities (push-ups, martial arts, dance, gymnastics ...).
- 3-5 times a week (≥ 20 min / day). Moderate-intense activities (soccer, skating, aerobic dance, cycling, swimming, volleyball, tennis, basketball...) that make you sweat!
- Moving every day (walking, household tasks, active games...).

For the fulfillment of these recommendations both at home and at school, refer to Family Physical Activity Barriers and Solutions and Proposed Activities for Educators in Appendix 1.

2.3 Benefits of Physical Activity

The practice of regular physical activity contributes to a multitude of benefits that go beyond its physical benefits:

- Rest and sleep: physical activity prevents exhaustion, facilitates rest, and combats stress.
- Prevent some chronic diseases such as cardiovascular disease, diabetes mellitus, osteoporosis and some cancers.
- Helps prevent overweight and obesity, to achieve a proper body weight and maintain a stable weight.
- Increases flexibility and strength: helps build bones and improves muscle tone.
- Psychological benefits: autonomy and improves self-esteem. Protects from depression and anxiety.
- Increases life expectancy and quality of life.

In children it also contributes to the integral formation of the person and the mental development necessary to reach maturity. Making physical activity a part of the child's
daily routine is not only fun, but also promotes healthy growth and development and is a good way to learn physical and social skills.

“PRACTICE OF REGULAR PHYSICAL ACTIVITY ENHANCES AND PROMOTES GENERAL WELLBEING”
3. Mediterranean Diet Food Groups, Selection and Preparation

Information for each food group (nutritional characteristics, recommended intake, main food products, seasonality, biodiversity and varieties of local production, typical elaboration and preparation methods, recipes, historical curiosity, festivities & traditions and special features) will be systematically available and adapted to each MedDiet Project participating country at the MedDiet Project website www.med-diet.eu.

Introductory concepts are provided below as tips and techniques for the selection, preparation, and cooking of typical Mediterranean Diet foods.

3.1. Food Selection

Even the values linked to the nutritional and health motivations are very important for the consumer, whom could even have good nutrition labelling and knowledge, conflicts with some other factors that influence food selection. The motivations concerning food characteristics linked to cultural and social background (prestige, social acceptance, fashion, modernity), ease of preparation and comfort in consumption, taste, and of course, the cost relative to consumer purchasing power are very important and, in most cases, decisive.

Food selection depends on many factors:

✓ Cost
✓ Personal taste
✓ Cultural and social background
✓ Ease of preparation
✓ Comfort in consumption
✓ Food characteristics (taste, colour, texture, shape, size)
✓ Relation to stay in good health due to its nutrient content
✓ Nutritional and health motivation

Eating is a complex act. It is not just the ingestion of a combination of foods, but also a social event accompanying many other non-nutritional factors that make us feel connected to the group to which we belong. The attitude we have toward certain foods reflects personal and emotional experiences. How we eat during childhood lays the foundation for our preferences for certain types of food as adults, as well as the acquisition of food selection patterns, and the incorporation of lifelong social attitudes and behaviours. Advertising, fashion, sports and aesthetic myths have a growing influence in adolescence. During adolescence, foods take on a social and symbolic
value to better appreciate the tastes and gastronomic traditions, while consumption is personalized with the risk of occurrence of inadequate eating practices (skipping meals, snacks at odd times, excessive alcohol consumption ...). Thus, food habits of a population have their origin in educational standards more or less consciously received in the family context during the early years of life and are modulated over time by the whole society.

The food education process involves the following factors:

- Food knowledge
- Identifying food characteristics: smell, taste, texture, shape,...
- Culinary preparation and presentation
- Recommended frequency of consumption
- Portion sizes of different food groups (Figure 8)
- Consumption during some stage of life
- Interest in activities related to food
- Health value
Figure 8. Mediterranean Food Groups Portion Size Chart
To influence the determinants for the maintenance and promotion of the Mediterranean Diet, both factors that influence the availability and selection of food (Figure 9), are crucial.

**Figure 9. Factors Related to Western Diet and Mediterranean Diet Adherence.**

Source: Modified from Drewnoski & Eichelsdoerfer, 2009

Never before in our history has the food supply in our environment been as rich and as varied as it is today. Therefore, it is essential for food and culinary nutrition education
to the consumer along with the challenge raised by improving the nutritional quality of food. This goes through promoting the Mediterranean Diet in its cultural and gastronomic setting, reducing the stigma associated with certain low cost foods, increasing the convenience when possible and essentially their accessibility, without sacrificing taste (Figure 10).

**Figure 10. – Actors and Elements for Mediterranean Diet Promotion**

![Figure 10](image)

*Source: adapted from Aranceta, 2002*

The main actors that sensitize consumers with attitudes that promote the knowledge and skills necessary for proper food selection according to the Mediterranean Diet pattern are the media, society, school and family, the restaurant and catering sector, the health sector and consumer education (Figure 10). All resources and actors must be organized and coordinated efficiently to achieve this goal. The current situation creates the need for long-term intersectorial actions to ensure the survival of the Mediterranean Diet, with special emphasis on collective interventions to children and youth.
3.2 Food Preparation

The current Mediterranean lifestyle should allow individuals to dedicate a space in the kitchen for the preferential selection of local Mediterranean produce, proper storage and handling, and cooking techniques that allow to maximise the nutritional properties of food, while enjoying tasty dishes.

Cooking techniques are often linked to the type of food and culinary tradition. Food can be cooked in water (boiled), fat (sautéed, braised, and fried) in both water and fat (stew), dry (grilled and oven) or steamed and in the microwave. Each influence food palatability and affects to a greater or lesser extent the preservation of nutritional properties. For more information on cooking techniques refer to the summary of cooking techniques and their advantages and disadvantages in the Table found in Appendix 2. There are some specific and sophisticated gastronomic cooking techniques used by chefs, but those mentioned below are the most common and the rest of foods, such as some vegetables and fruits, that are prepared to be eaten raw without subjecting them to any kind of cooking. Considering how to cook food provides different textures so softer preparations can be introduced more frequently for children.

The recommendations for the frequency of cooking techniques per week for school lunches are summarized in Figure 11.

**Figure 11. Spanish Consensus on the Frequency of Cooking Techniques per Week in School Meal Programming. School-age from 3 to 18 Years**

<table>
<thead>
<tr>
<th></th>
<th>WEEKLY FREQUENCY</th>
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<tbody>
<tr>
<td><strong>FIRST COURSE</strong></td>
<td></td>
</tr>
<tr>
<td>Soups and creams</td>
<td>1-2</td>
</tr>
<tr>
<td>Boiled or baked</td>
<td>2-3</td>
</tr>
<tr>
<td>Stews</td>
<td>1-2</td>
</tr>
<tr>
<td><strong>MAIN COURSE</strong></td>
<td></td>
</tr>
<tr>
<td>Baked or boiled</td>
<td>1-3</td>
</tr>
<tr>
<td>Braised, stewed or roasted</td>
<td>1-2</td>
</tr>
<tr>
<td>Fried or Battered</td>
<td>1-2</td>
</tr>
<tr>
<td>Grilled/griddle</td>
<td>0-1</td>
</tr>
<tr>
<td><strong>GARNISHES</strong></td>
<td></td>
</tr>
<tr>
<td>Raw</td>
<td>1-2</td>
</tr>
<tr>
<td>Fried</td>
<td>0-1</td>
</tr>
<tr>
<td>Boiled</td>
<td>0-1</td>
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</table>
Source. Modified from “Consenso nacional de la reunión de trabajo de los expertos de la evaluación de menús escolares (Ministerio de Sanidad y Ministerio de Educación, España, 2010)

Prioritize cooking techniques that do not require much addition of oil such as steam, oven, grill, fried,... and meet the frequency of use and in this way ensure a diversification in the use of healthy cooking techniques (boiled, stewed, boiled, grilled and fried).

Precooked foods. Includes pre-fried potatoes, meat, dough (pizza, cannelloni, cakes ...) and / or ultra frozen breaded fish, breaded, lasagna, etc.. No chips accompanied with side dishes. The proposal would limit these foods to a maximum frequency of ≤ 2 times per week.

Temperatures and cooking times for food determine the preservation or loss of nutrients, while allowing the destruction of pathogenic microorganisms. Cooking food causes physical and chemical transformations, with positive changes such as improved digestibility, and the conversion of nutrients into more easily digestible forms.

Those techniques that allow for the digestibility of foods like pasta, rice, legumes, tubers and some vegetables; also generally generate a loss of some vitamins and minerals from vegetables and fruits preparations. Consequently, the way that foods are cooked is absolutely essential for avoiding unnecessary nutrients loss since, in general, the longer food is exposed to heat, the greater the nutrient loss. Five minutes can make an enormous difference in the nutritional quality of a meal. In addition, it is hard to generalize even within food groups. Every food is unique and should be treated differently when cooking -temperatures and times-. Spinach shouldn’t be cooked for more than 2-3 minutes. But kale needs steaming for 6-8 minutes. Generally speaking, we have historically overcooked vegetables in Mediterranean countries.

<table>
<thead>
<tr>
<th>SUMMARY OF COOKING TIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegetables</strong>*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Eggs</strong></td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
</tr>
</tbody>
</table>

*The lower nutrient loss from steaming is the main reason it is highly recommend to get the most of many vegetables (for instance, boiling creates more nutrient loss than
steaming if all other factors are equal). Vegetables should never be exposed to high heat or boiling water for over 20 minutes. Ideally a short cooking time for vegetables (between 3-5 minutes) with a careful, minimized heat and water exposure are recommended.
4. Meals

The new Mediterranean Diet pyramid expresses the composition of meals for the first time in a pyramid. The presence of three main components: fruits, vegetables and cereals, should be the base of the meal, supplemented by other vegetable-origin foods (olives, nuts and seeds (a handful), and spices, herbs, garlic and onions) that add flavour and contribute to salt reduction) filling about 70% of the surface of the plate. The remaining 30% of the plate should be covered by animal-based foods such as dairy, fish, meat or others. Being cooked or seasoned with extra virgin olive oil is represented with a spoon in the center of the Tray. Beverages should consist of plenty of water and a glass of wine (in moderation) for adults if culturally permitted.

4.1 Mediterranean Diet Meal (for adults)

Figure 12. Healthy Meal Composition Tool for Adults

“IF YOU LOVE YOURSELF, FOLLOW ME. THE MEDDIET”

<table>
<thead>
<tr>
<th>VEGETABLES:</th>
<th>FRUITS:</th>
<th>CEREALS, GRAINS &amp; TUBERS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should be the largest portion of your meal.</td>
<td>Include fruit as the main dessert</td>
<td>Choose from: Rice, pasta, bread, and other cereals. These give you energy for the whole day. Whole grains like brown bread and brown rice fill you up and keep you energized even longer!</td>
</tr>
<tr>
<td>Choose a variety of colours and textures, both raw and cooked for greater body defences.</td>
<td>Choose a variety of colours and textures both raw (keep the skin whenever possible) and cooked for greater body defences.</td>
<td></td>
</tr>
</tbody>
</table>

| DAIRY, FISH, EGGS & MEAT: |
| Choose from: - Dairy (1 yoghurt, piece of cheese or a glass of milk). - Fish, eggs and poultry. - And from time to time red meat (beef, lamb...) and processed meats (sausages...) |

| LEGUMES, NUTS & SEEDS: |
| Don’t forget legumes; And a handful of nuts or seeds at one of the meals. These can often substitute cereals, grains & tubers but especially meat enriching meals. |

| WATER: OLIVE OIL: |
| Drink plenty of water. Use extra virgin olive oil for cooking and seasoning. |

*Stay Active. Exercise with friends and preferably outdoors since it is fun and healthy!*

*Ask for local, fresh, traditional and seasonal foods!*

*Eat the quantity of a dish every meal for the right amount.*

*Share meals with friends and family. Focus your attention on the meal without interruptions (TV, phone...)*
4.2 Mediterranean Diet Tray (for children)

Figure 13. Healthy Meal Composition Tool for Children.

**MEDITERRANEAN DIET TRAY**

**VEGETABLES:**
Should be the largest portion of your plate.
Choose a variety of colours and textures, both raw and cooked for greater body defences.

**FRUITS:**
Include fruit as the main dessert
Choose a variety of colours and textures both raw (keep the skin whenever possible) and cooked for greater body defences...

**DAIRY, FISH, EGGS & MEAT:**
Choose from:
- Dairy (1 yoghurt, piece of cheese or a glass of milk).
- Fish, eggs and poultry.
- And from time to time red meat (beef, lamb...) and processed meats (sausages...)

**CEREALS, GRAINS & TUBERS:**
Choose from:
- Rice, pasta, bread, and other cereals. These give you energy for the whole day.
- Whole grains like brown bread and brown rice fill you up and keep you energized even longer!

**LEGUMES, NUTS & SEEDS:**
Don’t forget legumes;
And a handful of nuts or seeds at one of the meals.
These can often substitute red and yellow components of your dish enriching it.

**WATER:**
Drink plenty of water. Limit soft drinks and juices for special occasions.

**OLIVE OIL:**
Use extra virgin olive oil for cooking and seasoning.

*Stay Active.* Exercise with friends and preferably outdoors since it is fun and healthy!

*Ask for local, fresh, traditional and seasonal foods!*

*Eat the quantity of a dish every meal for the right amount.

*Limit your intake of sweets and cakes, reserve them to special occasion.

*Limit your intake of junk food (chips, trench-fries,...).

*Share meals with friends and family. Focus your attention without interruptions (TV, phone...)*
Figure 14. Mediterranean Diet Tray

The composition of meals are not necessarily a single dish as expressed in the image of the Tray (a way to transmit the Mediterranean Diet principles and healthy school meal composition), should be spread over the different dishes that make up the meal, with the composition and proportions represented by the Pyramid and the Tray.

**Meal Distribution Throughout the Day**

The percentatges of energy that should be provided by each meal and the meal composition is presented below (Figure 15).

| VEGETABLES: | Should be the largest portion of your plate. Choose a variety of colours and textures, both raw and cooked for greater body defences. |
| FRUITS: | Include fruit as the main dessert. Choose a variety of colours and textures both raw (keep the skin whenever possible) and cooked for greater body defences. |
| DAIRY, FISH, EGGS & MEAT: | Choose from: Dairy (1 yoghurt, piece of cheese or a glass of milk), Fish, eggs and poultry, And from time to time red meat (beef, lamb) and processed meats (sausages...) |
| CEREALS, GRAINS & TUBERS: | Choose from: - Rice, pasta, bread, and other cereals. These give you energy for the whole day. - Whole grains like brown bread and brown rice fill you up and keep you energized even longer! |
| LEGUMES, NUTS & SEEDS: | Don’t forget legumes. And a handful of nuts or seeds at one of the meals. These can often substitute red and yellow components of your dish enriching it. |
| WATER: | Drink plenty of water. Limit soft drinks and juices for special occasions. |
| OLIVE OIL: | Use extra virgin olive oil for cooking and seasoning. |

*Stay Active. Exercise with friends and preferably outdoors since it is fun and healthy!*

*Ask for local, fresh, traditional and seasonal foods!*

*Eat the quantity of a dish every meal for the right amount.*

*Limit your intake of sweets and cakes, reserve them to special occasion.*

*Limit your intake of junk food (chips, french-fries...).*

*Share meals with friends and family. Focus your attention without interruptions (TV, phone...)*
Figure 15. Meal Distribution Throughout the Day
Variety

The variety of food groups and ways to prepare food is one of the most prominent and valued concepts of the Mediterranean Diet.

Mediterranean Diet dishes express variety and diversity, as reflected in the representative sample of Mediterranean recipes and the typical menus of the six participating Mediterranean countries in the MedDiet Project (See recipes at www.med-diet.eu) gathered together to reinforce the particularities of the Mediterranean Diet in different Mediterranean areas. For the selection of Mediterranean Diet recipes see the Mediterranean Diet recipe selection requirements; and for the relevant issues regarding a Mediterranean Diet recipe refer to the Template in the Appendix 3 and 4.
5. Mediterranean Diet Nutrition Values

Many are the nutritional characteristics of the Mediterranean diet that are notable:

- Variety of plant-based foods and its high consumption over animal-based foods;
- Richness in micro-nutrients (vitamin and minerals), antioxidants, non-nutritive factors (provided by fruits, vegetables and also herbs and spices);
- High in complex carbohydrates and fibre thanks to the high consumption of whole grains, legumes, fruits, vegetables and nuts;
- Presence of healthy fats from olive oil (monounsaturated), nuts and fish (both polyunsaturated, respectively) and low unhealthy fats (saturated and trans fats)
- Balanced macro-nutrient proportions (carbohydrates, protein and fat)
- Low energy density.

(A Nutritional glossary can be found at the MedDiet Project website www.med-diet.eu)
6. Health Benefits of the Mediterranean Diet

Vast evidence shows the relation between Mediterranean Diet food components and chronic diseases. Since food components are not consumed isolated but within meals and its health effect are often synergistic, studies focusing on the particular effect of one nutrient or food component have been gradually been displaced by an analysis focused on the whole dietary pattern.

The level and the quality of the evidence around the effects of the Mediterranean Diet pattern have exponentially raised, so have been developed the methodological tools to measure the Mediterranean Diet adherence. In fact, numerous studies observed that a good adherence to Mediterranean Diet pattern is systematically associated with significant lower risk of several chronic diseases.

Beneficial health effects of the Mediterranean Diet:
- mortality and life-expectancy,
- coronary heart disease,
- obesity,
- diabetes mellitus,
- metabolic syndrome,
- cancer,
- bronchial asthma,
- cognitive function, Alzheimer’s disease, and depression,
- nutrition adequacy and quality of life.

Extended information regarding the scientific evidence on Mediterranean Diet and health will be soon published through a DIGITAL LIBRARY in the near future on the MedDiet Project website www.med-diet.eu.

“THE MEDITERRANEAN DIET, ONE OF THE WORLD HEALTHIEST DIETS”
7. Mediterranean Diet, Sustainable Agriculture and the Environment

The Mediterranean Diet - a more environmentally friendly & sustainable agricultural model:
- Protecting the environment
  ✓ Less greenhouse gas effect
  ✓ Less of resources (energy, water and land use)
  ✓ Increased Biodiversity
- Promoting Sustainable Agriculture model

The environmental consequences caused by food systems are on public health agendas. Food is produced, processed, distributed, and consumed, and this has consequences both on human health and on the environment. Food items differ substantially regarding their environmental footprint that can be measured through energy consumption, agriculture land use, water consumption or greenhouse gas emissions. Animal-based foods are by far more land and energy intensive compared to foods of vegetable origin. Dietary patterns can substantially vary resource consumption and their impact on the environment as well as on the health of a given population. The Mediterranean Diet is postulated to be an environmentally friendly model.
8. The Advantages of the Mediterranean Diet

In summary, following the Mediterranean Diet supposes many advantages for individuals and the community:

- Good for Individuals
- Good for Public Health and Disease Prevention
- Good for Local Economics
- Good for the Environment
- Good for Sustainable Agriculture

**Figure 16. Areas Related to the Mediterranean Diet**

*Source: Adapted from Task Force on indicators for assessing the sustainability of the Mediterranean Diet, 2012.*
USEFUL LINKS

Governmental and non-profit organizations links and resources generated by public health or food related initiatives and programs deemed credible that could complement the MedDiet guidelines.

1. Greece National Catalogue of the Best practices of Local Authorities:  
   http://www.efet.gr/  
   http://www.paideiatrofi.org/

2. Social Marketing Resources  
   Center for Disease Control – In the Know: Social Media for Public Health  

3. Estrategia NAOS: http://www.naos.aesan.msp.es/

4. EUFIC. Consejo Europeo de Información sobre Alimentación: www.eufic.org

5. Alimentación Saludable y Actividad Física como instrumentos de promoción de la salud: Desarrollo de programas estatales y autonómicos en los gobiernos locales:  
   http://www.juntadeandalucia.es/salud/sites/csalud/galerias/documentos/c_3_c_1_vida_sana/alimentacion_equilibrada_actividad_fisica/premios_certamenes/3AmbitoComunitarioAccesit.pdf


7. Leadership for Healthy Communities:  

8. Libro Blanco para una Estrategia Europea sobre problemas de salud relacionados con la alimentación, el sobrepeso y la obesidad:  
APPENDIX

APPENDIX 1 - FAMILY PHYSICAL ACTIVITY BARRIERS AND SOLUTIONS

Sometimes we find obstacles for not practicing regular physical activity. Examples and possible solutions:

- **Barrier 1: Unsafe neighbourhood.**
  Solution: Children do not necessarily have to exercise outdoors to be active, indoor sports are so available.
  ✓ Play traditional games like Hide and Seek, bouncing games, catching games Tag, etc.
  ✓ Dance to music.
  ✓ Move around with a video or television program.
  ✓ Do active chores such as vacuuming and mopping.
  ✓ Join extracurricular activities held at school or in adapted spaces. For example: swimming at a pool, school dancing, play basketball, football and volleyball in school, etc.

- **Barrier 2: Inactive family.**
  Solution: Family should be a role model. Children are always watching. If adults are active, then it is most likely that children will also be.
  ✓ Be active together in the family housework.
  ✓ Take a walk together: go to the mall for a walk, to the park to play, hiking, walking on the beach, etc.
  ✓ Establish a daily routine (few minutes) for activities: walking, running, skating, cycling or swimming.
  ✓ Organize active holidays! Have a bowling or skating party, etc.
  ✓ Give gifts that encourage physical activity: sports equipment, stop by to do some adventure sports.

- **Barrier 3: Exceeding 2 hours a day of television, computers, video games...**
  Solution: Set a time limit and turn off the television.
  ✓ Turn off the TV during family meals to promote family relationships and become aware of the act of eating.
  ✓ Get the child used to not having a television set in their bedroom at very early ages.
  ✓ Have family leisure hours and practice dynamic activities.
Proposed Activities for Educators

We propose some popular gaming activities, classified according to the education level, to be carried out during recess at school to promote physical activity during leisure time and to encourage interaction among peers (see Table 4).

“STAY ACTIVE. EXERCISE WITH FRIENDS AND PREFERABLY OUTDOORS
SINCE IT IS FUN AND HEALTHY!”

Table 1. Classification of types of Physical Activity

<table>
<thead>
<tr>
<th>Non sports</th>
<th>Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dodge Ball</td>
<td>Football</td>
</tr>
<tr>
<td>Jump rope</td>
<td>Swim</td>
</tr>
<tr>
<td>Hopscotch</td>
<td>Martial Arts</td>
</tr>
<tr>
<td>Playing in the park</td>
<td>Rollerblading</td>
</tr>
</tbody>
</table>

Examples of Active Activities (Recommended a minimum of 15 minutes for each activity)

Table 2. Activities by Cycle (divided based on age and physical capabilities of children)

<table>
<thead>
<tr>
<th>Initial cycle: 1st level</th>
<th>Activity</th>
<th>Material</th>
<th>Installations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statues</td>
<td></td>
<td>Playground</td>
</tr>
<tr>
<td></td>
<td>Skipping</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Musical chairs</td>
<td>Chairs and music</td>
<td>Gym or large room</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial cycle: 2nd level</th>
<th>Activity</th>
<th>Material</th>
<th>Installations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hopscotch</td>
<td>Ribbon or chalk, tile</td>
<td>Gym or playground</td>
</tr>
<tr>
<td></td>
<td>Jump rope</td>
<td>Ropes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The 4 corners</td>
<td>Cones or plaster to mark corners</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle cycle</th>
<th>Activity</th>
<th>Material</th>
<th>Installations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tug of war</td>
<td>Long rope</td>
<td>Gym Court</td>
</tr>
<tr>
<td></td>
<td>Scarf game</td>
<td>Scarf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spinning tops</td>
<td>Spinning tops</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper cycle</th>
<th>Activity</th>
<th>Material</th>
<th>Installations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Relay</td>
<td>Cones, hoops, ribbons, scarves, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gymkhana</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dodge ball</td>
<td>Ball, chalk or ribbon</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2 – COOKING TECHNIQUES

- Boiling. Simple cooking where foods are dipped in boiling water at 100 °C for a certain time.
- Grill. Cooking food on a hot plate at 200 °C over a little olive oil to prevent food from sticking.
- Oven. Firings at temperatures suitable for the type of food and the size of the part, usually at elevated temperatures above 150 °C.
- Stew. Cooking fat food and water over medium heat and uncovered about 100 °C. Cooking food in fat over low heat and cook covered for that "drowned" in their own juices.
- Sautéed. Quick cooking foods in an uncovered container with a moderate amount of hot oil at temperatures around 180 °C.
- Fried. Cooking food by immersion in hot oil around 180 °C.
- Steam. Placing the food in a container with water, but without contacting water, food is cooked in the steam caused by evaporation at 100 °C.
- Blanching. Food substances -usually vegetables or fruits to remove a strong taste (cabbage, onions, etc.)- plunged first into boiling water, and removed after a brief time to be plunged then into cold water (shocked) to halt the cooking process.
## The Advantages, Disadvantages, Precautions and Solutions of Each Cooking Technique

<table>
<thead>
<tr>
<th>COOKING TECHNIQUES</th>
<th>ADVANTAGE</th>
<th>DISADVANTAGE</th>
<th>PRECAUTIONS</th>
<th>SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILED</td>
<td>Fibrous structures are weakened and some nutrients (fat-soluble vitamins) are released and better absorbed. You get a nutritious liquid, rich in minerals.</td>
<td>The food loses minerals that migrate to the cooking water and destroy much of the water soluble vitamins (vitamin C and group B).</td>
<td>Careful not to overcook pasta and rice as they lose starch, stick and may not be well accepted.</td>
<td>To minimize nutrient loss and prevent excessive grain softening, food must be added to boiling water, keep high heat, cook for the necessary time and drain immediately.</td>
</tr>
<tr>
<td>GRILL/GRIDDLE</td>
<td>The food in contact with the hot surface creates an outer layer that keeps juices and nutrients inside and takes on a very nice texture.</td>
<td>Food can be cooked too much or too little.</td>
<td>If food is undercooked it might be left hygienically unsafe. Roasting reduces its digestibility and nutritional value.</td>
<td>Eat straight off the griddle or preference for making grilled soft foods such as fish, zucchini or eggplant, for example.</td>
</tr>
<tr>
<td>OVEN</td>
<td>All foods can be cooked in the oven.</td>
<td>Foods tend to dry and harden that reduces their digestibility and nutritional value.</td>
<td>Prevent food from drying out.</td>
<td>Add some water or broth for added moisture and to prevent drying.</td>
</tr>
<tr>
<td>STEW</td>
<td>The long cooking food allows obtaining very pleasant flavours and textures children accept well.</td>
<td>Foods lose part of their identity and you get a bowl of uniform flavours and textures.</td>
<td>Avoid the monotony of the dishes with the same vegetables (onion, tomato and carrot).</td>
<td>Cook different types of food with a variety of accompaniments.</td>
</tr>
<tr>
<td>SAUTÉÉD</td>
<td>Infers good palatability to foods and maintains vegetables a bright colour.</td>
<td>Cooking is done in oil and its absorption can lead to excessive intake.</td>
<td>Cook food well but with a little oil.</td>
<td>Use it for side dishes or to accompany second courses since servings are smaller.</td>
</tr>
<tr>
<td>FRIED</td>
<td>Very well accepted by children because foods absorb cooking oils and are more flavorful.</td>
<td>Cooking oils deteriorate at high temperatures and increase the energy value of food.</td>
<td>Use it carefully and occasionally.</td>
<td>Heating the oil to the required temperature to obtain a crispy food and thereby minimize the absorption of fat. Use oils with high oleic acid content (extra virgin/virgin olive oil or high oleic acid sunflower oil) for higher temperature resistance and performance.</td>
</tr>
<tr>
<td>STEAM</td>
<td>High preservation of minerals in food, as well as some of the vitamins, Low acceptance of food texture by children.</td>
<td>Avoid using it only in case of need for food regime (intestinal</td>
<td>Use this technique for vegetable side dishes to add colour to the second course. Add herbs and</td>
<td></td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
<td>Tips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microwave</td>
<td>Comfort, ease of use and speed.</td>
<td>If the radiation does not reach the entire piece evenly, food may be partially heated or lightly cooked. Use the device following the instructions. Use it for the intermediate stages of the preparations and cooking to heat liquid (water, broth, milk) or to defrost quickly and hygienically.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw</td>
<td>Minimum loss of nutrients, only from storage and handling.</td>
<td>Little acceptance of the typical salad (lettuce, tomato and corn). Avoid monotony of trimmings and use imagination to provide variety of colors and textures to the dish. To prevent nutrient losses reduce storage time, clean the vegetables without letting them soak long and drain well. Avoid monotonous salads with many ingredients, colours and textures.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3- MEDITERRANEAN DIET RECIPE SELECTION REQUIREMENTS

The recipe should prioritize:
1. High content vegetables and/or legumes;
2. Olive oil as a principal added fat;
3. If the recipe has a garnish, it must be based on vegetables and/or legumes;
4. It should contain a grain product, such as bread, pasta or rice if possible;
5. Cooking techniques that do not require the addition of large amounts of fat: steamed, baked, grilled, fried, etc.
6. Include fresh, seasonal and/or local production food;
7. Include fish and/or seafood, or lean meats if it is a second course;
8. Ensure the presence of fresh and/or dried, and in case of using milk the low-fat priority fat (semi-skimmed or skimmed) in case it is a dessert

The recipe should avoid:
1. High amount of fat in the preparation of the dish, such as creams, butter, margarine, butter or a lot of oil.
2. Fatty meats, sausages on a large scale, as the main ingredient;
3. Desserts with a high content of sugars and/or fats;
4. Culinary preparations that require a quantity of fat such as fried, breaded, etc.;
5. The use of fats other than olive oil in the preparation of sauces.
## APPENDIX 4- MEDITERRANEAN DIET RECIPE TEMPLATE

<table>
<thead>
<tr>
<th>Name of the recipe</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Name of the restaurant</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td></td>
</tr>
</tbody>
</table>

Classify the recipe in one of the following groups:
- Salads
- Vegetables/Legumes
- Potatoes, pasta and rice
- Meat and eggs
- Fish
- Desserts

<table>
<thead>
<tr>
<th>Number of servings</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Season</td>
<td>Spring</td>
<td>Summer</td>
<td>Fall</td>
<td>Winter</td>
<td></td>
</tr>
<tr>
<td>Preparation Time (min.)</td>
<td>10-20</td>
<td>20-30</td>
<td>30-40</td>
<td>40-50</td>
<td>50-60</td>
</tr>
</tbody>
</table>

### Ingredients

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Ingredient</th>
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</tbody>
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- MEDITERRANEAN DIET - 45
Procedure:

Ingredients for the sauce or condiments:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Elaboration of the sauce or condiments

Mention, whenever required, the cooking time, temperature and cooking technique.
BIBLIOGRAPHY


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http://www.aesan.msc.es/AESAN/docs/docs/come_seguro_y_saludable/guia_alimentacion2.pdf


