

NUTRITIONAL RECOMMENDATIONS

THE ISRAELI MINISTRY OF HEALTH, 2019

Challenges facing the health system in Israel require a change in nutritional policy and its adaptation for the burden of disease. Unhealthy eating patterns cause obesity and chronic disease. Thus, the Ministry of Health, in conjunction with professionals in the field of nutrition and public health, is promoting a change in the nutritional guidelines as indicated by leading research in the field. These guidelines are also based upon the recommendations of the World Health Organization and other health organizations, with the necessary adjustments to the nutritional patterns and the burden of disease existing in Israel. A survey of the current world nutritional guidelines and various studies in Israel shows that the guidelines of the Mediterranean diet, combined with nutritional guidelines adapted to Israel, are the most appropriate guidelines for the updated nutritional recommendations. [The nutritional recommendations do not constitute a substitute for a personal consultation with a dietitian/nutritionist.](#)

It is important that people suffering from illnesses with certain dietary restrictions, such as cardiovascular diseases, diabetes, kidney and liver and other diseases, as well as people who for various reasons have chosen dietary restrictions (vegetarianism, veganism etc.) that entail nutritional adjustment, should consult with a dietitian/nutritionist and thereby receive personal guidance.

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1. SUMMARY OF THE MAIN POINTS OF THE RECOMMENDATIONS

The Mediterranean diet has advantages in four interconnected dimensions:

1. The health dimension
2. The environmental dimension
3. The social-cultural dimension
4. The economic dimension

One should aim to attain and preserve a healthy and stable weight within the normal range for adults, and a correct increase in weight and height from birth and throughout infancy until adolescence and into adulthood and elderly.

Along with maintaining a healthy diet, it is recommended to engage in regular physical activity, at least 150 minutes a week of medium intensity activity, or 75 minutes a week of high intensity activity for young people. It is recommended that children engage in physical activity for at least one hour a day..

THE DIET MUST BE VARIED AND BASED MAINLY UPON:

A menu rich in varied foods from a vegetable source.

Unprocessed food or food that has undergone minimal processing.

Infrequent use of fats, salt and sugar for seasoning and food preparation.

It is recommended to use cooking methods that preserve the natural nutrients in the foods (such as steaming and stir-frying), and to prefer preparing food at home from raw materials rather than ready-made food or ultra-processed food..

IT IS RECOMMENDED THAT THE WEEKLY DIET CONTAIN THE FOLLOWING ELEMENTS:

Different kinds of fruit and vegetables: at least 5 portions a day, preferably in a variety of colors. As much as possible, and if there is no dietary and/or medical restriction, it is preferable to avoid peeling after washing them. On the Ministry of Health website you can find the Portion Size Table for the various foods .

Legumes and whole grains: Legumes such as: broad beans, lupins, soya, beans, peas, chickpeas and lentils. Whole Grains such as: wheat, spelt, rye, oats, barley, rice, toasted green wheat, millet, quinoa, amaranth, buckwheat, teff, corn and bread made with whole-grain flour including pitta and rolls (wheat, rye, spelt etc.)

Vegetable fats: preferably olive oil, canola oil, avocado, almonds and tehina.

Sea and freshwater fish: some of the fish are rich in Omega 3, such as: salmon, tuna, sole, hake, halibut and pollock.



Eggs, the lean parts of chicken, turkey (for example breast) and beef

It is recommended to minimize beef/red meat as possible, and no more than 300 grams a week for red meat eaters. ^{1 2 3 4,}

Eggs – in moderation. One should pay attention to additional sources of eggs in the menu such as quiches and pastry goods.⁵

Low fat dairy products without added sugar or sugar substitutes such as: low fat soya drink without added sugar, unprocessed tehina from whole sesame etc.

IT IS RECOMMENDED TO REDUCE CONSUMPTION OF THE FOLLOWING FOODS AS MUCH AS POSSIBLE

- Fatty meats and mainly processed meats rich in fat and salt, internal organs and red meat.
- Ultra-processed foods containing large amounts of additives such as salt/sugar or their non-natural substitutes. These foods damage the taste and nutritional balance of the original food. As a result, these foods are characterized by excessive consumption, which is at the expense of healthier foods. The consumption of such foods is harmful to culture, social life and the environment.
- Baked goods containing high levels of saturated fats or trans-fat from vegetable sources. Eating added trans fat from vegetable sources should be avoided.
- Foods high in salt, such as: snacks, salted and toasted nuts and seeds etc. It is recommended to study the nutrition facts panel on the food label and compare the salt (sodium) content of the various products. The recommended consumption of sodium is up to 2,400 milligrams a day.
- Foods with sugar and the like such as honey, brown sugar, maple syrup, date syrup, corn syrup, oligosaccharides, fructose. When reading the food label, one should note that the quantity of the ingredients appears in descending order. If the sugar appears among the first ingredients, it means that the product contains large quantities of it so is not recommended. In the future sugar will appear in the nutrition facts panel labelled also as teaspoons.
- The consumption of alcohol should be reduced as much as possible. ⁶

IT IS RECOMMENDED TO USE COOKING METHODS THAT PRESERVE THE NATURAL NUTRIENTS IN THE FOODS

SUCH AS STEAMING AND STIR-FRYING AND TO PREFER PREPARING FOOD AT HOME FROM RAW INGREDIENTS RATHER THAN READY-MADE OR ULTRA-PROCESSED FOOD

DRINKING:

It is recommended to drink water.

It is recommended to avoid consuming sweetened drinks, including fruit juices, energy drinks and flavored water that have been proved to cause obesity, diabetes, cardiovascular diseases and fatty liver.

It is recommended to drink tap water.

It is worthwhile storing water in the refrigerator in a reusable glass container.



2. NUTRITIONAL PRINCIPLES

2.1 HEALTHY NUTRITION RELATES TO WHOLE FOOD

Healthy nutrition is achieved by relating to the whole food, and not just to the sum of nutrients of the foods comprising it. Although the nutritional value of the food does depend upon the nutrients, it also depends upon the foods supplying them, other foods in the meal, the method of preparing the food and the way of eating it.

A basis for this may be found in the protective effect of the Mediterranean diet against heart disease. As cumulative and synergic mechanisms are involved in the development of these diseases, so a variety of factors in the menu contribute to their prevention, and not one or another single nutrient. Not only this, the optimal effect of the total Mediterranean diet is stronger than the total of each one of the health effects of the foods composing it.^{7,17} The recommendations for the Mediterranean diet focus upon whole foods such as olive oil, fresh fruits, vegetables, nuts, whole grains and legumes. At the same time, the recommendations for the Mediterranean diet are to restrict the consumption of red meat, processed meat and ultra-processed foods. The recommendations relate to whole food and not just to the sum of its nutrients, and are part of the updated nutritional recommendations worldwide.

2.2 THE FOUR DIMENSIONS OF THE MEDITERRANEAN DIET

The Classical Greek word "diaita" means – lifestyle. Indeed, the Mediterranean diet embodies social customs based upon skills, knowledge, habits and tradition, from the field to the pan. In the Mediterranean Basin this means to the yield, harvesting, fishing, preserving, processing, preparation and eating. Also home cooking of local food, as well as preparation and eating in company, have a significant effect on the type and quantity of the food consumed. These are elements in the positive health effect among the consumers of the Mediterranean "diaita"(lifestyle)^{8,9} As a result the Mediterranean diet has advantages in four interconnected dimensions.

1. The health dimension
2. The environmental dimension
3. The social-cultural dimension
4. The economic dimension.

2.2.1 THE HEALTH DIMENSION: THE ADVANTAGES OF THE MEDITERRANEAN DIET IN LIGHT OF RESEARCH

The useful effects of the Mediterranean nutritional patterns in the prevention of morbidity and mortality have been known for a long time^{10,11} These effects have been examined in hundreds of controlled studies, and support the concept that the

Mediterranean diet is effective in improving health by way of a combination of a wide range of typical Mediterranean foods. Consumption of a Mediterranean diet is effective even without weight loss. Studies that examined the adoption of Mediterranean eating patterns found that most of the nutritional requirements, including minerals and vitamins (excluding Vitamin D), could be met in this way.¹² Several studies show that the Mediterranean diet nutritional pattern is likely to prevent cardiovascular diseases, hypertension, diabetes and different types of cancer. Likewise, it was found that adherence to the Mediterranean diet pattern has a protective effect against Alzheimer's Disease.^{13 14 15 16 17}

2.2.1.1 THE MEDITERRANEAN DIET FOR THE PREVENTION OF HEART DISEASE

There is a broad consensus regarding the effect of lifestyle on heart disease.¹⁸ The various guidelines for lowering the risk of heart disease include the characteristics of the Mediterranean diet: nutrition rich in fruit and vegetables, comprising also whole grains and fish and a limited salt intake. Furthermore, there is also a consensus in these guidelines for the reduction of the consumption of sugar, with special reference to abstaining from sweetened drinks.

The "Seven Countries" study is a pioneering study that showed a protective link against cardiovascular disease as far back as the Seventies of the 20th century.¹⁹ Following this, several scientific articles appeared that emphasized the health advantages of adopting a Mediterranean diet for the prevention of chronic and degenerative diseases even without weight loss. Several epidemiological studies and some controlled clinical and community trials, such as the "Lyon Study", showed the protective link of the Mediterranean diet in the prevention of the repeat occurrence of heart attacks.²⁰

The Greek researcher Trichopoulou and the Spanish intervention studies by PREDIMED, which dealt with the primary prevention of cardiovascular diseases, also continued in the last decades to provide a great deal of well-founded information indicating the health advantages of the Mediterranean diet.^{21, 22 23 , 24 25} Research shows that the protective influence of the Mediterranean diet on heart health is not just the effect of lowered cholesterol levels but also includes, inter alia, a decrease in blood pressure, a decrease in anti-inflammatory and anti-oxidant activity by virtue of the polyphenols in the diet.^{26 27} Fruit and vegetables are the foods that most significantly contribute to protection against heart disease.

The variety in fruit and vegetables and their quantity is inversely connected to the frequency of coronary heart disease.²⁸

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In the Attica study, conducted in the Attica district in Greece, the investigators examined the mechanism through which the Mediterranean diet protects against heart disease.²⁹ The study found that the Mediterranean diet patterns are independently connected to low levels of a variety of inflammation and coagulability markers that characterize heart disease. Mediterranean eating habits are expressed in the consumption of nutrients working together and in synergy. Mediterranean eating habits over a long period of time will significantly contribute to a decreased risk of heart disease, with even a small change in the diet able to contribute to a significant clinical change.

2.2.1.2 THE MEDITERRANEAN DIET AND VARIOUS DISEASES

The Mediterranean diet plays a role in the prevention of fatty liver disease.^{30 31 32 33 34 35 36 37 38}

Fatty liver is a disease that without treatment could turn out to be fatal.

Meta-analysis performed on several studies that examined the connection between a Mediterranean diet and cancer found a beneficial connection between it and most types of cancer.³⁹

Data from a series of cohort and case control studies show that a high consumption of foods typical of the traditional Mediterranean diet pattern is connected to a reduced risk of developing different types of cancer, for example cancer of the digestive system and breast cancer.^{40 41 42 43}

National surveys showed that the adoption of the Mediterranean diet patterns is also connected to a decreased body weight.^{44 45 46} Similar findings were also found in studies conducted in Israel and the connection also contributes to a narrower waist circumference. Narrow waist circumference is important as an indicator in preventing central obesity, a lower incidence of metabolic syndrome and Type 2 diabetes. All these were found to be lower among people eating according to the Mediterranean diet patterns.^{47 48 49 50}

The Mediterranean diet has several other health advantages such as the prevention of vascular disease and peripheral arterial disease,⁵¹ A decrease in the inflammation indicators and an improvement in the endothelium function^{52 53} protected against allergic diseases,⁵⁴ immunity of the microbiome (the accumulation of organisms that live on and inside the human body, whose presence is essential for the main bodily processes), a lower incidence of mental disorders such as depression.⁵⁵ and an improvement in the quality of life.^{56 57}

The Mediterranean diet is also likely to positively influence the slowing of the aging process and cognitive decline. These processes are connected to Alzheimer's Disease and vascular dementia, that is documented a long time before the clinical diagnosis of dementia.^{58 59} The characteristics of the Mediterranean diet operate as a defense



against cognitive decline, and include inter alia the antioxidants in fruit and vegetables and the anti-inflammatory agents in fish and olive oil.⁶⁰ A high level of adherence to the Mediterranean diet and attention to a diet containing not only partial elements thereof, have been proven to lower the risk of cognitive decline.⁶¹ The Nu Age study that examined the effect of the Mediterranean diet on the health of the over 65 adult population showed that adherence to Mediterranean diet patterns lowers inflammation levels among this population.⁶²

2.2.2 THE ENVIRONMENTAL DIMENSION – SUSTAINABILITY

Since the middle of the 20th century the manufacture of food worldwide increased significantly together with the increase in the population. These trends were accompanied by a change in lifestyles, such as an increase in the consumption of food of animal origin and ultra-processed food. The consumption of food of this type has a significant negative influence on the ecological system. As a result, during recent years there was a rise in interest in sustainable diets within the context of the food and nutrition systems. The attitude to the Mediterranean diet underwent a change during the past 50 years – from a healthy nutritional pattern to a model of a sustainable diet. During recent years the Mediterranean diet has been studied by the Food and Agriculture Organization (FAO) and the International Center for Advanced Studies in Nutrition and Agriculture (CIHEAM) as a test case for characterization and evaluation of "sustainable diets". The United Nations Food and Agriculture Organization defines a sustainable diet as "a diet with a low environmental effect. Nutrition that contributes to the assurance of healthy food and life for the present and the future generations. A sustainable diet is characterized by the following features: built on a broad variety of plants and animals in their natural habitat (biodiversity); protecting ecological systems; culturally acceptable; accessible; fair from the economic aspect; sufficient from the nutritional aspect; safe and healthy; optimizing human and natural resources".⁶³ Indeed the Mediterranean diet, based for the most part upon the cultivation of foods from plant sources, is a sustainable diet since it is characterized by a relatively low negative effect on the environment. This may be evaluated by means of calculations of hothouse gases emission and use of resources such as water and earth for cultivation.⁶⁴

Thus for example the cultivation of legumes, which constitute a substitute for protein rich foods, requires soil, energy and water in a significantly less amount than the cultivation of sources of animal protein such as beef. Foods of plant origin, originating in sustainable food systems such as ecological systems, create food with fewer pollutants, protect biodiversity, contribute to a fairer distribution of lands and create employment opportunities, while respecting and improving the knowledge of traditional manufacture,^{65 66 101} protect the environment in which we live and the entire food chain



that is essential for our health. Foods of plant origin influence the way in which we select, manufacture, process and transport the food to the consumers.^{79 67 68} (See Appendix 1).

The nutritional recommendations take into account characteristics such as the cultivation, manufacture and distribution of food, and encourage those that reinforce social and environmental sustainability. As a result, the recommendations emphasize the importance of a sustainable menu characterized by the consumption of local, seasonal and fresh food, and warn against the consumption of ultra-processed food..

2.2.2.1 LOCAL, ISRAELI AGRICULTURE

The Ministry of Agriculture in Israel emphasizes the variety of agricultural values that are not just economic, such as: landscape, use of waste, culture and leisure, green lungs, heritage values, security, wildlife corridors and more.

The State of Israel supplies itself with the great majority of fresh produce, both vegetable and animal; field crops; orchards and citrus, vegetables and flowers; livestock: poultry, beef and lamb; as well as honey, fish and more.⁶⁹

[See Appendix Number 3 – Table of Species of Fruit and Vegetables and their Season.](#)

2.2.2.2 A SUSTAINABLE MENU IS DEPENDENT UPON THE EXTENT OF PROCESSING THE FOOD^{70 71}

The extent of processing and the type of processing of the food characterize its environmental influence, and determine its nutritional composition and its sensory features. Furthermore, these factors will determine the composition of the entire meal and its conditions such as where, when and with whom it will be eaten.

There are four categories for processing food: (a specification of the definitions is in Appendix Number 2)

1. Non-processed food or minimally processed food – vegetables, fruit, legumes, grains, fresh poultry/meat/fish.
2. Foods originating in natural foods or which are natural, and are used for seasoning and cooking such as oil, sugar and salt.
3. Processed foods: - Non-processed food or minimally processed food to which ingredients from category number 2 have been added such as cheese or bread from basic ingredients and preserved fruit.
4. Ultra-processed foods - foods that have been processed by several industrial processing processes. These foods frequently contain additives that are not natural such as salty and fatty snacks, soft drinks, breakfast cereals, chicken nuggets and more.



The nutritional recommendations for Israel are based upon foods from categories 1 and 3 above and not upon ultra-processed foods due to three main reasons:

1. In accordance with the principles of the Mediterranean diet that are based upon foods near to their natural/raw state.
2. Foundation upon a vegetarian menu, with a moderate and restricted combination of animal foods, allows environmental balance and supports ecology.
3. Ultra-processed food is food which is not nutritionally balanced. Its manufacture, distribution, marketing and consumption are injurious to health, culture, social life and the environment.⁷²

The composition of ultra-processed food damages the nutritional balance due to the following characteristics:

- * High caloric density
- * Rich in flavor and surplus consumption as a result of the ingredients oil, fat, sugar, salt and various additives.
- * The encouragement of subconscious eating due to its being ready to eat, without the need for a plate, table and other accessories. It may be eaten in front of the television, at work or "on the road".
- * Offered in large portion sizes.
- * Drinking calories: sweetened drinks confuse the body's hunger and satiety signals, raise the risk of fatty liver and cardiovascular diseases and diabetes.
- * The texture of ultra-processed food frequently does not entail chewing and encourages becoming accustomed to such eating. Thus – for example, toddlers who become used to ultra-processed food sometimes refuse to eat fruit and vegetables since they are not accustomed to the chewing process.
- * The health implications of the consumption of ultra-processed food include: an increase in the risk of diabetes, cardiovascular disease, obesity, fatty liver, certain types of cancer, damage to the microbiome, an increase in the risk of mental illness and more.^{73 74 75 76 77}
- * When the list of ingredients contains a large number of substances, mainly those that are not recognized for home use, this is an ultra-processed product. Despite that before using them the ingredients undergo approval processes by the health authorities, the effect of their long term consumption and also the cumulative effect of the consumption together is not known, or their effect is revealed over the years as in the case of nitrates in processed meat.⁷⁸

THE COMPOSITION OF ULTRA-ROCESSED FOOD DAMAGES THE NUTRITIONAL BALANCE DUE TO THE HIGH LEVEL OF CALORIES, RICH FLAVOR, ENCOURAGEMENT OF UNCONSCIOUS EATING AND IT TAKES THE PLACE OF THE RECOMMENDED FOODS ON THE MENU



The characteristics of the consumption of ultra-processed food are dangerous to culture and social life. The global branding and marketing give a false feeling of belonging. In their intense marketing they mix emotion and self definition and food. Thereby they also turn traditional nutrition into "boring", in particular among young people.

Ultra-processed food is manufactured in packages ready for eating at any moment, and is harmful to social life in that it does away with the need for eating together, such as sitting around the table, food preparation and getting ready to eat. Thus, family-social opportunities are missed and social isolation is increased.

The manufacture of ultra-processed food is harmful to a sustainable environment: The use of cheap oil, sugar and other ingredients encourages the intensive manufacture of single food that is not designed for local produce. Such manufacture requires unbalanced energy investment, harms biodiversity and creates a lot of waste.

2.2.3 THE SOCIAL-CULTURAL DIMENSION

The Mediterranean diet patterns include the social-cultural dimension.⁷⁹ This dimension includes the culinary activities connected to the preparation of food together, the knowledge passed down from generation to generation in all matters pertaining to food, and also the time dedicated to the preparation of meals as a part of life. The traditional Mediterranean diet was characterized by home cooking from raw ingredients and not from ultra-processed food. This is important since evidence from research is becoming more established that home cooking is connected to a higher quality menu, which is reflected in the consumption of more fruit, vegetables and salads. Furthermore, traditional home cooking is characterized by slow cooking, with more moisture and at lower temperatures. These conditions reduce the risk of creating toxic chemicals in the food such as acrylamide, which is formed under conditions of intensive dry heating. Furthermore, home cooking of vegetables contributes to the better availability of phytonutrients.⁸⁰

Home cooking and the joint work contribute to the creation and reinforcement of social connections and better communication between family members. Thus for example, the joint preparation of meals and dining around the table create social support and a feeling of community. The enjoyment accompanying these meals can have a positive effect on behavior connected to the selection of food, and not only that but also on other behavioral and social elements connected to the feeling of belonging acquired, such as the prevention of violence and the reinforcement of parental authority while setting a personal example.⁸¹ It was found that family time once a day is important for creating a family framework, reducing the feeling of isolation, reinforcing communication skills and improving inter-personal relationships.

2.2.4 THE ECONOMIC DIMENSION

The food that we choose also has economic implications The Mediterranean diet patterns are based upon the self-preparation of food from basic, seasonal raw ingredients, for the most part from local produce. These raw ingredients, coming mainly from plant sources combined with some food from animal sources, are cheaper than buying ready-made meals. Likewise, the purchase of raw ingredients from local growers (for example fruit and vegetables) assists in supporting the local agriculture and economy. [See Appendix Number 3 - Table of Species of Fruit and Vegetables and their Season.](#)⁸¹

2.3 THE RECOMMENDED NUTRITION IS APPROPRIATE THROUGHOUT THE ENTIRE LIFE CYCLE

The principles of the recommended nutrition are appropriate for all age groups. Nutrition throughout all the years of life has an immediate effect as well as a long term effect on bodily health. The diet supplies the varying nutritional requirements throughout one's lifetime in accordance with the stages of growth and adolescence, and lifestyle (for example physical activity). The quantity and types of foods and their texture vary according to need, in accordance with ability and in accordance with personal preference.

2.3.1 THE RECOMMENDED MEDITERRANEAN DIET FOR THE FIRST 1000 DAYS

The first 1000 days of life are defined as days having a unique potential for development of the fetus and the infant.⁸² The nutritional recommendations also include preparation for pregnancy, the pregnancy itself and the first two years in the life of the infant. During this period the brain development is relatively fast. Since nutrition has an effect on development, it is recommended to strictly observe the recommended nutrition principles throughout the pregnancy and throughout the lactation period and during the first years of life. You can find on the Ministry of Health website [Recommendations for Nutrition during Pregnancy](#)⁸³ [Guide to Feeding Baby](#)⁸⁴ and a [Position Paper on the Subject of Complementary Foods](#)⁸⁵

BEYOND THE IMMEDIATE HEALTH EFFECTS OF THE MEDITERRANEAN DIET, NUTRITIONAL HABITS ACQUIRED AT A YOUNG AGE FORM THE BASIS OF EATING HABITS THROUGHOUT THE YEARS OF PUBERTY, ADOLESCENCE AND ADULTHOOD



2.3.2 THE MEDITERRANEAN DIET DURING THE YEARS OF GROWTH AND ADOLESCENCE

Beyond the immediate health implications of the Mediterranean diet, nutritional habits acquired at a young age constitute a basis for eating habits throughout the years of growth, adolescence and adulthood. Therefore, it is important to strictly observe the principles of the recommended diet at home as a matter of routine.

On the Ministry of Health website there are guidance and explanatory materials for the adoption and acquisition of Mediterranean life habits at every age.⁸⁶

There is no difference in the principles and manner of nutrition at the different ages apart from adjusting the quantities to growth and normal development.

2.3.3 THE RECOMMENDED DIET ALSO HAS A PROTECTIVE AND BENEFICIAL EFFECT DURING ADULTHOOD

Adulthood is characterized by the presence of chronic inflammation and an increase in inflammation precursors. This is due to the fact that over the years the balance between the inflammation precursors and those suppressing them is damaged.

Healthy and acceptable nutrition such as the Mediterranean diet can constitute a protective factor against damage to this balance^{87 88} and even contribute to an improvement in physical abilities⁸⁹. The principles of the recommended diet should be adapted to and into old age as required, such as: grinding the food to make chewing and swallowing easier, whole grains to ease common constipation, one egg every day, and enrichment with an extra portion from the group of dairy products. Furthermore, the social dimension significantly influences eating and health habits at these ages. Therefore, it would be helpful to find a group of friends for the preparation and eating of the food. Eating with family, a close friend or neighbor can improve the appetite and ease the general and nutritional isolation.

2.4 FOOD CHOICE ARCHITECTURE

An obesogenic environment is defined as life conditions, opportunities and the environment that influence the obesity of the individual and the population.⁹⁰

ENVIRONMENTAL FACTORS INFLUENCING EATING HABITS INCLUDE:

- The extent of the vicinity to the food: the distance between home or work to the supermarket, kiosk, fast food restaurants, etc.
- The amount of physical activity required for the purpose of daily activities: walkability, availability of transport, the possibility of safe walking and the easy and safe choice of stairs, walking distance from a variety of daily places such as school, crèche, library, stores etc.

- The feeling of neighborhood safety: a high feeling of safety will allow and encourage physical activity such as walking, neighborhood social games etc.
- The degree of availability of advertising and marketing of ultra-processed food.
- The economic cost of ultra-processed food as opposed to healthy food.
- State (governmental) intervention is required in order to influence these environmental characteristics, encouraging inter alia the shaping of a healthy environment on the regional and municipal level, in the educational institutions, in the media and more.

2.4.1 HEALTH SHAPING POLICY:

In 2016 a Regulatory Committee was formed for the promotion of healthy nutrition in Israel. The Committee presented recommendations for the promotion of a policy that would help the consumer choose healthy food easily, such as:⁹¹

- Labelling of harmful food: food containing levels of saturated fat, sodium and/or sugar above the determined threshold levels,⁹² will be prominently labelled on the front of the package. This law came into force on 1.1.2020.
- The development of a voluntary green symbol the front of the package, suited to the Mediterranean diet.
- The restriction of marketing of harmful foods to children: the establishment of a committee led by the Ministry of Health for the restriction of advertising and marketing of food harmful to children.⁹³
- Calorie marking in restaurant chains.
- The encouragement of small manufacturing plants to manufacture healthy food.
- Integration of nutritionists in the Well Baby Clinics.

THE EFSHARI BARI (HEALTHY IS POSSIBLE) NATIONAL PROGRAM⁹⁴

The program is a joint initiative of three government ministries, the Ministry of Health, the Ministry of Culture and Sport and the Ministry of Education, with the aim of leading a joint effort on the national and local level in order to promote an environment allowing healthier eating habits and a combination of physical activity in day to day life, in all the population groups. The National Program operates on various levels that complement each other, including legislation and regulation, infrastructures, on site activities and practical information.



THE MINISTRY OF EDUCATION DETERMINES RULES FOR A HEALTHY SCHOOL ENVIRONMENT ⁹⁵

- **MINISTRY OF EDUCATION DIRECTOR GENERAL DIRECTIVES** on the subject of healthy nutrition in the schools.
- The promotion of nutrition education programs for all age groups. The programs have two core subjects in every study year, and in the future nutritionists will be integrated into the education system.
- **HEALTH PROMOTING SCHOOLS**
- **RULES AND REGULATIONS FOR THE SALE OF HEALTHY FOOD IN THE SCHOOL**
- **GUIDELINES FOR HEALTHY NUTRITION IN THE SUMMER CAMPS**
- **MUNICIPAL SUPPORT FOR A HEALTHY LIFESTYLE:**
 - A municipal dietitian and health promoters in the city
 - Efsharibari activity in the cities
 - A network of healthy cities
 - Economic support for cities that choose to promote healthy nutrition and physical activity
- Health-promoting work places:
[EFSHARIBARI AT WORK](#) ⁹⁶

All these support the creation of a health protection network for the citizen by means of designs that influences a healthy eating environment.



THE GREEN LABEL



LARGE AMOUNT OF SUGAR



LARGE AMOUNT OF SODIUM



LARGE AMOUNT OF SATURIUM

2.4.2 DESIGNING A HEALTHY ENVIRONMENT BY THE INDIVIDUAL

In the balance of the forces influencing public health, the consumer plays a significant part by his focusing on the health objective at a personal level. An involved civilian society and the design of the home eating environment will assist in the implementation of the updated nutritional recommendations for Israel.

Studies show that the manner of eating and the arrangement of the food contribute to informed and better choices throughout the day.⁹⁷ The organization of the home environment so that the ultra-processed food, if there any in the home, should not be readily accessible and visible, will help in the prevention of subconscious eating of harmful food. Another principle is the organization of the food table in such a manner so as to help in healthy choices: small plates and small serving spoons and serving of food so that there are no large cooking pots/serving bowls on the table.

This design of the eating environment contributes to eating in small portions and additional thought before taking an extra serving. Finally, focusing on the food, which is facilitated by switching off screens, television, mobile phone etc., will contribute to awareness and moderate eating.

Shaping the purchasing process is important for the acquisition of healthy habits. It is recommended to stick to a list that has been prepared in advance, and to start the purchasing process in the fruit and vegetable department. You should ascertain that the composition of the shopping cart is similar to the composition of the diet recommendations: most of the cart should contain natural and/or minimally processed foods, according to the definitions in [Appendix 2](#).

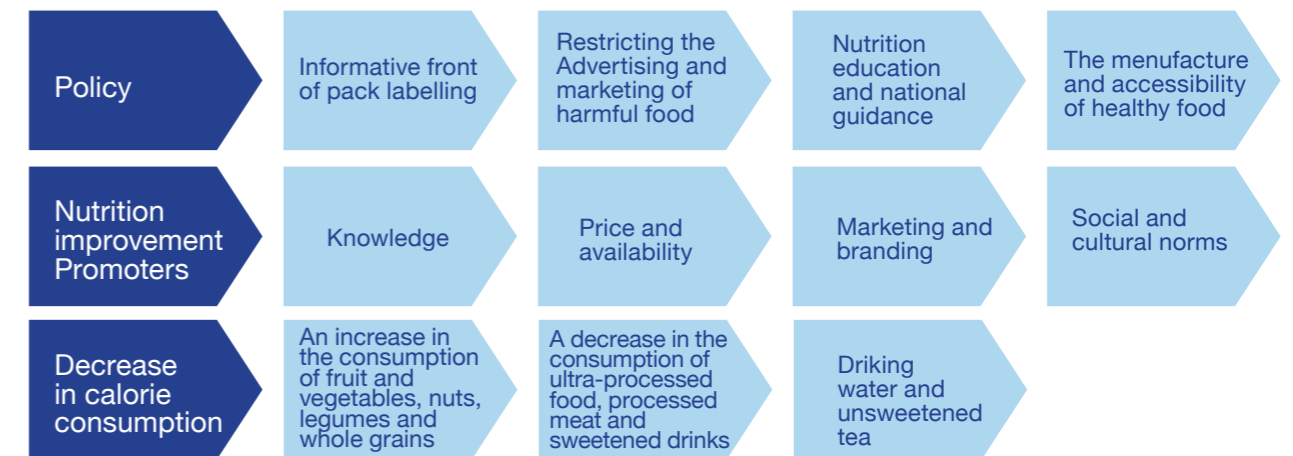


figure 1 - Promoting Mediterranean lifestyles for disease prevention ^{98 99}





Shaping the purchasing process is important for the acquisition of healthy habits. It is recommended to stick to a list that has been prepared in advance, and to start the purchasing process in the fruit and vegetable department



Studies show that the manner of eating and the arrangement of the food at home contribute to an informed and better choices throughout the day. Shaping the purchasing process is important for the acquisition of healthy habits



3. NUTRITIONAL RECOMMENDATIONS IN THE SPIRIT OF THE MEDITERRANEAN DIET

This chapter contains the nutritional recommendations adapted for Israel. These recommendations contain the recommended foods for every day and for every week, together with the eating patterns such as the purchase, method of preparation and manner of eating.^{100 101}

3.1 PRACTICAL RULES FOR A HEALTHY DIET

3.1.1 PREFERRING FOODS CLOSE TO NATURE

As noted previously it is recommended to prefer natural foods:

It is worthwhile to drink tap water instead of soft drinks and juices, to eat fruit instead of snacks, and to prefer food prepared at home such as soup, salad, grains and legumes or steamed vegetables. These foods, as specified above, constitute an important and main source of several nutrients and serve as the main basis of a healthy, nutritionally balanced, tasty and sustainable menu from the environmental and social aspect.

3.1.2 FOOD COMBINATIONS

Several foods from plant sources, when eaten in different combinations, supply the nutrients optimally. A good example of this is a combination of grains with legumes to obtain a complete protein (for example: rice with beans, chickpeas with wheat, burghul with lentils etc).

3.1.3 A SMALL QUANTITY OF FOOD FROM ANIMAL SOURCES

Food from animal sources such as fish, meat, eggs, milk and dairy products assist in the improvement of the nutritional value of food products from plant sources, so it is desirable to integrate small quantities of them in some of the meals.

3.1.4 THE USE OF SEASONINGS

It is recommended to use herbs and pure or mixed spices without salt instead of salt, soup powder and powdered spices. The recommended spices include: parsley, dill, coriander(cilantro), basil, marjoram, thyme, as well as vegetable seasoning like garlic and onion. Pure dried spices without the addition of salt or other substances may be used, such as spice mixtures without salt, pepper powder, cayenne pepper and sweet paprika, ground coriander, turmeric, cardamom, cinnamon, cloves etc. All these contribute many flavors and important nutrients.

3.1.5 BE SPARING WITH SUGAR AND SALT

It is important and worthwhile to gradually become accustomed to the natural taste of the food and drink and to reduce the use of salt, sugar and their substitutes. Instead one can use herbs and pure spices as specified above.

3.2 RECOMMENDED MENU

3.2.1 FOODS THAT SHOULD BE EATEN EVERY DAY

GRAINS

Whole grains that supply the body with energy, protein, minerals, vitamins, antioxidants and fiber. Whole grains have not been peeled and contain all the elements of the nucleus, including the external hull, endosperm and the germ. It is better to eat whole grains that have undergone as little processing as possible and without the addition of sugar, for example whole wheat, brown rice, whole wheat pasta, spelt, oats, burghul, buckwheat etc.

VEGETABLES

It is recommended to eat lots of vegetables and to consume at least 5 portions of vegetables a day (at least one fresh vegetable). You should vary and choose vegetables of different colors that supply a variety of antioxidant elements that protect health. You may also eat them between meals as a "munch/treat" and not just at the meal or as an in between snack.

FRESH FRUIT

It is recommended to eat between 2-3 portions a day, as a dessert or between meals.

LEGUMES

It is recommended to vary the consumption of legumes in dishes or as a substitute for a meat course, in combination with grains. Legumes are rich in protein, iron, the B group vitamins, a plethora of dietary fiber, and some of them also contribute calcium such as white beans. Legumes are low in fat.

There is an abundance of legumes and they may be easily integrated into the daily menu – such as lentils, beans, chickpeas, broad beans (fava beans), peas, black-eyed peas, soya beans/tofu and more.

They may be eaten as a hot dish, added to a salad and also as legume-based flours.

IT IS RECOMMENDED TO EAT EVERY DAY: GRAINS, FRESH FRUIT AND VEGETABLES, PULSES, FATS, NUTS AND SEEDS, SPICES AND HERBS



MILK, ITS PRODUCTS AND SUBSTITUTES (milk, cheese, soya products without additives)

It is recommended to consume low fat milk products in moderation in accordance with age, preferably cultured such as yogurt or low fat cheese. The consumption of these products contributes to bone health.

FATS

Olive oil should be the main source of fat in the diet due to its high nutritional quality. Its special composition also withstands cooking and so it may be used both for quick cooking and for seasoning.

Olive oil substitutes can be avocado, canola oil (rapeseed) and tehina from whole sesame seeds.

NUTS AND SEEDS

Nuts, almonds, peanuts, sunflower seeds, pumpkin seeds, whole sesame seeds, unroasted and unsalted, constitute a good source of healthy fats, protein, vitamins, minerals and dietary fiber. A handful of them a day can serve as a healthy snack, and a link has been found between a reduced risk of heart disease. They should be consumed in moderation since these foods are not a insignificant amount of calories.

SPICES, HERBS, ONION AND GARLIC:

It is recommended to use spices since they contribute many flavors to the food and assist in reducing the consumption of salt.

DRINKS

It is important to drink 1.5 – 2 liters water throughout the day (8 – 10 glasses a day, the water may be varied with tea, mint, lime etc.) for the purpose of appropriate hydration of the body.

3.2.2 FOODS THAT IT IS RECOMMENDED TO CONSUME IN MODERATION THROUGHOUT THE WEEK:

Foods from animal sources such as eggs, fish, chicken/turkey.

In the recommended diet these products do not constitute the main part of the meal but just part of it.

FISH

It is recommended to consume at least once a week fish that constitutes a good source of Omega 3 oil. The intention is fresh and frozen fish and not salted/smoked fish.

CHICKEN/TURKEY

About 2 – 3 portions of these may be consumed a week.

RED MEAT (BEEF)

It is recommended to eat very little red meat/beef and no more than 300 grams a week.

EGGS

In moderation, paying attention to the accumulated sources of eggs in the menu such as pies and pastries, you may have up to one egg a day.

3.2.3 FOOD THAT SHOULD BE CONSUMED AS INFREQUENTLY AS POSSIBLE

3.2.3.1 ULTRA-PROCESSED FOOD

Ultra-processed foods are not nutritionally balanced. As a result of their composition and method of marketing we tend to consume exaggerated amounts of them, at the expenses of healthy unprocessed or minimally processed foods. The consumption of ultra-processed food is harmful to culture, social life and the environment as has been specified above. The definitions of the degrees of food processing and examples thereof may be read in Appendix Number 2.

ULTRA-PROCESSED MEAT

It is desirable to avoid eating ultra-processed meat in its various forms such as salami, sausages, various pastrami, formed meat etc.

SWEETENED FOOD AND SNACKS

Candy, cakes, cookies, juices, ice creams, soft and sweetened drinks, snacks and other foods from this group are not part of the Mediterranean diet routine and so it is important to eat as little of them as possible

3.2.3.2 ALCOHOL

It is desirable to reduce consumption as much as possible. Various studies show a beneficial link to a small daily amount of alcohol, but on the other hand during recent years much evidence has accumulated regarding the damage from drinking alcohol.

ALCOHOL IS INJURIOUS TO HEALTH IN SEVERAL WAYS:

- * Cumulative consumption that causes damage to the body's organs and tissues
 - * Drunkenness leading to accidents or poisoning
 - * Addiction leading to defects, to the risk of self-harm or to violence.
- During 2016, 2.8 million cases of death worldwide were attributed to



drinking alcohol. Today alcohol is the leading risk factor in cases of death and functional damage in the 15 – 49 age group. A study that examined the general effect of alcohol on health according to updated research methods found that the positive effects of the moderate consumption of alcohol were outweighed by the risk in its consumption.⁶ The reasons for death attributed to the drinking of alcohol in the 15 – 49 age group are cirrhosis, road traffic accidents and self harm. Above the age of 50, the number of deaths from cancer attributed to the drinking of alcohol rises significantly.

There is no "safe" amount for drinking alcohol routinely in the context of cancer.¹⁰² It should be noted that the drinking of alcohol is also harmful to the environment and persons in the vicinity of alcohol drinkers – family members, the work place etc.¹⁰³ For this reason, the consumption of alcohol should be reduced as much as possible. It should be noted that drinks where the alcohol undergoes refining such as whiskey, rum, vodka are considered to be ultra-processed.

Pregnant women or those planning a pregnancy, children and youth are populations that should be especially careful to abstain from drinking alcohol. A harmful link has also been found between the drinking of alcohol and breast cancer in women.

3.2.3.3 COFFEE AND TEA

Foods and beverages containing caffeine should be restricted, in particular among children, pregnant women, persons sensitive to caffeine and persons suffering from various diseases. Others may drink 3-4 cups of coffee a day. It is important to pay attention to the fact that coffee based on milk may contain large quantities of milk and addition of sugar.

3.2.3.4 SWEETENERS / SUGAR SUBSTITUTES

The various sugar substitutes, while contributing less calories than sugar, are also liable to harm the nutritional balance and the body's reaction to the sweet taste. Purchased products containing sweeteners such as drinks, frequently also contain other additives such as preservatives and artificial flavorings. These are ultra-processed foods and their consumption should be reduced as much as possible.

3.2.3.5 ENERGY DRINKS

These drinks are very rich in caffeine and for the most part also sugar and therefore they are not recommended for drinking.

The danger to health increases in proportion to the consumption. These drinks can constitute an actual danger when they are consumed combined with alcohol.

3.3 RECOMMENDED LIFE HABITS – IN PRACTICE

3.3.1 PHYSICAL ACTIVITY

An important part of a healthy and balanced lifestyle includes regular physical activity. Physical activity contributes to the prevention of diseases, physical and mental wellbeing, an increase in energy output and maintaining a healthy body weight. Physical activity is also connected to a reduced risk of heart disease. Observing the Mediterranean diet habits together with the routine performance of physical activity synergistically contribute to the prevention of heart disease.¹⁰⁴

Walking, climbing stairs, doing housework, riding a non-electric bicycle and other activities all constitute simple and easy examples of physical activity. Any physical activity is preferable to lack of activity at all. It is recommended to reach at least 150 cumulative minutes of medium physical activity a week, or 75 minutes of high intensity activity. At least one hour of physical activity every day is recommended for children. Every minute counts.

3.3.2 MODERATION

It is important to be satisfied with small portions of food in order to avoid obesity, mainly when not engaging in intensive physical activity. Most people who live in an urban environment and have a sedentary lifestyle require smaller amounts of energy for the basic essential requirements.

3.3.3 REGULAR MEALS

It is highly recommended to eat regular meals, while paying attention to the quality of the food and its quantity and also to the eating environment. It is worthwhile adopting regular eating patterns that include: eating at fixed hours, avoiding eating between meals, eating slowly and with enjoyment, concentrating on the food and avoiding other activities during the meal. Watching television or using other digital instruments during the meal distracts from the meal. A meal in a clean, comfortable, smoke-free and quiet place will contribute to moderate and controlled eating.

AN IMPORTANT PART OF A HEALTHY LIFESTYLE INCLUDES REGULAR PHYSICAL ACTIVITY

IT IS RECOMMENDED TO REACH AT LEAST 150 CUMULATIVE MINUTES OF MEDIUM PHYSICAL ACTIVITY A WEEK, OR 75 MINUTES OF HIGH INTENSITY ACTIVITY. AT LEAST ONE HOUR A DAY IS RECOMMENDED FOR CHILDREN



3.3.4 THE CONSUMPTION OF LOCAL PRODUCE, HOME COOKING AND EATING IN COMPANY AT THE TABLE – AN IMPORTANT PART OF LIFE

As specified above, the consumption of local produce and home cooking are an important part of a healthy life style. It is worthwhile turning cooking into a routine activity and dedicating a suitable time and place to it (for example instead of looking at the computer or watching television). Cooking is likely to be a relaxing and enjoyable activity, and it is possible to do it with family, friends and loved ones in daily life, at celebrations and events.

For people lacking cooking skills it is worthwhile learning from family members, friends and acquaintances who are cooks; to ask for recipes, to look at cookery books and the Internet, and even to take part in cooking courses and community activities of traditional kitchens. It is worthwhile asking the schools where your children study to hold cooking and nutrition classes as part of the formal syllabus. Take part in community activities of organizations that dedicate themselves to the culinary tradition, gastronomy and the local traditional kitchens in the various sectors. Recommended methods of cooking: steaming, baking, cooking in a pressure cooker, cooking in the microwave, stir frying in a little oil. These cooking methods are preferable to frying or roasting on coals or barbecuing.

3.3.5 HOME CULTIVATION

It is recommended to try and grow food at home, even herbs in a window box, in a pot plant or in the garden. Herbs such as parsley, mint, basil, coriander etc. may be grown in a window box. It is worthwhile trying to take part in community and municipal initiatives for growing vegetables in community gardens and holding municipal markets for the purpose of promoting local agriculture and protecting it.



3.3.6 PURCHASING FOOD

Where to purchase: it is worthwhile trying to purchase food from places offering a selection of raw foods, or those that have undergone minimal processing. Examples of these places include: farmers markets, municipal markets and direct purchase from the authorized growers. It is worthwhile paying attention that the food purchased is raw or has undergone minimal processing.



These products are generally cheaper than their ultra-processed parallels.

How to purchase: it is recommended to go shopping when not hungry and to prepare a shopping list in advance in order to avoid unplanned purchases.

Marketing messages: pay attention to and be careful of messages of advertisements for and marketing of unhealthy food: the media world exposes us and our children to a wide variety of foods that for the most part are harmful to us. Therefore, it is important to exercise discretion and judgement with regard to the messages of the advertisements.



PREFER HOME GROWN FOOD SUCH AS: HERBS IN A WINDOW BOX OR GARDEN. IT IS ALSO WORTHWHILE TAKING PART IN COMMUNITY AND MUNICIPAL INITIATIVES FOR GROWING VEGETABLES IN GARDENS



Have dinner together



Prefer home cooking



Vegetables/fruits and whole grains: every main meal



Olive/canola oil, legumes, nuts, tahini, milk products or milk substitutes: at least once a day



Fish, eggs, turkey/chicken: on a weekly basis



Red meat: no more than 300 grams per week



Sweet, snacks, sweet beverages and processed meat: reduce consumption significantly



4. NUTRITIONAL PATTERNS EXISTING IN ISRAEL

4.1 RECOMMENDATIONS FOR CHANGING COMMON EATING HABITS IN ISRAEL

A survey of the existing nutritional patterns in Israel shows that there is room for improving the nutritional habits gradually: ¹⁰⁵

- Drink less fruit juice: eat the fruit and vegetables and drink the water.
- Increase the variety of legumes in the menu: legumes constitute an important element in the recommended diet since they are a vegetarian substitute for meat/poultry. The legumes may be put into soups and salads and special dishes prepared from them, and similarly to hummus spread, a variety of other legumes spreads can be prepared. Exposing children from a young age to a variety of legumes and setting a personal example by eating them will turn their integration into the menu into a habit.
- Choose whole grains in the form nearest to the natural state: in choosing foods with whole grains, you should also examine the other ingredients of the food, and choose those composed from familiar ingredients and which contain low levels of sodium, saturated fat and sugar.
- When choosing milk or its substitutes, one should choose products without added sugar that constitute a suitable substitute for milk. You may replace milk with a soy drink without additives. The list of ingredients on the package will help in understanding the composition of the product and in making an informed decision with regard to its purchase.
- Reduce the consumption of ultra-processed food as specified in this document.

4.2 A SURVEY OF THE NUTRITIONAL PATTERNS EXISTING IN ISRAEL ACCORDING TO DIVISION INTO FOOD GROUPS

FRUIT AND VEGETABLES

Fruit and vegetables have traditionally constituted an inseparable part of all the meals; fresh vegetables in the morning, cooked and fresh vegetables at lunch, fruit throughout the day and vegetables for the evening meal. The consumption of fresh fruit and vegetables is not high among the elderly (aged 65 and over). Among young people and the elderly there is a tendency to consume fruit in the form of juices that do not constitute a desirable substitute for fresh fruit (fruit juices do not contain important nutrients such as dietary fiber, and on the other hand they are rich in sugars and

calories). Likewise, there is a tendency to consume more commercially processed salads such as salads in sauces or mayonnaise and less fresh vegetables. In the entire population, the consumption of fruit and vegetables is lower than the recommended minimum of 7 – 8 portions a day; among the elderly the average consumption of fruit totals about 65 grams a day. Among young people the consumption does total 6 – 7 portions of fruit and vegetables although a considerable part of this consumption is based upon fruit juices. The contribution of juices to health, due to their being rich in sugar and low in fiber, is less than that of whole fruits and is also liable to contribute to obesity. Fruit juices are categorized under the definition of "sugar" according to the definitions of the World Health Organization; free sugars are all the monosaccharides and disaccharides added to food by the manufacturer or during cooking or by the consumer, and also the sugars occurring naturally in honey, syrups, unsweetened fruit juices and fruit juice concentrates. Lactose, that occurs naturally in milk and its products, as well as the sugars found inside the cell structure of the foods (mainly in fruit and vegetables) are not included in this definition.¹⁰⁶ The average daily consumption of soft drinks (including sweetened fizzy drinks, sweetened drinks, energy drinks and flavored water) among young people is 1.3 glasses a day.

LEGUMES

The most consumed legume in Israel is the chickpea, mainly in salads and spreads. Cooked chickpeas are eaten less. The consumption of other legumes is not high, despite their relatively low price and the fact that they are a high-quality source of protein, vitamins and fiber and are low in sodium and fat. The average consumption of legumes is less than one portion a day, although among young people (aged 11 – 19) it comes close to one portion a day, but most of it comes in the form of ready-made hummus salads that do not constitute the ideal source of legumes, since they are sometimes rich in salt and fat so choose the healthier hummus salads.

OLIVE OIL

During recent years there has been an increase in the consumption of olive oil and a decrease in the consumption of soy oil. More industrialized food products are manufactured with olive oil (for example sauces). The average consumption is one tablespoon a day. Olive oil is also consumed as an additive in cooking, but it is difficult to estimate in what quantity. The consumption of olive oil rises with the recognition of the health advantages it provides.



GRAINS

The consumption of whole grains, including whole-grain bread, wholegrain noodles and wholegrain breakfast cereals was not high until the last decade. Recently, with the increase in awareness of the importance of these foods, there has been a noticeable increase in the sale of wholegrain products, in particular breads.

There is also a multiplicity of products such as cakes, cookies and breakfast cereals that are made from whole grains (but that mostly contain also large quantities of salt, saturated fats and sugars).

The average consumption of grains ranges from 5 – 10 portions a day, with consumption among adolescents and populations with low socio-economic status being the highest.

MEAT, POULTRY AND FISH

Chicken makes up the main part of the consumption of animal food products in Israel, and after that turkey. The average consumption per day of chicken in Israel is 72 grams. Among the consumers alone, the average daily consumption is 160 grams. The average consumption of fish, except of tinned tuna, is very low, mainly among youth, children and the elderly, despite the proven health advantages of the consumption of fish. The average Israeli does not consume much beef, although during recent years there has been an increase in the consumption of various kinds of beef.

MILK, ITS PRODUCTS AND SUBSTITUTES

Adults and the elderly consume on to one and a half portions of dairy products a day. The consumption is higher among adolescents, about 3.1 portions a day, with sweetened milk drinks comprising a considerable part. In recent years there has been an increase in the consumption of soy products, in the form of products and drinks on a soy basis as a substitute for dairy products.

ULTRA-PROCESSED FOOD

A preliminary estimate has found that about 15% of the foods consumed are defined as ultra-processed food. Sweet drinks, candy, breakfast cereals, snacks, sauces and spreads are ultra-processed foods that are consumed very frequently. Exposure in significant percentages to sweetened drinks, desserts and salty snacks starts even before the age of one year. The consumption of these foods contributes to the higher than recommended consumption of sodium and sugar.¹⁰⁷

RECOMMENDED:
DRINK LESS
FRUIT JUICE,
INCREASE THE
CONSUMPTION
OF FRUIT,
VEGETABLES AND
LEGUMES AND
CHOOSE WHOLE
GRAINS



5. IMPLEMENTATION OF THE RECOMMENDED DIET IN THE HOME MENU

The objective of the nutritional recommendations is to create nutritionally balanced and enjoyable eating habits that are culturally adapted and support social and environmental sustainability.

The present chapter gives guidance with regard to the implementation of the nutritional recommendations by means of suggestions for meals and recipes throughout the day, when the guiding principle is preference for unprocessed or minimally processed foods, plus the possibility of moderate seasoning. The meals are appropriate for any age, are simple to prepare, colorful and tasty. At least one meal a day should be dedicated to eating as a family and the selection of dishes prepared at home should be expanded gradually to all the day's meals..

EXAMPLES OF MEALS THROUGHOUT THE DAY:

BREAKFAST

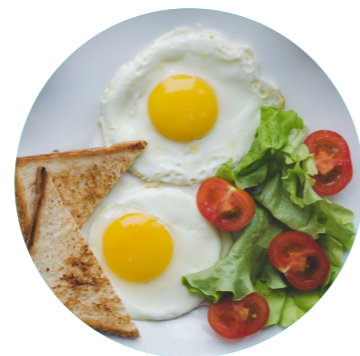
Breakfast provides an opportunity for a healthy start to the day and the acquisition of correct eating habits. Like the other meals, this meal should be based upon the principles of the nutritional recommendations. When the preparation becomes a daily habit, it does not take a long time and makes a significant contribution to a good and healthy feeling.

FOR EXAMPLE:

Oatmeal porridge combined with fruit or homemade granola with yogurt and fruit.



Israeli salad, omelet and a slice of bread



LUNCH

It is recommended to aim to gradually reach a situation where the food consumed throughout all hours of the day is food that has been prepared at home in advance. In this way we determine the type and quantity of ingredients contained in the meal. Preparing food at home in advance is characterized by control over its composition and moderate eating. During the course of the past fifteen years, there has been a noticeable increase in the percentage of people dining out, mainly at lunch and the evening meal (dinner/supper). At the eating occasions taking place outside the home, there has been an increase in the percentage of people eating both lunch and dinner (supper) at restaurants. It transpires from a literature search conducted with regard to the composition of food prepared outside the home that children, youth and adults who consume food outside the home are exposed to foods that are richer in fat, sugar, salt and calories and lower in essential nutrients. Eating patterns of foods outside the home lead to an increase in the risk of obesity and its accompanying morbidity. ^{108, 109, 110}

EXAMPLES OF LUNCHES:



Homemade sandwich



Tabbuleh salad "تبولة"

Vegetable salad with additions such as:
Tuna, corn, nuts, cheese squares
Tehina, olives,
Legume dishes with whole grain and vegetables



Brown rice, chicken/fish and steamed vegetables



EVENING MEAL (DINNER/SUPPER):

Eating together as a family is part of the nutritional recommendations for Israel. The joint preparation of the meal and eating it together as a family provides quality time where the household members can share their day's experiences, talk to each other and reinforce the relationship between them.

EXAMPLES OF DINNERS/SUPPERS:

Whole wheat pasta in tomato sauce with tuna and vegetable salad. Corn cobs, cottage cheese, vegetable salad. Bread, legume spread, sliced vegetable. Quiche, tehina and vegetables.



IN-BETWEEN MEAL:

Sometimes, especially during the growth stages, the body requires an additional small meal during the course of the day. This meal should also be on a Mediterranean home basis. It is important to plan the in-between meals, just like the other meals throughout the day, in advance. In the absence of planning it will be very easy to choose harmful foods.

EXAMPLES OF IN-BETWEEN MEALS:

Fruit salad.
Fruit in yogurt without additions.
A handful of different kinds of nuts/almonds.
Dried fruits.
Vegetables in a cheese or tehina dip.
A whole wheat sandwich.



Assisted in the writing: Nutrition researchers: Prof. Elliot Berry, Prof. Iris Shai, Prof. Danit Shahar, Dr. Dorit Adler, Dr. Sigal Eilat, Dr. Shira Zelber--Sagi, Prof. Raanan Shamir. From the Food Control Service – Eli Gordon. From the Nutrition Division: Moran Magnazi Blaychfeld , Avidor Ginsberg, Hava Altman, Rebecca Goldsmith, Josefa Kachal, Faina Tsodikov, Orit Yona, Orit Zilberberg, Shirly Rachmiel, Carmit Safra and Prof. Ronit Endevelt. From the Public Health Services: Zohar Barnet Itzhaki. Thanks also to who assisted in the preparation of the document.



PREFER HOME COOKING



NOTE: IT IS ABSOLUTELY POSSIBLE TO ASSEMBLE A LIGHT LUNCH COMPRISING FOR EXAMPLE A SANDWICH, SALAD AND FRUIT, AND TO SUPPLEMENT IT AT THE EVENING MEAL COMPRISING COOKED FOOD, AND VICE VERSA



6. APPENDICES

6.1 APPENDIX NUMBER 1: THE MEDITERRANEAN DIET AS A SUSTAINABLE DIET

Dr. Zohar Barnet-Itzhaki and Prof. Ronit Endevelt.

Nutrition constitutes the basis for man's existence. Since the dawn of civilization man has gathered food and hunted it as part of the ecological systems in which he existed. With the advance of history, with an emphasis on the Agricultural Revolution and the Industrial Revolution, man began to influence his environment, to endanger and pollute it. Presently the food industry constitutes a significant factor in ruining the environment and global warming. The food industry leads to the emission of 20% - 30% of the hothouse gases, constitutes a significant factor in deforestation, damages biodiversity, leads to the exploitation of land and water resources and the pollution of water sources (1).

The animal based food industry that developed in the last century also constitutes a significant environmental threat, that is expressed mainly in the massive emission of methane gases by dry land livestock (2), in the exploitation of living spaces for the breeding of livestock and sites for the benefit of agricultural crops for feeding livestock (3), in damaging biodiversity, (4) and in the creation of masses of sewage and waste (3). It should be noted that the Westernization processes being undergone by different populations in the world such as in India and in China are also expressed, inter alia, in an increase in the consumption of meat, and this aggravates the problem. (2)

The food industry is also liable to cause the diminishing of the food resources, with the emphasis on marine systems: massive fishing leads to a significant reduction and the danger of extinction of fish populations in the oceans, seas and other sources of water (5). The UN Environment Program (UNEP) has warned that over-fishing is liable to cause severe damage, in particular in Africa, in the Far East and in Central America (6).

Globalization, that allowed large quantities of food to be transported large distances, also contributed to the environmental damage latent in the food industry. Transporting food entails on the one hand special treatment of the food (such as preserving and chilling), and on the other hand causes emissions of hothouse gases and other gases to the atmosphere due to the use of heavy vehicles to transport the food (with the emphasis on lorries and airplanes) (1).

The prevailing trend in agriculture at present focuses on the cultivation of a reduced number of species and strains. Studies from recent years show that the number of

species and strains in agricultural use (grains, tubers, fruit and vegetables) has been dramatically reduced during the last hundred years, some of the strains have become totally extinct and some of them are unavailable for cultivation purposes. For example, 88% out of 2,683 strains of pears that were grown in the United States during the 19th century no longer exist in the market at all and it is not possible to grow them. The cultivation of a reduced number of strains embodies many dangers, including a contribution to the species being damaged by bad weather, diseases and pests, and a threat to its survival (7). Accordingly a reduction in the number of species is liable to damage the strength of agriculture and threaten the public's nutritional security. All these are opposed to the principles of sustainability that entail equal reference to the environment, to society and the economy (8), looking out for the welfare of human beings and the welfare of the environment in the present and in the future generations. What then is sustainable nutrition (sustaining nutrition)? According to the UN Food and Agriculture Organization (FAO), sustainable nutrition is: "Sustainable Diets are those diets with low environmental impacts which contribute to food and nutrition security and to a healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources". (9). Accordingly, a sustainable menu must feed an ever-growing population in a fixed and equalitarian manner and with healthy and balanced food with minimum damage to biodiversity, the environment and animals:

- A menu based on food from vegetable sources and on small quantities of food from animal sources causes less environmental and ecological damage than a menu mostly based upon food from animal sources. A reduced consumption of food from animal sources assists in a significant reduction in the production of hothouse gases, deforestation for the purpose of pasture areas and growing food for the livestock industry (10) and also a reduction in the extensive consumption of water required for growing food from animal sources
- The production of food and the consumption of a menu based mostly of food from vegetable sources such as whole grains, legumes, fruit and vegetables, also contributes to society, since they encourage local family agriculture and manufacture and living under conditions of solidarity.



- Placing the emphasis on local consumption and avoiding transporting food for long distances. See Appendix Number 3 – Table of Fruit and Vegetables and their Season.
- A sustainable menu encourages varied agriculture that is based upon a large number of species and encourages biodiversity.

The UN Food and Agriculture Organization points to the Mediterranean diet as an example of sustainable nutrition (10):

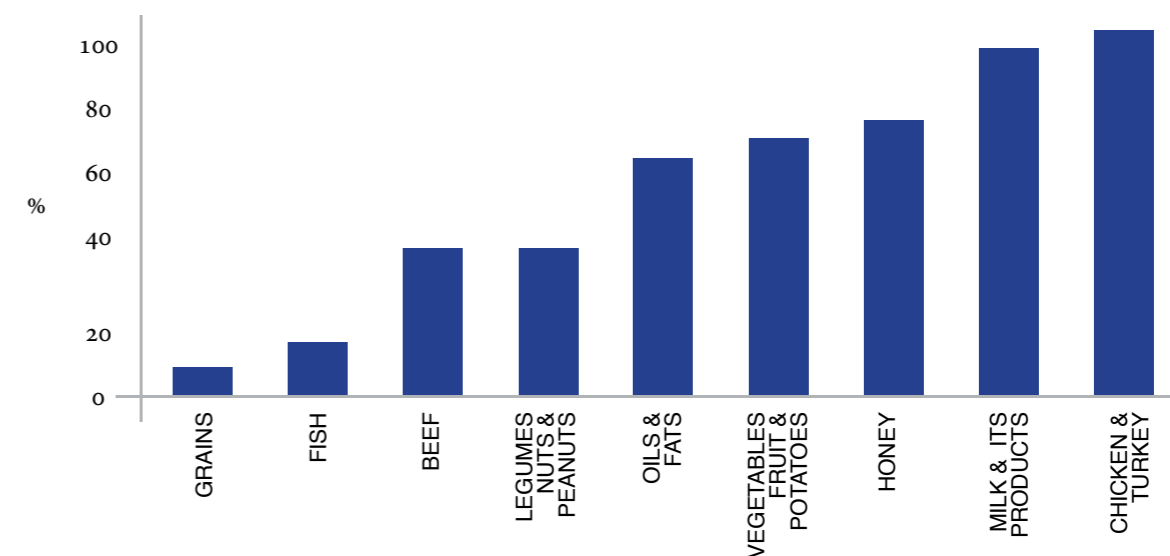
From the environmental aspect, the classic Mediterranean diet places the emphasis on biodiversity (for example the preservation of various strains of olives) and also leans on two varied habitats (for example hills suitable for growing olives, pine forests, wheat and vegetable fields) (10). In a 2005 study Duchin conducted a life cycle analysis and examined the environmental impact of products and various types of food. Duchin showed that the Mediterranean diet has a relatively low environmental impact, inter alia since it is based mainly on the consumption of vegetables, fruit, grains and legumes, with a relatively low consumption of meat and animal products (11). Furthermore, this diet has cultural aspects that respect the culinary and cultural heritage of various communities.

THE MEDITERRANEAN DIET AS A SUSTAINABLE DIET IN ISRAEL

In addition to its universal nutritional virtues, the Mediterranean diet has advantages as a sustainable diet in particular in Israel. In Israel there are favorable weather conditions, a varied climate and different types of soil. In addition advanced technological methods are developed and implemented in agriculture in Israel. All these allow the cultivation of varied species and strains of vegetables, tubers, fruit, legumes, nuts, peanuts and oils that constitute the bulk of the Mediterranean diet. The consumption of local Israeli food contributes to the local society and economy, to the development and preservation of employment opportunities for the residents, and entails less resources in chilling, preservation and long distance transportation of the food and thereby contributes to a reduction in the emission of hothouse gases.

According to data from the Central Bureau of Statistics, the percentage of own supply of food in Israel is according to the following specification: (12)

Graph 1: THE PERCENTAGE OF OWN SUPPLY OF FOOD IN ISRAEL



It transpires from the data that a significant part of most of the food recommended in the Mediterranean diet such as vegetables, fruit, potatoes, oils, legumes and nuts, was grown in Israel. Furthermore, a large number of olive trees grow in Israel and provide a supply of olives and oil for local consumption. Accordingly, there is less need for transporting food long distance, reduced emission of hothouse gases and the principles of sustainability are preserved.

It should be noted that despite 100% of the chicken and 40% of the beef consumed in Israel being home grown, the majority of the food consumed by the cattle, chickens and turkeys (for example: grains and soya) is imported from abroad, so that its transportation is injurious to the environment. This figure is another reason for the advantages of the Mediterranean diet, that is relatively low in meat, as a sustainable diet.

1. Garnett, Tara. What is a sustainable healthy diet? Food Climate Research Network. [Online] 2014. http://www.fcrn.org.uk/sites/default/files/fcrn_what_is_a_sustainable_healthy_diet_final.pdf.
2. Meat production and consumption: Environmental consequences. Parunovic N. Petrovic Z. Djordjevic V. Milicevic D. Nastasijevic I. 2015, Procedia Food Science, 235-238 עמ' 5, כרך .



3. Reducing the environmental impact of dietary choice: perspectives from a behavioural and social change approach. Joyce A., 2012. ואחרים, J Environ Public Health. .
4. Forecasting potential global environmental costs of livestock production 2000-2050. Pelletier N ו- Tyedmers P. 2010, PNAS, 18371-4 עמ' 43, כרך 117.
5. Fisheries: decline of Pacific tuna populations exaggerated? J, Hampton, et al. 2005, Nature, Vol. 434, p. 7037.
6. UNEP. In: Challenges to International Waters: Regional Assessments in a Global Perspective (The Global International Waters Assessment Final Report). s.l.: The university of Kalmar and the Municipality of Kakmar, Sweden, and the Governments of Sweden, Finland and Norway, 2006.
7. Linking Agricultural Biodiversity and Food Security: The Valuable Role of Sustainable Agriculture. Thrupp LA. Special Biodiversity issue, 2000, Royal, 265-281 עמ' 76, כרך 7.
8. GH, Brundtland. Our Common Future: Report of the World Commission on Environment and Development (WCED). Oxford: Oxford University Press, 1987.
9. Food security and sustainability: can one exist without the other? EM Berry, ואחרים, 2015, Public Health Nutrition, 1-10 עמ' 16, כרך 16.
10. Final document: International Scientific Symposium Biodiversity and Sustainable Diets: United against Hunger. FAO. Rome: s.n. , 2010. Food and Agriculture Organization.
11. Sustainable consumption of food: a framework for analysing scenarios about changes in diets. F, Duchin. 2005, Journal of Industrial Ecology, Vol. 9, pp. 99-114.
12. Central Bureau of Statistics. The Food Supply Balance 2012.

6.2 APPENDIX NO. 2: FOOD PROCESSING CLASSIFICATION

The method for the definition of the extent of food processing is recognized in the world of research and policy determination.^{101, 112, 113}

It relates to foods according to the extent of their processing and not according to their nutritional content

Group 1

Unprocessed or minimally processed foods

The first NOVA group is of unprocessed or minimally processed foods. Unprocessed (or natural) foods are edible parts of plants (seeds, fruits, leaves, stems, roots) or of animals (muscle, offal, eggs, milk), and also fungi, algae and water, after separation from nature. Minimally processed foods are natural foods altered by processes such as removal of inedible or unwanted parts, drying, crushing, grinding, fractioning, filtering, roasting, boiling, pasteurisation, refrigeration, freezing, placing in containers, vacuum packaging,

or non-alcoholic fermentation. None of these processes adds substances such as salt, sugar, oils or fats to the original food.

The main purpose of the processes used in the production of group 1 foods is to extend the life of unprocessed foods, allowing their storage for longer use, such as chilling, freezing, drying, and pasteurising. Other purposes include facilitating or diversifying food preparation, such as in the removal of inedible parts and fractioning of vegetables, the crushing or grinding of seeds, the roasting of coffee beans or tea leaves, and the fermentation of milk to make yoghurt.

Group 1 foods include fresh, squeezed, chilled, frozen, or dried fruits and leafy and root vegetables; grains such as brown, parboiled or white rice, corn cob or kernel, wheat berry or grain; legumes such as beans of all types, lentils, chickpeas; starchy roots and tubers such as potatoes and cassava, in bulk or packaged; fungi such as fresh or dried mushrooms; meat, poultry, fish and seafood, whole or in the form of steaks, fillets and other cuts, or chilled or frozen; eggs; milk, pasteurised or powdered; fresh or pasteurised fruit or vegetable juices without added sugar, sweeteners or flavours; grits, flakes or flour made from corn, wheat, oats, or cassava; pasta, couscous and polenta made with flours, flakes or grits and water; tree and ground nuts and other oil seeds without added salt or sugar; spices such as pepper, cloves and cinnamon; and herbs such as thyme and mint, fresh or dried; plain yoghurt with no added sugar or artificial sweeteners added; tea, coffee, drinking water.

Group 1 also includes foods made up from two or more items in this group, such as dried mixed fruits, granola made from cereals, nuts and dried fruits with no added sugar, honey or oil; and foods with vitamins and minerals added generally to replace nutrients lost during processing, such as wheat or corn flour fortified with iron or folic acid.

Group 1 items may infrequently contain additives used to preserve the properties of the original food. Examples are vacuum-packed vegetables with added anti-oxidants, and ultra-pasteurised milk with added stabilisers.

Group 2

Processed culinary ingredients

The second NOVA group is of processed culinary ingredients. These are substances obtained directly from group 1 foods or from nature by processes such as pressing, refining, grinding, milling, and spray drying.

The purpose of processing here is to make products used in home and restaurant kitchens to prepare, season and cook group 1 foods and to make with them varied and enjoyable hand-made dishes, soups and broths, breads, preserves, salads, drinks, desserts and other culinary preparations.

Group 2 items are rarely consumed in the absence of group 1 foods. Examples are salt mined or from seawater; sugar and molasses obtained from cane or beet; honey



extracted from combs and syrup from maple trees; vegetable oils crushed from olives or seeds; butter and lard obtained from milk and pork; and starches extracted from corn and other plants.

Products consisting of two group 2 items, such as salted butter, group 2 items with added vitamins or minerals, such as iodised salt, and vinegar made by acetic fermentation of wine or other alcoholic drinks, remain in this group.

Group 2 items may contain additives used to preserve the product's original properties. Examples are vegetable oils with added anti-oxidants, cooking salt with added anti-humectants, and vinegar with added preservatives that prevent microorganism proliferation.

Group 3

Processed foods

The third NOVA group is of processed foods. These are relatively simple products made by adding sugar, oil, salt or other group 2 substances to group 1 foods. Most processed foods have two or three ingredients. Processes include various preservation or cooking methods, and, in the case of breads and cheese, non-alcoholic fermentation.

The main purpose of the manufacture of processed foods is to increase the durability of group 1 foods, or to modify or enhance their sensory qualities.

Typical examples of processed foods are canned or bottled vegetables, fruits and legumes; salted or sugared nuts and seeds; salted, cured, or smoked meats; canned fish; fruits in syrup; cheeses and unpackaged freshly made breads

Processed foods may contain additives used to preserve their original properties or to resist microbial contamination. Examples are fruits in syrup with added anti-oxidants, and dried salted meats with added preservatives.

When alcoholic drinks are identified as foods, those produced by fermentation of group 1 foods such as beer, cider and wine, are classified here in Group 3.

Group 4

Ultra-processed food and drink products

The fourth NOVA group is of ultra-processed food and drink products. These are industrial formulations typically with five or more and usually many ingredients. Such ingredients often include those also used in processed foods, such as sugar, oils, fats, salt, anti-oxidants, stabilisers, and preservatives. Ingredients only found in ultra-processed products include substances not commonly used in culinary preparations, and additives whose purpose is to imitate sensory qualities of group 1 foods or of culinary preparations of these foods, or to disguise undesirable sensory qualities of the final product. Group 1 foods are a small proportion of or are even absent from ultra-processed products.

Substances only found in ultra-processed products include some directly extracted

from foods, such as casein, lactose, whey, and gluten, and some derived from further processing of food constituents, such as hydrogenated or interesterified oils, hydrolysed proteins, soy protein isolate, maltodextrin, invert sugar and high fructose corn syrup. Classes of additive only found in ultra-processed products include dyes and other colours, colour stabilisers, flavours, flavour enhancers, non-sugar sweeteners, and processing aids such as carbonating, firming, bulking and anti-bulking, de-foaming, anti-caking and glazing agents, emulsifiers, sequestrants and humectants.

Several industrial processes with no domestic equivalents are used in the manufacture of ultra-processed products, such as extrusion and moulding, and pre-processing for frying.

The main purpose of industrial ultra-processing is to create products that are ready to eat, to drink or to heat, liable to replace both unprocessed or minimally processed foods that are naturally ready to consume, such as fruits and nuts, milk and water, and freshly prepared drinks, dishes, desserts and meals. Common attributes of ultra-processed products are hyper-palatability, sophisticated and attractive packaging, multi-media and other aggressive marketing to children and adolescents, health claims, high profitability, and branding and ownership by transnational corporations.

Examples of typical ultra-processed products are: carbonated drinks; sweet or savoury packaged snacks; ice-cream, chocolate, candies (confectionery); mass-produced packaged breads and buns; margarines and spreads; cookies (biscuits), pastries, cakes, and cake mixes; breakfast 'cereals', 'cereal' and 'energy' bars; 'energy' drinks; milk drinks, 'fruit' yoghurts and 'fruit' drinks; cocoa drinks; meat and chicken extracts and 'instant' sauces; infant formulas, follow-on milks, other baby products; 'health' and 'slimming' products such as powdered or 'fortified' meal and dish substitutes; and many ready to heat products including pre-prepared pies and pasta and pizza dishes; poultry and fish 'nuggets' and 'sticks', sausages, burgers, hot dogs, and other reconstituted meat products, and powdered and packaged 'instant' soups, noodles and desserts.



When products made solely of group 1 or group 3 foods also contain cosmetic or sensory intensifying additives, such as plain yoghurt with added artificial sweeteners, and breads with added emulsifiers, they are classified here in group 4. When alcoholic drinks are identified as foods, those produced by fermentation of group 1 foods followed by distillation of the resulting alcohol, such as whisky, gin, rum, vodka, are classified in group 4.

Taken from reference 115
















6.3 APPENDIX NO. 3: TABLE OF SPECIES OF FRUIT AND VEGETABLES AND THEIR SEASON. IT IS RECOMMENDED TO SELECT LOCALLY GROWN FRUIT AND VEGETABLES WITH THE MAKING "MADE IN ISRAEL" AND SIMILAR¹⁴

**SPECIES OF FRUIT AND THEIR SEASON
GROWING REGION, HARVEST DATES AND STORAGE LIFE**

SPECIES OF FRUIT	HARVEST/PICKING TIME	STORAGE LIFE	GOWING REGIONS
Apple 	July-December, depending on strain	12 months	Upper Galilee, Western Galilee, Golan Heights
Banana 	All year round	No storage	The Jordan Valley, Western Galilee, Carmel Coast
Pear 	July-September, depending on strain	12 months	Upper Galilee, Western Galilee, Golan Heights
Grapes 	April-December, depending on strain	3 months	The Jordan Valley, Arava, the Coastal Plain, Lachish
Peach/nectarine	April-October, depending on strain	Two weeks	From the north until the southern Coastal Plain
Plum	May-October, depending on strain	Two months	The Golan Heights, Upper Galilee, Western Galilee
Apricot	May-June, depending on strain	1 month	Upper Galilee, Zichron region, Binyamina
Avocado 	August-June, depending on strain	1 month	From Upper/Western Galilee to the Western Negev
Mango 	June-October, depending on strain	1 month	Arava, the Jordan Valley, around the Kinneret
Cherry 	May-June	Two months	The Golan Heights, Western Galilee, the Etzion Bloc
Date	October-November	Year+	From the Kinneret to Eilat along Highway 90
Orange 	September-April, depending on strain	1 month	The Coastal Plain from Binyamina to the Eshkol region
Yellow grapefruit 	October-May	Two months	The Coastal Plain from Binyamina to the Eshkol region, the eastern valleys
Red grapefruit 	October-May	Two months	The eastern valleys, Northern Negev
Clementine	September-April, depending on strain	Two weeks	The Coastal Plain from Binyamina to the Eshkol region
Lemon 	All year round	5 months	All over the country
Pomelo	October-January, depending on region	1 month	Western Galilee, Jezreel Valley, Emek-Hamaayanot
Red pomelo	October-November	1 month	The Kinneret Valley, Jezreel Valley, Emek-Hamaayanot
Pomelit	September-February	No storage	Jezreel Valley, Emek-Hamaayanot
Pomegranate 	July-November, depending on strain	4 months	All over the country apart from the Galilee/Golan/Arava
Kiwi 	October-November	8 months	All over the country
Almond	July-August	Year+	All over the country
Guava	September-November, April-May	No storage	All over the country apart from the Golan Heights and areas prone to cold
Fig	April-January, depending on strain	No storage	All over the country
Lychee 	June-July	3 weeks	Lower Galilee, Upper Galilee, Western Galilee
Pineapple 	All year round	Two weeks	All over the country apart from the Galilee/Golan
Sweetsop	September-December	No storage	Western Galilee, Central Coastal Plain
Papaya	August-May	No storage	All over the country apart from the Golan Heights
Pitaya	July-April, depending on strain	Two weeks	Western Galilee, Central region to Northern Negev

Our thanks to the Plants Production and Marketing Board for the tables

**SPECIES OF VEGETABLES AND THEIR SEASON
GROWING REGION, HARVEST DATES AND STORAGE LIFE**

SPECIES OF VEGETABLE	HARVEST/PICKING TIME	STORAGE LIFE	GROWING REGIONS
Tomato 	All year round, depending on region	No storage	Western Negev, Ramat HaNegev, Arava, Center
Cucumber	All year round	No storage	Center
Riverside Onion	From July to mid-September	September – February	Jezreel Valley, Western Negev, Galilee, Golan Heights, Arava
Onion 	September - March	No storage	Jezreel Valley, Western Negev, Galilee, Golan Heights, Arava
Pepper 	All year round, depending on region	No storage	Arava, Negev, Carmel Beach
Potato 	All year round	Long storage	Negev, Center, Upper Galilee
Cabbage	All year round	Two months	Negev, Jezreel Valley, Center, Coastal Plain
Lettuce 	All year round	No storage	Coastal Plain, Center
Cauliflower 	Mainly November – May + summer	No storage	Coastal Plain
Beetroot 	All year round	3 months	Negev, Center, Jezreel Valley
Carrot 	All year round	3 months	Negev, Jezreel Valley, Valley of the Springs, Upper Galilee
Zucchini 	All year round	No storage	Negev, Arava, Center
Kohlrabi 	All year round	No storage	Coastal Plain, Jezreel Valley, Negev
Fennel	All year round (mainly in winter)	No storage	Coastal Plain, Jezreel Valley, Negev
Garlic 	Green – from March to April White – April to June	June - April	Negev, Center, Galilee, Jezreel Valley
Celery 	All year round	No storage	Negev
Sweet Potato	July - September	October - July	Negev, Center
Pumpkin 	Earlier than March - July	July - March	Coastal Plain, Negev, Arava, , Jezreel Valley, Center
Radish	All year round	No storage	Negev
Seasoning vegetables	All year round	No storage	Jordan Valley, Arava, Negev, Valley of the Springs, Jezreel Valley, Center

Our thanks to the Plants Production and Marketing Board for the tables



7. Bibliography

- 1 Etemadi A, Sinha R, Ward MH, Graubard BI, Inoue-Choi M, Dawsey SM, Abnet CC. Mortality from different causes associated with meat, heme iron, nitrates, and nitrites in the NIH-AARP Diet and Health Study: population based cohort study. *BMJ*. 2017 May 9;357:j1957.
- 2 Lippi G, Mattiuzzi C, Cervellin G. Meat consumption and cancer risk: a critical review of published meta-analyses. *Crit Rev Oncol Hematol*. 2016 Jan;97:1-14.
- 3 The Netherlands Nutrition Centre: Hoeveel en wat kan ik per dag eten? Vis, peulvruchten, vlees, ei, noten en zuivel <http://www.voedingscentrum.nl/nl/gezond-eten-met-de-schijf-van-vijf/hoeveel-en-wat-kan-ik-per-dag-eten-.aspx>
- 4 Georgina Gustin: Another Nation Trims Meat From Diet Advice <http://theplate.nationalgeographic.com/2016/03/23/another-nation-trims-meat-from-diet-advice>
- 5 Eckel RH. Eggs and beyond: is dietary cholesterol no longer important?. *Am J Clin Nutr* 2015;102:235-6.
- 6 GBD 2016 Alcohol Collaborators. Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Published online August 23, 2018 [http://dx.doi.org/10.1016/S0140-6736\(18\)31310-2](http://dx.doi.org/10.1016/S0140-6736(18)31310-2)
- 7 Martı́nez-González MA, Gea A. Mediterranean diet: the whole is more than the sum of its parts. *British Journal of Nutrition* (2012), 108, 577-578
Frisardi V, Panza F, Seripa D, Imbimbo BP et al, Nutraceutical properties of Mediterranean diet and cognitive decline: possible underlying mechanisms. *J Alzheimers Dis*. 2010;22(3):715-40
- 8 Davis C, Bryan J, Hodgson J, Murphy K. Definition of the Mediterranean Diet: A Literature Review. *Nutrients* 2015, 7, 9139-9153
- 9 S Radd-Vagenas, A Kouris-Blazos, M Fiatarone Singh and VM Flood. Historical review Med diets and cuisine. *Asia Pac J Clin Nutr* 2017;26(5):749-763
- 10 Allbaugh LG. Crete: a case study of an underdeveloped area. Princeton, NJ: Princeton University Press; 1953.
- 11 Trichopoulou A, Costacou T, Bamia C, D. T. Adherence to a Mediterranean diet and survival in a Greek population. *New England Journal of Medicine*. 2003;348:2599-608.

- 12 Maillot M, Issa C, Vieux F, Lairon D et al, The shortest way to reach nutritional goals is to adopt Mediterranean food choices. Evidence from computer-generated personalized diets. *Am J Clin Nutr*. 2011;94(4):1127-37.
- 13 Solfrizzi V, Frisardi V, Seripa D, Logroscino G et al, Mediterranean diet in pre-dementia and dementia syndromes. *Curr Alzheimer Res*. 2011 Aug;8(5):520-42.
- 14 Solfrizzi V, Panza F, Frisardi V, Seripa D et al, Diet and Alzheimer's disease risk factors or prevention: the current evidence. *Expert Rev Neurother*. 2011 May;11(5):677-708.
- 15 Dhikav V, Anand K. Potential predictors of hippocampal atrophy in Alzheimer's disease. *Drugs Aging*. 2011 Jan 1;28(1):1-11.
- 16 Devanand D, Lee J, Luchsinger J, Manly J et al, Lessons from epidemiologic research about risk factors, modifiers, and progression of late onset Alzheimer's Disease in New York City at Columbia University Medical Center. *J Alzheimers Dis*. 2013;33 Suppl 1:S447-55.
- 17 Frisardi V, Panza F, Seripa D, Imbimbo BP et al, Nutraceutical properties of Mediterranean diet and cognitive decline: possible underlying mechanisms. *J Alzheimers Dis*. 2010;22(3):715-40.
- 18 M.Y. Khanji et al. Lifestyle advice and interventions for cardiovascular risk reduction: A systematic review of guidelines *International Journal of Cardiology* 263 (2018) 142-151
- 19 Keys A (Ed). Coronary heart disease in seven countries. *Circulation* 1970;41(Suppl.1):211 pp.
- 20 Kris-Etherton P, Eckel RH, Howard BV, St Jeor S et al, Nutrition Committee Population Science Committee and Clinical Science Committee of the American Heart Association. AHA Science Advisory: Lyon Diet Heart Study. Benefits of a Mediterranean-style, National Cholesterol Education Program/American Heart Association Step I Dietary Pattern on Cardiovascular Disease. *Circulation*. 2001 Apr 3;103(13):1823-5.
- 21 Willett W, Sacks F, Trichopoulou A, Drescher G et al, Mediterranean diet pyramid: a cultural model for healthy eating. *Am J Clin Nutr* 1995;61:1402S-6S.
- 22 Serra-Majem L, Roman B, Estruch R, Scientific evidence of interventions using the Mediterranean diet: a systematic review. *Nutr Rev*. 2006;64:S27-S47.



- 23 La Vecchia C. Association between Mediterranean dietary patterns and cancer risk. *Nutr Rev.* 2009;67(Suppl 1:S):126-9.
- 24 Trichopoulou A, Bamia C, Trichopoulos D, Anatomy of health effects of Mediterranean diet: Greek EPIC prospective cohort study. *BMJ.* 2009;338:b2337.
- 25 Richter et al. Recent Findings of Studies on the Mediterranean Diet What are the Implications for Current Dietary Recommendations? *Endocrinol Metab Clin N Am* 43 (2014) 963-980.
- 26 San s. Mediterranean diet, active lifestyle and cardiovascular disease: A recipe for immortality?. *European Journal of Preventive Cardiology*; 0(00) 1-4. The European Society of Cardiology 2018
- 27 A. Trichopoulou, E. Vasilopoulou. Mediterranean diet and longevity. *British Journal of Nutrition* (2000), 84, Suppl. 2, S205±S209
- 28 Conrad et al. Greater vegetable variety and amount are associated with lower prevalence of coronary heart disease: National Health and Nutrition Examination Survey, 1999-2014. *Nutrition Journal* (2018) 17:67
- 29 Chrysohoou et al. Adherence to the Mediterranean Diet Attenuates Inflammation and Coagulation Process in Healthy Adults. The ATTICA Study. *Journal of the American College of Cardiology.* 44: 2004. doi:10.1016/j.jacc.2004.03.039
- 30 Velasco N, A C, Grassi B. The Mediterranean diet, hepatic steatosis and nonalcoholic fatty liver disease. *Curr Op Clinl Nutr Metab Care.* 2014;17:445-53.
- 31 Dhikav V, Anand K, Potential predictors of hippocampal atrophy in Alzheimer's disease. *Drugs Aging.* 2011 Jan 1;28(1):1-11.
- 32 Frisardi V, Panza F, Seripa D, Imbimbo BP et al, Nutraceutical properties of Mediterranean diet and cognitive decline: possible underlying mechanisms. *J Alzheimers Dis.* 2010;22(3):715-40.
- 33 Cherbuin N, Anstey KJ, The Mediterranean diet is not related to cognitive change in a large prospective investigation: the PATH Through Life study. *Am J Geriatr Psych* 2012 Jul;20(7):635-9.
- 34 Daviglus ML, Bell CC, Berrettini W, Bowen PE et al, NIH State-of-the-Science Conference Statement: Preventing Alzheimer's Disease and Cognitive Decline. *NIH Consens State Sci Statements.* 2010 Apr 28;27(4).

- 35 Jack CR Jr, Wiste HJ, Vemuri P, Weigand SD et al, Alzheimer's Disease Neuroimaging Initiative. Brain beta-amyloid measures and magnetic resonance imaging atrophy both predict time-to-progression from mild cognitive impairment to Alzheimer's disease. *Brain* 2010 Nov;133(11):3336-48.
- 36 Etgen T, Sander D, Bickel H, Förstl H, Mild cognitive impairment and dementia: the importance of modifiable risk factors. *Dtsch Arztebl Int.* 2011 Nov;108(44):743-50.
- 37 Wang Z, Dong B, Zeng G, Li J et al, Is there an association between mild cognitive impairment and dietary pattern in Chinese elderly? Results from a cross-sectional population study. *BMC Public Health.* 2010 Oct 8;10:595.
- 38 Gardener S, Gu Y, Rainey-Smith SR, Keogh JB et al, Adherence to a Mediterranean diet and Alzheimer's disease risk in an Australian population. *Transl Psychiatry.* 2012 Oct 2;2:e164.
- 39 Schwingshackl L, Hoffmann G, Adherence to Mediterranean diet and risk of cancer: an updated systematic review and meta-analysis of observational studies. *Cancer Med.* 2015 Dec;4(12):1933-47.
- 40 La Vecchia C, Mediterranean diet and cancer. *Pub Health Nutr* 2004;7(7):965-8.
- 41 Pelucchi C, Bosetti C, Rossi M, Negri E et al, Selected aspects of Mediterranean diet and cancer risk.. *Nutr Cancer.* 2009;61:756-66.
- 42 Bosetti C, Pelucchi C, La Vecchia C, Diet and cancer in Mediterranean countries: carbohydrates and fats. *Pub Health Nutr* 2009;12(9A):1595-600.
- 43 Buckland G, Travier N, Cottet V, González CA et al, Adherence to the Mediterranean diet and risk of breast cancer in the European prospective investigation into cancer and nutrition cohort study. *Int J Cancer.* 2013;132(12):2918-27.
- 44 Sánchez-Villegas A, Bes-Rastrollo M, Martínez-González MA, Serra-Majem L. Adherence to a Mediterranean Dietary Pattern and Weight Gain in a Follow-up Study: the SUN Cohort. *Int J Obesity*; 2006;30:350-8.
- 45 Panagiotakos DB, Chrysohoou C, Pitsavos C, Stefanadis C, Association between the Prevalence of Obesity and Adherence to the Mediterranean Diet: the ATTICA Study. *Nutrition.* 2006;22:449-56.
- 46 Shai I, Schwarzfuchs D, Henkin Y, Shahar DR et al, Weight Loss with a Low-Carbohydrate, Mediterranean or Low-Fat Diet. *New England Journal of Medicine.* 2008;359:229-41.



- 47 Martínez-González MA, Fuente-Arrillaga C, Nunez-Cordoba JM, Basterra-Gortari FJ et al, Adherence to Mediterranean diet and risk of developing diabetes: prospective cohort study. *BMJ*. 2008;336(7657):1348-51.
- 48 Salas-Salvadó J, Bulló M, Babio N, Martínez-González MÁ et al, Reduction in the incidence of type 2 diabetes with the Mediterranean diet: results of the PREDIMED-Reus nutrition intervention randomized trial.. *Diabetes Care*; 34: 14-19. 2011;34:14-9.
- 49 Koloverou E, Esposito K, Giugliano D, Panagiotakos D, The effect of Mediterranean diet on the development of type 2 diabetes mellitus: a meta-analysis of 10 prospective studies and 136,846 participants. *Metabolism* 2014;63:903-11.
- 50 Esposito K, Maiorino MI, Bellastella G, Chiodini P, Panagiotakos D, Giugliano D. A journey into a Mediterranean diet and type 2 diabetes: a systematic review with meta-analyses. *BMJ Open*. 2015 Aug 10;5(8):e008222.
- 51 Nosova E, Conte M, Grenon M. Advancing beyond the "heart-healthy diet" for peripheral arterial disease. *J Vasc Surg*. 2015;61:265-74.
- 52 Schwingshackl L, Hoffmann G. Mediterranean dietary pattern, inflammation and endothelial function: a systematic review and meta-analysis of intervention trials. *Nutr Metab Cardiovascular Dis*. 2014 Sep;24(9):929-39.
- 53 Garcia-Marcos L, Castro-Rodriguez JA, Weinmayr G, Panagiotakos DB et al, Influence of Mediterranean diet on asthma in children: a systematic review and meta-analysis. *Pediatr Allergy Immunol*. 2013 Jun;24(4):330-8.
- 54 Raphe C, Untruth M, Berger K, Dietary patterns and the risk of depression in adults: a systematic review of observational studies. *Ear J Nutria*. 2014 Jun;53(4):997-1013.
- 55 Sanchez PH, Ruano C, de Irala J, Ruiz-Canela M et al, Adherence to the Mediterranean diet and quality of life in the SUN project. *Eur J Clin Nutr*. 2012;66:360-8.
- 56 Veronese N, Stubbs B, Noale M, Solmi M, Luchini C, Maggi S. Adherence to the Mediterranean diet is associated with better quality of life: data from the Osteoarthritis Initiative. *Am J Clin Nutr*. 2016 Nov;104(5):1403-1409.
- 57 Dhikav V, Anand K, Potential predictors of hippocampal atrophy in Alzheimer's disease. *Drugs Aging*. 2011 Jan 1;28(1):1-11.
- 58 Dhikav V, Anand K, Potential predictors of hippocampal atrophy in Alzheimer's disease. *Drugs Aging*. 2011 Jan 1;28(1):1-11.

- 59 Frisardi V, Panza F, Seripa D, Imbimbo BP, Vendemiale G, Pilotto A, Solfrizzi V. Nutraceutical properties of Mediterranean diet and cognitive decline: possible underlying mechanisms. *J Alzheimers Dis*. 2010;22(3):715-40.
- 60 Aridi SA, Walker JL, Wright ORL. The Association between the Mediterranean Dietary Pattern and Cognitive Health: A Systematic Review. *Nutrients* 2017, 9, 674; doi:10.3390/nu9070674
- 61 Tang EYH, Harrison SL, Albanese E, Gorman TJ, Rutjes AWS, Siervo M, Stephan B. Dietary interventions for prevention of dementia in people with mild cognitive impairment. *Cochrane Database of Systematic Reviews* 2015, Issue 10. Art. No.: CD011909. DOI: 10.1002/14651858.CD011909.
- 62 Berendsen A, et al. (2014). A parallel randomized trial on the effect of a healthful diet on inflammaging and its consequences in European elderly people: design of the NU-AGE dietary intervention study. *Mechanisms of ageing and development* 134(11-12):523-530
- 63 Food and Agriculture Organization: Sustainable Diets And Biodiversity Directions And Solutions For Policy, Research And Action 2012 <http://www.fao.org/docrep/016/i3004e/i3004e.pdf>
- 64 U Fresán et al. The Mediterranean diet, an environmentally friendly option: evidence from the Seguimiento Universidad de Navarra (SUN) cohort. *Public Health Nutrition*: 21(8), 1573–1582. 2018
- 65 Carlsson-Kanyama A, González AD. Potential contributions of food consumption patterns to climate change. *Am J Clin Nutr*. 2009 May;89(5):1704S-1709S.
- 66 Horrigan L, Lawrence RS, Walker P, How sustainable agriculture can address the environmental and human health harms of industrial agriculture. *Environ Health Perspect*. 2002 May;110(5):445-56.
- 67 Watts N, Adger WN, Ayeb-Karlsson S, Bai Y, Byass P, Campbell-Lendrum D, Colbourn T, Cox P, Davies M, Depledge M, Depoux A, Dominguez-Salas P, Drummond P, Ekins P, Flahault A, Grace D, Graham H, Haines A, Hamilton I, Johnson A, Kelman I, Kovats S, Liang L, Lott M, Lowe R, Luo Y, Mace G, Maslin M, Morrissey K, Murray K, Neville T, Nilsson M, Oreszczyn T, Parthemore C, Pencheon D, Robinson E, Schütte S, Shumake-Guillemot J, Vineis P, Wilkinson P, Wheeler N, Xu B, Yang J, Yin Y, Yu C, Gong P, Montgomery H, Costello A. The Lancet Countdown: tracking progress on health and climate change. *Lancet*. 2017 Mar 18;389(10074):1151-1164



- 68 Horrigan L, Lawrence RS, Walker P, How sustainable agriculture can address the environmental and human health harms of industrial agriculture. Environ Health Perspect. 2002 May;110(5):445-56.
- 69 <https://moag.maps.arcgis.com/apps/MapJournal/index.html?appid=cda6f-4d6aa7444789e722840b1ae9833> מיפוי החקלאות בישראל, אתר משרד החקלאות
- 70 oubarac JC. Ultra-processed foods in Canada: consumption, impact on diet quality and policy implications. Montréal: TRANSNUT, University of Montreal; December 2017
- 71 Monteiro CA, Cannon G, Levy RB et al. NOVA. The star shines bright.[Food classification. Public health] World Nutrition January-March 2016, 7, 1-3, 28-38
- 72 Trends in consumption of ultra-processed foods and obesity in Sweden between 1960 and 2010. Public Health Nutr. 2015 Dec;18(17):3096-107.
- 73 BMJ 2018;360:k322 <http://dx.doi.org/10.1136/bmj.k322>
- 74 M.L.C. Louzada et al. Consumption of ultra-processed foods and obesity in Brazilian adolescents and adults. Preventive Medicine 81 (2015) 9–15
- 75 Fardet A. Minimally processed foods are more satiating and less hyperglycemic than ultra-processed foods: a preliminary study with 98 ready-to-eat foods. Food Funct. 2016 May 18;7(5):2338-46.
- 76 Monteiro CA, Moubarac JC, Levy RB, Canella DS, Louzada MLC, Cannon G. Household availability of ultra-processed foods and obesity in nineteen European countries. Public Health Nutrition: 2017; 21(1), 18–26
- 77 Zinöcker MK, Lindseth IA. The Western Diet–Microbiome–Host Interaction and Its Role in Metabolic Disease. Nutrients 2018, 10, 365; doi:10.3390/nu10030365
- 78 2013 רשימת תוספי מזון על-פי תקנות בריאות הציבור מהדורה מעודכנת – פברואר 2013 http://www.health.gov.il/UnitsOffice/HD/PH/FCS/Documents/fcs_list.pdf
- 79 Bach-Faig A, Berry EM, Lairon D, Reguant J et al, Mediterranean Diet Foundation Expert Group. Mediterranean diet pyramid today. Science and cultural updates. Public Health Nutr. 2011 Dec;14(12A):2274-84.
- 80 S Radd-Vagenas, A Kouris-Blazos, M Fiatarone Singh and VM Flood. Historical review Med diets and cuisine. Asia Pac J Clin Nutr 2017;26(5):749-763

- 81 Sofi F, Macchi C, Abbate R, Gensin GF et al, Mediterranean diet and health status: an updated meta-analysis and a proposal for a literature-based adherence score. Public Health Nutria. 2014 Dec;17(12):2769-82.
- 82 Jennifer A. Woo Baidal, Lindsey M. Locks, Erika R. Cheng, Tiffany L. Blake-Lamb, Meghan E. Perkins, Elsie M. Taveras. Risk Factors for Childhood Obesity in the First 1,000 Days A Systematic Review. American Journal of Preventive Medicine. 2016;50:761-779
- 83 תזונה בריאה בהיריון. משרד הבריאות https://www.health.gov.il/Subjects/pregnancy/during/Pages/proper_nutrition_during_pregnancy.aspx
- 84 מדריך לאנשי מקצוע להזנת התינוק והפעוט. משרד הבריאות https://www.health.gov.il/hozer/bz25_2012.pdf
- 85 2018 נייר עמדה בנושא מזונות משלימים – המדריך המלא. האגף לתזונה, משרד הבריאות. https://www.health.gov.il/Subjects/FoodAndNutrition/Nutrition/Documents/complementary_feeding_prof.pdf
- 86 האגף לתזונה, משרד הבריאות <https://www.health.gov.il/Subjects/FoodAndNutrition/Nutrition/Pages/default.aspx>
- 87 Martucci et al. Mediterranean diet inflammaging within the hormesis paradigm. Nutrition Reviews 2017; 75:442-55
- 88 Staubo et al. Mediterranean diet, micronutrients and macronutrients, and MRI measures of cortical thickness. Alzheimer's & Dementia 2016
- 89 Zbeida M et al. Mediterranean diet and functional indicators among older adults in non-Mediterranean and Mediterranean countries. J Nutr Health Aging. 2013
- 90 Lake M, Townshend T. Obesogenic environments: exploring the built and food environments. Obesogenic environments JRSH 2006;126(6):262-267
- 91 דו"ח ועדת האסדרה לתזונה בריאה https://www.health.gov.il/publicationsfiles/healthydiet-committee_recommendation.pdf
- 92 תקנות מזון וסימון תזונתי https://www.health.gov.il/Subjects/FoodAndNutrition/Nutrition/Adequate_nutrition/Pages/labeling.aspx
- 93 הוועדה למניעת פרסום ושיווק מזון מזיק https://www.health.gov.il/Services/Committee/HealthyDietCommittee/Committee_Prevention_Advertising_Marketing_Harmful_Food/Pages/default.aspx



94. <http://www.efsharibari.gov.il/about>
95. חוזרי מנכ"ל לאורחות חיים בריאים, משרד החינוך. <http://cms.education.gov.il/EducationCMS/Applications/Mankal/EtsMedorim/2/2-2/HoraotKeva/K-2016-8-1-2-2-90.htm>
96. אפשרי בריא בעבודה. <http://www.efsharibari.gov.il/work>
97. Wansink B. Environmental Factors That Increase the Food Intake and Consumption Volume of Unknowing Consumers Annu. Rev. Nutr. 2004;24:455-479.
98. Tru"bswasser T, Branca F. Nutrition policy is taking shape in Europe. Public Health Nutrition:2008; 12(3), 295-306
99. Yu et al. Cardiovascular Disease Prevention by Diet Modification. Cardiovascular Disease and Diet. JACCVOL 72:2018; 914-26
100. Davis C, Bryan J, Hodgson J, Murphy K, Definition of the Mediterranean Diet; a Literature Review. Nutrients. 2015 Nov 5;7(11):9139-53
101. DIETARY GUIDELINES FOR THE BRAZILIAN POPULATION
http://bvsms.saude.gov.br/bvs/publicacoes/dietary_guidelines_brazilian_population.pdf
102. UK Department of Health. UK Chief Medical Officers' Low Risk Drinking Guidelines. August, 2016
103. Burton R, Sheron N. No level of alcohol consumption improves health. Lancet. 2018 Sep 22;392(10152):987-988.
104. Alvarez-Alvarez et al. Strong inverse associations of Mediterranean diet, physical activity and their combination with cardiovascular disease: The Seguimiento Universidad de Navarra (SUN) cohort. European Journal of Preventive Cardiology 2018.
105. סקרי בריאות ותזונה לאומיים, מב"ת. המרכז הלאומי לבקרת מחלות
106. Guideline: sugars intake for adults and children. World Health Organization, 2015 <http://www.who.int>
107. He M, Tucker P, Irwin JD, Gilliland J, Larsen K, Hess P. Obesogenic neighbourhoods: the impact of neighbourhood restaurants and convenience stores on adolescents' food consumption behaviours. Public Health Nutr. 2012 Dec;15(12):2331-9.
108. Lachat C, Nago E, Verstraeten R, Roberfroid D, Van Camp J, Kolsteren P. Eating

- out of home and its association with dietary intake: a systematic review of the evidence. Obes Rev. 2012 Apr;13(4):329-46.
109. Hill JL, Olive NC, Waters CN, Estabrooks PA, You W, Zoellner JM. Lack of healthy food options on children's menus of restaurants in the health-disparate Dan River region of Virginia and North Carolina, 2013. Prev Chronic Dis. 2015 Mar 26;12:E40.
110. Hill JL, Olive NC, Waters CN, Estabrooks PA, You W, Zoellner JM. Lack of healthy food options on children's menus of restaurants in the health-disparate Dan River region of Virginia and North Carolina, 2013. Prev Chronic Dis. 2015 Mar 26;12:E40.
111. תודה למחברי ותורמי "מתכונים נבחרים מהמטבח הערבי ישראלי 2017" https://www.health.gov.il/Subjects/FoodAndNutrition/Nutrition/Recipes/Documents/arab_cooking.pdf
112. Monteiro CA, Cannon G, Levy RB et al. NOVA. The star shines bright. [Food classification. Public health] World Nutrition January-March 2016, 7, 1-3, 28-38
113. Nutrient Profile Mode. Pan American Health Organization. WHO. Washington, DC. 2016
114. מועצת הצמחים, ענף הפירות והירקות 2018

