

# Curriculum Report

## PhysioFit



2020 -1-UK01-KA201-078894



**jovesólides**  
JÓVENES HACIA  
LA SOLIDARIDAD  
Y EL DESARROLLO

---

## Table of Contents

Introduction	3
UK Curriculum (Academy for International Science and Research - AISR)	4
Spanish Curriculum (Jovesólides)	9
Italian Curriculum (Pescara 5)	17
Turkish Curriculum (21YY)	23

# Introduction

The PhysioFit project was developed based on the urgent need to tackle childhood obesity. This report provides an analysis of the Health and Nutrition curriculum in partner countries (Northern Ireland - UK; Italy; Spain; Greece and Turkey), with a focus on the approaches, practices, and challenges faced by each country in health and nutrition to students. The report also explores the effectiveness of these initiatives in preparing students for the demands of the 21st-century workforce and the extent to which they align with the current trends and best practices. Through this analysis, the report aims to provide insights and recommendations for policymakers, educators, and stakeholders on ways to enhance Health and Nutrition education in Europe and better prepare students for the challenges and opportunities of the future.

## THE OVERALL RATIONALE FOR CARRYING OUT THIS RESEARCH

This report was completed in order for AISR to have a clear understanding of our partners educational frameworks. So that we could effectively implement the correct content and difficulty level within the PhysioFit game. This was an extra output as AISR wanted to be thorough in our analysis of said educational frameworks making the game more educational congruent across the partner counties and beyond.



Co-funded by the  
Erasmus+ Programme  
of the European Union

*This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## UK Curriculum (Academy for International Science and Research - AISR)

For the purpose of this report, the only UK curriculum that was analysed is the Northern Irish one, due to the fact, that AISR's head office is located in Derry-Londonderry. At Key Stage 3 (post-primary Years 8, 9 and 10 - ages 11-14), the curriculum builds on the learning experiences that pupils bring from primary school. The "Statutory Curriculum at Key Stage 3" document expands upon the Education (Curriculum Minimum Content) Order (2007 No. 46) by setting out the minimum requirements of the Northern Ireland Curriculum that should be taught at Key Stage 3 with examples, and supplements it by providing a detailed rationale to guide its interpretation. It represents the final approved outcomes of a series of proposals and consultations which informed revisions to the Northern Ireland Curriculum (2006). With regards to the topics of Nutrition and Health, there are a variety of subjects which cross over into these topics as part of their KS3 learning objectives.

### Key Elements

The overarching goal of the Northern Ireland Curriculum aims to empower young people to achieve their potential and to make informed and responsible decisions throughout their lives. Within that goal there are a number of different 'key objectives' which the educational board CCEA (Council for the Curriculum, Examinations & Assessment) set out to help students achieve their potential. One of these objectives is **Personal Health** which they describe as:

- The significance of individual well-being – social, mental and emotional needs at different ages as well as physical health – the health of families and society now and in the future, including to the economy and the nation.

Health and Nutrition are key components in the Northern Irish curriculum, and it is interlinked with a variety of subjects within the KS3 curriculum.

### Sciences and Technology and Design

Science and Technology is a compulsory Area of Learning at Key Stage 3. It has two subject Strands: **Science** and **Technology and Design**.

This Area of Learning aims to stimulate pupils' curiosity, enthusiasm and innovation. The statutory requirements for the subject strands have a common framework that is linked to the

curriculum objectives and key elements. This framework facilitates more collaborative and connected learning. It also encourages pupils to relate their learning to life and to work.

Schools can choose to organise pupils' learning in Science and Technology by:

- Teaching the subject strands together;
- Connecting learning in the subject strands; and/or
- Teaching the subject strands separately.

With regards to nutrition and health, the Science KS3 curriculum covers the topic of **Organisms and Health**, which:

- Explores physical, chemical and biological effects on personal health, for example, inherited characteristics, exercise and nutrition, misuse of chemicals, loud sound etc.
- Investigate the effects of pollution
- Investigate what can be done to conserve and promote biodiversity, for example, school wildlife gardens / wilderness areas, anti-pollution strategies, habitat management etc.

The Technology and Design curriculum whilst not being directly linked to nutrition and health, does cover aspects of design which can influence health and nutrition, such as:

- Design cost effective and appropriate solutions to meet the specific needs of diverse local and global groups.
- Identify product needs and pursue sustainable harmonious design solutions in a local outdoor/indoor context.
- Explore technical inventions and designs that have met a social need cost-effectively.

## Home Economics

In Home Economics, pupils have opportunities to explore a range of topics and develop Whole Curriculum Skills and Capabilities. Pupils learn about:

- Healthy Eating
- Home and Family Life
- Independent Living

Home Economics helps prepare young people for independent living. It is a practical subject that can promote and enhance the wellbeing of individuals, families and communities through understanding food choice, nutritional health, consumer issues and relationships. This subject strand aims to equip pupils with the knowledge, skills and values that will help them to make appropriate lifestyle choices. The skills, knowledge and understanding developed through studying Home Economics are important in today's society, where:

- Obesity is an increasing problem;

- Diet-related illness is prevalent; and
- Many people rely on ready meals.

Key nutrition-related learning objectives of the Home Economics curriculum include:

- Developing practical skills in the safe, hygienic, healthy and creative use of foods to plan, prepare, cook and serve a range of meals
- Developing the practical skills in the safe use of a range of utensils and appliances in the preparation, cooking and serving of a variety of dishes
- Investigate the impact of storage, preparation and cooking on food
- Explore ways to achieve a healthy diet
- Explore the roles and responsibilities of individuals within a variety of home and family structures
- Develop awareness of parenting skills,
- Investigate some of the changing needs of family members at different stages of the life cycle (including nutritional)

## **Physical Education**

Physical Education is a compulsory Area of Learning at Key Stage 3. It enables pupils to learn through movement so that they develop, extend and refine their skills in a range of movement contexts. Pupils take part in a balanced programme of Athletics, Games, Gymnastics and Swimming. The Department of Education recommends that schools should provide pupils with at least two hours of curricular Physical Education each week. Schools are the most important context for promoting healthy lifestyles in pupils. Active, enjoyable and challenging Physical Education learning experiences encourage pupils to develop:

- Positive attitudes to and enjoyment of physical activity;
- An awareness of the positive impact of physical activity on health and wellbeing
- Experience and evaluate the health and fitness benefits of a range of different physical activities, including their physical, social and psychological well-being

## **Conclusions**

It is important to note that in Year 10, learners have to choose their GCSE subject for Year 11 and 12, based on their future career aspirations, choice of university or their interest. Most students will take a minimum of five subjects at GCSE including the compulsory subjects of Maths and English Language. Not every school requires learners to take Science, but if so, it may be taken as a single or double award, or split into the three separate sciences (Biology, Chemistry and Physics). The optional subjects range from

modern foreign languages, humanities subjects like History; arts subjects like Music, Drama, to technical subjects such as Design and Technology, Food Technology, or Computer Science. Some schools also offer vocational subjects such as construction and travel and tourism.

Therefore, not all pupils will study the subject of Home Economics or Design and Technology described above. While these subjects may be effective in promoting healthy eating habits and tackling childhood obesity, the drawback is that only a subset of students will have access to this education.

In order to address this issue, it is recommended that further research be conducted on the effectiveness of incorporating healthy eating habits and physical activity into other subjects, such as science and mathematics. Additionally, the development of more comprehensive and inclusive curricula that address the root causes of childhood obesity should be explored.

By taking these steps, we can work towards ensuring that all students have access to the tools and education necessary to lead healthy and active lifestyles, and ultimately reduce the prevalence of childhood obesity in our communities.

### **Obesity Prevention Initiatives by the Public Health Agency (PHA) in Northern Ireland**

A Fitter Future for All, the regional framework for preventing and addressing overweight and obesity in Northern Ireland from 2012 to 2022, serves as the basis for the PHA's work on obesity prevention.

<http://www.health-ni.gov.uk/sites/default/files/publications/dhssps/obesity-fitter-future-framework-ni-2012.pdf>

The purpose of the framework is to "empower the population of Northern Ireland to make healthy choices, reduce the risk of overweight and obesity-related diseases, and improve health and well-being by creating an environment that supports and promotes a physically active lifestyle and healthy diet."

The overarching goals of the framework are to increase the proportion of individuals who consume a healthy, nutritionally balanced diet and the proportion of individuals who meet the Chief Medical Officer's physical activity recommendations.

A Healthier Future for Everyone reflects a life course perspective.

Within the following three life course stages, essential outcomes and interventions can be implemented:

1. Preconception, antenatal, maternal, and early childhood;
2. Children and adolescents;
3. Adults and the general population.

Advisory groups have devised time-bound, short-, medium-, and long-term objectives through their work. The PHA is responsible for leading the health-related aspects of the framework through a multi-agency Regional Obesity Prevention Implementation Group (ROPIG) comprised of several critical statutory and non-profit sector organisations.

Some examples of childhood related programmes include:

- Improving nutrition knowledge of childcare providers through delivery of Nutrition Matters for the early years training;
- Food in Schools programme which supports schools to promote healthy eating at meal times and throughout the school day. Nutritional Standards for school lunches and other food and drink in schools have been revised and consulted on and are now awaiting ministerial approval from the Department of Education before implementation can commence;
- The Active School Travel programme which encourages and supports school children to walk, cycle or scoot to school. For more information please visit [www.sustrans.org.uk/NISchools](http://www.sustrans.org.uk/NISchools)



Image source: <https://www.healthedco.co.uk/Subject/Nutrition>

## Spanish Curriculum (Jovesólides)

### INDEX

1. Spanish context of health education programs in preschool, primary, secondary and high school education
2. Valencian Community context of health education programmes in pre-school, primary, secondary and high school education<sup>1</sup>
3. Legal framework
4. Health Plan of the Comunitat Valenciana
5. Spanish context of health education programs in preschool, primary, secondary and high school education

Nowadays, one of the main worldwide health problems is obesity and obesity. A phenomenon that is increasing in underdeveloped and developed countries. Within Europe, the Mediterranean countries (Spain, Italy, Greece, Cyprus, and Malta) have the highest percentage of overweight children, despite the downward trend in recent years.

The issue is especially serious in the child population, directly affecting the welfare of society as a whole; with important physical, emotional, social, and economic consequences in the short and long term. Therefore, the way to approach the problem should be through a collective effort and with as many actors as possible.

Educational centres should be considered as an essential context for the health promotion and prevention strategies for children and youth, where they can get relevant information, build good habits, and routines to achieve healthier diets. The amount of time spent in schools and other educational environments are privileged scenarios for formal and non-formal learning methods for children.

In Spain, as in the rest of Europe, obesity represents a real public health challenge. In addition, the Spanish Government is seeking to improve schools' curriculum with compulsory subjects, to promote practices and make the schools promote a healthy lifestyle.

According to the latest ALADINO 2019 Study, which was carried out in Spain, it shows that 40.6% of the analysed children have a weight excess (23.3% are overweight and 17.3% are

---

<sup>1</sup> [INFORME SOBRE EL ESTADO ACTUAL DE LOS PROGRAMAS DE EDUCACIÓN PARA LA SALUD EN LOS CENTROS EDUCATIVOS DE LA COMUNITAT VALENCIANA - NOVIEMBRE 2020](#)

obese). The same report also shows that overweight is higher in girls, 24.7%, than in boys, 21.9%, instead, the obesity is higher in boys, 19.4%, than in girls, 15%.<sup>2</sup>

In terms of socioeconomic status, the data is also striking: overweight and obesity are more frequent among schoolchildren from families with a lower income level than those with a higher one. It can be seen how the prevalence of obesity increases as family income decreases. Obesity almost doubles in families with an income inferior to 18,000 euros per year (23.3%), compared to families with an income superior to 30,000 euros per year (12.1%). Research shows that in families where the parents have only studied primary education, obesity rises to 24.3%, while in families where the parents have done university education, it is 12.4%. It can be appreciated how obesity and excess weight affect families with lower incomes, which also influence the quality of the aliments and the preparation of them, less time and less caring about the food attributes. Thus, income is a key factor in childhood obesity, although it is a multi-causal problem.

74% of the child population between 1-14 years old spend an hour or more of their free time in front of a screen every day during the week, rising to 82.6% on weekends. 83.7% of 10 - 14 year olds spend an hour or more a day in front of a screen during the week and 92.6% on weekends.

The impact of COVID-19 on education has caused an unprecedented crisis in education systems. Millions of students have been affected by the closure of educational centres and schools for long periods. In some cases the suspensions were partial, but in other cases they were total, deepening a delay in education and worsening the levels of overweight due to confinement, generating more unequal education. For this reason, it is a government priority to promote new post-Covid strategies to prevent childhood obesity.

The Spanish Ministry of Health has launched awareness campaigns for the prevention of childhood obesity and the fight against youth sedentary lifestyles. Programs such as DAME 10! or UDAs aim to reduce sedentary time among students during school hours.

### **1. Valencian Community context of health education programmes in pre-school, primary, secondary and high school education<sup>3</sup>**

Despite the fact that the educational and health administrations have opted for integrating Health Promotion and Education at School, the reality is that it is not being carried out effectively and equitably in all educational centres, and therefore it is necessary to develop this type of program to overcome the shortcomings that exist in this area.

**There is no comparison between the work carried out by school nurses in schools and the health education school programs offered by the Conselleria de Sanitat.** Despite the planning and programming of health policies, they have not been implemented

---

<sup>2</sup> Estudio ALADINO 2019, Estudio sobre la Alimentación, Actividad Física, Desarrollo Infantil y Obesidad en España 2019-Ministerio de Consumo Agencia Española de Seguridad Alimentaria y Nutrición, 2020.

<sup>3</sup> [INFORME SOBRE EL ESTADO ACTUAL DE LOS PROGRAMAS DE EDUCACIÓN PARA LA SALUD EN LOS CENTROS EDUCATIVOS DE LA COMUNITAT VALENCIANA - NOVIEMBRE 2020](#)

and developed in an equitable manner and over time in the educational centres of the Valencian Community.

While current education regulations propose working on health issues which, despite not occupying a specific place in the curriculum, must be worked on throughout schooling, including health education (HE), not all schools manage to do so. In fact, depending on the level of transversality achieved, we can classify the schools themselves and detect that many of these centres do not reach the level of "Health Promoting School".

Despite the instructions given by the various education laws in Spain, from the law LOGSE to the current law LOMCE, which specify that it is the responsibility of teachers to carry out HE in schools in a cross-cutting manner with the collaboration and in coordination with health professionals, the truth is that HE is not carried out in a uniform and consolidated manner in all educational centres. Teachers are not specialised in health, which makes it infeasible for them to teach in fields they are unfamiliar with. Teachers state that "they feel overwhelmed and incapable of dealing with subjects such as drug addiction, eating disorders, affective-sexual education, etc." and demand that "a health professional with teaching skills should be in charge of training students in these subjects".

The most important thing would be to set up a protocol to standardise the entry of expert school nurses who are currently working in schools in various municipalities to continue developing the school health care programme in their schools in the Valencia Region.

Therefore, the short-term objective is to achieve and guarantee an optimal state of health of the younger population by influencing all stages, from childhood to adolescence, and in terms of healthy habits and behaviours. These habits and behaviours are easier to acquire if action is taken from the earliest stages of life. Health education will influence young people to develop responsibility for their own health care in adulthood. In this way, risky behaviours and bad habits, which are often the cause of future illnesses, can be reduced.

## **2. Legal framework:**

Ley Orgánica 2/2006, of 3 May, on Education constitutes the basic legislation of the education system. This has been partially amended by Organic Law 8/2013, of 9 December, for the improvement of educational quality.

According to the law LOE (2006), the Official Gazette (BOE) must provide between 55-65% of what must be studied during Compulsory Education, which is what is known as minimum education, while each Autonomous Community is responsible for completing the curriculum and extending it, being responsible for between 35 and 45% of the proposed curriculum.

After analysing the BOE and the DOCV, it is clear that, in general terms, the BOE has a greater contribution of content in the field of Health than the DOCV. These data reflect the fact that the Valencian Community does not give the treatment that could be expected to Health Competences.

If we look at the specific health content, we see that the plenty of curricular content is conceptual content, and it is striking how little specific content there is in terms of know-how. Thus, we do not find a sufficient curricular contribution for each of the three dimensions to develop competences in health.

Article 59 of Law 8/2018, of 20 April, of the Generalitat, on Health in the Valencian Community, defines school health as the set of programmes and activities aimed at health education and the conservation and promotion of the physical, mental and social health of students in non-university schools in the Valencian Community.

The Regional Ministry responsible for health will communicate or propose, as legally established, to the Regional Ministry responsible for education, the elaboration of intervention protocols on those problems and aspects of health that are considered to be of interest for the protection and promotion of health in the child and youth population.

The Conselleria is responsible for: c) Carrying out studies and appropriate health and hygiene proposals in the field of health education, with the aim of improving the health of the school population.

### **3. Health promotion services and prevention in the educational environment times of COVID-19 in la Comunitat Valenciana<sup>4</sup>**

The planning of activities in the educational environment that, from the Generalitat, is aimed to provide activities offered collaboratively by the Regional Ministry of Universal Health and Public Health and the Regional Ministry of Agriculture, Rural Development, Climate Emergency and Ecological Transition, in coordination with the Regional Ministry of Education, Culture and Sport, which guarantees an adequate integration in the educational projects of the centres. Some of these programmes focus precisely on nutrition and food. The following are some of these activities that are offered currently connected with this topic:

- PROGRAMME

- 6. EVALUATION OF FOOD SUPPLY IN SCHOOLS

- ACTIVITY

- 6.1. REVIEW OF SCHOOL CANTEENS

Evaluate the food offer of the school canteen menu, and its adequacy to the recommendations of the Guide for School Canteen Menus 2018 (GMCE-CV-2018).

Target age group: School canteen service diners between 6 and 16 years old.

Educational level: primary education (6-12 years) and ESO (12-16 years).

Description of the activity:

During the 2020-2021 school year, the food offer will be evaluated in 33% of primary education and compulsory secondary education schools in the Valencian Community in order to verify the adequacy of the monthly menu plan to the recommendations of the Nutrition, Physical Activity and Prevention of Obesity (NAOS) strategy and the Guide to Menus in School Canteens in the Valencian Community (GMCE-CV-2018).

---

<sup>4</sup> [Cartera de servicios en el entorno educativo](#)

The composition of each school's monthly menu will be examined, counting portions per food group. The school will receive a report with the results of the assessment against the reference values. If necessary, improvements will be proposed to adapt the school menus to the GMCE-CV-2018 recommendations.

In addition, the food and drink offer in educational centres will be verified in accordance with DECREE 84/2018, of 15 June, of the Consell, on the promotion of healthy and sustainable food in centres of the Generalitat.

Materials: Guide to Menus in School Canteens 2018:  
<http://www.san.gva.es/guia-comedores-escolares-2018>

- PROGRAMME

7. PROMOTING THE CONSUMPTION OF FRUIT, VEGETABLES, MILK AND MILK PRODUCTS IN SCHOOLS DAIRY PRODUCTS IN SCHOOLS

- ACTIVITY

7.1. Distribution of fruit and vegetables, in season, accompanied by measures for the acquisition of healthy eating habits.

Target age group: 6-12 years.

Educational level: Primary education and special education. If budget availability allows, this measure may also be extended to pre-school education.

Description of the activity:

The activity consists of the distribution of fruit and vegetables, mainly seasonal, accompanied by actions aimed at the acquisition of healthy eating habits by minors.

Specifically:

- a) Holding of information sessions and talks aimed at both pupils and teachers.
- b) Production of informative material.
- c) Preparation of educational material on the characteristics and health benefits of fruit and vegetable consumption, with emphasis on native, seasonal and organic vegetables.
- d) Guided visits to farms and/or fruit and vegetable handling and conditioning centres.

Materials: <http://www.agroambient.gva.es/es/web/desarrollo-rural/campanas-promocion>

- PROGRAMME

7. PROMOTING THE CONSUMPTION OF FRUIT, VEGETABLES, MILK AND MILK PRODUCTS IN SCHOOLS DAIRY PRODUCTS IN SCHOOLS

---

- ACTIVITY

7.2. Distribution of milk and dairy products accompanied by measures for the acquisition of healthy eating habits.

Target age group: 6-12 years.

Educational level: Primary education and special education. If budgetary resources permit, this measure may also be extended to pre-school education.

Description of the activity:

The activity consists of the distribution of liquid milk and other dairy products, such as natural yoghurt, accompanied by activities aimed at the acquisition of healthy eating habits by children. These actions can be carried out in combination with the distribution of fruit and vegetables.

Specifically:

- a) Holding of information days and talks aimed at both pupils and teachers.
- b) Production of informative material.
- c) Preparation of educational material on the characteristics and benefits of the consumption of these products.
- d) Guided visits to livestock farms and/or centres where these products are produced and/or processed.

Materials: <http://www.agroambient.gva.es/es/web/desarrollo-rural/campanas-promocion>

#### **4. Health Plan of the Valencian Community ( 2016-2020)**

As a reference for the entire Valencian Community, there is the HEALTH PLAN OF THE VALENCIAN COMMUNITY (2016-2020). The IV Health Plan is the point of reference and the roadmap that will mark the development of health policies in the Valencian Community in the coming years.

The IV Health Plan adopts the slogan "Health at all ages. Health in all policies" and is configured around five major strategic lines, among which:

- 4. Health care at all stages of life.
- 5. Promoting health in all areas of life.
- Line 4. Caring for health at all stages of life
- 4.1 Paying special attention to children's health

Analysis of the situation

Among the population of children and young people (2-17 years old) in the VC, 25.6% are overweight, this proportion being higher in males than in females. 16.8% of boys are

overweight and 11.7% are obese. 16.8% of boys are overweight and 11.7% are obese. In the case of girls, these figures are 15.7% and 7.1%, respectively, according to the information provided by the ENSE 2011-2012 for the SC.

#### Objectives

- Focus on children's health
- Promote comprehensive interventions to achieve the highest level of child health, with special attention to the most vulnerable populations.

#### Actions

4.1.8. Monitor weight and height in child health surveillance check-ups.

4.1.9. Monitor the risks of child malnutrition and develop mechanisms for preventing and addressing it in coordination with social and educational services.

4.1.10. Promote actions in the community environment aimed at promoting healthy eating, such as cookery workshops, design of balanced menus, family meals, urban vegetable gardens or local shops.

4.1.11. Encourage programmes and actions to promote physical activity in the community environment, such as safe school routes, active family leisure activities or the recovery of public spaces for children's play.

4.1.12. Encourage the use of new technologies to raise awareness and inform families and educators of the importance of acquiring healthy lifestyle habits from early childhood.

#### Line 5. Promoting health in all areas of life

#### 5.2. Encouraging Physical Activity

In the case of the child population (<15 years old), 43% of children do some kind of physical activity in their free time on a regular basis and 34.5% do so just occasionally. On the other hand, 22.5% are sedentary, this proportion being higher in girls than in boys. This difference by sex can be seen in all age groups and is particularly evident in the 10-14 age group.

When asked about the time spent on sedentary activities at home, 69.6% of children spend more than one hour a day during the week watching television and 18.9% spend a similar amount of time using other electronic devices (computer, video game console, mobile phone, etc.). In the 5-14 age group, these activities intensify at weekends, with 38.7% spending more than two hours a day watching television and 20.6% spending a similar amount of time using other devices with screens.

#### Objectives

- Encourage physical activity.
- To encourage people to be active at all stages of their life cycle.

## Actions

5.2.1. Develop and disseminate recommendations on physical activity in different environments and stages of people's lives, taking advantage of different formats (written, audiovisual, Apps) and media (web, press, radio).

5.2.3. Incorporate advice and prescription of physical activity in primary care, adapting recommendations to different age groups.

5.2.7. Include training related to physical activity and health in the continuing education plans of health and education professionals

## 5.3. Ensuring and Promoting Healthy Eating

### Objective

- To ensure and promote healthy eating.
- To promote healthy eating and improve the quality of actions aimed at protecting consumer health from the dangers associated with the consumption of certain types of food.

## Actions

5.3.9. Promote cross-sectoral actions to increase the consumption of fruit and vegetables in all population groups, especially those produced locally and organically.

5.3.10. Encourage the provision of healthy food and local commerce in collective canteens (schools, hospitals, residences, companies and other centres).

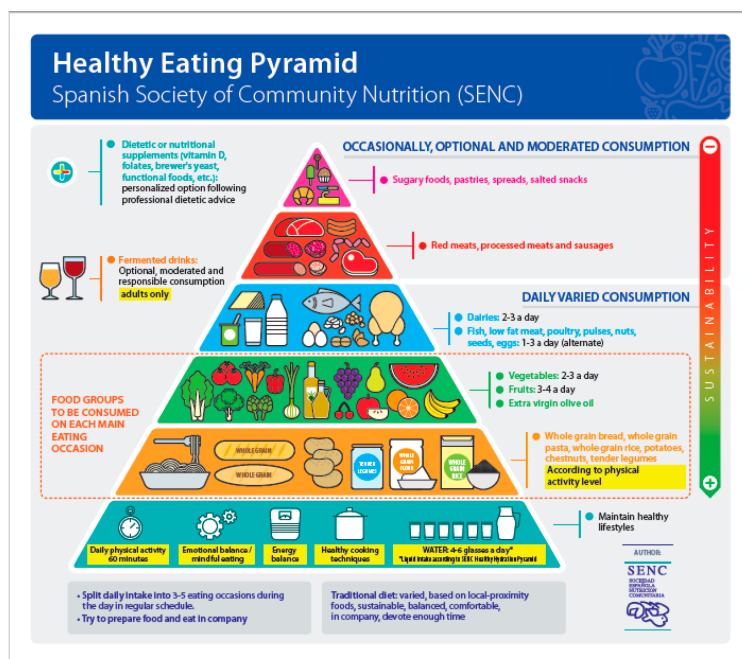


Image source: <https://www.mdpi.com/2072-6643/11/11/2675>

## Italian Curriculum (Istituto Comprensivo Pescara 5)

### Health education in Italian Schools

There are 2 basic documents issued by the Ministry of Education for school curricula: National Guideline published in 2012 and National Guidelines and new scenarios published in 2018:

1. Indicazioni Nazionali per l'infanzia e il primo ciclo di istruzione Miur 2012  
[API Speciale Cop.indd \(indicazioninazionali.it\)](#)
2. Indicazioni Nazionali e nuovi scenari Miur 2018  
[Indicazioni-nazionali-e-nuovi-scenari.pdf \(indicazioninazionali.it\)](#)

In 2015, the Ministry of Education published the Guidelines for food Education referred not only to schools but as a general priority for institutes and ONGS. Following this experience a research was conducted on how this topic is integrated in school subjects and the study was published in 2018.

From the analysis of the 1,004 completed questionnaires, it emerged that food education activities are carried out mainly by teachers in the linguistic-humanistic areas (26%), followed by those in the logical-mathematical areas (23%), scientific-technological areas (18%), physical education (5%) and food science and culture (5%). If from a geographical point of view, the highest percentage of food education activities take place in the northern regions, looking at the different school cycles it is in primary schools that the prevalence of projects is found (89.2%). This is followed by lower secondary schools (75.3%), nursery schools (65.5%) and upper secondary schools (58.2%). About half of the questionnaires show that 47% of the teachers stated that in the last three years food education activities have remained unchanged; for 45% they have increased. Attention to health is the main motivation for teachers to carry out these activities (average score 6.4 out of 7), followed by attention to the environment (6.3), the circular economy and waste (6.2), and correct lifestyles (6.2).

Linee guida per l'educazione alimentare Miur 2015  
[3a595d32-bb61-4a8f-ac82-710ec4552ad5 \(miur.gov.it\)](#)

Ed. Alimentare nelle scuole italiane. Rapporto di Ricerca 2018 Miur+ Food Education Italy  
[df6c0f67-2c7d-42d2-adc8-08cdf708a163 \(miur.gov.it\)](#)

---

## **A complex challenge**

Experts identify poor dietary behaviour as a primary risk factor - along with smoking, alcohol and physical inactivity - for the most frequent chronic diseases in our country. Nutrition education efforts are therefore a priority. For interventions to be meaningful, however, it is necessary to promote Food Culture through a systemic approach.

## **The role of schools**

The school is the institution which, more than any other, can support effective food education, thanks to its presence in the area, its intercultural richness and its daily dialogue and observation with young people. Through interdisciplinary actions and targeted courses, the school can guide young people to reappropriate the act of eating, and to explore its complexity in an emotional and cultural sense. All of this without forgetting the need for physical activity (be it motor, play or sport).

## **A new awareness for the younger generation**

Through food education, the school contributes to raising awareness, especially among the younger generations, of being part of a local and global community on a daily basis. It is essential that young people acquire, for themselves and for the community, a new awareness of the issues of sustainability, personal and collective wellbeing, and the adoption of correct lifestyles. It is also essential for young people to be aware of the various factors involved:

- prevention
- understanding the personal nutrition process
- the need to protect production areas, supply chains and food systems
- the seasonality and typicality of food products
- a responsible consumption style.

Lastly, it is essential that they learn to limit waste and the use of non-renewable resources or resources that are difficult to dispose of, and that they understand the economic, ethical and social contexts within which the food system as a whole operates.

## **From nutrition to food education**

The issues of food safety and food security are highly topical and, together with national and Community obligations, are increasingly the subject of careful study and collective and ongoing reflection. This reflection must follow interdisciplinary and intercultural paths to educate on sustainable development (ecological, social and economic sustainability), solidarity, peace and legality. In particular, the idea of "sustainability", i.e. the impact that agricultural food production has on the environment and on social organisation, must become part - as an essential parameter - of today's concept of food quality.

Special attention must also be paid to the ethical aspects of production and consumption. This means moving away from an approach that is often focused on nutrition alone, to find a new key that - through work on the multiple value aspects of food and nutrition - guarantees

the significance and effectiveness of food education. This is a complex and stimulating challenge to which the entire education and training system is called upon to respond.

The latest document by the Italian Ministry of Education introduces a new school subject in school curricula: **civic education**.

2019 Linee guida per l'insegnamento di Ed. civica 20 agosto 2019 n.92

[ALL.-Linee guida educazione civica dopoCSPI-1.pdf \(istruzione.gov.it\)](#)

The provision refers to the principle of the transversal nature of the new teaching because the plurality of the learning objectives and the expected skills cannot be ascribed to a single subject.

The transversality of the teaching offers a different paradigm of reference compared to disciplines.

Civic education, therefore, goes beyond the canons of a traditional discipline - assuming a better aligned cross-curricular value matrix, which must be combined with the disciplines of study - in order to avoid superficial and unproductive aggregations of the disciplines and to develop an interconnection process between disciplinary and extra-disciplinary knowledge.

The Guidelines are developed around three conceptual cores that constitute the pillars of the law, to which all the different themes identified by the law can be linked:

1. CONSTITUTION, law (national and international), legality and solidarity
2. SUSTAINABLE DEVELOPMENT, environmental education, knowledge and protection of heritage and territory
3. DIGITAL CITIZENSHIP

It is inside the second core theme that we can find health education and lifestyle including food education and quality of life.

#### CITIZENSHIP AND SUSTAINABILITY

Education to sustainability, peace and conflict prevention. Enhancement and protection of the environmental heritage, identities and food products that characterise the territory. Food education. Reduce, recycle, reuse. Attention to the dimension of the self for a balanced growth of the individual in terms of health and well-being.

Following these guidelines each school elaborates its own curriculum. The following is an extract from IC5 Civic Education Curriculum:

Year 4 primary		Year 5 primary	
Competence development goals	Learning objectives	Competence development goal	Learning objectives
<b>HEALTH AND WELL-BEING</b> Be aware of the importance of sports practices for their own well-being.	<b>HEALTH AND WELL-BEING</b> - Experience sport practices to discover one's own potential and relate within the group.	<b>HEALTH AND WELL-BEING</b> Be aware of the importance of sports practices for personal growth and for relationships.	<b>HEALTH AND WELL-BEING</b> -Recognise sport as a positive way of relating, in and outside school.
<b>NUTRITION EDUCATION</b> Be aware of correct attitudes that counteract food waste	<b>FOOD EDUCATION</b> - Recognise the consequences of food waste and food as an essential good	<b>NUTRITION EDUCATION</b> Identify correct eating behaviours to take care of their own health	<b>NUTRITION EDUCATION</b> - To know the relationship between nutrition and physical exercise in relation to healthy lifestyles
Year 1 and year 2 lower secondary		Year 3 lower secondary	
Competence development goals	Learning objectives	Competence development goal	Learning objectives
Recognise the right to health as a personal and social value.	Recognise the food standards established by the Ministry of Health. - Recognise unhealthy eating habits and their consequences.	Give their contribution to the surrounding reality	Behave respecting the territory and the environment. - Recognise and explain the consequences of the irresponsible use of resources

Based on these common criteria each school can plan projects and learning modules to formalise food education inside their own curricula. In lower secondary school food education is a second year subject.

Referring to the epistemological principle of each discipline, teachers link learning units to the theme of nutrition and well-being.

Example of a learning unit for year 2 lower secondary 12 years old students:

SUBJECT	TOPIC
Science	The human body: digestive system. Ecosystems and food chain. The food pyramid Nutrients Hygiene and health care behaviours - Dietary principles - Function of sugars, fats and proteins - Importance of vitamins, minerals and water - Metabolism, energy requirements and diet - Main diseases related to dietary disorders
Design and Technology	Food cultivation/production and conservation. 0 km products. Labels
Physical education	Movement and healthy lifestyle. Balanced diet and energy requirements
Italian	Dietary disorders: anorexia and bulimia
Geography-History	Food products in European countries
Foreign languages	Food habits in British, French, Spanish countries. Vocabulary, functions and language related to food.

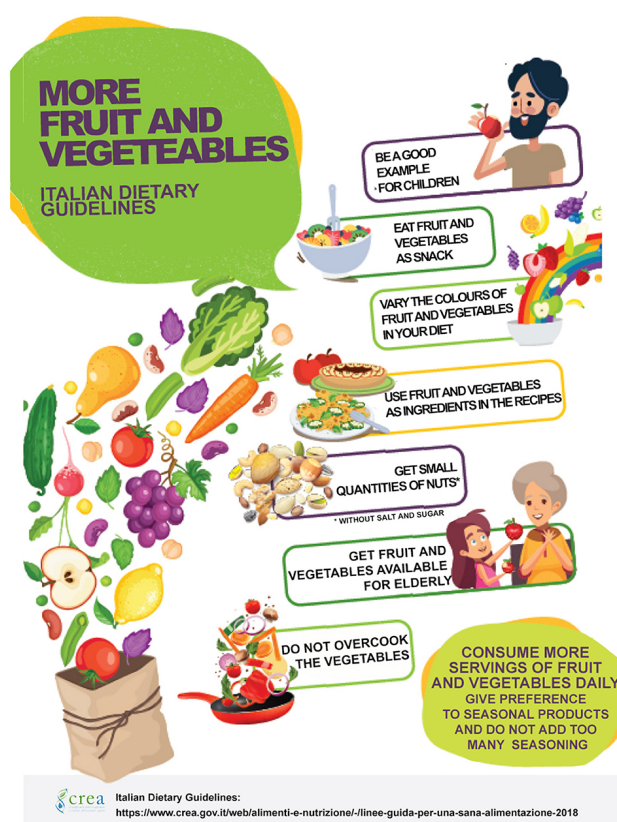


Image source: <https://www.frontiersin.org/articles/10.3389/fnut.2022.861526/full>

## Turkish Curriculum (21YY)

### Primary science and technology curriculum

The new primary science and technology curriculum has many characteristics: it has seven learning areas with four content strands supported by skills, understanding and attitudes; there is a spiral approach for each strand; mainly based on the constructivist approach; enriched with teaching activities and multiple assessment methods and techniques. The learning areas most applicable to project are **Physical Processes & Life and Living Beings**

The structure of the curriculum is established so that students may bring their daily life experiences into classrooms and, conversely, can take out their school experiences outside the school. In order to realise this, several suggested activities are provided in order to incorporate many related curricular outcomes to technology understandings.

The new curriculum, where appropriate, prompts teachers to such important student misconceptions identified in the literature. Another purpose is to alert teachers to those widespread misconceptions since oftentimes the teachers may have persistent misconceptions themselves.

The new curriculum urges teachers and educators to use more formative learning assessment and measurement techniques rather than usual pen and paper tests. Among the many alternative measurement methods and techniques that can be listed, the range includes developing a student portfolio, group activities, and peer evaluation.

### Weekly course hours

Another big improvement was made in the weekly course hours with the new curriculum. Science courses in grades 4-8 were given 3 class hours per week, but with the current reform efforts the weekly hours were increased to 4 class hours per week. Currently, in grades 4-8 pupils take 144 class hours of the science and technology course in each grade. Here we should also mention that there is a separate course entitled “design and technology” that is similar to the science and technology class, which is two hours per week.

### SPECIAL OBJECTIVES OF THE TEACHING PROGRAM (PRIMARY)

The main objectives of the Science Curriculum, which aims to educate all individuals as science literate, are as follows:

1. To provide basic information about astronomy, biology, physics, chemistry, earth and environmental sciences and science and engineering applications,

2. In the process of exploring nature and understanding the relationship between human and environment, adopting scientific process skills and scientific research approach and producing solutions to problems encountered in these fields
3. To realise the mutual interaction between the individual, the environment and the society; To develop awareness of sustainable development regarding society, economy and natural resources,
4. To take responsibility for the problems of daily life and to use the knowledge of science, scientific process skills and other life skills to solve these problems
5. To develop career awareness and entrepreneurship skills related to science.
6. Helping to understand how scientific knowledge is created by scientists, the processes through which this knowledge is created and how it is used in new research.
7. To raise interest and curiosity about the events that occur in nature and its immediate surroundings, to develop an attitude.
8. To raise awareness of safe working by realising the importance of safety in scientific studies.
9. Developing reasoning ability, scientific thinking habits and decision-making skills by using socioscientific issues.
10. To ensure the adoption of universal moral values, national and cultural values and scientific ethical principles

## **BIOLOGY EDUCATION PROGRAM**

With the Biology Curriculum, students develop many skills, which directly cross over with the topics of Health and Nutrition, such as:

1. Having knowledge about laws, theories, processes, principles, principles, hypotheses and experiments in biology.
2. Gain the ability to use biological knowledge and applications in daily life
3. To actively participate in and evaluate the debates on biology and science
4. Willingness to produce new ideas and to carry out original studies by using the knowledge, skills and competencies acquired in the biology course

There are numerous topics across the key stage that develop these skills which are associated with Health and Nutrition, such as:

### **9th Grade:**

Life Science Biology

### **10th Grade:**

Ecosystem Ecology and Current Environmental Issues

### **11th Grade:**

Human Physiology

Community and Population Ecology

### **12th Grade:**

Gene to Protein

## Energy Conversions in Living Things

### Creatures and the Environment



Image source:

<https://www.wfp.org/publications/school-nutrition-education-material-teachers-parents-and-school-aged-children-package>

## **Greek Curriculum (Fifty-Fifty)**

### **Health Education in Greek Schools: A complex challenge**

Experts identify poor dietary behaviour as a primary risk factor - along with smoking, alcohol, and physical inactivity - for the most frequent chronic diseases in our country. Nutrition education efforts are therefore a priority. For interventions to be meaningful, however, it is necessary to promote Food Culture through a systemic approach.

### **The role of schools**

The school is the institution which, more than any other, can support effective food education, thanks to its presence in the area, its intercultural richness and its daily dialogue and observation with young people. Through interdisciplinary actions and targeted courses, the school can guide young people to reappropriate the act of eating, and to explore its complexity in an emotional and cultural sense. All of this without forgetting the need for physical activity (be it motor, play or sport).

### **A new awareness for the younger generation**

Through food education, the school contributes to raising awareness, especially among the younger generations, of being part of a local and global community on a daily basis. It is essential that young people acquire, for themselves and for the community, a new awareness of the issues of sustainability, personal and collective well-being, and the adoption of correct lifestyles. It is also essential for young people to be aware of the various factors involved:

- prevention
- understanding the personal nutrition process
- the need to protect production areas, supply chains and food systems
- the seasonality and typicality of food products
- a responsible consumption style.

Lastly, it is essential that they learn to limit waste and the use of non-renewable resources or resources that are difficult to dispose of, and that they understand the economic, ethical and social contexts within which the food system as a whole operates.

### **From nutrition to food education**

The issues of food safety and food security are highly topical and, together with national and Community obligations, are increasingly the subject of careful study and collective and ongoing reflection. This reflection must follow interdisciplinary and intercultural paths to

educate on sustainable development (ecological, social and economic sustainability), solidarity, peace and legality. In particular, the idea of "sustainability", i.e. the impact that agri food production has on the environment and on social organisation, must become part - as an essential parameter - of today's concept of food quality. Special attention must also be paid to the ethical aspects of production and consumption. This means moving away from an approach that is often focused on nutrition alone, to find a new key that - through work on the multiple value aspects of food and nutrition - guarantees the significance and effectiveness of food education. This is a complex and stimulating challenge to which the entire education and training system is called upon to respond.

### **Integration of “Nutritional Education”**

The Greek Ministry of Education in collaboration with the Greek Ministry of Education and Religion in recent years has carried out an innovative process in which the integration of “Nutritional Education” has been entered as a new subject in the timetable of the Primary School. This action aims to bring the students closer to the concepts of good and healthy food and to instil in them the ideal of a healthy lifestyle.

According to the amendment of 2017, the elementary school curriculum was changed, while "Nutritional Education", lasting 40 minutes, was added as a distinct part of the elementary school schedule. The teaching time of “Nutritional Education” was assigned, as a matter of priority, to the teachers who taught the second hour (2:15-3:00 PM) of the All-Day Program.

It is worth mentioning that the Directorate of Primary Health Care, Department C of the Development of Health Education and Prevention Programs, of the Ministry of Health, in a post in an official government press release, informed about the school year 2022-2023 for the planning of the development and implementation of the actions and interventions to raise awareness and educate the student population in the context of Health Education at the National Level.

The mentioned actions and interventions are to contain presentations, printed and audio-visual material, and promote in this way for re-approval and extension of implementation time to the Greek Ministry of Education and Religion (Y.PAI.TH) with the relevant previous official document. According to which, during the 2021-2022 school year, interventions, awareness-raising, and information actions were carried out in the context of Health Education among the student population at the National level, a fact that they wanted to repeat in the New Year. Therefore, a request was filed for the approval of new supplementary supervisory material and implementation methodology, which was approved by the Institute of Educational Policy.

It should also be noted that due to the health crisis for the management of the coronavirus pandemic, it was not possible to implement the Health Education interventions of the Ministry of Health in the student community for the school year 2021-2022, due to the specific operating conditions of the school units and the increased workload in the Health Units.

### **The purpose is to achieve:**

1. The development of various interventions in the axes of Health Education and Prevention in School Units.

2. Ensuring a healthy and safe school and community environment.
3. The participation (of the student community, health professionals and agencies) in joint health promotion actions in the community.
4. The reinforcement of values, ideas and principles that promote social solidarity, volunteerism and participation.
5. Early diagnosis and referral to quality services
6. The protection and monitoring of children - students (Child Health Book, Individual Student Health Card, Pediatric Protocols, etc.).
7. The development of integrated and systematic interventions that have continuity, consistency and perspective, utilising the experiential and community approach.
8. Strengthening the acquisition of knowledge and skills for the adoption of healthy behaviours in the general student population, through basic principles of primary prevention and positive attitudes (without connection to diseases and symptoms or to morbid conditions)

### **About the subject of "Nutritional Education"**

THEMATIC AXIS: "NUTRITIONAL EDUCATION" (PANHELLENIC ASSOCIATION OF DIETITIANS-NUTRITIONISTS and ASSOCIATION OF DIETITIANS - NUTRITIONISTS OF GREECE)

The purpose of the thematic axis is to inform and raise awareness among children and young people about the great importance and value of nutritional education, as it is now known and scientifically proven, that proper and balanced nutrition is a prerequisite for proper mental, spiritual, physical and mental health of children's development. Nutritional education is preferable in the early stages of childhood, as it determines eating habits in adulthood, while early nutritional education and intervention prevents wrong eating behaviours and habits and delays wear and tear diseases. The school space can become a key axis and pillar of the nutritional education of students.

This intervention utilises presentation material on the theme **"I eat smart, I feel good"**

- A. for Kindergarten,
- B. for the 1st and 2nd Primary classes,
- C. for the 3rd and 4th Primary classes,
- D. for the 5th and 6th Primary,
- E. for all Middle School classes,
- F. for all High School classes, with corresponding instructions for teachers and health professionals,
- G. brochure with experiential activities, games,
- H. poster with the title: " Her secrets... of a balanced diet" and
- I. form with a nutrition quiz.

In the cases where the development of the said IST thematic axis has been planned in the school units. "NUTRITIONAL EDUCATION", it is proposed to combine the development of presentations by TH.A. "ID. Environment and Health" while intervention D.2 may also follow. "Oral health and nutrition".

## Program Subject: NUTRITION

The purpose of the program is to promote the mental and physical health of students by adopting healthy eating habits.

<b>Subject: Nutrition</b>	
Subsections Goals	
Topics	Learning outcomes
What are the basic nutrients that humans need and where do they get them from?	To recognize the power of nutrition in the consumption of food, developing critical thinking
What is the origin of the foods and what is their nutritional value?	For students to understand the origin of foods, their value and their effects on health
What are the effects of diet on health?	To adopt positive attitudes and behaviours
What foods does man consume today and what foods did he consume at other times?	For students to understand the origin of foods, their value and their effects on health
What are the eating habits of different people?	To develop skills to classify, process and evaluate information and to be aware of the risks that threaten their health
How to ensure the right way of eating.	To investigate how the economic situation determines the way of eating and the standard of living
How healthy is the way of eating today?	To adopt positive attitudes and behaviours
Religion and eating habits	To investigate the relationship of nutrition with place, time, economy, religion and culture (Ethics And Customs)
What is the economic cost to man's nutritional health today?	To recognize the power of nutrition in the consumption of food and to resist, developing critical thinking
Hunger in developing countries.	To investigate how the economic situation determines the way of eating and the standard of living
Politics and nutrition.	To investigate how the economic situation determines the way of eating and the standard of living
Economy and nutrition	To investigate the relationship of nutrition with place, time, economy, religion and culture (Ethics And Customs)
Which International Organizations take care of the world's nutritional wellbeing?	To gain knowledge on the global nutritional landscape and the key players involved

## Curriculum of “Nutritional Education” subject

A sample curriculum program oriented to the lesson of nutritional education is analysed below in both the Greek and English versions.

TIMETABLE	DURATION ACTIVITIES
13.00-13.40	1st teaching hour of full-day program - 40' Meal preparation/ Lunch
13.40-14.20	2nd teaching hour of full-day program - 40' Introduction to Nutrition and Nutritional value of foods
14.20-14.40	Break time Rest/ Free play/ Physical Education Exercises
14.40-15.20	3rd teaching hour of full-day program - 40' Activities and exercises based on the previous theory
15.20-15.40	Break time Free and organised play
15.40-16.20	4th teaching hour of full-day program-40' Completion of a nutrition questionnaire and closed and open-ended questions aimed at rewarding students (evaluation of the day)
16.20-16.50	5th teaching hour of full-day program-30' Preparation for departure

### Analysis of the aforementioned table's data

Note that there are three main meals of the day: Breakfast, which should cover approximately 25% of our daily needs. A good breakfast it is necessary to have energy-performance. Lunch, which is a must to cover approximately 50-60% of our daily needs and is the main meal.

Dinner, which should cover approximately 15-25% of our daily needs. We eat early in the evening, so that digestion is complete before we sleep. In between, we can eat fruit.

During the meal, certain rules of conduct apply. These rules are likely to differ from country to country. However, they are applied by most inhabitants of the same country.

Such rules are:

- We always wash our hands before sitting at the table to eat.
- We sit in our chairs and have both hands on the table.
- Cut small pieces and chew them well.
- We don't eat with our mouths open.
- We don't talk with our mouths full of food.
- We do not spread our hands in front of others while they are eating.
- We do not take food from the plate of others, even if they have stopped eating.

- We don't lift up the cutlery and we don't shake them while we talk.
- We brush our teeth well after eating.

### Indicative activities of the nutrition program

- Recording with questionnaires of eating habits around three main meals of the day: breakfast, lunch, and dinner
- Interviews with grandparents: as young people what they ate for breakfast, lunch, and dinner and when they were having fun.
- Research on categories of occupations involved from the production of a product until it reaches our plate, and calculation of economic cost.
- Visit an advertising company to study and understand the production of an advertisement and the messages it actually conveys.
- Preparing breakfast at school.
- Establishing rules of behaviour for mealtimes.
- Cooperation with purchasing services
- Visit a product standardisation factory, superstores, and popular stores markets.
- Recording of television advertisements relating to nutrition, a compilation of advertisements from print media and dramatisation of them.
- Research on world hunger.
- Research the eating habits of various people.
- Search for sources from the internet and libraries.

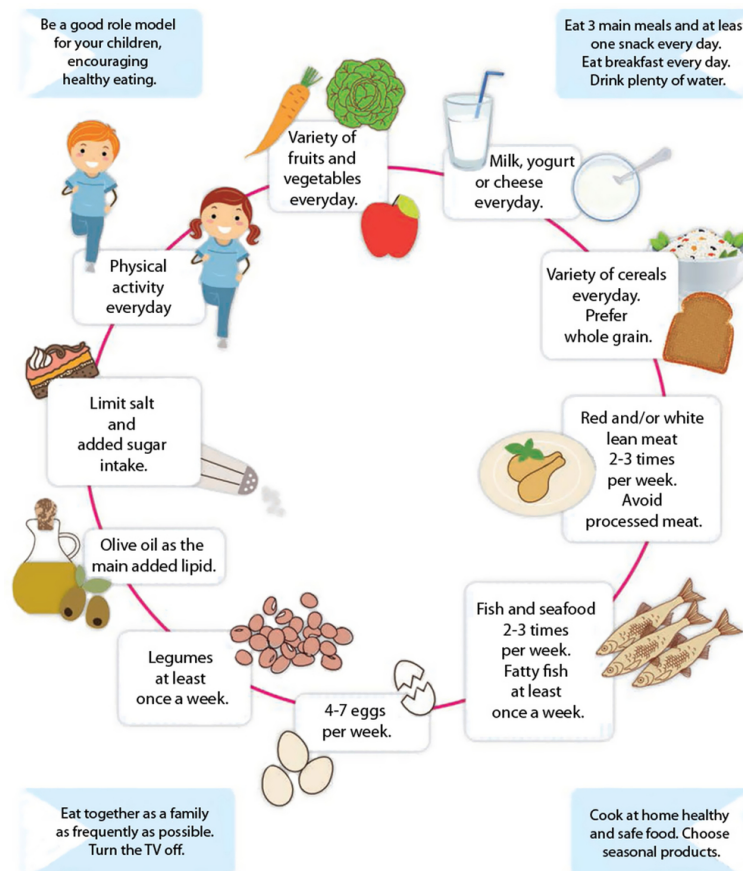


Image source:

<https://www.cambridge.org/core/journals/public-health-nutrition/article/national-dietary-guidelines-of-greece-for-children-and-adolescents-a-tool-for-promoting-healthy-eating-habits/C10A6724412019DE76DA7AA252419359>

## OVERALL CONCLUSION

Whilst the educational frameworks mentioned in this report are effective within each respective partner country, there would still be a need for developing stand alone subjects relating to nutrition, health and fitness. Currently, the nutrition elements of the educational frameworks are not adequately taught nor do they have sufficient content within the curriculum for each partner country.

There would be a need for staff development for teachers in a form of nutrition workshops and training, in order to get them occupationally competent to deliver effective nutritional learning within the classroom. This was also confirmed by the teacher survey the partners carried out within their countries. Please see the Teacher Survey Report.

There also needs to be a programme for the education of parents, so that schools and parents can educate their kids together. This bipartisan approach would enable a more effective way of tackling the obesity problem within each partner country. There could also be school linkages with nutritional organisations within each partner country, who could guest teach within the schools.