



Chapter 9

ΠΑΙΔΕΙΑΤΡΟΦΙ, Greece



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ΠΑΙΔΕΙΑΤΡΟΦΙ website: paideiatrofi.org/en

1. ΠΑΙΔΕΙΑΤΡΟΦΙ programme overview

ΠΑΙΔΕΙΑΤΡΟΦΙ is an EPODE-like programme for the prevention of childhood obesity that was launched in Greece in 2008 and implemented in 4 pilot cities.

In 2015, ΠΑΙΔΕΙΑΤΡΟΦΙ extends throughout 15 municipalities in Greece reaching more than 820,000 citizens, while 15 more cities have expressed their interest in entering the programme before the end of 2016.

The aim of the ΠΑΙΔΕΙΑΤΡΟΦΙ programme is to educate the city populations on a healthy and balanced diet to reduce childhood obesity rates in Greece. The aim is to help children up to 12 years old and their families change their lifestyles in a radical and sustainable way.

For children at this young age, most decisions regarding nutrition (food purchases, frequency and quality of meals, etc.) and physical activity (exercise, transport methods and more) are made within the family setting. The town is where the majority of daily activities are developed and where the family's daily contact is made with a variety of social entities such as schools, work, health, transportation, physical activity (sports

clubs). Therefore, it remains essential to take action at a local level in cooperation with all the local stakeholders involved with children and their families.

1.1. Philosophy

PAIDEIATROFI takes a community-based approach to inspire a lifestyle change at the local level in a sustainable way.

Both collectively and individually, citizens are being called on to raise awareness about the obesity issue, and particular emphasis is put on not stigmatising overweight individuals. PAIDEIATROFI uses a positive, concrete and “step-by-step” teaching and learning of nutritional balance and physical activity. According to the programme’s educational philosophy, food appears as a source of pleasure and there is no stigmatisation of any food.

PAIDEIATROFI is a programme with a long-term view: it maintains realistic objectives and takes environment and other constraints into account such as time availability, time spent at home, budget, and product availability. The programme messages are based on national, European and international scientific recommendations. Moreover, these messages are regularly enriched by field experience and good practices sharing.

1.2. Organisation

In order to maximise the effectiveness of the programme, a professional structure has been created, including the National Coordination Team, the Local Team of every participating municipality and the National Scientific Committee. The responsibilities of those involved in the programme are outlined below.

The **National Coordination Team** is comprised of a team of three professionals who offer continuous and specialised services: training, communication and social marketing. Nostus Communications & Events is responsible for the National Coordination of the PAIDEIATROFI programme using its executives’ expertise in social marketing and organisational techniques. The National Coordination Team is committed to providing continuous specialised training on the PAIDEIATROFI methodology. It also prepares new approaches and ideas based on the dynamics of the local teams and aims to change (local) social policies on childhood obesity. Finally, it provides communications support methodology for health professionals and the public, focusing on public health issues.

The **Local Team** in cooperation with the Local Project Manager of each municipality is the driving force behind the programme and implements the actions in the town. In order for actions related to public health to be effective, they must be specific and visible to all stakeholders involved. The communication of these actions facilitates the awareness, mobilisation and participation of the residents. The town is at the heart of the intervention and at the centre of the programme’s philosophy. The aim of the

town is to strengthen dynamics of social groups and to alter professional practices in order to change the local environment. The active participation of multiple local stakeholders can help change the social environment of the area.

Each municipality determines a Local Project Manager to organise and coordinate the programme at local level and to mobilise the most important relevant stakeholders and municipal services. The National Coordination Team undertakes the continuous and effective training of the local project managers.

The **National Scientific Committee** supervises the development of the programme by taking into account national and international scientific guidelines.

The specialised, independent PAIDEIATROFI National Scientific Committee has been established for an efficient programme operation. This committee is composed of leading professionals and professors from the areas of Paediatrics, Child Psychology, Dietetics and Food Science. The purpose of the Committee is to place the programme in a national context, taking into account scientific guidelines. At the same time, the Committee supervises the development of the programme, its evaluation and publications; overall, it has an influence on the programme at a national scale. Finally, the Committee advocates for PAIDEIATROFI within the scientific, institutional and political environments.

1.3. PAIDEIATROFI National Scientific Committee Members:

- **Georgios P. Chrousos**, Professor/Chairman of the Department of Paediatrics at the Athens University Medical School;
- **Efthimios Kapantais**, Specialist Pathologist/Diabetologist, General Secretary of the Hellenic Medical Association for Obesity;
- **Yannis Manios**, Associate Professor, Department of Nutrition & Dietetics, Harokopio University;
- **Antonis Zampelas**, Professor, Human Nutrition Department, Agricultural University of Athens;
- **Panagiotis Varagiannis**, Dietician/Nutritionist, General Secretary, Hellenic Dietetics Association;
- **Paris Papachristou**, Dietician/Nutritionist, Hellenic Institution of Gastroenterology & Nutrition;
- **Konstantinos Karteroliotis**, Professor/Head of Theoretical Sciences, Faculty of Physical Education and Sport Science, National and Kapodistrian University of Athens;
- **Giannis Kalfas**, Dietician/Nutritionist, Hellenic Association Nutritionists & Dieticians;
- **Nikos Efstathiou**, Educator.

1.3.1. Institutional, scientific and private partners

The PAIDEIATROFI childhood obesity prevention programme has the support of key governmental and scientific bodies and runs under the auspices of:

Institutional Bodies:

- the Ministry of Culture and Sports;
- the Hellenic Healthy Cities Network.

Scientific Bodies:

- the Hellenic Diabetes Association;
- the Hellenic Society for Clinical Nutrition and Metabolism;
- the Hellenic Medical Association for Obesity;
- the Hellenic Foundation of Gastroenterology and Nutrition;
- the Hellenic College of Paediatricians;
- the Greek Dieticians and Nutritionists Union;
- the Hellenic Society for the Study of Risk Factors in Vascular Diseases;
- the Pan-Hellenic Association of Dieticians and Nutritionists.

1.3.2. Partners and collaborations

Private partners guarantee the funding of the programme at the national level while supporters at the local level are encouraged to contribute to the funding of local activities either with funds or through in-kind donations. The Local Project Managers are in contact with the local businesses to incentivise them to participate as actively as possible in the programme and to become part of a PAIDEIATROFI initiative. The private sector serves as a catalyst for the public sector to fund the cities for the actions related to public health.

Since November 2013, PAIDEIATROFI's private partner is the Coca-Cola Foundation, which supports the programme within the context of the company's global commitment to promoting physical activity and balanced nutrition.

All private partners both at national and local levels sign an agreement with the National Coordinator and the municipality respectively, stipulating the benefits and obligations involved in this cooperation. Within those agreements, private partners agree to support the programme and its objectives financially as well as in any other way possible, such as volunteerism, transfer of expertise, etc, and to communicate their involvement at a corporate level, without interfering in the scientific content or implementation methods.

PAIDEIATROFI IN NUMBERS: 2008 – 2015

15	Municipality members
9	Themes about nutrition & physical activity
60,000	Leaflets & posters distributed to the local population
40	Scientific events with the participation of PAIDEIATROFI
1,000	Reports in National & local media (print, web, TV and radio)
220	Local activities organised by the PAIDEIATROFI municipality/members

1.3.3. Evaluation of the programme

PAIDEIATROFI is not a scientific research programme but an intervention programme. However, in order to evaluate the effectiveness of its actions and the change in behaviours of the families participating in its activities at a local level, PAIDEIATROFI has teamed up with the Harokopio University of Athens to conduct a survey to evaluate the programme according to a number of indicators including:

- the evolution of childhood obesity and overweight in PAIDEIATROFI cities compared to the reference city, using BMI data recorded by the university in all of the schools of two PAIDEIATROFI cities;
- the change in families' behaviours towards healthier nutrition and physical activity as well as the families' participation in PAIDEIATROFI activities.

The survey has been launched in May/June 2014 and was completed in May/June 2015. The results of the survey will be announced in September 2015.

2. Social marketing activities

Once or twice a year a PAIDEIATROFI theme is selected and highlighted in order to:

- Promote a balanced, diversified, affordable and fun diet;
- Encourage children and families to be more active and to exercise on a regular basis.

Dedicated tools and roadmaps for different target audiences (teachers, dieticians, local teams, parents, children, etc...) help foster pleasant and balanced eating habits and greater physical activity in everyday life:

- Information in the way of posters, guides, leaflets, pedagogical kits...:
 - practical advice;
 - adapted tricks to daily life;
 - help to understand behaviours.
- Proximity actions targeting families:
 - public meetings;
 - cooking lessons;
 - pedagogical sessions in schools;
 - sensory early-learning sessions.



Date	Topic	Objective
2008	We move and we like it!	Promotion of physical activity and reduction of sedentary behaviour, encourage family physical activities.
2009	The season has the taste for fruit!	Promotion of fruit consumption, tips for parents to encourage their children to try more fruits on a daily basis.
2009	Breakfast – My secret weapon!	Promotion of the importance of breakfast consumption to children and their families; link energy for daily activities with breakfast.
2010	The season has the taste for vegetables!	Promotion of vegetable consumption, tips for parents to convince their children to consume more vegetables.
2011	Simple, economic and healthy eating!	Promotion of everyday home cooking, and understanding of the cost per portion of food prepared at home compared with that of catering, restaurants, etc.
2012	Fish and Seafood!	Promotion of fish and seafood consumption, tips for parents to convince their children to try more kinds of fish and seafood.
2013	My portion size!	Promotion of a balanced portion size according to the needs of each age, understanding on how to measure correct portions for children and adults.
2014	Physical Activity!	Promotion of physical activity on a daily basis and reduction of sedentary behaviour, encouraging family physical activities.
2015	Energy Balance!	Promotion of energy balance concept; understanding how energy and daily activities are linked, promotion of family activities, better sleep.

EXAMPLES OF LOCAL ACTIONS

Date	Topic	Results
Sept/Dec 2013 Jan/Apr 2014	Constructions of the Pyramids of Physical Activity and Balanced Nutrition	Children were acquainted with the different varieties of food and the relation between energy and PA.
Sept/Nov/Dec 2013	Cooking Lessons & Contests	Children were introduced to cooking and experimentation with food.
Nov 2013	Wald of the family	Children and their families participated in a walk on a designated path in a local grove.
June 2014	Dance Festivals	Children prepared dancing routines and gave performances in front of their peers and families.
Feb 2014	Informative talks for parents	Parents were briefed about the importance of balanced nutrition and how to include those principals in their everyday life.
Dec 2013	Creation of comic books by artists and pupils	By participating in the creation of a comic book, children understood the benefits of sleep and the negative effects resulting from not sleeping enough.

Date	Topic	Results
May 2014	Floor games in schoolyards (twister, hopscotch)	After children participated in the creation of floor games, they used them on a daily basis.
Mar 2014	Vegetable gardens in schoolyards	Children were introduced to the food chain, from the seeds to the final vegetable, and got the opportunity to consume the vegetables produced.
Apr 2014	Distribution of fruits & fruit salads in schools	Children consumed more fruits per day and adopted the habit of eating more fruits on a daily basis.
Apr/May 2014	DIY leaflets and recipe books	Children created leaflets and recipe books that were distributed amongst them.
May 2013	Interactive workshops for families	Families understood how to interact with their children in order to promote healthy nutrition habits.
May 2014	Festivals of physical activity	Children performed physical activity games in the school and in front of their parents.



3. EPHE Community

3.1. Maroussi

The EPHE National Coordination Team selected Maroussi as the pilot city for the EPHE project because of its varied demographic profile. It is one of the largest municipalities in Greece and its inhabitants have different socioeconomic backgrounds and educational levels.

In addition, Maroussi has been a very active PAIDEIATROFI city since 2009, implementing successful actions in the field for the prevention of childhood obesity. The PAIDEIATROFI team has had an excellent cooperation with the Mayor, the municipality representatives and employees. Thus, we decided to invite Maroussi to participate in EPHE to further extend this fruitful collaboration and to work together for the promotion of health equity, in terms of physical activity and nutrition.

Maroussi is a suburban city in the northeastern part of the Athens agglomeration, Greece. Within Maroussi lies the biggest forest in urban Athens, Dasos Syngrou. The Athens Olympic Sports Complex, the largest sports complex in Greece, built for the 2004 Summer Olympics, is located in the southwestern part of the municipality.

3.2. Number of schools/beneficiaries

In Maroussi, two local elementary schools participated in the EPHE project. Each school represents the socio-economic status of the area within which it is located. The 15th elementary school is located in an area where parents have medium-to-high socioeconomic status and education level, while at the 16th elementary school parents have medium-to-low socioeconomic status and educational backgrounds.

In total, there were 180 children and families participating in the EPHE programme and its evaluation process.

INFRASTRUCTURE IN SCHOOLS

	15th Primary school	16th Primary school
Medical service for school	NO	NO
Canteen	YES	YES
Type of canteen	PRIVATE	PRIVATE
Snacks offered approved by a dietician	NO	NO
Water fountain	YES	YES
Playground	YES	YES
Sports field	YES	NO
Sport hall	YES	NO
Compulsory physical activity	YES	YES
Possibility of extra school PA	YES	NO

3.3. Local partners

There were a large number of local partners working together for the implementation of the EPHE programme at Maroussi, each contributing to the project according to their specialisation and capacities:

- Mayor and Vice-Mayors;
- the Local Town Council;
- the Municipality Department of Education;
- the Municipality Department of Social Services;
- the Municipality Department for the Environment;
- the Municipality Department of Public Relations;
- PAIDEIATROFI national and local teams
- agriculturists;
- nutritionists/dieticians;
- doctors;
- the school principals and teachers;
- local artists (painter, comic artist...);
- local NGOs;
- local sponsors and stores.

4. Interventions Undertaken

4.1. The Preparation Step

The first year of the EPHE project included initial actions for the introduction of EPHE at the local level in order to gain support from the local actors and to motivate the families involved in the study sample to participate in the first evaluation phase. These actions included having meetings with municipality representatives, disseminating information, sending out invitation letters, holding presentations about the programme as well as providing motivational tools for the evaluations, organising educational trips for children to sports centres for physical activities and to other venues for nutrition education.

4.2. The Intervention Step

Following the completion of the first evaluation process, the second year was dedicated to the implementation of local EPHE actions on the field. A number of original and interactive activities were implemented in order to address the determinants of this baseline results analysis. The following actions were implemented:

- educational excursion at Mount Parnitha;
- Jonathan Sports Centre - educational visit;
- parents' information meetings;
- distribution of press releases at national and local level, website and Facebook posts, posts on school blogs;
- EPHE Opening Celebration;
- a mini questionnaire on fruit, vegetables & water consumption, sleep and physical activity;

- “Grape – the Protagonist of the Autumn” – educational visit;
- website and Facebook posts;
- cooking lessons with vegetables;
- PAIDEIATROFI Walk for the Whole Family;
- the distribution of the Pyramid of balanced nutrition, food hygiene and physical activity;
- the distribution of posters, leaflets and school programmes, promoting physical activity;
- workshops on the consumption of water;
- the construction of the Physical Activity Pyramid;
- the decoration of the School’s Vessels Area;
- workshops on the increase of quality/quantity of sleep;
- the fruit and vegetables open market;
- the construction of the Pyramid of Balanced Nutrition;
- the creation of The Rainbow of Fruits & Vegetables;
- a blind man’s buffet with vegetables;
- a post on the 16th elementary school blog regarding the following EPHE actions for the period February - June 2014;
- « I am what I eat » educational programme;
- a salad bar for Mardi Gras celebration;
- the Parents’ Information Day;
- « Make your own EPHE leaflet » action;
- the EPHE World’s Water Day;
- the creation of a comic book regarding sleep;
- herbs and vegetable gardens in schools;
- the Month of « Fresh Fruits »;
- workshops on the increase of quality/quantity of sleep;
- fruit and vegetables cook books;
- painted floor games in the schoolyards for the promotion of physical activity;
- the EPHE Festival;
- the annual field trip;
- the vegetable gardens harvest;
- the EPHE Summer Celebration.

4.3. The Observation Step

The third year of the EPHE project focused on obesity prevention activities that targeted the whole Maroussi community. These activities sought to continue to raise awareness throughout the community, schools, and families participating in the EPHE project evaluation process.

In September 2014, we organised meetings with all of the directors and teachers (from grades 1, 2 and 3) of the schools in order to explain the last stage of the project: the EPHE classes were invited to continue the PAIDEIATROFI activities such as workshops about fruits and physical activities.

Onsite visits to both schools were held in April 2015. These occasions were the opportunity to hold meetings with the head masters regarding the final coordination of the 3rd questionnaire in June 2015 and to brief the parents about their voluntary participation in organised events within the schools for the promotion of healthy eating, including preparing healthy snacks with their children, games promoting healthy and balanced eating behaviours and physical activity.

5. Remarkable activities

Action: Family Day at Syggrou Grove

Objective: Promotion of physical activity and less screen time

Local actors:

- the PAIDEIATROFI National Coordination Team;
- the PAIDEIATROFI Local Team;
- the Maroussi Municipality Department of Education;
- the Maroussi Municipality Department of Environment;
- the Maroussi Municipality Department of Social Services;
- the Maroussi Municipality Department of Public Relations;
- the Mayor and Vice-Mayors of Maroussi municipality;
- the Agricultural University of Athens;
- the Hellenic Dieticians Association;
- the school principals and teachers of all local elementary schools of Maroussi;
- NGO KEAN;
- the dietician, member of the local PAIDEIATROFI team;
- sponsors (Coca-Cola, a local bookstore, a local fruit producer);
- the NGO for the Environment KEAN;
- the Institute of Agricultural Sciences.

5.1. Description of the action:

The EPHE action “Family Day at Syggrou Grove – we move, we learn and we have fun!” was completed successfully, on Sunday, 10 November 2013.

With great enthusiasm and the good weather, younger and older friends of PAIDEIATROFI gathered at the entrance of the Grove on Sunday morning to participate in a unique event, which had everything! We started with a walk in the Grove, aiming at promoting physical activity and having a first acquaintance with this precious oasis of 1,000 acres of oxygen and green area.

At the end of the route, loud music was playing via the open theatre’s megaphones welcoming the children and their parents and inviting them to take their seats in order to watch the second part of the event. The Mayor of the Municipality of Maroussi, Mr. G. Patoulis, welcomed the participants, along with Ms. Helena Stamou, National Coor-

dinator of PAIDEIATROFI and the President of the Institute of Agricultural Sciences, Mr. Leonidas Kazakopoulos.

Later, clinical dietician Maria Koufaki took the stage and, with the help of a three-dimensional structure, informed the attendees about issues regarding balanced diet, health and physical activity. Within the framework of the EPHE programme, one three-dimensional food pyramid was offered to every primary school of the Municipality of Maroussi, as an educational tool.

Then, in cooperation with the N.G.O. KEAN – Cell of Alternative Youth Quests, all the children participated in the Planetbook floor game; a game about the planet and the environment.

Many more surprises and gifts awaited the young participants, such as board games and educational books. Water, juices and fresh fruits were also distributed to the participants, as in the PAIDEIATROFI programme, the physical activity goes hand-by-hand with a balanced diet.

The sponsors were Coca-Cola 3E with the natural juice Amita, Agrotica Center and several partnering organisations, like the Hellenic Dietician Association and the Agricultural University of Athens who also contributed to the success of the event.



5.2. Key Lesson:

The success of the activities implemented in the framework of a community-based programme is widely dependent upon the smooth collaboration of various local actors.

From the initial brainstorming and planning of an action in the field up to the day of the event, it is really important to include key local actors that will contribute something different to the event, according to their expertise, uniqueness and role. All of these partners have distinct roles and can contribute something different and valuable to the programme.

In our case, the various departments of the municipality came together to organise the EPHE activity, using their excellent knowledge of the Maroussi community and its local population.

The environmental organisations were able to add a different character to the event, helping families to learn about the Grove plantation and to become educated on its natural environment. Contact with nature can be a major motivation for physical activity and less screen time.

Nutrition experts were able to inform parents on key issues about their children's diet, through practical examples and advice.

The school staff informed the parents about the details of the event and invited them to participate, securing high attendance to the EPHE event.

The PAIDEIATROFI team was responsible for the coordination of all of these partners, the planning and promotion of the event, the budget allocation and the management of any unforeseen issues on the day of the Family Walk.