



Chapter 8

MAIA, Portugal



Marta Sampaio, Nair Rocha, Maria João Gregório

MAIA facebook: [EPHE.Maia.Menu.Saudavel](https://www.facebook.com/EPHE.Maia.Menu.Saudavel)

1. MAIA Programme overview

- City: Maia
- “Maia Menu Saudável” programme has been developed since 2005 and was initiated as a Nutrition Education Project.
- “Maia Menu Saudável” programme has been developed as a community-based initiative, after becoming a part of the Maia School Health Programme. This programme includes projects in the main areas of school health promotion according to Portuguese National Health Policy: nutrition education, food safety, oral health, skin cancer prevention, but also speech therapy, body posture education, and blood donation promotion. “Maia Menu Saudável” is a community-based programme under the responsibility of the Education and Health Division in the Maia city administration.
- This programme covers all the public preschools, kindergartens and primary schools in the municipality of Maia, promoting healthy eating habits and lifestyle to over 7,000 schoolchildren, their families, teachers and the whole school community involved.

- Main objectives: This programme has a particular focus on nutrition education interventions in the school environment as well as the promotion of healthy eating habits and lifestyles, including the acceptance of healthy foods that are commonly rejected by children in school lunches, such as vegetables, fish and fruit.
- Number of beneficiaries: 42 public schools and about 7,000 schoolchildren.
- Organisation of the programme at central and local level:
 - the local coordination team:
 - Nair Rocha (Coordinator of Health Division of Maia Municipality);
 - Marta Sampaio (Nutritionist of Health Division of Maia Municipality);
 - scientific support: Faculty of Nutrition and Food Sciences of the University of Porto (FCNAUP);
 - public and private partner: Gertal.

2. Social marketing activities

Social marketing strategy for the EPHE project in Portugal

As part of the social marketing campaign, at the beginning of the second year of the EPHE project, creative slogans (“Move more”; “Eat + vegetables”; “Eat + fruit”; “Drink more water”; “Sleep better”) were defined for each EPHE theme (fruit and vegetables consumption, sedentary lifestyle, water consumption, and sleep in terms of quality and duration) (Figure 1).

Furthermore, to mobilize the entire community involved in the EPHE project, we used Facebook as the primary communication tool (<https://www.facebook.com/EPHE.Maia.Menu.Saudavel>). All the activities implemented within the EPHE project were shared on the Facebook page which turned out to be an effective way to establish contact with the families.

Press releases were distributed to the local and national media outlets at various stages of the EPHE project to inform the communities on project events and results.



Figure 1. Creative slogans for a social marketing campaign.

The Maia School Health Programme uses different social marketing tools in order to achieve its main goal of healthy lifestyle promotion amongst school age children. The social marketing strategy of this project includes:

- the project’s implementation included in the School Health Programme at the beginning of each school year with the use of various channels: hoarding adver-

tising in Maia Municipality (Figure 2), Facebook page of the Health Division of Maia Municipality and through personal contacts with school coordinators;

- a protocol signature at the beginning of each school year between the Health Division of Maia Municipality and all the schools participating in the different school health projects. All the scientific and private partners are invited to participate in this event;
- an e-book of recommendations for the implementation of each school health project available to teachers and school coordinators;
- dissemination of all activities promoted within the School Health Programme in the Facebook page of the Health Division of Maia Municipality. The most important events are also communicated through social media with press releases.



Figure 2. Hoardings of the School Health Programme.

3. The EPHE community

The city of Maia was chosen to take part in the EPHE project, as it is the municipality with the most experience in implementing strategies to promote the healthy diet of its citizens and a relevant political commitment in the field of health promotion. The municipality, which has an Education and Health Division with a nutritionist, is very dedicated to the development and implementation of a health education programme at the school level.

Maia is a large urban town (135,306 inhabitants in 2011) situated in the north region of Portugal and in the second largest urban area of this country (Porto Metropolitan Area).

Maia Municipality participates in policy decisions in health for the municipality and is also responsible for the educational policy, including health promotion in schools.

The Maia Municipality is responsible for providing school meals in all public preschools, kindergartens and primary schools. A private catering company manages the canteens while all the menus are approved by the nutritionist of the municipality.

- Number of schools/beneficiaries targeted: 2 public primary schools, including 241 children and their families (Gandra School Center – 129 children and Geuifães School Centre – 112 children).
- Local partners involved:
 - scientific partners: FCNAUP;
 - private partners: Unicer, Vitalis, Lidl, Decathlon, Prove, AderSousa, Gertal and Vieira de Castro;
 - [institutional partners](#): the Directorate-General of Health (DGS), the National Programme for the Promotion of Healthy Eating (PNPAS).

4. Interventions undertaken

During the first year, the focus was on preparing the community for the project implementation. In this period, the two project leaders of “Maia Menu Saudável” selected two schools to participate in the EPHE project (Gandra School Centre and Geuifães School Centre). Two schools with varied socio-economic status from different neighbourhoods were selected for the study. During this period, a motivation and awareness campaign was also designed to motivate the entire community to get involved in this project (school coordinators, teachers and the whole school community, children and their families). The first evaluation phase (baseline evaluation) was also conducted during this year.

During the second year, different actions were designed according to the results of the baseline evaluation. In Portugal, data showed stronger differences between the various socio-economic groups with variables related to fruit and vegetables consumption, soft drink intake and total screen time, namely the time spent watching TV. Children of low SES exhibited lower vegetables and fruit intake, a higher consumption of soft drinks, and a higher number of hours spent watching TV or on a PC. Regarding the determinants of the nutritional and sedentary behaviors related to the gap between SES, we identified four major behaviors amongst the children:

- the high cost of certain foods;
- the availability of foods (fruits and vegetables);
- the knowledge about food and nutrition (the importance of vegetables consumption);
- the inefficiency of parents to manage children’s nutritional and sedentary behaviours (TV watching and soft drink consumption).

According to these results, EPHE interventions had to focus on actions promoting fruit and vegetables intake, water intake instead of soft drinks and physical activity. The main interventions implemented were as follows:

[The distribution of fruit & vegetables baskets](#)

To encourage families to consume fruit and vegetables, baskets of fruit and vegetables were distributed to each EPHE family. This activity aimed to address determinants related to availability and the high cost of healthy foods. A partnership with local producers also helped encourage healthier eating habits.



Figure 3. Fruit & Vegetables Baskets.

[Facebook contests for the EPHE families](#)

During the second year of the EPHE project, Facebook contests were organised to promote the involvement of parents and families in the EPHE activities. For example, a Facebook contest was launched to support the “Fruit & Vegetables Baskets” campaign. EPHE families were encouraged to prepare and cook a recipe with the vegetables and fruits included in the basket and take a picture of the prepared dish. The family with the most creative picture received one basket of fruit and vegetables per week for a month.

[“Vegetable Friends Project”](#)

In the field of vegetables promotion, Maia Municipality has an on-going project called “Vegetable Friends”. This project was developed in partnership with the Faculty of Nutrition at Porto University. This project targeted children and parents. The “Vegetable Friends” project consisted of 90-minute classroom workshops on a 4-week period. These workshops included cooking activities for children and tasting of

different recipes prepared with vegetables. These workshops provided skills regarding vegetables, nutritional and food plant facts as well as health benefits. Different games, team competitions and other entertainment activities were also organised during these workshops. Each workshop session focused on a different group of vegetables. This activity was developed in close cooperation with FCNAUP, and all the sessions were designed by graduate students of Nutritional Sciences course. All the sessions were supervised by nutritionists from FCNAUP and Maia Municipality (Figure 4).



Figure 4. Poster of “Vegetable Friends Project”.

“Nutrition’s Super-Powers” project

Within the EPHE activities, a nutritional educational intervention was implemented during the school mealtime in order to encourage children to eat all foods provided at school lunch, mainly the more disliked ones, such as vegetable soup, vegetables and fish.

First, in each classroom was organised a workshop that explained the different nutrition’s “super-powers” (“Strength Power” associated with meat, fish and eggs, “Energy Power” provided by foods like cereals and their derivatives, and “Protective Power” represented by vegetables and fruits) together with the health benefits of their consumption.

Secondly, a competition between the EPHE classrooms in each school was organised at lunchtime, during which two nutritionists monitored the children’s food consumption (twice a week between March and June), encouraging their food intake.

For each meal’s component eaten, the children received a “nutrition power” stamp (Figure 5). The winner of the day was the classroom that would have collected the most stamps. All children felt highly motivated for this activity and generally tended to eat all the food products.

Lastly, a formative session was provided to the school staff, with content related to the best practices for educational strategies to encourage children to eat healthy foods during school meals.



Figure 5. Poster of the “Nutrition’s Super-Powers” project.

“Celebration of “World Water Day”

World Water Day is celebrated each year on 22 March to raise awareness on the importance of water intake. As a joint action between all EPHE communities, this day was celebrated, with the organisation of a big event in schools addressing two EPHE themes: “Move more!” and “Drink more water!”. The main objective of this event was to make children aware of the importance of regular physical activity and the adoption of an active and healthy lifestyle, with water as the beverage of choice. Different activities related to athletics were organised in schools with the aim of promoting the athletics as a simple and fun physical activity modality and water consumption as the better beverage choice as well as making children aware of the importance of hydration during the practice of physical activity. For this intervention, a famous Portuguese athlete (Fernanda Ribeiro) was invited to perform the athletic activities within the schools.

“Good Sleep Habits” poster

A session with children was organised to explain the importance of sleeping well, and a bedroom poster, developed by a psychologist, with some rules for « good sleep habits » was distributed to the children.

Picnic for EPHE families

To celebrate the end of the second year of the EPHE Project’s implementation in the Maia community, a picnic was organised for the all the community people involved. All children taking part in the EPHE project in Portugal were invited (about 280 children), their families as well as all the staff of the two schools involved in the EPHE project (teachers, coordinators and other workers). This event took place outside the school environment, in an urban park of Maia Municipality. The main goal of this initiative was to sensitise all children and families to the importance of a healthy lifestyle, promoting water consumption and intake of fruit as snacks, and at the same time to promote physical activity. Different animations were organised, including a Yoga course. (Figure 6).



Figure 6. Yoga class during the EPHE Picnic.

During the third implementation year, focus was put on the implementation of coordinated actions across the different EPHE communities, not only on the school level but more broadly on the community one, in order to create awareness and visibility for the EPHE themes at both local and national level. The activities organised were the following:

- [World Sleep Day Celebration](#) – An exhibition was organised in a shopping centre in Maia of pillows decorated by the children of each classroom involved in the EPHE project.
- [World Health Day Celebration](#) – During the day, fruit and vegetables were offered at the metro station nearest to the main square of Maia city. Children from a professional school offered fruit and vegetables with some flyers produced by the children involved in EPHE Project containing nutrition education messages regarding to the importance of fruit and vegetables consumption.
- [World Water Day Celebration](#) – A Facebook contest was organised, which challenged children and their parents to take a picture with a message related to the promotion of water consumption.
- [International Dance Day Celebration](#) – On the occasion, a flash mob was organised in the central plaza with a choreography created for a selected song for the EPHE project.

5. Remarkable activities

Within the implementation of the EPHE project, and considering the most successful initiatives, we would like to highlight the following aspects:

- One of the most successful initiatives within the EPHE project was the development of activities engaging the whole community such as the EPHE Picnic. These kinds of activities were an opportunity to involve the entire community directly

taking part in the EPHE project (children and their families, plus school staff), the community outside the school environment, the different private partners, and the political representatives.

- The importance of the development of a good social marketing strategy is determinant, considering the utilisation of social networks such as Facebook as an important communication tool. The use of communication tools in a dynamic way was very important to engage parents in the EPHE activities (Facebook contests with family challenges).
- The importance of the involvement of the mass media with the social marketing campaign to mobilize different actors and establish different partnerships. The endorsement of public partners in the EPHE project together with the political interest of the local politicians in this project increased since the baseline results were disseminated through the Portuguese national media.
- The rewards were important not only for increasing the participation rate, but also to obtain the parental support and involvement in all the interventions of a nutrition education programme. A great participation of children and their families in activities was indeed guaranteed whenever a reward was given.
- The importance of a good motivation campaign, mainly for the school staff (coordinators, teachers and educational assistants). The involvement and motivation of teachers in the project is integral to the success of any intervention in this area. For example, as a motivation tool within the EPHE activities, a healthy cooking workshop was organised with a Portuguese Master Chef for teachers involved in EPHE.
- According to the Portuguese baseline results from EPHE, it was clear that nutrition education programmes should go beyond the development of knowledge and skills on healthy eating. It is also important to provide competencies in the field of education.
- Nutrition education programmes should go beyond the development of knowledge and skills on healthy eating. It is indeed important to provide knowledge and skills in terms of educational strategies, either for the school staff or for parents and families, to encourage children to eat healthy foods.
- The importance of designing interventions relates directly to the real needs of the community targeted. Thus, it is crucial to include the baseline evaluation before the implementation of any strategy in the field of health promotion.

References

1. INSTITUTO NACIONAL DE ESTATÍSTICA, (2012). *Censos 2011. Resultados definitivos - Portugal*. Lisboa, Portugal.
2. GRAÇA P, GREGÓRIO MJ, (2013). The construction of the National Program for the promotion of healthy eating. Conceptual aspects, strategic guidelines and initial challenges. *Revista Nutricias*. 18:6-9.
3. WORLD HEALTH ORGANIZATION, (2013). *Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-2020*. Sixty-sixth World Health Assembly.

4. WORLD HEALTH ORGANIZATION, (2009). *Global Health Risks. Mortality and burden of disease attributable to selected major risks*. Geneva, Switzerland: WHO.
5. GRAÇA P, NOGUEIRA PJ, SILVA AJ, ROSA MV, ALVES MI, AFONSO D, ET AL, (2013). *Alimentação Saudável em Números*. Direção-Geral da Saúde.
6. WIJNHOFEN TM, VAN RAAIJ JM, SPINELLI A, STARC G, HASSAPIDOU M, SPIROSKI I, ET AL, (2014). *WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6-9-year-old children from school year 2007/2008 to school year 2009/2010*. BMC Public Health. 14(806).
7. GREGÓRIO MJ, GRAÇA P, COSTA A, NOGUEIRA PJ, (2014). Time and regional perspective of food insecurity during the economic crisis in Portugal, 2011-2013. *Saúde e Sociedade*. 23(4):13-27.