PROMOTION of CHILD HEALTH in MUNICIPALITIES
CEIDSS - Centre for Studies and Research in Social Dynamics and Health - is a non-profit research organization working in the area of health promotion focused on the social determinants of health and especially contributing for the reduction of health inequalities.

It develops research (R&D) programs aligned with National and International (WHO and EU) Health priorities guided by the vision of identifying cost-effective health policies and strategies particularly in the area of childhood obesity. It is particularly focused on protection and promotion of health and prevention of disease through community-based programs on nutrition, health and social intervention and related aspects of health inequalities.

CEIDSS’s activities are developed in association with local authorities with the Institutional support of the Ministry of Health and Ministry of Science and Education. CEIDSS has been also participating in several European consortiums, such as the EU project (EAHC) “OPEN and more recently in CO-CREATE (EC-H2020). CEIDSS participates in European networks, or by giving technical support such as to the study “Childhood Obesity Surveillance Initiative/WHO Europe” in Portugal, or as a partner such as in the EPODE International Network and the European Public Health Nutrition Alliance.

CEIDSS has significant expertise in the areas of addressing childhood obesity through a multidisciplinary and multi stakeholders approach, within the fields of Epidemiology, Nutrition and Dietetics and Public and Environmental Health. CEIDSS has several years of experience in coordinating, collaborating and managing large, cross-disciplinary, multi-site research collaborations, both at the European level and also at national level.

In Portugal, CEIDSS has been developing comprehensive community based Programs on tackling childhood malnutrition aligned with health priorities and guided by low-cost policies and strategies, such as Program Obesity Zero (POZ), Eat Mediterranean, AMEA Teens, AMEA Kids and MUN-SI.

CEIDSS has a young and multidisciplinary team, with researchers, university Professors, nutritionists and other health and education professionals who collaborate at both national and international level.
“It has been an absolute privilege to be Head of a Research Centre whose mission has been to benefit the community by promoting health to those more at risk. Using a multi-sectorial approach, CEIDSS’s young multidisciplinary team participates actively in public health nutrition projects producing innovative intervention research and improving the health status of the population. With an emphasis on Nutrition and Health education and action on health determinants and risk factors, linked with Non-Communicable diseases and through its partnerships and Consortium at international, national and local level, this awarded non-profit organization has become decisive and important in promoting healthier lifestyles and contributing to a better future for all.”

Message from the President

Awards

Food and Nutrition Awards 2015
MUN-SI Program
Winner of the 1st Honourable Mention in the category of Initiatives of Mobilization

Hospitais do Futuro 2012
MUN-SI Program
2nd place in the category of Municipalities

Food and Nutrition Awards 2010
Project POZ
Best Scientific Public Health Project

Fundação AstraZeneca 2009
Project POZ
Best Scientific Project Award
Background

Portugal is one of the countries within the WHO European Region with higher prevalence of childhood overweight (30,7%) along with countries such as Greece, Italy and Spain. This situation has been shown to be associated with inadequate eating behaviours which, together with reduced levels of physical activity, relate to unhealthy lifestyles. Children belonging to families that do not have adequate resources are of greater concern as these are also related with lower levels of education and health literacy and, consequently, poorer eating and lifestyle choices. In order to tackle this issue, action should be taken at both micro and macro levels and in different setting such as home and families, communities and schools. Increasing evidence shows that the most successful interventions are multi-component, adapted to the local context, using the existing local structures of a community, and involving the participants in the planning and implementation stages. Therefore, it is essential to develop programs that encourage the early adoption of healthier lifestyles and create favourable structural and environmental conditions for health. In this context, is important to implement innovative, diverse and comprehensive intervention strategies, such as the empowerment of the citizens, developing personal skills, creating healthy environments and designing health policies.

Community-based programs, carried out at local level, integrated in regional health policies and guided by national and international programs and policies, seem to respond more effectively to decrease the prevalence of childhood obesity. Children and adolescents have been the target group for CEIDSS research, including the support of surveillance and nutritional status evaluation, as for COSI Portugal study, and children’s health promotion programs. These ages are more receptive and willing to be involved in the educational process thus they represent an important target population for the early acquisition of healthy lifestyles.
Given the complexity of childhood obesity, CEIDSS works through a comprehensive and multidisciplinary approach by establishing partnerships, participating in International Networks and creating multidisciplinary teams capable of better understanding and tackle this important public health issue.

A multidisciplinary approach supported by a scientific strong structure has been very important for the promotion of childhood health. It allows the discussion and production of information (both scientific and of common understanding) and helps the development of policies that provide a more successful intervention in Public Health.
Programs focused on the promotion of children’s health, at municipality level, developed by CEIDSS, aim to reduce the prevalence of childhood malnutrition in Portugal through community-based interventions, involving low income families, and through activities that encourage these families for a healthier lifestyle. Its purpose is to engage the Municipality on tackling childhood obesity by following the National Health Plan’s principles, thus supporting political decisions which aim the promotion of health.

Good examples of CEIDSS’s community based programs include POZ acknowledged as “Best Scientific Project in Public Health” (Nutrition Awards) which was implemented during one year (2009/10) in 5 municipalities; the Eat Mediterranean and AMEA projects which were implemented for 2 years (2015 to 2017), the first taking place in the municipalities of Alpiarça and Santarém, and the second in more than 20 municipalities through two interventions: AMEA Teens and AMEA Kids. MUN-SI program, awarded with the 2nd place in the category of municipalities and 1st Honourable Mention in the category of Initiatives of Mobilization (Food and Nutrition Awards), started in 2008 and is still ongoing, having covered other 7 municipalities.
MUN-SI Program

MUN-SI Program is coordinated by CEIDSS and started from a pilot study conducted in five municipalities (Viana do Castelo, Fundão, Oeiras, Seixal and Montijo) in 2008. Data from the first stage of this study - 3173 children; (7.5±0.8 years old) identified 32.1% of overweight and 14.3% of obesity. These results were similar to the data obtained from the first round (2008) of the Childhood Obesity Surveillance Initiative – COSI Portugal. It highlighted the importance of working with and for the community with the support of the municipality, but it also stressed the need for urgent intervention as Portugal presented one of the highest prevalence of overweight and obesity in Europe.

MUN-SI main goal is to slow the progression of the prevalence of overweight and childhood obesity in Portugal through a set of activities in which local environments mobilize the community to the adoption of healthy lifestyles. It also intends to reach the National Health Plan on the obesity prevention, developing healthy local policies throughout decision makers and activities directed to local participants (family, school, environment), mostly on healthy eating habits and physical activity promotion.

The MUN-SI program arises closer to each municipality needs and local policies, and intends to offer a proactive and interactive response to the problem of childhood obesity, seeking its prevention at municipality level based on continuous and sustainable actions developed during 1-4 years’ periods.
MUN-SI is developed through a community based program at municipality level structured in 6 nuclear axes/themes:

**Healthy School**
Within the activities directed to promote a healthy school environment, children are considered as the main “actors”. Behavioral modulation and intervention is performed through age appropriate recreational and educational activities, with the aim of incorporating concepts about healthy lifestyle, especially physical activity, nutrition and balanced diet. Several topics which relate to healthy eating also focus in the promotion of the MEDITERRANEAN DIET.

**Family**
Several family based activities focusing in promoting healthy lifestyles are developed as a sharing and learning process within its environment. Healthy eating, active and recreation activities include: picnics, healthy table at home, local markets/supermarkets visits, food labeling reading and interpretation, discourage of the consumption of foods with low nutritional value, healthy cooking workshops, vegetable urban gardens, and the promotion of physical activity.

**Healthy City**
Along with the municipality program within urban areas; parks, beaches, cycle paths, among others are primer setting in which several initiatives are developed for promotion of healthy lifestyle among the community.

**Training**
Training of Health and Educational Professionals on surveillance, screening, treatment and child nutrition monitoring.

**Research**
Research (R&D) support to MUN-SI program is aligned with National and International (WHO and EU) Health priorities guided by the vision of identifying cost-effective health policies and strategies particularly in the area of childhood obesity at municipality level.

**Communication**
A communication set up program is established with partners in each municipality and includes the propagation in several media channels such as TV, press, radio, social media and websites.
School is considered one of the most important settings for education in health. The approach of health promotion in school environment is to consider school as a whole where all school agents (teachers, children, family, school operating assistants, aides and Chefs) contribute to a healthy and sustainable school environment. Within the activities focused on the promotion of a healthy school environment, children are considered as the main “actors”. Behavioural modulation and intervention at school level is performed through 4 levels of action:

Set of a Coordination Team
A municipality team which includes technical staff and CEIDSS researchers is established and responsible for the implementation of the program locally throughout 1-4 years. The selection and contact of the targeted schools and families for the implementation of the Program is facilitated by the municipality.

Initial Assessment
Nutritionists trained by CEIDSS assess the nutritional status of children (weight and height). The results are then discussed with the families and within the coordination team.

Classroom Implementation
The thematic chosen program is implemented every school year by nutritionists and trained personnel along with teachers. The focus of the theme aims the promotion of a healthy lifestyle, mainly related with the promotion of the MEDITERRANEAN DIET. This program is discussed in detail with the municipalities and all teachers, who are key elements of the process. Age-appropriate, playful-educational activities are implemented with the goal of introducing and incorporating concepts about healthy living, physical activity and nutrition.

Scientific Evaluation
Conducted through a multidisciplinary committee of experts who evaluate and validate all the actions and program’s materials.
“Fruits and Vegetables” was the theme addressed during the school year 2012/2013. In total, 12 preschools and primary schools were included, covering 484 children. The sessions were diverse. Seasonal fruits were promoted through a quiz, healthy snacks were cooked and then tasted, and a story was told to encourage fruit intake. The practice of physical activity was also encouraged by the renowned athlete “Miguel Moreira” who addressed its benefits.

In the school year 2013/2014, “Legumes and Fish” was the theme chosen. In total, 6 public primary schools were enrolled and participated in the study, covering 640 students. Two sessions were developed in each of the participating schools, where activities related to the theme were carried out, tackling the importance of these not so popular food items among children, to be integrated in a healthy diet in a tasteful way. In the end, teachers reported that about 94% of the students changed their behaviours in relation to the foods covered (legumes and fish), as well as about 50% of the teachers reported being more sensitized to this theme.
In the school year 2014-2015 the MUN-SI project developed didactic activities under the theme “My Breakfast”. The program was implemented in 7 schools, involving students from pre-school and primary school, covering around 1630 students. The theme “My Breakfast” consisted in preparing an example of a healthy breakfast along with an educational session and later sharing of the prepared meal with the parents or caregivers. In this way, children were educated about the importance of breakfast and the family was also involved, allowing a more successful impact in the family setting. After a month, it was possible to see that there was an increase in the number of children who eat breakfast and that at least half of the children reported already eating fruit for breakfast.

With the aim of improving children’s health through healthy eating, in 2015/2016, home brought snacks to school was addressed. Nutrition and food education to over 1700 children in how to prepare healthy snacks was done through educative but also practical sessions in classroom to raise awareness among children, teachers and parents regarding the importance of healthy snacks. The activity’s slogan was “Healthy snack is a VENCE snack”, meaning V-varied, E-economic, N-nutritious, C-creative, E-equilibrated. It presented practical, economic and healthy suggestions of snacks as well as it brought awareness to all participants about the negative health consequences of a high fat, sugar and salt diet. After the activity, children received a “Healthy Snacks VENCE” sticker to glue in their lunch boxes in order to remind them how to prepare their own healthy snack/lunch every day.

At the end of the intervention, there was an increase (5%) in the intake of foods such as eggs, nuts, dairy products and mainly fruit and a decrease in the consumption of cakes/pastries/snacks/soft drinks from 10 to 14%, in home brought snacks to school.
Mediterranean Diet
2016/2017 — 2017/2018

The Mediterranean Diet was the theme addressed during two school years (2016 to 2018) remaining the current theme. A total of 1000 children (aged 8-10 years old) were enrolled in MUN-Si Oeiras and over 6000 children from pre-school to secondary school took part in the Eat Mediterranean project.

Mediterranean Diet is characterized by simple, complete, varied and balanced food, with preference for local and seasonal foods, taking into account sustainability and the environment, and translates a lifestyle where physical activity, rest and conviviality also become central to health.

As part of our valuable cultural heritage and its vast scientifically proven health benefits, the Mediterranean Diet is an important issue to be addressed to children, always seeking to involve the school community, whether teachers, staff, other students and parents. From 2016 to 2018, the activities carried out in the school environment aimed to promote the Mediterranean Diet principles as well as the intake of foods that characterize this dietary pattern such as vegetables, fruits, legumes, nuts, fish, water and olive oil. The activities included a "Mediterranean Story", where children actively participated, and a healthy cooking workshop involving the whole school community.

During the Eat Mediterranean project, in Santarém and Alpiarça municipalities, similar activities were developed at the schools’ grounds. This program proved to have a favourable impact on the participant’s nutritional status as well as on the participant’s adherence to the Mediterranean Diet, with a greater intake of fruits and vegetables and a lower intake of foods with high salt, sugar and fat content.

Healthy School
The “Mediterranean Food Wheel” was developed by CEIDSS, adapting the official “Mediterranean Food Wheel” to a floor board-game. This game was implemented in more than 32 primary schools and has reached more than 1100 children, in 2017 and 2018. It is a playful educational activity, where teachers help children to learn about the principles of the Mediterranean Diet kindling curiosity about this thematic and promoting its adherence.

Healthy City

MUN-SI Morning
2012

To promote physical activity in the community CEIDSS developed the initiative “MUN-SI Morning”, at Parque dos Poetas – Oeiras, where several families participated. Children and families were able to spend a fun time learning about healthy eating as well as practicing different sports. There were gymnastics, yoga and dance classes, in which even the Mayor of Oeiras Municipality actively participated.

Healthy Beaches and Gardens
2014-2016

The beaches of Figueira da Foz, Carcavelos and Oeiras were the place of several activities developed during the summer time. These included activities such as “Everyone can be healthy”, a visit to a “stand”, where it was possible to do anthropometric measurements, and get tips about healthy snacks to bring to the beach. The activity entitled “Let’s play and learn” was dedicated to all children who wished to learn more about healthy food while participating in educational games. Finally, for the theme “Healthy Seniors”, physical activity and adequate hydration was promoted among the senior population.

The “OPEN flashmob” was also an initiative for the physical activity promotion where all the community was invited to dance. This activity was not only promoted at the beaches but also in several urban spaces such as gardens, including Jardim Conde Sucena - Águeda and Jardim do Torre de Belém - Lisbon.
Family initiatives that promote healthy lifestyles, included in comprehensive interventions, are able to improve healthy behaviours and skills, inside or outside home.

As first educators, family plays a very important role in the learning and development of children’s health since it is within the family that good habits and healthy lifestyles are instituted. CEIDSS develops projects and initiatives to promote family-oriented healthy lifestyles in the community space (inside and outside the home).

Healthy eating, active and recreational activities, within this context and setting, include: picnics, cooking healthy dishes, local markets/supermarkets visits, food labelling reading and interpretation, discourage the consumption of foods with low nutritional value, healthy cooking workshops, urban gardens, the promotion of physical activities (walking, hiking, “pedibus”, “treasure hunts”, dancing) and the support for creation of urban areas and green zones which promote safe physical activities.

The POZ and AMEA programs (www.ameaprogram.com) are good examples of successful initiatives to address childhood obesity within the family. By understanding the active participation of children (AMEA Kids) or adolescents (AMEA Teens), as drivers and accountable for change within their own families, this comprehensive program was based on a multidisciplinary, multi-sectorial strategy targeting more disadvantaged groups.

Based on the rationale that local governments exert an important and decisive role in counteracting malnutrition in children and adolescents, the program “AMEA” sought to engage the community and all stakeholders at local level on helping children and adolescents through a set of individual and community activities at different levels. AMEA program individual level intervention included home visits to each participant, by trained nutritionists who guided the family to healthier lifestyles and habits. This individual intervention included nutritional status evaluation, promotion of physical activity and food and nutritional counselling. Regarding the latter, the nutritionists worked with each participant the number and the quality of their daily meals, especially the morning and afternoon snacks, motivating children and adolescents to make their own food choices, encouraging a higher consumption of fruit and vegetables and discouraging foods with a high content of sugar, salt and fat. In each visit, participants received recommendations and agreed in easy and attainable goals. The nutritionist explained the meaning of these changes in their lives and health and how they should be made gradually. The nutritionists also joined the participants and corresponding families in visits to the supermarkets, in order to help them make better food choices and improve the family’s health literacy, namely concerning food labelling and advertising. Other activities, included the children’s and adolescents’ participation in healthy cooking workshops with local Chefs,” Zumba Mega Class”, Peddypapers, hiking and Facebook challenge among others.

The positive impact of AMEA program, which is demonstrated by an overall improvement of the participants’ nutritional status but also by an increase of the health literacy and behavioural change, represents a sustainable community health promotion initiative, as it has promoted an unceasing motivation for effective and gradual changes towards healthy lifestyles in children, adolescents and their families.
Research and Development is one of the main structural and support part of CEIDSS activities. It is present in every phase of the Projects development, with the help of a scientific team of diverse experts and culminates in several types of publications from original papers to websites material.

Some Scientific Publications include:
To more updated publications go to: http://www.ceidss.com/publicacoes/


Livro de Receitas: de Adolescentes para toda a a família - Projeto AMEA Teens. Ceidss 2016


Rito A; Wijnhoven T; Rutter H; Carvalho MA; Paixão E; Ramos C; Claudio D; Sanches R; Cerqueira Z; Carvalho R; Faria C; Feliciano E and J. Breda.Prevalence of obesity among Portuguese children (6–8 years old) using three definition criteria: COSI Portugal, 2008. Pediatric Obesity, 7(6): 413-422. 2012. DOI: 10.1111/j.2047-6310.2012.00068.


"Nutrition Manual for children"

Validated by the Ministry of Education and Science, the “Nutrition Manual for children” is a practical guidebook addressing healthy eating and physical activity promotion, towards primary school children, perfectly adapted to the school environment. It includes educational and playful activities, adapted to the programmatic contents, with the purpose of supporting the teacher and/or educator in the implementation of behaviours that promote a healthy lifestyle in children from 6 to 10 years.
MUN-SI Program addresses children’s health through a strategy to tackle malnutrition, particularly childhood obesity to encourage a healthier generation with higher quality of life. Family and school are the main educational institutions that play a key role in building healthy habits in children. The health development of these children will contribute to a healthier and more productive adult generation in a society with less social inequalities and in the long run, to contribute to a lower economic burden in Health, in general.

Partnerships with Institutions which have this vision and social responsibility will strengthen the health intervention through well-structured strategies within the community, being a mechanism of good practice and cost-benefit in health.

TO APPLY TO THE MUN-SI PROGRAM PLEASE CONTACT THE FOLLOWING E-MAILS:

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Institutional Partners:
The institutional partners are very important for their contribution, experience, social responsibility, scientific and/or professional support. Some of its contributions can be as follows:

1. Discuss and certify the program implementation and evaluation of the methodologies that support the scientific community;
2. Collaborate in the implementation of the activities;
3. Collaborate with a core of international experts in order to share knowledge and experiences aimed to optimising the program;
4. Establish dialogue between scientific experts, decision-makers and political representatives, public and private institutions with civil society;
5. Participate in general and scientific events to publicise the program;
6. Collaborate in the dissemination of the scientific culture program, being able to be involved in the entire process of program implementation and evaluation, contributing to identify specific points crucial to the effectiveness and sustainability of the program.

Municipality as a Partner
As a partner, the municipality is responsible to implement the programme at local level with the National Team during a period of 1-4 years, designing all steps and phases of each program. The Municipal Team, appointed by the Mayor, includes the Local Coordinator and its Local Team and works with CEIDSS and agrees on the following:

• The Program will be established in accordance to the Municipality’s local priorities.
• The Municipality will identify the areas of MUN-SI intervention.
• The Coordination will submit a proposal of activities in each intervention area.
• The activities will be carried out by Nutritionists duly trained by and for the Program.

Want to be a MUN-SI Partner?