«Millions are allocated to the treatment of cardiovascular disease, but not enough to educate and promote health. Both aspects are essential to preventing an illness that is already the world's leading cause of death»

DR. VALENTÍN FUSTER

2023 Annual Report

Foundation for Science, Health and Education

"la Caixa" Foundation

INDEX

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Dr. Valentín Fuster
President SHE Foundation

LETTER FROM THE PRESIDENT

Primordial prevention in the face of the epidemic of childhood obesity and subsequent cardiovascular disease

As we have long reported, childhood obesity has become an epidemic and is being increasingly focussed on international organisations and researchers in Global Health.

This has been helped by the recent publication in The Lancet of a comprehensive study led by Professor Majid Ezzati of Imperial College London in collaboration with over 1,500 researchers and the World Health Organisation (WHO). [1]

The study, based on data from more than 220 million individuals from nearly 200 countries taken from 1990 to 2022, found that rates of obesity – along with addictions to alcohol, smoking and other narcotics as the leading risk factors for cardiovascular disease – had increased in countries across all regions, cultures and income levels. The prevalence of obesity more than doubled for women, from 8.8% to 18.5%, and nearly tripled for men, from 4.8% to 14%.

This is something we have known for a long time and had partial data on. Unfortunately, this is not a new trend. For example, in the US, 43.8% of women and 41.6% of men were classified as obese in 2022, with the male prevalence being the tenth highest in the world.

However, what I find really worrying, and what this paper highlights, is the trend of rising obesity rates among children and adolescents, underlining the urgent need for public-private policies, especially among the youngest demographic group.

The overall prevalence of obesity quadrupled in girls from 1990 to 2022, from 1.7% to 6.9%, and almost quintupled – from 2.1% to 9.3% – among boys. The proportion of underweight girls fell from 10.3% in 1990 to 8.2% in 2022, and for boys it fell from 16.7% to 10.8%. The total number of children and adolescents affected by obesity in 2022

was almost 160 million (65 million girls and 94 million boys), compared to 31 million in 1990. While 77 million girls and 108 million boys were underweight in 2022, down from 81 million for girls and 138 million for boys in 1990.

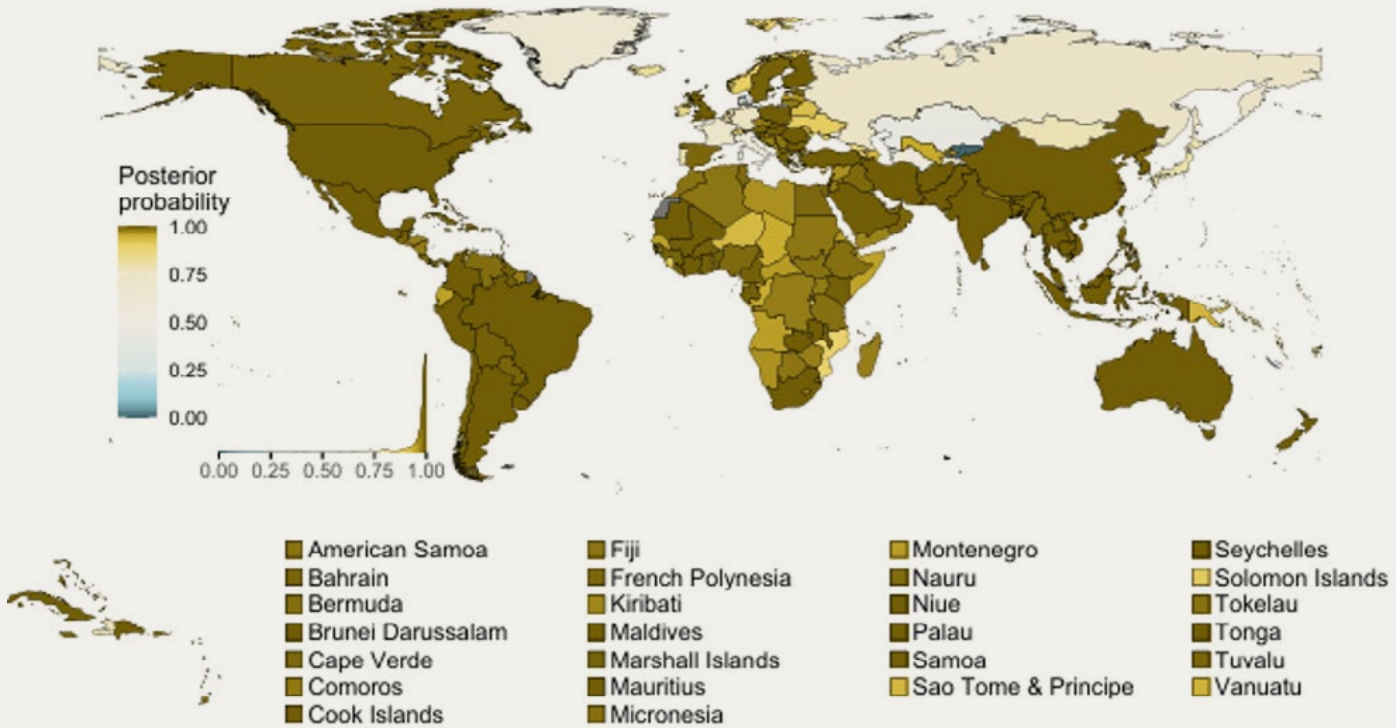
> **It is very worrying that something that was already so evident in 1990 amongst adults in much of the world is now being repeated in school-age children and adolescents without anything being done to prevent it.**

More will be obese for much of their lives, greatly increasing the risks of cardiovascular disease. Most worrying of all is the predicted development shown in the map below.

I have been convinced that a change in the population's lifestyle is the only way to avoid the spread of cardiovascular diseases, which are a real epidemic and the main cause of death in the world.

Faced with this evidence and following my consecutive presidencies of the American Heart Association (AHA) and the World Heart Federation (WHF) in 2009, I decided to establish the SHE Foundation. A non-profit foundation that, based on basic and clinical research (Science), aims to promote healthy habits (Health) through communication and education (Education) in the population. To this end, the SHE Foundation dedicates its efforts to creating a framework for what education means and entails in the

Posterior probability of an increase from 1990 to 2022



Dr. Valentín Fuster in his office at Mount Sinai Fuster Heart Hospital, New York.

acquisition of healthy habits from childhood onwards. The aim is to promote a world where children, young people and adults all have the capacity to act positively towards their health.

Because if society reduces risks, the impact of cardiovascular diseases will be also reduced. Cardiovascular diseases are the leading cause of death in the world.

> **Diagnosing the problem is the first step towards solving it. I welcome international organisations' increasing focus on the health of the youngest people.**

Thus in the USA, the National Heart, Lung and Blood Institute (NHLBI) has identified human health as one of the top strategic priorities for the future, shifting the focus towards the importance of prevention rather than treatment.

In 2018, we published a reflection in the Journal of American College of Cardiology (JACC) on cardiovascular disease and primordial prevention (the first step in prevention applied to the healthy population, encouraging this population group to incorporate healthy habits and customs by intervening even before risk factors are present).

We argued – as is now becoming clear – that it could provide a pathway to success in preventing the onset of disease. Otherwise, most people would go on to develop cardiovas-

cular disease, first subclinically, which would then manifest itself clinically during their lifetime. We wondered when it would best time to educate and intervene and concluded that the implementation of unhealthy behaviours can begin in early childhood, introducing the first stage of developing risks for cardiovascular disease (CVD). For example, unhealthy diets begin to influence CVD markers at an early age, and conditions such as obesity, dyslipidaemia, high blood pressure and glucose intolerance can be acquired as early as between three and eight years of age, persisting into adulthood [2].

It is precisely for all these reasons that the SHE Foundation has promoted the Comprehensive Health Research Program (PSI! – Programa de investigación Salud Integral), whose hypothesis "the acquisition of healthy habits from childhood reduces the risks of cardiovascular disease and improves quality of life" is being tested simultaneously in Bogotá, New York (Harlem, Bronx), Madrid, and Mataró (Barcelona). And because children and their families must be part of proactive health societies, we are also studying the role of the community in promoting a healthy and sustainable environment. This research is taking place in Cardona and Sallent (Barcelona) and is called the Healthy Communities Program.

Throughout all my research, it has become obvious that, in order to fight cardiovascular diseases and really achieve a long-term widespread change, we must carry out a kind of revolution, a paradigm shift: to study health and not just disease.

I ask you to join in with it – something I believe in.

Valentin Fuster, MD, PhD
SHE Foundation –Science, Health and Education– President

- **I believe all humans are at risk of developing heart disease.**
- **I believe our current society does not see itself as vulnerable to cardiovascular disease.**
- **I believe that, despite advances and billions of dollars invested in healthcare, cardiovascular disease continues to escalate due to incomplete education and ingrained poor health habits.**
- **I believe that scientific and medical research should inspire and inform educational tools to reduce heart disease worldwide.**
- **I believe that changing lifestyle habits is the only way to prevent the spread of cardiovascular disease.**
- **I believe our greatest opportunity to change the population's habits and stop this trend begins with children and their families.**
- **I believe reducing heart disease is achievable through early health education among children ages 3 to 5, which will lead to the development of healthy habits and an improved of quality of life.**
- **I believe the promotion of global health must be addressed in a positive way, through early and recurrent health education, the introduction of new educational tools, and improving society's awareness regarding heart disease development.**

[1] Prof Majid Ezzati, et Al. Worldwide trends in underweight and obesity from 1990 to 2022: a pooled analysis of 3663 population representative studies with 222 million children, adolescents, and adults. *Lancet* 2024: 403: 1027–50. February 29, 2024 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)02750-2/fulltext

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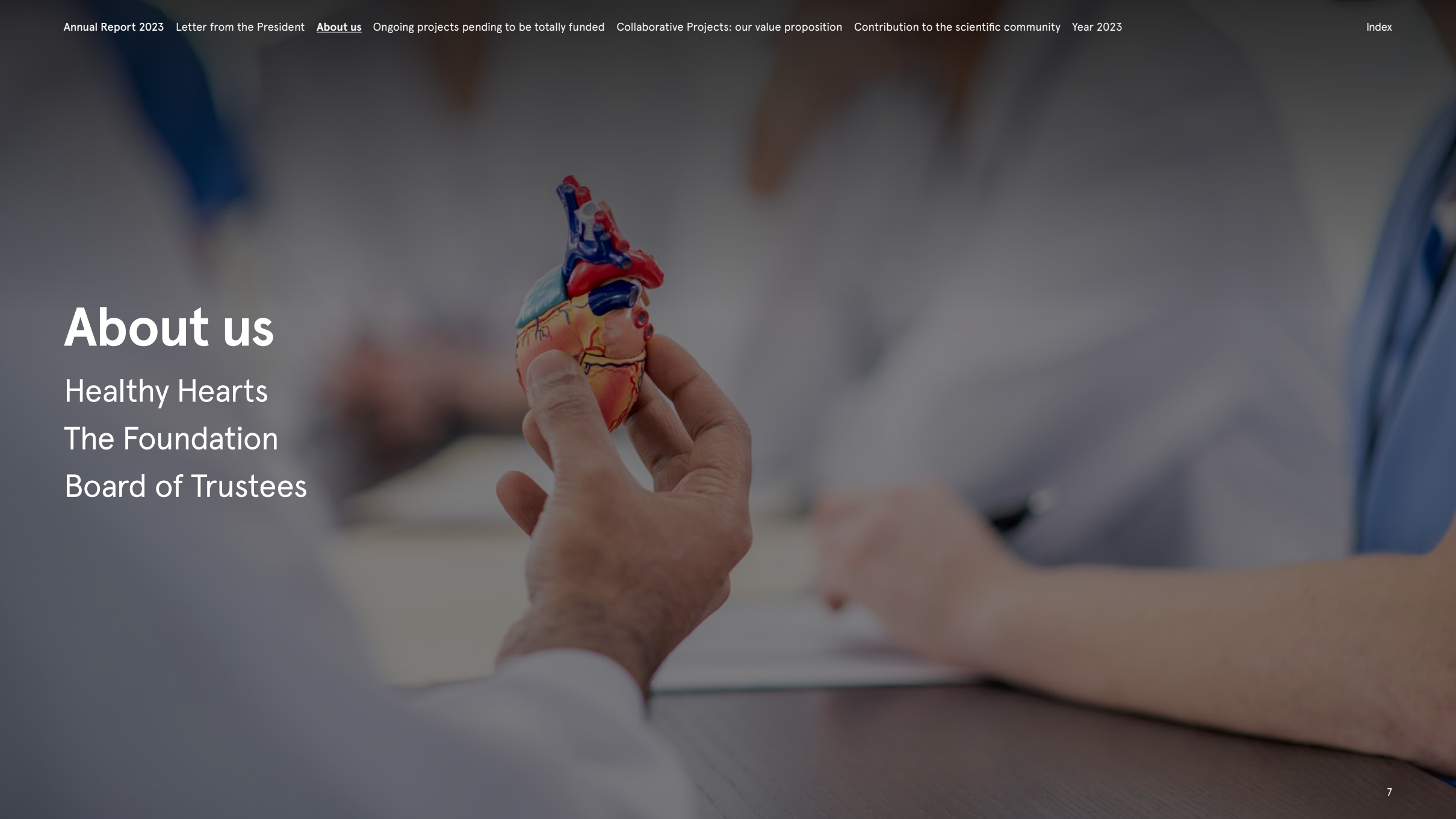


About us

Healthy Hearts

The Foundation

Board of Trustees

HEALTHY HEARTS

Health promotion. A declaration of intentions.

After a lifetime devoted to medicine and research, Dr. Valentín Fuster de Carulla is convinced that a change in the population's lifestyle is the only way to avoid the spread of cardiovascular diseases, which are a real epidemic and the main cause of death in the world.

> **Factors such as obesity, alcohol addictions, smoking and other drugs have become the main risk factors for cardiovascular disease and year after year cause a considerable increase in the number of people who suffer from it.**

Experts agree that the only way to avoid the spread of these diseases is a change in the lifestyle of the general public and awareness-raising of the need to promote healthy habits.

> **The challenge is how to move on from treating the disease towards preventive health care.**

Cardiovascular diseases are the leading cause of death in the world.

The main cardiovascular risk factor for both adults and children is obesity and its associated factors, such as diabetes and high blood pressure, which stem from an inadequate diet and low levels of physical activity.

Addictions to alcohol, smoking and other drugs are also important risk factors for cardiovascular disease. The proliferation of these unsatisfactory habits among the general population increases year after year the number of cardiovascular diseases.

Longer life expectancy, due to more advanced medicine and new technologies, is causing an unsustainable social and economic burden on our society.

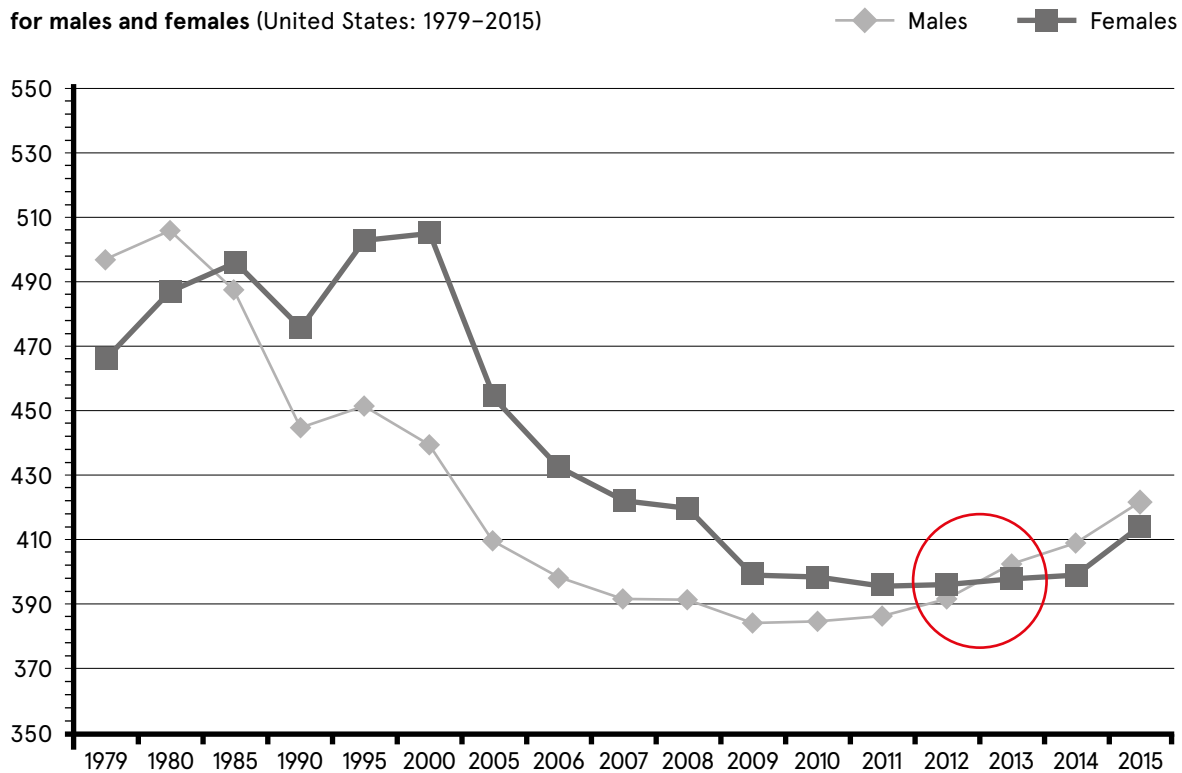
HEALTHY HEARTS

«What would happen if society were able to modify its current routines and acquire healthy habits?»

DR. VALENTÍN FUSTER

Cardiovascular diseases (CVD), consisting of ischemic heart disease, stroke, heart failure, peripheral arterial disease, and a number of other cardiac and vascular conditions, constitute the leading cause of global mortality and are a major contributor to reduced quality of life . In 2017, CVD caused an estimated 17.8 million deaths worldwide, corresponding to 330 million years of life lost and another 35.6 million years lived with disability.

Cardiovascular disease (CVD) mortality trends for males and females (United States: 1979–2015)



Cardiovascular disease (CVD) mortality trends for males and females (United States: 1979–2015).
Source: National Center for Health Statistics and National Heart, Lung, and Blood Institute.
Benjamin E.J -et-al. 2018-heart-disease-and-stroke-statistics-2018-update-a-report-from-the-american-heart-association Circulation. 2018;137:e67–e492

THE FOUNDATION

«The prevention of disease and the promotion of health are the key to reducing the prevalence of cardiovascular disease in the world»

DR. VALENTÍN FUSTER

Dr. Fuster promoted the creation of SHE in 2009, a non-profit foundation that, focused on basic and clinical research (Science), is aimed at promoting healthy habits (Health) through communication and Education of the population. In 2017, the "la Caixa" Foundation joined the board of trustees of the SHE Foundation to give continuity to its research work.

With this purpose, the SHE Foundation devotes its efforts to creating a frame of reference for what an education in health, stressing the acquisition of healthy habits from childhood, means and involves, to promote a world in which children, young people and adults have the ability to act positively regarding their health.

> **Because if society reduces risks, the impact of cardiovascular diseases will be also reduced.**

The SHE Foundation is dedicated to validating scientific hypotheses and generating knowledge for publication in leading journals to promote health, especially for children and young people. To achieve this goal, it develops various training programs.

SCIENCE

We aim to be a scientific reference due to our rigorous methods in the assessment of any health project or program that is promoted by the foundation.

HEALTH

We promote health as a priority, influencing the risk factors that reduce cardiovascular disease and improve the quality of life.

EDUCATION

We want to create a frame of reference for what having an education in health, stressing the acquisition of healthy habits for life, means and involves.

BOARD OF TRUSTEES

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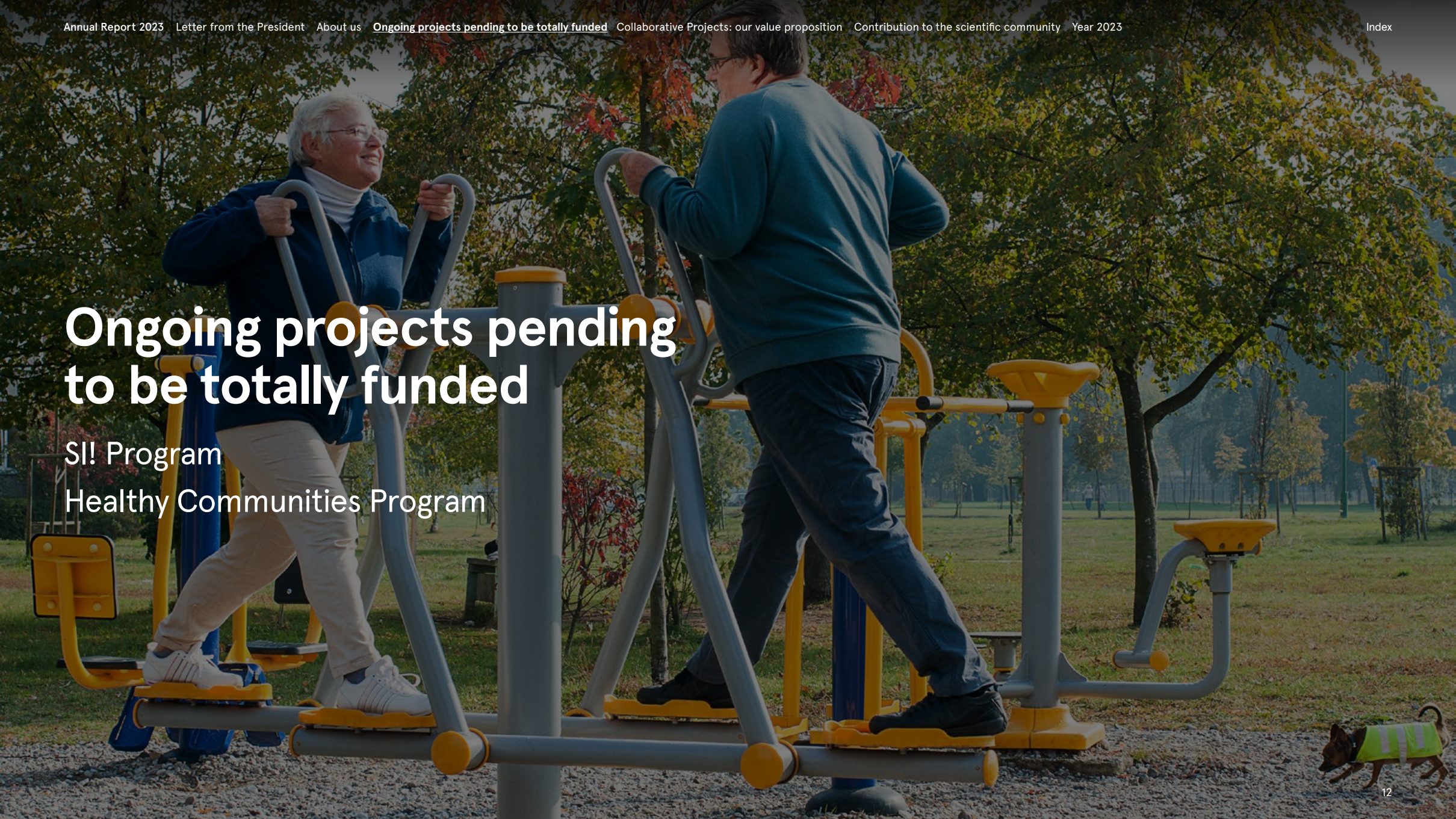
"la Caixa" Foundation joined the SHE Foundation board of trustees in 2017 to give continuity to its research work.

"la Caixa" Foundation



Ongoing projects pending to be totally funded

SI! Program

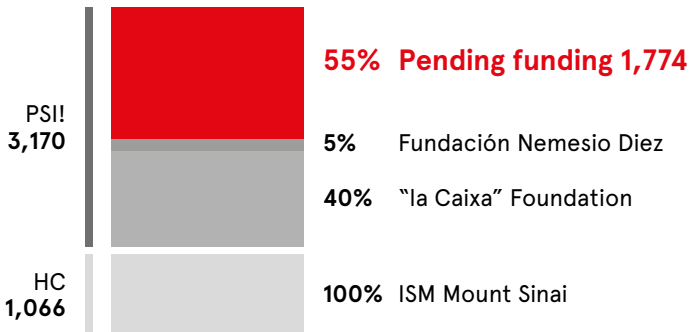
Healthy Communities Program

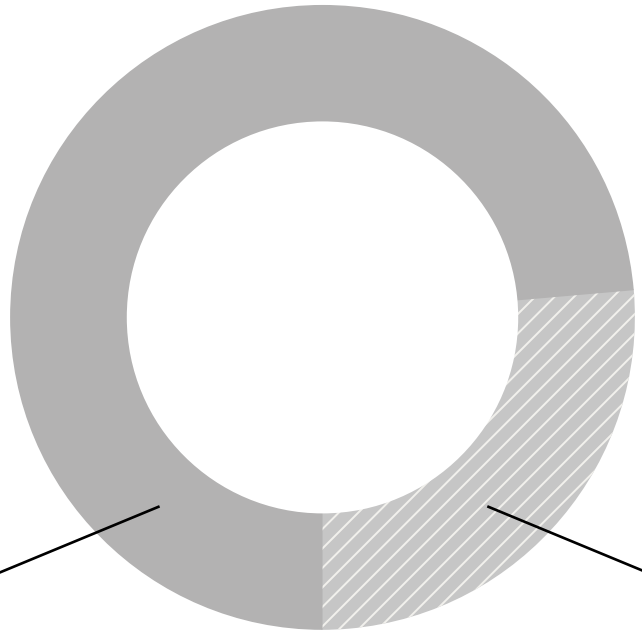
PERIOD 2024 - 2031

Funding needs and uses

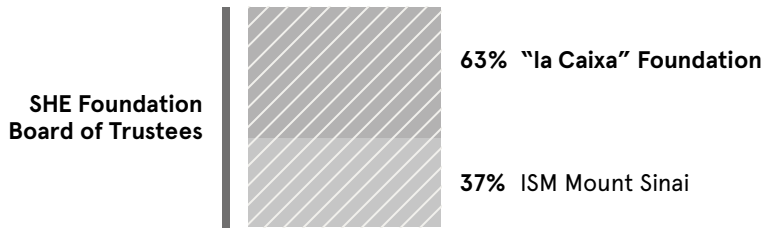
(Thousands of €)

RESEARCH PROJECTS





OVERHEADS



4.236

SI! Program	**3,170**
Healthy Communities	**1,066**

1,510

Overheads	**1,510**

100% of the contributions to be raised from grants or philanthropy will be fully allocated to direct costs in the different research programs.

The SHE Foundation Board of Trustees through "la Caixa" Foundation -63%- and the Icahn School of Medicine at Mount Sinai (ISMMS) -37%- committed to support the overhead of the foundation until ending the research currently underway.

SI! PROGRAM

Hypothesis The acquisition of healthy habits from childhood reduces the risk of cardiovascular diseases and improves the quality of life in adulthood.

Foundation for Science, Health and Education SI! Salud Integral | "la Caixa" Foundation

The epidemiological data indicate that cardiovascular risk factors are present from early childhood, and that the unhealthy habits acquired in childhood persist into adult life.

The main **cardiovascular risk factor**, in both adults and children, is **obesity** and its associated conditions (diabetes and arterial hypertension), resulting from poor eating habits and a low level of physical activity.

In addition, other cardiovascular risk factors such as alcohol abuse, smoking and the use of other drugs are also beginning to manifest in the Spanish (pre)-adolescent population. Public health research has shown that health-promoting initiatives should start in childhood in order to secure lasting and effective behavioral changes.

The **SI! Program** consists of an intervention in educational centres to promote cardiovascular health from the pre-school stage. Its aim is to demonstrate that the acquisition of healthy habits from childhood reduces the risks of cardiovascular disease and improves quality of life in adulthood.

The program operates at four levels: school, environment, teachers, families and pupils.

Levels of intervention

The SI! Program consists of four basic, interrelated components:

- **Promoting healthy eating**
- **Promoting active lifestyle**
- **Knowledge of the body and the heart**
- **Learn how to manage emotions**

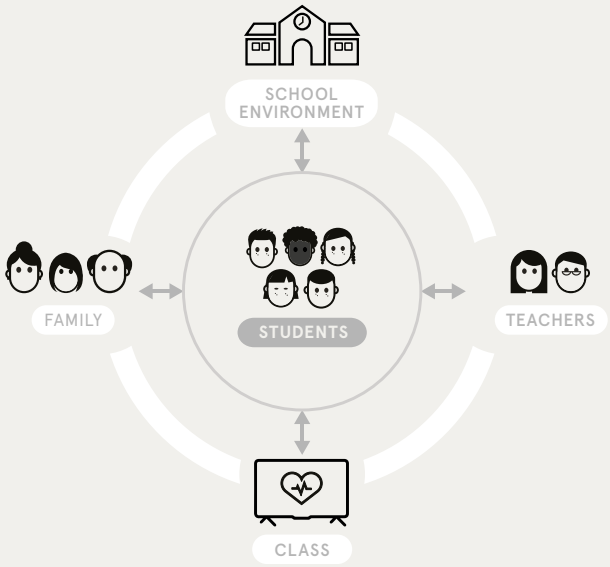


Figure 1. Components and Levels of Intervention

SI! PROGRAM

Scientific Studies of the SI! Program in Infant, Primary and Secondary Stage.

The intervention at the school environment level is carried out through regular communications to the management team and the school coordinator for subsequent distribution amongst the teaching staff.

The action at the teacher level aims, on the one hand, to make the teaching staff aware of the reality of cardiovascular disease and the importance of their contribution as educators in the acquisition of healthy habits in the school population and, on the other hand, to train teachers in healthy habits and in the methodology to be followed to teach the program in the classroom and provide them with materials and tools to work with students. This 30-hour training course for teachers in charge of teaching the contents is accredited by the different Autonomous Administrations.

The contents of the program were checked by educational psychologists and teachers at the centres, as well as being in line with the school curriculum. Special emphasis is placed on their involvement in order to achieve changes in routines and habits in the family environment.

The SHE Foundation has carried out several scientific studies in different Educational Stages to demonstrate the hypothesis of the **SI! Program**.

SI! PROGRAM

Infant Education Stage

This was carried out from 2011 to 2014 in 24 state schools in Madrid through a randomized, controlled study. Half of the schools that participated in the study were randomly assigned to the intervention group, whose students carried out a minimum of 30 hours of activities per academic year focusing on the program components on emotion management, additional weekend activities with family members, annual health fairs, etc. Students in the remaining (control) schools continued with their usual curriculum.

A dozen researchers from the National Centre for Cardiovascular Research and Mount Sinai Hospital evaluated the effectiveness of the **SI! Program** in 2,062 children aged 3-5 years. The results of the study showed that the implementation of the program led to a significant increase in children's knowledge, attitudes and healthy habits, as well as an improvement in markers of adiposity.

In conclusion, the SI! Program contributes new and valuable information on the benefits of an early intervention targeted to pre-school children, referred to the

Intervention in Preschool, Elementary and Secondary Education

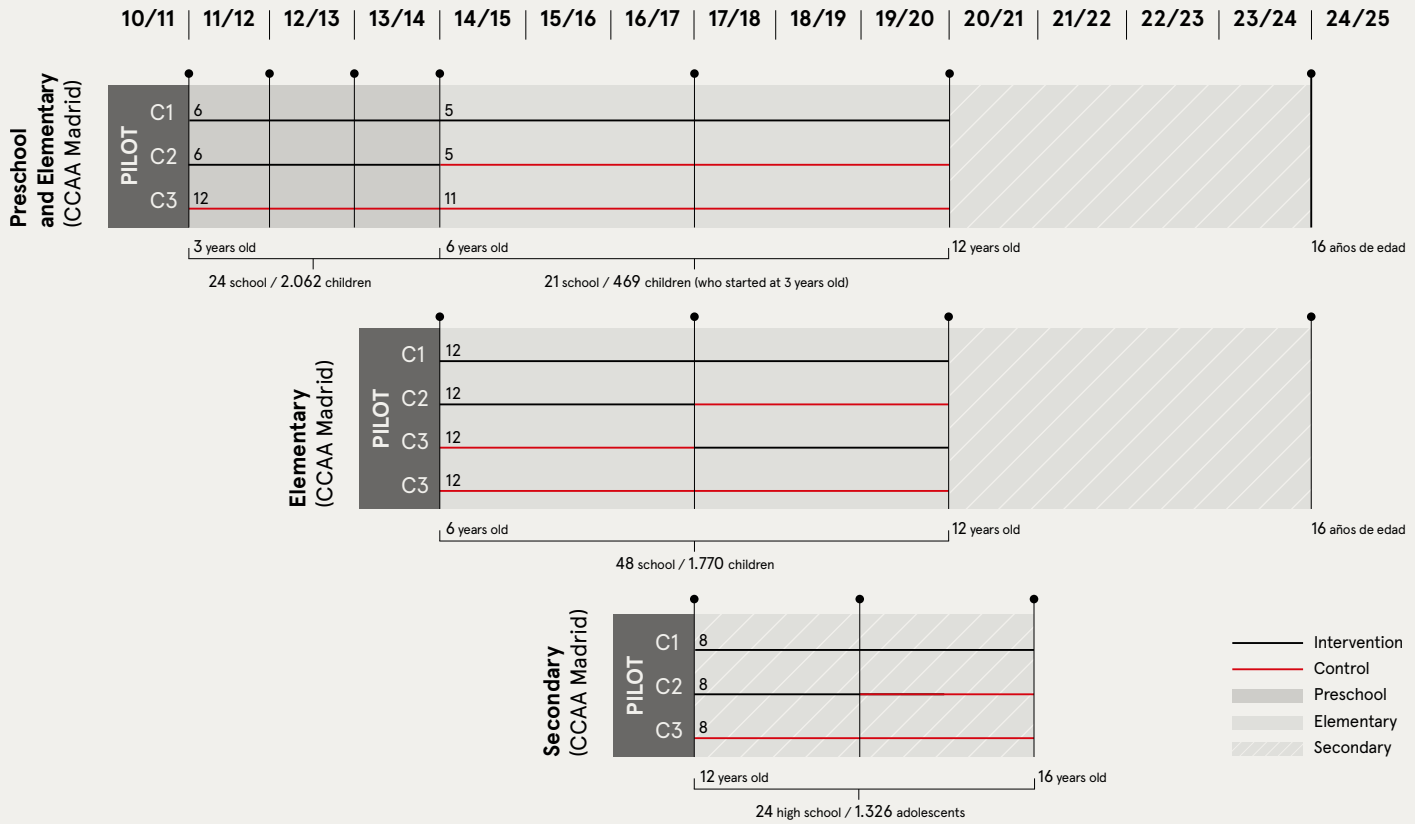


Figure 2.

promotion of healthy life habits. According to Dr. Fuster, *"the basis of the program is the fact that it is between 3-6 years of age when we develop our future behavior as adults. Cardiovascular disease has a lot to do with behavior, and so here we have our window of opportunity"*.

This study moreover uses an innovating design since it expands the role of physicians to also encompass the teaching community. On the other hand, it involves a protocol with structured evaluation, something that is usually lacking in community public health interventions.

The program moreover coordinates families and educators through the pupils, which may serve to guarantee the sustainability of the intervention. Currently, the SI! Program has been extended to more than 130 schools in the Community of Madrid, Catalonia and Galicia.

MADRID/CATALONIA/GALICIA

+130 Schools

SI! PROGRAMA

Primary Education Stage

In Madrid, a randomized study was carried out from 2014 to 2020 in the primary education stage (children aged 6 to 11 years). Forty-eight public schools from 16 municipalities in the south of Madrid participated, with a total of 1,770 children, their families and teachers. A randomization was carried out in 4 groups of schools with different exposure to the **SI! Program**. The aim of this design was to evaluate the effect of the SI! Program at different times and with different intensities. Additionally, the children participating in the randomized study of the SI! Program were followed up. In this way, it will be possible to evaluate the effect of the SI! Program in the long term and with different intensity of exposure to the intervention.

Although the final study measurements were taken during the lockdown caused by the COVID-19 pandemic, the results show a beneficial effect of the SI! Program on indicators of adiposity and body weight, especially for those benefitting from the implementation of the program in the early years of the primary school.

The results obtained from all SI! studies have shown that the effect of the intervention on children's health is likely

Specialized personnel performing measurements

to be more sustainable if it is started as early as possible and includes reinterventions to reinforce key messages to families until children become more independent. Through a new randomised study starting in the 2023-24 school year in Madrid, a primary school version of the SI! Program will be implemented using all the experience gained over the last ten years, which has led to the design of a reintervention strategy in the classroom and a reinforcement of actions at school and family level.

SI! PROGRAM

Secondary Education Stage

SI! Program has been applied in Secondary Education through a randomized design from 2017 to 2021. The project, awarded by the Marató of TV3 in collaboration with the University of Barcelona, the National Center for Cardiovascular Research and SHE-la Caixa Foundation, has included 1,326 adolescents aged 12 to 16 years from 24 public high schools in the north of Madrid, Barcelona and Baix Llobregat. Most early adolescents enrolled in the SI! Program for Secondary School trial had a poor or intermediate cardiovascular health at baseline, with just 11% of them demonstrating ideal cardiovascular health [16]. The lowest scoring individual component was dietary habits, with only 0.6% of adolescents meeting ideal recommendations.

The SI! Program was implemented in at least the first two years of secondary school. Although the COVID-19 pandemic did not allow the full potential of the intervention to be evaluated, the results showed that spreading the **SI! Program** content over four years benefited the cardiovascular health of adolescents to a greater extent than when spread across the first two years of secondary school. These results confirm that the effect of school-based interventions promoting health are influenced by factors such as the duration and magnitude of the content delivered, and that there is still a long way to go in implementation science to help us identify the most effective strategy to curb the epidemic of cardiovascular disease by focusing on younger generations.

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HEALTHY COMMUNITIES PROGRAM

Hypothesis The local implementation of educational interventions to promote health at community level improves the overall cardiovascular health of its population

Foundation for Science, Health and Education SHE HC Healthy Communities | "la Caixa" Foundation

The current worldwide epidemic of cardiovascular diseases is the outcome of the consumerist society we live in. The major increase in the prevalence of these diseases must be addressed by means of multi-sector health promotion and primary prevention strategies that encourage a healthy lifestyle and reduce cardiovascular risk factors, morbidity and mortality.

Although mortality by cardiovascular diseases has decreased in the developed countries, also confirmed in Spain, the combination of factors such as the population's greater life expectancy, increased patient survival after a cardiovascular event, or city development and its derived effects (such as a sedentary lifestyle, obesity, changing eating habits and smoking) keep the prevalence of these diseases high. In view of the situation, we must focus our efforts not only on the treatment of cardiovascular disease, but also on primary prevention by means of multi-sector strategies to promote health and healthy lifestyles. Thus, the experts hold that community intervention programs promoting integrated health may have a significant impact on cardiovascular health.

The **Healthy Communities Program**, implemented in collaboration with the City Council of Cardona, aims to promote the development of healthy lifestyles throughout all stages of life and to contribute to promoting quality of life, correcting health habits and self-management of the main risk factors for cardiovascular diseases, such as overweight, obesity, physical inactivity, blood pressure and smoking.

Consequently, the aim is to turn Cardona (Barcelona, Spain) into a healthy city, that means, a city that prioritizes the health of its inhabitants in all its actions, including the creation of physical (healthy urbanism) and social environments (environment) that promote health. The idea is to be able to create a replicable model for the development of healthy municipalities. During the pilot phase of the project community activities were organized, involving the residents of Cardona according to their capacities, conferences about health were organized and motivational workshops were held by "health promoters", trained specifically for the program, to promote healthy lifestyles.

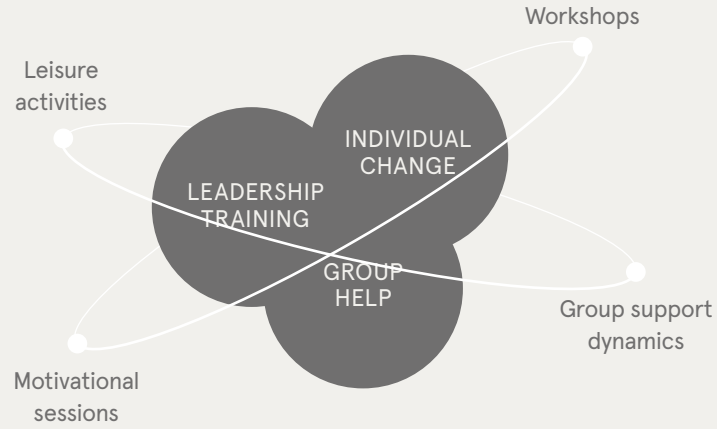
Moreover, Cardona's program included an ambitious urban development plan designed to provide an atmosphere that promotes physical activity among the population. In this pilot study approximately 10% of the city population was longitudinally assessed in years 2014 (beginning of the pilot study), 2016 (impact of pilot health promotion activities) and 2018 (sustainability, end of the pilot study). Preliminary results were promising and showed in the first 18-month period (intervention period) a trend toward improvement of their health scores, mainly driven by improvements in the physical activity and dietary components. These findings justified the development of the next stage of the project in which the impact of the creation of a Healthy City will be appropriately tested through a quasi-experimental study design and relevant outcomes, so the model could be accepted and replicated elsewhere: **Healthy Communities 2030.**

By promoting a more active lifestyle, the Healthy Communities Program (HC-2030), launched in fall 2021, should encourage people to make healthier decisions about how they move, what they eat and how they use the environment around them and also provide opportunities to improve mental health and happiness. We hypothesize that a healthy city will impact positively to their inhabitants by improving cardiovascular health and physical activity indices, mental health and wellbeing.

To this end, a community-level intervention study was initiated in 2021 with 1813 12-year-old participants (910 in the intervention municipality of Cardona and 903 in the control municipality of Sallent) over a period of five years.

> **The Healthy Communities Program is a multidisciplinary health-promotion initiative. The project will result in a toolkit for a community-driven health promotion intervention that could be replicated in cities and towns both nationally and internationally.**

The primary endpoint will be the between group (intervened town vs control town) difference for the change in the Fuster-BEWAT score which consists of a 0-15 scale for behaviors/health factors related to blood pressure, exercise, weight, alimentation (diet), and tobacco use (smoking).




Individual and collective cardiovascular health


Active lifestyle


Healthy food habits


Emotional well-being


Protective factors against tobacco and alcohol

The **Healthy Communities Program** is a multidisciplinary health-promotion initiative. The project will result in a toolkit for a community-driven health promotion intervention that could be replicated in cities and towns both nationally and internationally. The core of the intervention will be based on the previous health promotion programs developed and evaluated by the Science, Health and Education (SHE) Foundation: the **SI! Program** for children, and the **Fifty-Fifty Program** for adults.

The effect of these interventions was proven through randomized trials and the results were published in high-impact journals (*Journal of the American College of Cardiology, American Heart Journal, American Journal of Medicine, etc.*).

During the intervention in the municipality of Cardona, SI! Programme activities were carried out in schools and institutes and Fifty-Fifty Programme workshops were carried out for adults. The latter have been adapted to the needs of the participants (by making them accessible online and in person) with summary workshops open to the public before starting the mutual help group phase. During this last phase, follow-up measurements have been carried out, with a 75% response from participants. In the spring of 2024, the final phase of the study began, during which participants continued to meet in groups to discuss related issues (nutrition, stress, smoking, etc.). In addition, Cardona's local medical centre has begun to include attendance at these self-help groups among its routine recommendations, thus becoming actively and directly involved in the HC2030 community health project.

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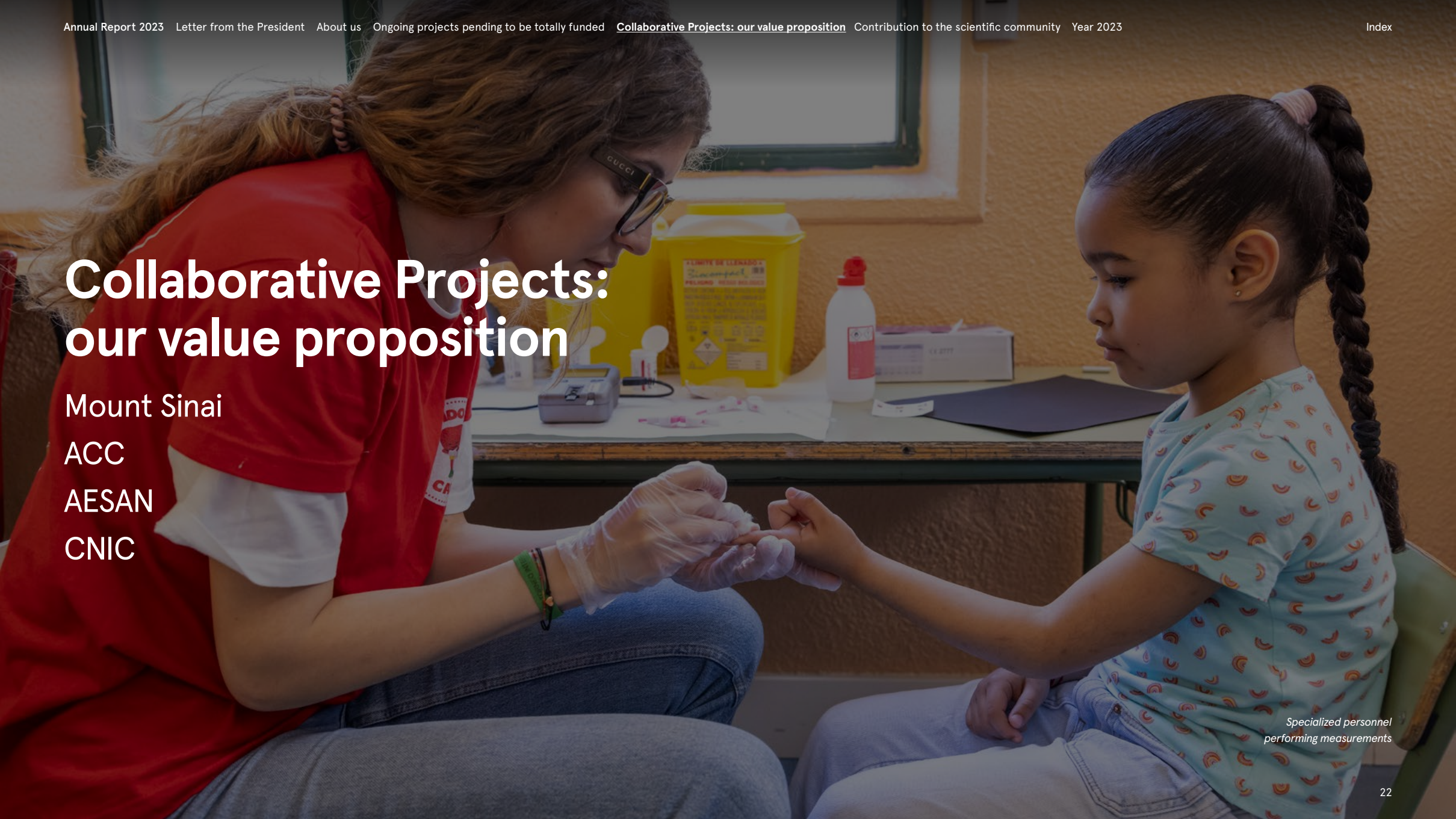
Collaborative Projects: our value proposition

Mount Sinai

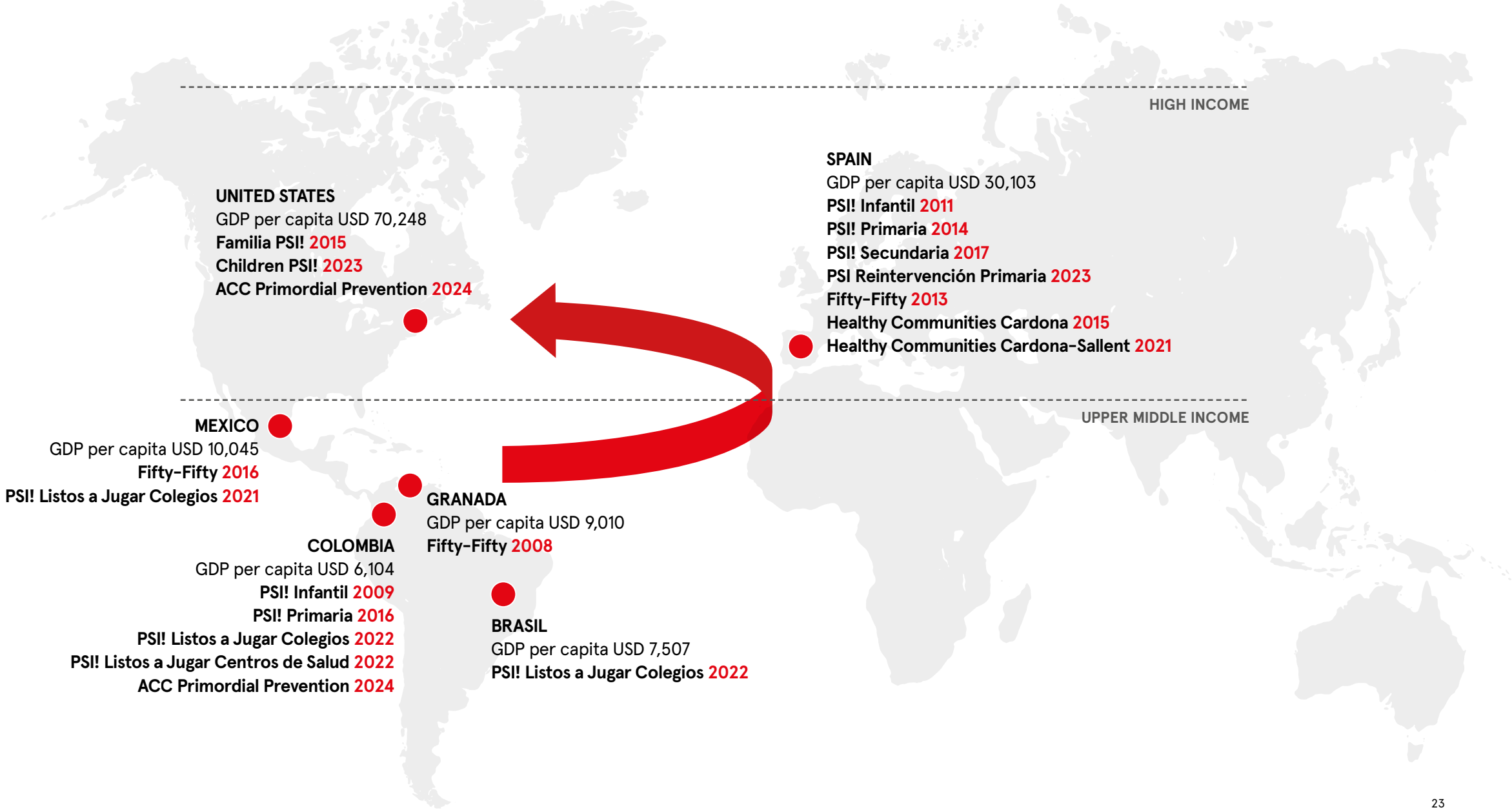
ACC

AESAN

CNIC



Specialized personnel performing measurements


HIGH INCOME
UNITED STATES
GDP per capita USD 70,248
Familia PSI! 2015
Children PSI! 2023
ACC Primordial Prevention 2024
SPAIN
GDP per capita USD 30,103
PSI! Infantil 2011
PSI! Primaria 2014
PSI! Secundaria 2017
PSI Reintervención Primaria 2023
Fifty-Fifty 2013
Healthy Communities Cardona 2015
Healthy Communities Cardona-Sallent 2021
UPPER MIDDLE INCOME
MEXICO
GDP per capita USD 10,045
Fifty-Fifty 2016
PSI! Listos a Jugar Colegios 2021
GRANADA
GDP per capita USD 9,010
Fifty-Fifty 2008
COLOMBIA
GDP per capita USD 6,104
PSI! Infantil 2009
PSI! Primaria 2016
PSI! Listos a Jugar Colegios 2022
PSI! Listos a Jugar Centros de Salud 2022
ACC Primordial Prevention 2024
BRASIL
GDP per capita USD 7,507
PSI! Listos a Jugar Colegios 2022

MOUNT SINAI | «HEALTHY HABITS FOR LIFE» PROGRAM

Colombia, Bogotá.

In 2009, Dr. Fuster designed a community intervention study in collaboration with "Sesame Street" and "Plaza Sesamo".

The aim of the program, targeted to children between 3-5 years of age, their parents and teachers, was to promote the development of healthy habits that persist into adult life, through leisure-educational activities focusing on nutrition, a healthy heart and the importance of physical exercise.

The study carried out in Bogotá, Colombia, included 1,216 children aged 3 to 5 years, 928 parents, and 120 teachers from 14 schools. However, a re-intervention was made 7 years later to 596 children between 9 and 13 years old from the first study and compared with a group of 620 children of the same age who had not been intervened in the preschool stage. No statistically significant differences were found between the groups after the intervention at 9-13 years old, so it seems important that re-intervention strategies are carried out at an earlier age to maintain a sustained effect of the preschool intervention.

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Céspedes J et al. *Am J Med*, 2013, 126(12):1122-6. Promotion of cardiovascular health in preschool children: 36-month cohort follow-up.

Céspedes J et al. *Am J Med*, 2013, 126(1):27-35 e3. Targeting preschool children to promote cardiovascular health: cluster randomized trial.

MOUNT SINAI | «FAMILIA» PROGRAM

United States, New York, Harlem.

The study enrolled 562 children aged 3-5 in 15 of New York City's preschools in the high-risk community of Harlem along with 1,000 adults with the aim of demonstrating that education in **healthy living habits** from an early age improves the knowledge, attitudes and habits of children and intervention in adults can reduce the risk of **cardiovascular diseases** and improve **quality of life**.

Three different inter-related and synergic research projects were proposed within the "FAMILIA" Program:

1) Evaluation of the **cardiovascular health** impact of a community-based educational program for the **comprehensive promotion of health** (Programa SI!) centered on four areas (eating habits, knowledge of the body and heart, physical activity, and the management of emotions) and targeted to pre-school children and their parents or caregivers.

2) Analysis of multiple lifestyle intervention strategies in adults.

3) Evaluation of possible genetic changes linked to behavioral changes in children and their parents or caregivers.

References

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MOUNT SINAI | «CHILDREN» PROGRAM

United States, New York. From Harlem to the Bronx.

CHILDREN

Children's Lifestyle, Diet & Exercise Intervention

SI! NYC

The (**CHI**ldre´s **L**ifestyle, **D**iet and exe**R**cise int**E**rve**N**tion (**CHILDREN**) Project of Mount Sinai Heart at Icahn School of Medicine is to promote cardiovascular health in the five boroughs of New York city's by providing children with the knowledge and skills to avoid cardiovascular risk factors throughout their lives.

This project aims to better understand how childhood socioeconomic context and their immediate environment intersect to children's behavior, and consequently, cardiovascular risk factors.

The CHILDREN study aims to provide a cardiovascular health promotion program (SI! Program) to nearly 2,000 schools in the five boroughs of New York.

The first groundwork was laid with the Family Program that took place in Harlem in 2015. The program included 562 children aged 3 to 5 from 15 New York City Head Start schools in the high-risk Harlem community, along with 1,000 family members.

CHILDREN is now launching in the Bronx with an initial intervention in 50 schools in New York City's 9th and 10th school districts with a 65-70% Latino population below the poverty line. The goal is to validate the efficacy and sustainability of this intervention, and to study how socioeconomic status, environmental factors, teacher involvement and other elements present in childhood can affect cardiovascular health.

The program is based on and adapted from educational initiatives by Sesame Workshop and the SHE Foundation.

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MOUNT SINAI | «LISTOS A JUGAR» PROGRAM

Latin American

Promoviendo
la Salud Integral
SI! Latin America

For more than a decade Sesame has collaborated with Dr. Valentín Fuster to promote cardiovascular health and well-being by educating children to lead healthier lifestyles in Colombia, Spain and Harlem. Jointly, a muppet was created (Dr. Ruster) as well as media and outreach materials. Over this period of time Dr. Fuster's team has conducted rigorous research on the long-term benefits of using Sesame Street materials in preschool health promotion interventions has during the preschool years.

Building on this initial work, Sesame's Listos a Jugar program launched 3 years ago as a regional response to the high incidence of obesity and diabetes in children in Latin America. The program has reached over 11 million people largely through mass media distribution. Initially funded by public and private partners, included a 26-episode television series, digital assets including an app and a website, and resources for caregivers and educators. Since then, it has been distributed in Bolivia, Brazil, Colombia, Ecuador, Mexico, and other Central American countries.

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Céspedes J et al. *Am J Med,* 2013, 126(12):1122-6. Promotion of cardiovascular health in preschool children: 36-month cohort follow-up.

Céspedes J et al. *Am J Med,* 2013, 126(1):27-35 e3. Targeting preschool children to promote cardiovascular health: cluster randomized trial.

MOUNT SINAI | «ACC PRIMORDIAL PREVENTION» PROGRAM

A Vision Shared Between The American College Of Cardiology, Sesame Workshop And Mount Sinai.

ACC will leverage its core competence in CV education, evidence-based interventions, and health equity to scale "Listos a Jugar" Sesame's program nationally, gradually building the robust community-based infrastructure necessary towards permanently change the health trajectory of US and Latin America youth.

Reinforce
Reinforce the SI! NYC Program with ACC and CardioSmart branding and promotion, including access to ACC's suite of patient-centered health tools in Spanish, English, and Chinese for parents, family, and the community.

Recruit
Recruit cohorts of cardiologists and advanced practice providers to become champions of primordial prevention using the *Listos a Jugar* methodology; leverage the ACC's expertise in bespoke educational experiences supported by train-the-trainer scaling.

Replicate
Work to launch localized versions in Buffalo, NY, Philadelphia, PA, Camden, NJ, Hobbs, NM, and Reno, NV; current locations of ACC's on-the-ground food- and prevention-based health equity programs.

AESAN | FIFTY-FIFTY PROGRAM

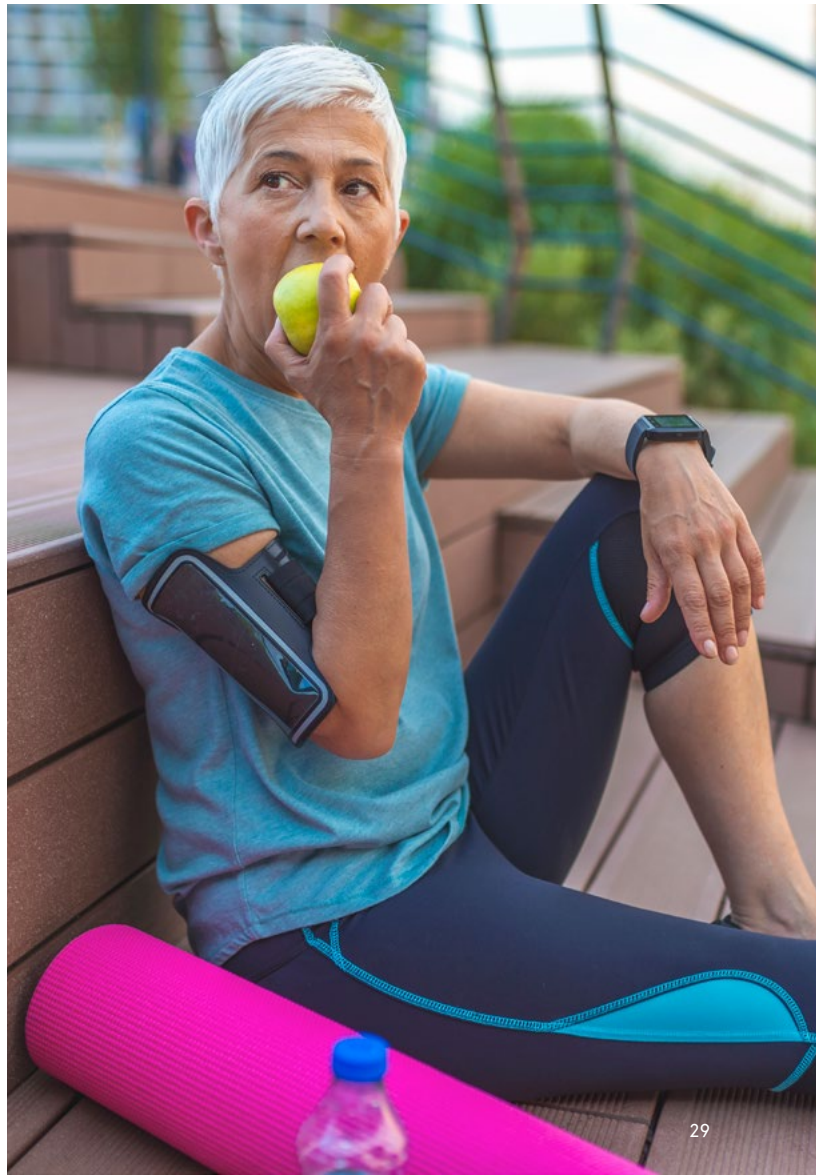
Hypothesis If adults are trained in peer groups and provided with the knowledge, skills and attitudes a healthy lifestyle requires, their cardiovascular health habits and their own self-control of the risk factors will improve.

In Spain, **cardiovascular diseases** are the leading cause of mortality or disability.

The American Heart Association defines that cardiovascular health is poor in Spain. Less than 1% of all Spaniards reach ideal values for the 7 cardiovascular health indicators and thus have a healthy lifestyle. In Spain the prevalence in adults of overweight is: 36%, obesity: 17%, smoking: 27% and sedentary life: 37%.

The SHE Foundation and the Spanish Agency of Consumer Affairs, Food Security and Nutrition (AESAN) from the Spanish Ministry of Consumer Affairs, promoted the introduction of the Fifty-Fifty Program. This Program constitutes a community intervention trial designed by Dr. Valentín Fuster with the aim of improving comprehensive health in adults, helping them to establish self-control of the main risk factors for such diseases. The participants in the study were healthy adults between 25-50 years of age and with at least one cardiovascular risk factor.

Based on previous scientific learnings, Dr. Fuster initiated a pilot project in the town of Cardona (Barcelona, Spain). The good results obtained facilitated the conduction of a larger study in another 7 Spanish cities and towns: Barcelona, Cambrils, Guadix, Manresa, Molina de Segura, San Fernando de Henares and Villanueva de la Cañada. This study involved 543 volunteers (71% females), each with at least one cardiovascular risk factor.



The intervention was based on elements of Social Cognitive Theory. The key elements of this theory include observational learning, reinforcement, self-control and self-efficacy.

In a first phase, all the participants were enrolled in educational and motivational workshops designed to promote healthy living habits. The meetings were used to address motivations for change, stress management, smoking cessation, healthy eating habits, regular physical exercise, and blood pressure self-control.

Then, in a second phase lasting 12 months, the participants were randomized to two groups (1:1): an intervention group, involving peer group activities; and a control group, simply subjected to follow-up during the same period of time.

The investigators have performed a new analysis of cardiovascular risk factors: at baseline, after workshops, 12 months (after peer group) and 40 months after the end of the study to assess the progression of the participants.

The main outcome assessed in the study was the mean change in a composite score related to blood pressure, exercise, weight, diet and tobacco consumption (Fuster-BEWAT score).

The results obtained from the study, accompanied by a rigorous scientific evaluation, confirm that educating adults in knowledge, skills and attitudes about a healthy lifestyle, accompanied by peer support, improves cardiovascular health habits and self-management of risk factors, and confirms the importance of giving continuity to support dynamics.

The **Fifty-Fifty Program** has also been applied in Spanish companies PortAventura and AMPO with the aim of providing tools to improve the cardiovascular health of their workers.

It is essential to implement programs to promote healthy habits which, like this one, are of great value in raising public awareness, since, in the words of Dr. Fuster, "we must not prevent disease, we must promote health".

Cardiovascular risk factors

- **Sedentarism**
- **Unhealthy eating**
- **Blood pressure**
- **Obesity**
- **Smoking**

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CNIC | INICIATIVA VIVE

España

INICIATIVA VIVE

March 2011, the Pro CNIC Foundation and the SHE Foundation signed a collaboration agreement under the name "VIVE" Initiative, with the aim of joining forces to improve the cardiovascular health of adulthood. This agreement gave rise to a joint coordination plan led by Dr. Valentí Fuster, director of the National Centre for Cardiovascular Research (CNIC).

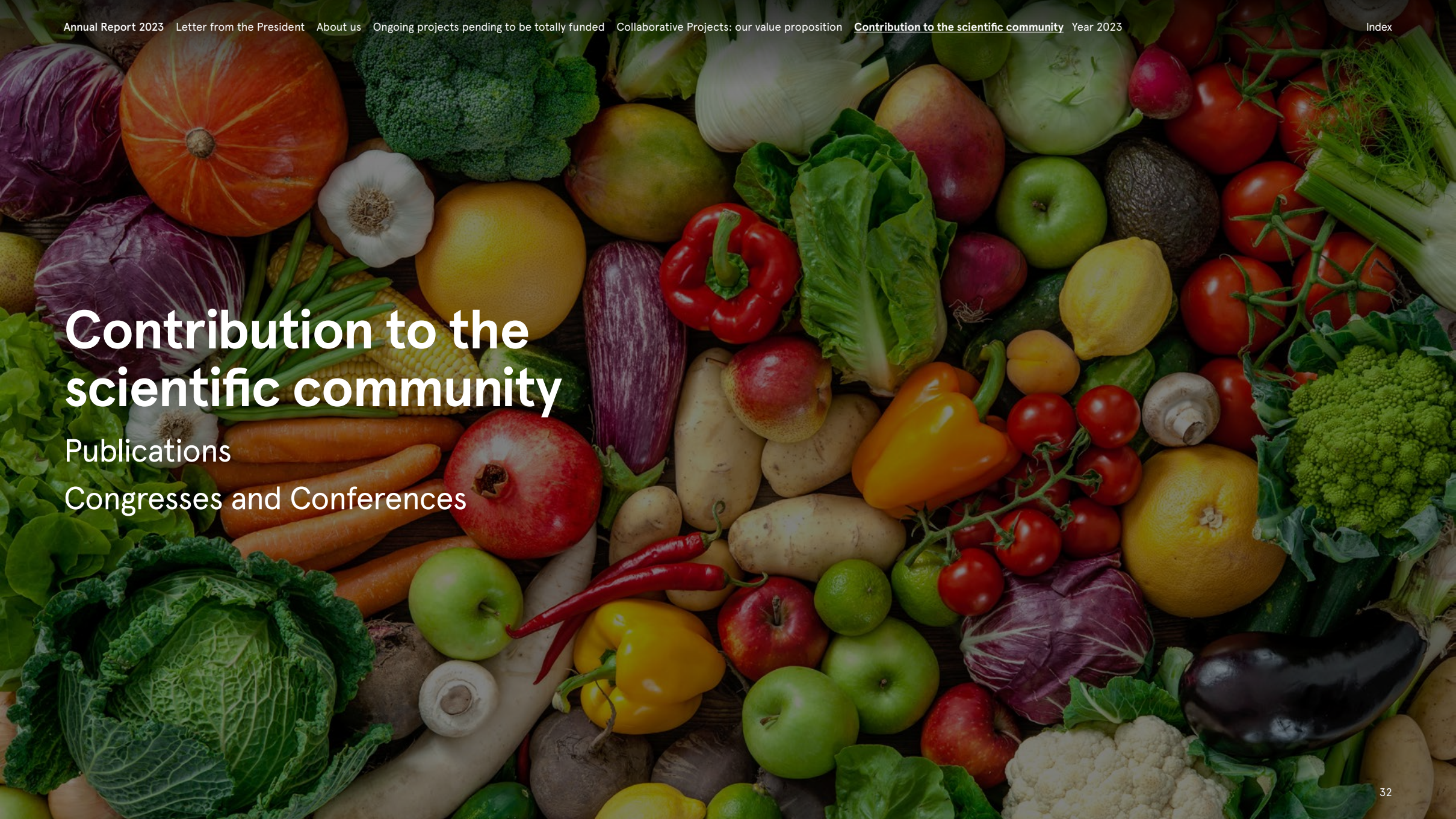
Within the framework of Iniciativa VIVE, "Salud en Familia" is a cardiovascular health promotion program **aimed at people who would like to make changes to their lifestyle and those around them**, with the aim of improving their health in a comprehensive way.

The program is designed to be applied to the whole family because doing physical activity, eating healthily and talking about our emotions, in short, **being healthy, is a way of life that is achieved with teamwork.**

The majority of our lifestyle habits in adulthood are developed from **attitudes, knowledge and behavior acquired during childhood and adolescence and later established during our youth.** Children cannot be healthy without the help of the people around them, because **at this age they do not have the autonomy to make decisions about their habits**. Furthermore, adults are their reference point and an important source of learning through imitation.

Throughout the units of this program, we work on **content related to the main factors of heart protection** with games, crafts and fun activities, during which adults and children enjoy time together while taking care of their health.

Specialized personnel performing measurements



Contribution to the scientific community

Publications

Congresses and Conferences

PUBLICATIONS

«If we do a study and it is not published in a top journal we consider it a failure»

DR. VALENTÍN FUSTER

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- Póster: Body image satisfaction and adherence to an obesogenic dietary pattern: results from the SI! Program for Secondary Schools. Martínez-Gómez J, et al.

Annual meeting of the European Society of Cardiology - Preventive Cardiology, 04-2024, Atenas, Grecia.

- Póster: Adherence to an obesogenic dietary pattern during adolescence: are differences widening?. Martínez-Gómez J, et al.
- Póster: Adherence to an obesogenic dietary pattern during adolescence and longitudinal changes in body composition. Martínez-Gómez J, et al.

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- Póster: Unlocking the Power of Polyphenols: A Promising Biomarker of Anti-Inflammatory Diet in Adolescents. Arancibia-Riveros C, et al.

ISBNPA 2023, 22nd Annual Meeting of the International Society of Behavioral Nutrition and Physical Activity. 06-2023. Uppsala, Suecia.

- Comunicación oral: Body image satisfaction and food intake in adolescents from the SI! Program for Health Promotion in Secondary Schools. Bodega P, et al.
- Comunicación oral: Association between social vulnerability burden and cardiovascular health over adolescence using the novel Life's Essential 8 score. Martínez-Gómez J, et al
- Comunicación oral: A mediation analysis on the relationship between adolescents' migrant background and their body mass index. Beneito-Durá M et al.
- Comunicación oral: The accumulation of social vulnerabilities directly associates with obesity and weight gain over adolescence. Fernández-Alvira JM, et al.
- Póster: Influence of parental health on children's health behaviors from the SI! Program for Elementary Schools. de Cos-Gandoy A, et al.

- Póster: Impact of a school-based health promotion intervention in adolescents: primary results of the SI! Program cluster-randomized trial. Santos-Beneit G, et al.

The First International Conference on Antioxidants: Sources, Methods, Health Benefits and Industrial Applications. 05-2023. Online.

- Comunicación oral: Gender Differences between Total Polyphenols in Urine and Cardiovascular Risk Factors in Spanish Adolescents using Structural Equation Modelling. Laveriano-Santos EP, et al.

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- Comunicación oral: The role of socioeconomic background on cardiovascular health promotion in early childhood: insights from the SI Program for preschoolers. de Cos-Gandoy A, et al.
- Póster: Gender differences in cardiovascular health over adolescence using the novel Life's Essential 8 score. Martínez-Gómez J, et al.
- Póster: Nutritional status, body image satisfaction, and self-esteem in adolescents from the SI! Program for secondary school trial. Bodega P, et al.
- Póster: Cardiovascular magnetic resonance derived biventricular strain in healthy adolescents: reference values and comparison between myocardial tagging and feature-tracking. Real C, et al.

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- Comunicación oral: Tiempo de pantallas, patrones de sueño y su asociación con marcadores antropométricos en adolescentes incluidos en el Programa SI! en España. Martínez-Gómez J, et al.

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- Póster moderado: Cardiac magnetic resonance imaging derived reference values for ventricular anatomy and function and myocardial tissue characterization in adolescents: the EnIGMA study. Real C, et al.
- Póster moderado: Absence of myocardial involvement after SARS-CoV2 infection or vaccination in asymptomatic adolescents assessed with cardiac magnetic resonance imaging: insights from the EnIGMA study. Párraga R, et al.
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- Conferencia invitada: El factor emocional en los hábitos saludables. Rodríguez C.
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- Póster: Determinación del óxido nítrico en orina como posible biomarcador de riesgo cardiovascular y su asociación con la dieta en adolescentes. Arancibia-Riveros C, et al.

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- Póster: Polifenoles en orina y su relación con factores de riesgo cardiovascular en adolescentes españoles del Programa SI! en educación secundaria. Laveriano-Santos EP, et al.

SEC 2020. Congreso de la Salud Cadiovascular de la Sociedad Española de Cardiología. 10-2020. Online.

- Comunicación oral mini: Estado de salud cardiovascular y su asociación con variables sociodemográficas en adolescentes jóvenes incluidos en el Programa SI!: un estudio transversal. Fernández-Jiménez R, et

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- Comunicación oral: Prevalence and correlates of cardiovascular health among early adolescents enrolled in the SI! Program in Spain: a cross-sectional analysis. Fernández-Jiménez R, et al

12th International Conference on Education and New Learning Technologies (EDULEARN 2020). Annual International Education Conference. 07-2020. Online.

- Comunicación oral: The SI! Program for promoting heart-healthy habits in children aged 3 to 5 years: pedagogical strategies. Carral V, et al.

V Workshop Anual del Instituto de Investigación en Nutrición y Seguridad Alimentaria (INSA-UB) "Alergias e intolerancias alimentarias: De la sospecha a la mesa". 11-2019. Barcelona, España.

- Póster: Higher polyphenols excretion in urine associates with a better body composition in Spanish adolescents. Parilli-Moser I, et al. IV Congreso Nacional de Psicología e International Symposium on Psychological Prevention. 07-2019. Vitoria-Gasteiz – Álava, España.
- Comunicación oral: El componente de factores de protección y gestión emocional en el Programa SI! de Salud Integral: fundamentación en las diferentes etapas educativas (Infantil, Primaria y Secundaria). Carral V, et al.
- Póster: El Programa SI! para promocionar la salud cardiovascular en Educación Secundaria: factores de protección frente al consumo de tabaco. Carral V, et al.

IV Congreso Nacional de Psicología e International Symposium on Psychological Prevention. 07-2019. Vitoria-Gasteiz – Álava, España.

- Comunicación oral: El componente de factores de protección y gestión emocional en el Programa SI! de Salud Integral: fundamentación en las diferentes etapas educativas (Infantil, Primaria y Secundaria). Carral V, et al.
- Póster: El Programa SI! para promocionar la salud cardiovascular en Educación Secundaria: factores de protección frente al consumo de tabaco. Carral V, et al.

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- Póster: Relationship between urinary nitric oxide and polyphenols in a pilot study with adolescents. Ramírez-Garza SL, et al.

VI Reunión Jóvenes Investigadores de la Sociedad Española de Nutrición. 06-2019. Soria, España.

- Comunicación oral: Healthy eating in Preschools and Elementary Schools: The SI! Program. Bodega P, et al.

FIEP 2019. 30th FIEP World Congress, 14th FIEP European Congress and 2nd Congrés FIEP Catalunya. 06-2019. Barcelona, España.

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- Póster: The physical activity component in the SI! Program. Órrit X, et al.

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- Póster: Dietary patterns and their impact on cardiovascular health factors among Spanish adolescents. Bodega P, et al.
- Póster: Influence of socioeconomic inequalities on dietary patterns and cardiovascular health among Spanish adolescents. Fernández-Alvira JM, et al.

V Workshop Anual del Instituto de Investigación en Nutrición y Seguridad Alimentaria (INSA-UB) "Ciencia y Propiedades del Cava y el Vino". 11-2018. Barcelona, España.

- Póster: Nutritional status and total urinary polyphenols in adolescents: picture from a pilot study. Laveriano-Santos EP, et al.

NUTRIMAD 2018. IV World Congress of Public Health Nutrition y XII Congreso Nacional de la Sociedad Española de Nutrición Comunitaria (SENC). 10-2018. Madrid, España.

- Póster: El componente de alimentación en el Programa SI! de Salud Integral. Bodega P, et al.

Curso Inteligencia Emocional y Salud. Universidad Internacional de Andalucía (UNIA). 07-2018. Huelva, España.

- Conferencia invitada: Emociones y corazón. Rodríguez C.

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- Póster: Estimation of dietary phenol compound intake and major foods sources in a Spanish teenage population: study of the SI! Program. Castro-Barquero S, et al.
- Póster: Relationship between polyphenols and body weight in adolescents, pilot study. Laveriano-Santos EP, et al

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XII-Congreso Internacional Dieta Mediterránea. Fundación Dieta Mediterránea. 04-2018. Barcelona, España.

- Conferencia invitada: School-based Behavioral Intervention to Face Obesity and Promote Cardiovascular Health Among Spanish Adolescents: a cluster-randomized Controlled trial. SI! Study. Santos-Beneit G.
- Conferencia invitada: Promoting Health among Preschool Children in the United States of America: the FAMILIA Project (Harlem, New York). Fernández-Jiménez R.
- Póster: Dietary polyphenol intake and major food sources in a Spanish teenagers population: the SI! Program. Castro-Barquero S, et al.
- Póster: Relationship between polyphenols and cardiovascular risk factors in adolescents, pilot study. Laveriano-Santos EP, et al.

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- Póster: A peer-group-based intervention on cardiovascular risk factors and the impact on quality of life: the Fifty-Fifty trial. Soto A, et al.

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- Póster: Adherencia a la dieta Mediterránea en proyectos de promoción de salud cardiovascular. Bodega P, et al.

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- Comunicación oral: Impact of a Comprehensive Lifestyle Peer-group-based Intervention on Cardiovascular Risk Factors: A Randomized Controlled Trial. Gómez-Pardo E, et al.

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- Póster: The Program SI! intervention for enhancing a healthy lifestyle among children aged 3 to 5: a cluster randomized trial. Peñalvo JL, et al.

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- Póster: Anthropometry and blood pressure in 3-5 year old children of Madrid: Program SI! study. Santos-Beneit G, et al.
- Póster: Improved behavior in children aged 3 to 5 after one year of a school-based intervention for healthy living. Peñalvo JL, et al.
- Póster: Mediterranean dietary patterns in 3-5 year old children and their parents: the Program SI! Study. Sotos-Prieto M, et al.

Year 2023

«Childhood at the center of health promotion»
Dra. Gloria Santos

SHE Foundation in figures

Annual Report 2023

Specialized personnel performing measurements

Childhood at the center of health promotion

DR. GLORIA SANTOS
SHE Foundation Scientific Team Manager

During 2023, the SHE Foundation launched a new project which involves putting into practice all the knowledge gained since the first randomised study of the SI! Program in 2009. Throughout the years, we have found that the program benefits students' cardiovascular health across the different educational stages in which it has been implemented, from nursery to secondary school, but these improvements are not maintained over time. We have also found that 12-year-olds are being blatantly misinformed when it comes to recommendations for healthy habits in aspects promoted by different sectors of society, such as nutrition. Therefore, we know that it is necessary to intervene before adolescence, and that children's autonomy works in favour of the internalisation of messages and the adoption of routines. For this reason, the new project of the SI! Program focuses on the primary school education – in which students already have greater autonomy than in nursery school – and proposes a reinforcement of the intervention in the child's environment through the school environment and families with the aim of enhancing the effects of the program. This also includes a classroom reintervention as a reminder of the key messages two years on to ensure that the effect is maintained over time. This new study's hypothesis is that this reintervention will enhance the benefits of the SI! Program for children's health, even if it is carried out in the final years of primary school at the age of greatest potential for change. Through an innovative tool self-managed by each school, the educational community will become an agent of change and the main manager of the health education of their students. Thanks to the classroom activities, they will be able to acquire the necessary tools to incorporate healthy lifestyle habits at an individual and collective level. Throughout 2023, the necessary permits have been obtained from the Community of Madrid's Ministry of Education and the corresponding Ethics Committee, while the focus has been placed on recruiting schools that wish to participate and that will begin with measurement and teacher training activities in spring 2024.

As we have been implementing the various versions of the SI! Program's different randomised studies, the American Heart Association has proposed cardiovascular health indicators including biochemical parameters such as blood glucose or cholesterol and others related to lifestyles such as diet, physical activity or sleep. Along the same lines, for the new SI! reintervention study, we are proposing a new index based on the American Heart Association's metrics to more specifically assess the effect of the SI! Program on children's cardiovascular health. During the pilot study of the SI! Reintervention Program carried out in spring 2023, we were able to finish adjusting this index and we are currently working on the publication of the new tool that will undoubtedly contribute to the necessary search for the most appropriate metrics to evaluate the effect of educational

interventions promoting health such as those carried out by the SHE Foundation.

Within the framework of community health promotion, the Healthy Communities 2030 project has continued this year with one of its most critical phases, during which the SHE Foundation team has played a fundamental role. Through this study, we aim to demonstrate that a combination of health education programs (the SI! Program and the Fifty-Fifty Program) can have a positive impact on the health of an entire community – in this case in the intervention municipality (Cardona, Barcelona) compared to the control municipality (Sallent, Barcelona). During 2023, the training workshops were held in Cardona, marking the beginning of the intervention for the participating adults. Throughout the year, intense work was done to adapt this training phase, establishing strategies in accordance with the participants' different needs. Face-to-face workshops were therefore held, such as those carried out in the first study of the Fifty-Fifty Program, online sessions, training modules for young people, intensive sessions with various overlapping themes and motivational days at strategic moments, amongst other formats. In addition, the involvement of different entities in the municipality was key to these workshops' success, with the availability of spaces in the town hall to hold these meetings, as well as the availability of youth and senior citizens' centres. Finally, participants from both Sallent and Cardona have been re-contacted for the first follow-up measurements that began in autumn 2023, obtaining a very positive response and therefore predicting a promising result in this first phase of the study.

> **During 2023, several papers were presented at international conferences and several articles were published in high-impact journals, including the manuscript of the main results of the SI! Program implemented in secondary schools, which was a trending topic in JAMA Cardiology for weeks.**

This publication has prompted several comments from researchers around the world highlighting the importance of such interventions in order to at least delay the decline in cardiovascular health that begins in adolescence and continues into adulthood. In this multicentre randomised study involving more than 1300 adolescents, the SI! Program was implemented in the first two years of secondary school or spread over the four years of secondary school. Although the COVID-19 pandemic did not allow the full potential of the intervention to be evaluated, the results showed that spreading the SI! Program content over four years benefited the cardiovascular health of adolescents to a greater extent than when spread across the first two years of secondary school. These results confirm that the effect of school-based interventions promoting health are influenced by factors such as the duration and magnitude of the content delivered, and that there is still a long way to go in implementation science to help us identify the most effective strategy to curb the epidemic of cardiovascular disease by focusing on younger generations.

With the new SI! Program study that began this year, we hope to provide more knowledge in this crucial field of health promotion through the school environment, which UNESCO and the World Health Organisation have set as one of the main objectives in health promotion since 2021, with a target population of almost two billion children and adolescents of school age through which we can, with the help of the scientific community and public and private entities, improve the health and well-being of the world's population.

Dr. Gloria Santos
SHE Foundation Scientific Team Manager

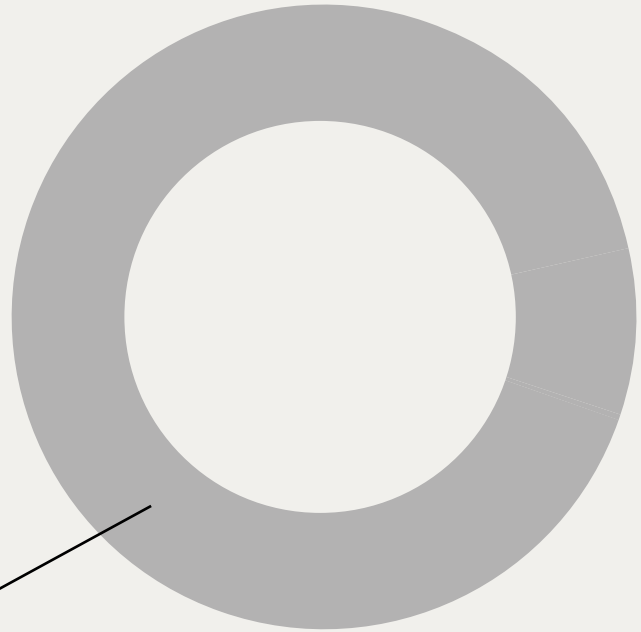
SHE FOUNDATION IN FIGURES - 2023

Transparency. Source and uses of resources.

INCOME

Source of total income
991.530,22 €

Projects
991.530,22 €



100%
Projects
991.530,22 €

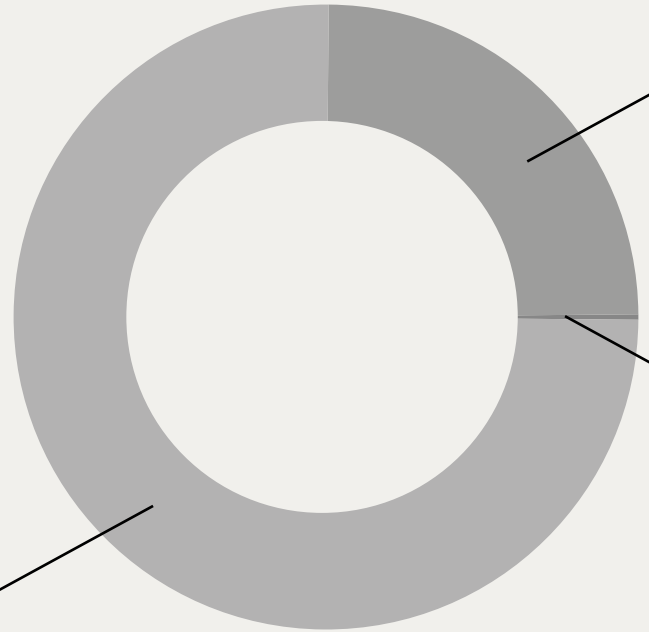
COSTS

Destination of total costs
981.761,06 €

Research Programs
736.290,43 €

Administration
244.193,01 €

Financial expenses
1.277,62 €



24,87%
Overhead
244.193,01 €

0,13%
Financial expenses
1.277,62 €

75%
Research Programs
736.290,43 €

SHE FOUNDATION IN FIGURES - 2023

Breakdown funding

(Thousands of €)

RESEARCH

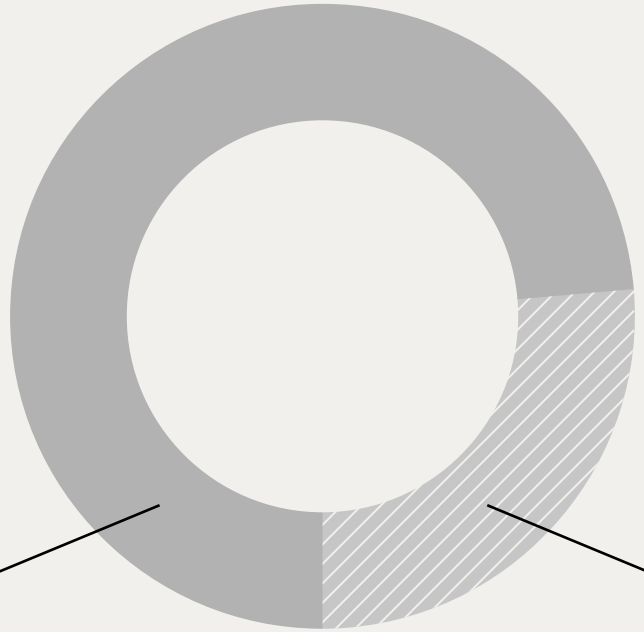
PSI! **448**

93% "la Caixa" Foundation

7% Fundación Nemesio Diez

HC **290**

100% ISM Mount Sinai



OVERHEADS

SHE Foundation Board of Trustees

65% "la Caixa" Foundation

35% ISM Mount Sinai

738

SI! Program **448**

Healthy Communities **290**

244

Overheads **244**

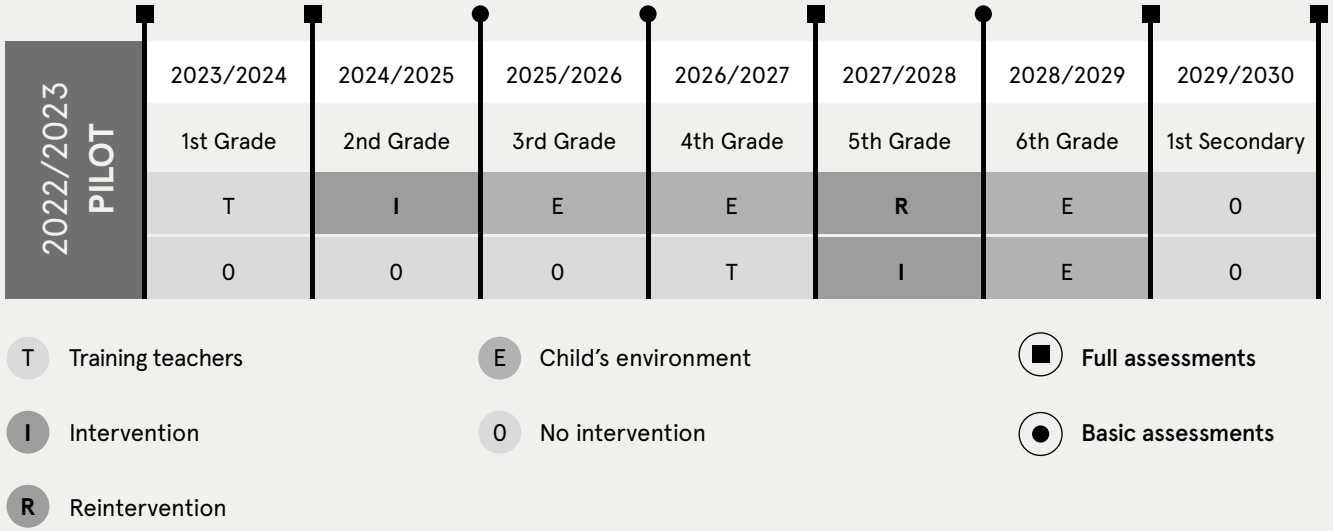
ANNUAL REPORT 2023

SI! Program – Annual Report

In August 2023, the main results of the SI! Program's randomised study conducted in secondary schools were published in the journal JAMA Cardiology, one of the highest-impact scientific journals in its field.

During the 2022-23 academic year, the pilot study of the SI! Reintervention Program was carried out to adjust the pedagogical and assessment tools and strategies for the randomised study. Four schools in Madrid took part in the pilot study – measurements were taken from 122 students in the first year of primary school, questionnaires were sent to their families, and evaluation sessions of the materials with teachers and management teams were delivered.

During the last term of the 2022-23 school year and the first term of 2023-24, the recruitment of schools and families for the randomised study of the SI! Reintervention Program began, inviting both state schools and academies in the Community of Madrid to participate.



ANNUAL REPORT 2023

SI! Program – Annual Report

136
SCHOOLS

13,732
CHILDREN IN PRESCHOOL

10,429
CHILDREN IN ELEMENTARY

725
ADOLESCENTS IN SECONDARY

24,886
TOTAL CHILDREN

35
PUBLICATIONS

35 articles published in high-impact scientific journals

36
CONGRESSES

Participation in 36 congresses

+235
CENTERS

More than 235 educational centers have implemented the SI! Program

37m
CHILDREN

More than 37,000 children have participated in the educational activities of the SI! Program

2,200
TEACHERS

More than 2,200 teachers have been trained to implement the SI! Program

ANNUAL REPORT 2023

Healthy Communities – Annual Report

CARDONA
SALLENT

MUTUAL
SUPPORT
GROUPS

1,810
PERSONS
CONTACTED FOR
FOLLOW-UP

- Since January 2023, the project's baseline database has been cleaned and first analyses of preliminary results have been carried out.

- Training workshops were held and mutual support groups were set up for participants.

- In October 2023, the first follow-up measurements were taken in Cardona and Sallent, and the first measurements for the participants who wished to join the study.

- Throughout 2023, the SHE Foundation team continued to run training workshops for the study participants in Cardona. The following contents have been taught:
  - Motivation to change habits
  - Healthy eating
  - Emotional well-being
  - Stress management
  - Physical activities
  - Prevention of the consumption of toxic substances such as tobacco and alcohol

- All participants received a report with the results of the measurements and a booklet containing healthy lifestyle recommendations.

- As of 31 December 2023, 869 participants have been measured (492 in Cardona and 377 in Sallent). Measurements will continue until spring 2024.

- During the year, different activities were organized, such as conferences with participation from Dr. Fuster, training workshops, an Escape room, Pilates and talks with health professionals.

ANNUAL REPORT 2023

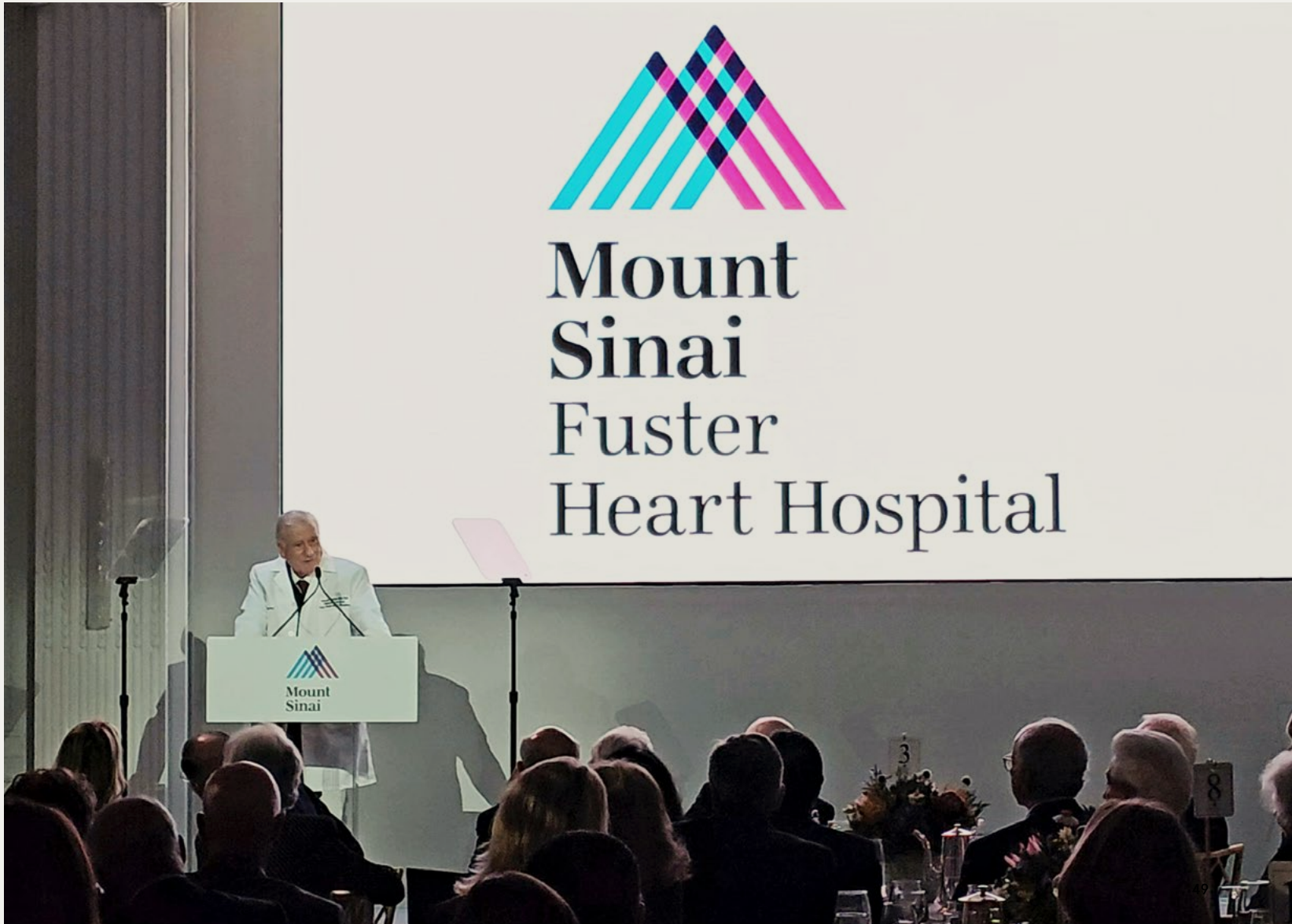
Mount Sinai Renames Top-Ranked Heart Hospital to Honor Valentin Fuster, MD, PhD, and His Legacy of Excellence

NEW YORK, NY – 26 DE OCTUBRE, 2023

Mount Sinai Health System announced today that "Mount Sinai Fuster Heart Hospital" is the new name for its top-ranked heart service, formerly known as Mount Sinai Heart.

The renaming honors Valentin Fuster, MD, PhD, Physician-in-Chief of The Mount Sinai Hospital and President of the Fuster Heart Hospital, for the immeasurable impact that he has made and will continue to make on the field of cardiology and his leadership at Mount Sinai.

https://www.mountsinai.org/about/newsroom/2023/mount-sinai-renames-top-ranked-heart-hospital-to-honor-valentin-fuster-md-phd-and-his-legacy-of-excellence



FOUNDATION TEAM

Pedagogical Area

Pedagogical management

Isabel Carvajal
Degree in Biology. Madrid Complutense University. Specialty: Genetics and Physiology.

Pedagogical Area

Anna Badia
Degree in Physical Activity and Sport Sciences from the INEFC University of Barcelona.

Belén Blanco
Bachelor's Degree in Law and Political Science. Universidad Autónoma de Madrid.

Domingo Haro
Degree in Sciences of Physical Activity and Sport (INEFC Barcelona - University of Barcelona).

Natalia Montilla
Degree in Psychology. Universidad Autónoma de Barcelona.

Xavier Òrrit
PhD in physical activity and sport from the Autonomous University of Barcelona.

Carla Rodríguez
Bachelor's Degree in Psychology and Post-graduate degree in Positive Psychology and Emotional Intelligence. Universidad Complutense de Madrid.

Scientific Area

Scientific management

Gloria Santos
Ph.D. degree in Biology by the Complutense. University of Madrid.

Scientific Team

Patricia Bodega
BSc in Human Nutrition and Dietetics (Universidad San Pablo CEU and PhD student in Health Science and Sports (Universidad de Zaragoza).

Amaya de Cos
BSc in Biology (Universidad Autónoma de Madrid), MSc in Biostatistics (Universidad Complutense de Madrid)

Mercedes de Miguel
BSc in Biology (University of Salamanca, 2001), Master in Proj. Management.

Management

General Management

Carles Peyra
MBA and Graduated, ESADE Business Administration School – Universitat Ramon Llull, Barcelona.

Management and finances

Rafael Badia
Bachelor's degree in Business Sciences (Universidad de Barcelona) and postgraduate in financial management (EADA).

Ester Pla
Bachelor's degree in Tourism. Escuela superior de Turismo Jesuitas Sant Ignasi (Barcelona).

Collaborators

Comunication

Olga Montilla
Bachelor's degree in Advertising and Public Relations. U. Pompeu Fabra.

Quality

Pilar Altarriba
Project Management. Universidad Autónoma de Barcelona.

Pedagogy

Vanesa Carral
PhD in Psychology. Universidad de Barcelona.

PARTNERS

Mount Sinai

cnic Fundaciónprocnic

IMIM Parc de Salut MAR Barcelona
Institut Hospital del Mar d'Investigacions Mèdiques

Universitat de Barcelona

sesameworkshop

alícia

American College of Cardiology

Fundación Nemesio Diez

Ajuntament de Cardona

SALLENT

Concello de OURENSE Educación

Generalitat de Catalunya
Departament d'Educació

Comunidad de Madrid

Institut Català de la Salut
Catalunya Central

Gobierno de España · Ministerio de Consumo


SHE
Foundation
for Science, Health
and Education
"la Caixa" Foundation