

ACTIVITIES REPORT 2021

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01 WHO WE ARE

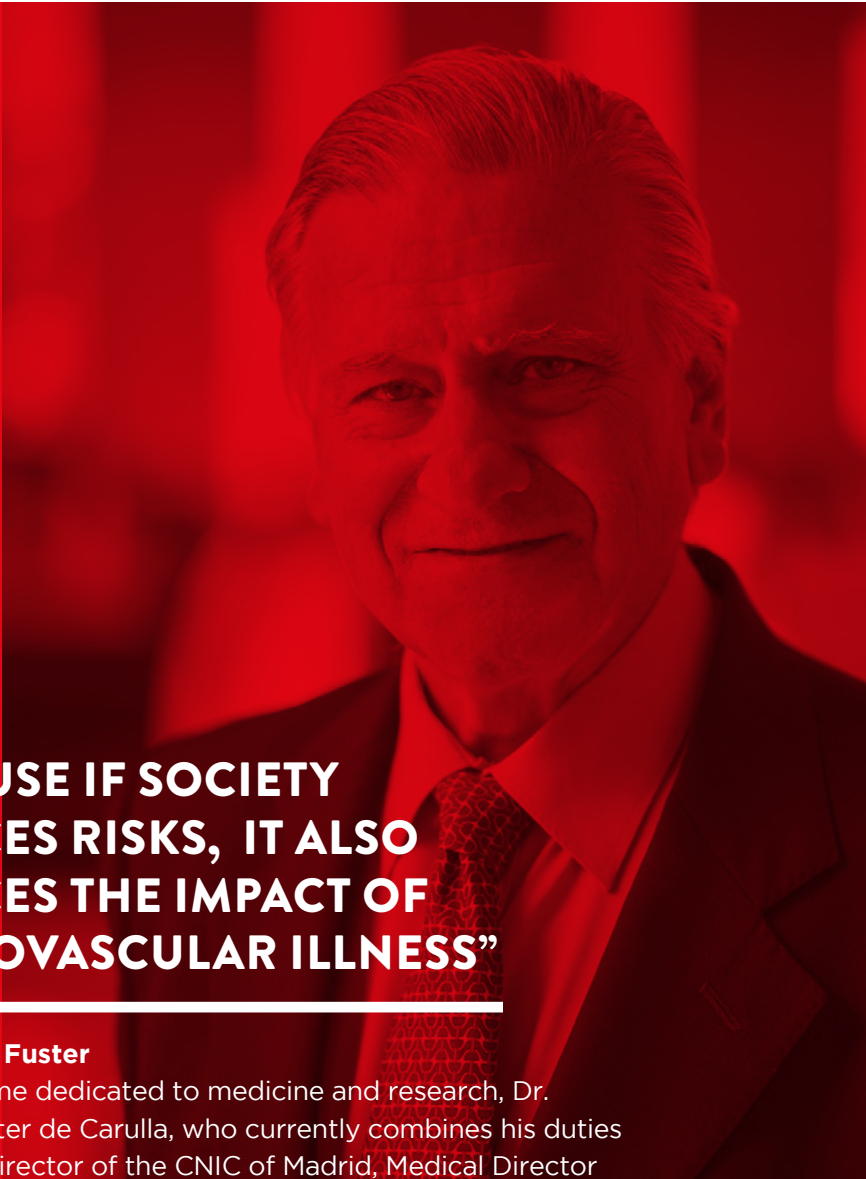
“WHAT WOULD HAPPEN IF SOCIETY WAS CAPABLE OF MODIFYING ITS CURRENT ROUTINES AND ACQUIRE HEALTHY HABITS?”

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.

In the light of this evidence, and thanks to the experience gained during his career, in 2009 Dr. Fuster promoted the creation of SHE Foundation. A non-profit foundation that, basing itself on basic and clinical research (Science), aims to promote healthy habits (Health) through communication and education (Education) to the population.

The SHE Foundation dedicates its efforts in creating a framework of what it means and entails to have an education that impacts the acquisition of healthy habits from childhood, with the aim of promoting a world where children, young people and adults have the capacity to act positively regarding their health.

In 2017, “la Caixa” Foundation joined the board of trustees of the SHE Foundation to give continuity to its research work.

A portrait of Dr. Valentín Fuster, an older man with grey hair, wearing a dark suit, white shirt, and patterned tie. He is smiling slightly and looking towards the camera. The background is a blurred indoor setting. The entire image is overlaid with a semi-transparent red filter.

“BECAUSE IF SOCIETY REDUCES RISKS, IT ALSO REDUCES THE IMPACT OF CARDIOVASCULAR ILLNESS”

Dr. Valentín Fuster

After a lifetime dedicated to medicine and research, Dr. Valentín Fuster de Carulla, who currently combines his duties as General Director of the CNIC of Madrid, Medical Director and Director of the Cardiovascular Institute of Mount Sinai Hospital in New York and President of the SHE Private Foundation (Science for Health and Education), is convinced that a change in the lifestyle of the population is the only way to avoid the spread of cardiovascular diseases, a true epidemic and the leading cause of death in the world.

02 THE YEAR IN FIGURES

1.076K €
BUDGET

14
TEAM

188
CENTRES

34.140
CHILDREN

103
**TRAINED
TEACHERS**

30
**TEACHER
TRAINING
HOURS**

3
**PUIBICATIONS
AND POSTERS**

3
**COMMUNITIES
(CATALONIA, MADRID
AND GALICIA)**

03 RESEARCH PROJECTS

- SI! PROGRAM

Started in 2010, the SI! Program is a school intervention program aimed at children from 3 to 16 years old with one clear objective: to demonstrate that the acquisition of healthy habits from childhood reduces the risk of suffering cardiovascular diseases, while improving the quality of life in adulthood.

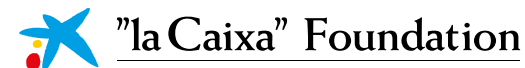
Research into public health indicates that health promotion initiatives should begin in the childhood stage. Only in this way is a change in behaviour sustained over time, long term and effective.

The **SI! Program** is taught in the classroom by teachers, after being trained by the **SHE - "la Caixa" Foundation**, which either can be face-to-face or semi-face-to-face. The programme also has ISO 9001 certification.

Since its launch in 2010, the SI! Program has trained a total of 2,080 teachers throughout Spain, and 8 meetings of program coordinators have been organized.

SI! PROGRAM

IT CAME ABOUT WITH THE WILL TO PROMOTE CARDIOVASCULAR HEALTH WITH THE VERY YOUNG, IN A SIMPLE AND PRACTICAL WAY, AND WITH THE OBJECTIVE OF TEACHING HOW TO MAINTAIN HEALTHY HABITS DURING LIFE.



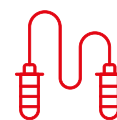
FOR ITS IMPLEMENTATION, 4 KEY AREAS OF ACTION HAVE BEEN ESTABLISHED:



ACQUISITION OF HEALTHY EATING HABITS



KNOWLEDGE OF THE BODY AND THE HEART



DOING PHYSICAL ACTIVITY

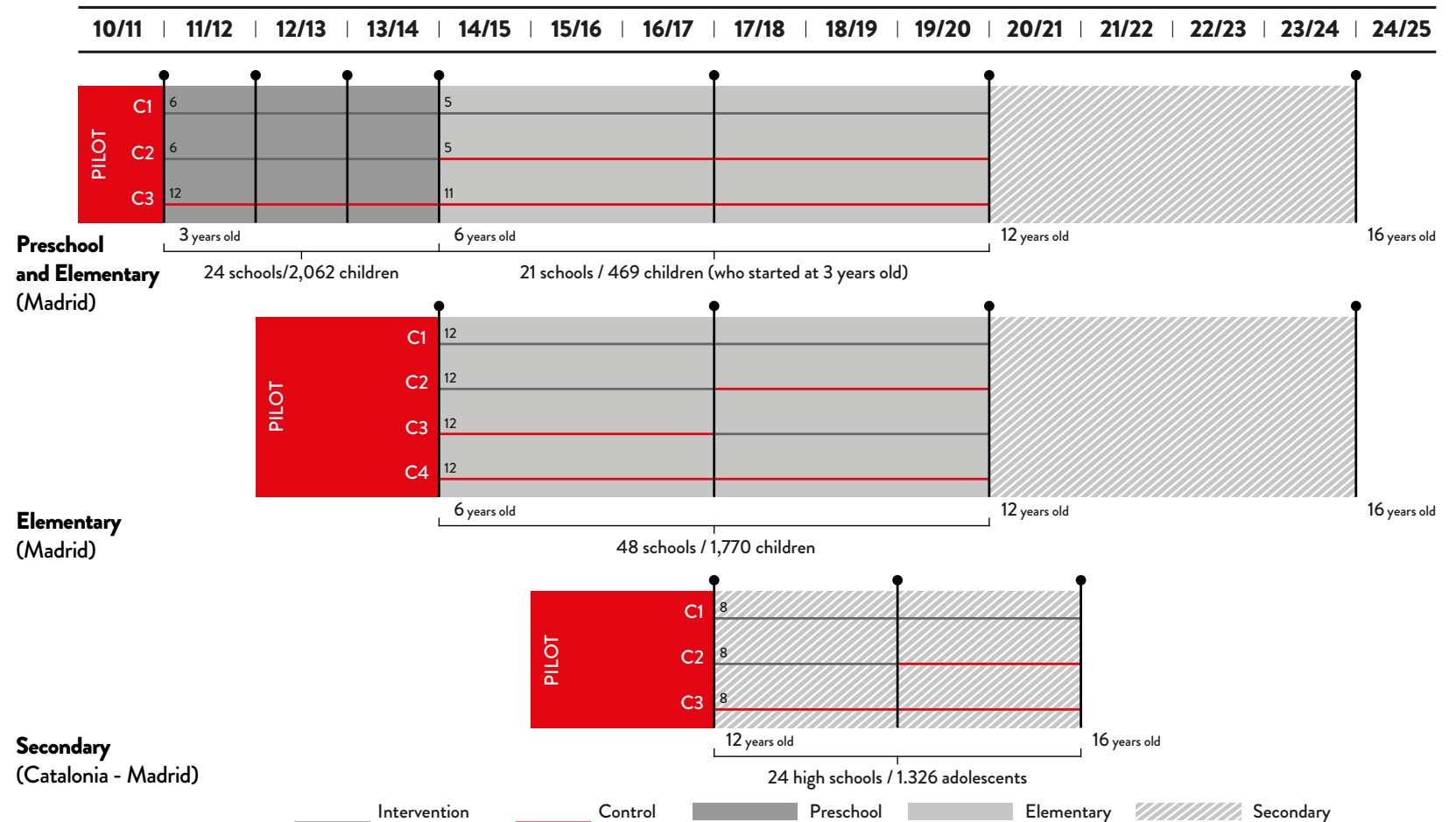


EMOTION MANAGEMENT

03 RESEARCH PROJECTS

- SI! PROGRAM

INTERVENTION IN PRESCHOOL, ELEMENTARY AND SECONDARY EDUCATION IN SPAIN



03 RESEARCH PROJECTS

- SI! PROGRAM

ELEMENTARY EDUCATION

- We continue to analyse data from the scientific study in Primary Education and prepare the publication of the results.

- Some of the schools participating in the scientific study continue to implement the SI! Programme in Primary Education and also in Pre-school Education.

SECONDARY EDUCATION

- The winning project of a grant on La Marató from TV3 together with the CNIC and the University of Barcelona.

- The scientific study of Secondary Education continues.

- During the 2020-2021 academic year, the implementation has been carried out in the fourth year of ESO (compulsory secondary education (year 11 equivalent) in the schools in the scientific study's intervention group.

- During the months of February to June 2021, the scientific measurements were carried out in the participating schools in Madrid and Catalonia.

BENEFICIARIES OF THE SI! PROGRAM

188	19.362	13.378	1.400
CENTRES	CHILDREN IN PRESCHOOL	CHILDREN IN ELEMENTARY	ADOLESCENTS IN SECONDARY

34.140
TOTAL CHILDREN

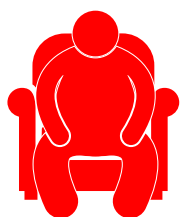
03 RESEARCH PROJECTS

- 50/50 PROGRAM

The 50/50 Program is a scientific study that helps to modify lifestyle habits and control main risk factors for cardiovascular disease:

overweight and obesity, sedentarism, smoking and high blood pressure through workshops and peer education.

CARDIOVASCULAR RISK FACTORS



SEDENTARISM



UNHEALTHY EATING



BLOOD PRESSURE



OBSESITY



SMOKING

AS A CONSEQUENCE OF THE INTERVENTION OF THE FIFTY-FIFTY PROGRAM, A BENEFICIAL EFFECT HAS BEEN OBSERVED IN THE ACQUISITION OF HEALTHY HABITS RELATED TO CARDIOVASCULAR HEALTH, SHOWING A CLEAR IMPROVEMENT IN THE OVERALL RESULT AND SPECIFICALLY IN EACH ONE OF THE FIVE COMPONENTS: BLOOD PRESSURE, PHYSICAL ACTIVITY, WEIGHT, DIET AND TOBACCO.



"la Caixa" Foundation

50/50 MUNICIPALITIES AND 50/50 COMPANIES

The Fifty-Fifty Program, which started in 2013, has been implemented in 7 municipalities and a follow-up of participants up to 40 months after completion the intervention has been carried out. During 2021, the analysis of the data collected in previous evaluations was completed and several aspects of the whole Fifty Fifty Programme intervention were delved into in order to incorporate improvements.

The results were published in the American Heart Journal in 2021. (The challenge of sustainability: Long-term results from the Fifty-Fifty peer group-based intervention in cardiovascular risk factors, Fdez- Alvira JM, Fuster V. et al, 2021, 240:81-88).

The Fifty-Fifty Program was also applied in companies with the objective to give them tools that allow them to improve the cardiovascular health of their employees.

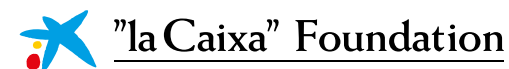
03 RESEARCH PROJECTS

- HEALTHY COMMUNITIES 2030

The SHE - “la Caixa” Foundation has designed a scientific study to evaluate the effectiveness of a community intervention, Healthy Communities, focusing on the main risk factors of cardiovascular disease (smoking, hypertension, diabetes, dyslipidemia, obesity) as well as cardiovascular and neurodegenerative events. The purpose of the project is to implement and validate a healthy city program in which cardiovascular health habits are promoted at all stages of life. The citizens themselves are involved in improving their own health and wellness potential, generating a health culture in a community where working for cardiovascular health is everyone’s job.

Healthy Communities HC2030 is based on the implementation of health programs previously evaluated by the SHE - “la Caixa” Foundation and whose results have been published in high-impact scientific journals: SI! Program and Fifty-Fifty Program.

The scientific study will be carried out in Cardona (intervention city) and Sallent (control city).

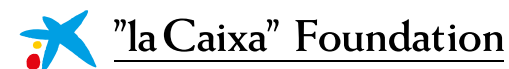


COMPONENTS



03 RESEARCH PROJECTS

- HEALTHY COMMUNITIES 2030



ACTIVITIES

The outbreak of the COVID-19 pandemic in 2020 led to the postponement of the start of the project and the adaptation of the intervention so that the activities could be carried out both in person and virtually.

January 2021

The team's efforts were focused on revising the project to make it viable in a situation that could either allow for or restrict face-to-face activities. With this in mind, the following elements were designed:

- Interactive virtual sessions led by SHE Foundation technicians.
- Video summaries of the sessions.
- Audiovisual clips to reinforce the contents.
- Motivational challenges to be carried out in safe conditions.

February 2021 - June 2021

The communication plan was designed and the HC2030 project was resumed.

Age and sex stratification of the census of the two populations was carried out to choose the possible participants in the project, 1150 in Cardona and 1150 in Sallent through the local census.

The measurement team for each population was set up.

July - August 2021

The events to present the start of the project were held: July the 28th in Cardona and August the 4th in Sallent.

- Meetings were held with the secondary schools involved to explain the project and count on their collaboration.

September - November 2021

The HC 2030 project began with the intervention in Cardona and Sallent.

The first measurements were carried out in the Cardona and Sallent secondary schools for participants aged 12 to 18.

The collaboration agreement was signed between the SHE Foundation and IDIAP-Jordi Gol.

Information sessions were held in Cardona and Sallent to provide information to those interested.

December 2021

The preparation of the training platform with the intranet for project participants was completed.

Videos of the sessions, audiovisual clips for reinforcement, motivational challenges and the motivational challenges and self-assessment questionnaires were made available.

04 PUBLICATIONS, CONFERENCES AND CONGRESSES

PUBLICATION

The challenge of sustainability: Long-term results from the Fifty-Fifty peer group-based intervention in cardiovascular risk factors

Juan Miguel Fernández-Alvira PhD¹, Rodrigo Fernández-Jiménez MS PhD^{1,2}, M. Mercedes de Miguel PhD^{1,3}, Gloria Santos-Beneit PhD^{1,4}, Patricia Bodega PhD^{1,5}, Christopher A Hill PhD^{1,6}, Vanesa Carral PhD^{1,7}, Carla Rodríguez PhD^{1,8}, Isabel Carvajal PhD^{1,9}, Xavier Orrit PhD^{1,10}, Amaya de Cos PhD^{1,11}, Teresa Robledo PhD^{1,12}, Valentín Fuster MD PhD^{1,13}

Background
The Fifty-Fifty trial demonstrated that a peer group-based intervention was able to improve healthy behaviors in individuals with cardiovascular (CV) risk factors immediately post-intervention.

The challenge of sustainability: Long-term results from the Fifty-Fifty peer group-based intervention in cardiovascular risk factors.

Juan Miguel Fernández-Alvira
Rodrigo Fernández-Jiménez,
Mercedes de Miguel, Gloria Santos-Beneit, Patricia Bodega, Christopher A Hill, Vanesa Carral, Carla Rodríguez, Isabel Carvajal, Xavier Orrit, Amaya de Cos - Gandoy, Marian Dal, Teresa Robledo, Valentín Fuster.

CONGRESS XXV Jornadas Internacionales de Nutrición Práctica y XIV Congreso Internacional de la SEDCA.

PATRONES DE ESTILO DE VIDA Y SALUD CARDIOVASCULAR EN ADOLESCENTES DEL PROGRAMA SI! DE SECUNDARIA

Bodega P (1), Fernández-Alvira JM (2), Santos-Beneit G (1,2,3), Moreno LA (4,5), Lamuela-Raventós RM (6,8), Fuster V (2,3)

INTRODUCCIÓN
Algunos estilos de vida (EV) poco saludables entre una subpoblación de adolescentes, al igual que en la vida de adultos, pueden incrementar el riesgo cardiovascular (RCV) en la infancia. Sin embargo, los datos sobre el impacto de las intervenciones que buscan modificar estos estilos de vida en la infancia son limitados. El objetivo de este estudio es determinar si una intervención basada en pares (Programa SI!) puede mejorar los estilos de vida y la salud cardiovascular (SCV) de los adolescentes, en concreto en los adolescentes de riesgo cardiovascular (RCV).

OBJETIVOS
Establecer la relación entre los EV (hábitos de alimentación, actividad y sedentarismo) e indicadores antropométricos (Índice de masa corporal, presión arterial, colesterol total, triglicéridos, glucosa en ayunas, hemoglobina glicosilada (HbA1c), hemoglobina (Hb) y hematócrito).

MÉTODOS
Se identificaron cuatro patrones de EV en niños y niñas en riesgo de RCV. El patrón más saludable (P1) se caracterizó por un mayor consumo de frutas y verduras, menor consumo de alimentos ultraprocesados, mayor actividad física y menor sedentarismo. El patrón menos saludable (P4) se caracterizó por un mayor consumo de alimentos ultraprocesados, menor actividad física y mayor sedentarismo.

RESULTADOS
Se identificaron cuatro patrones de EV en niños y niñas en riesgo de RCV. El patrón más saludable (P1) se caracterizó por un mayor consumo de frutas y verduras, menor consumo de alimentos ultraprocesados, mayor actividad física y menor sedentarismo. El patrón menos saludable (P4) se caracterizó por un mayor consumo de alimentos ultraprocesados, menor actividad física y mayor sedentarismo.

CONCLUSIONES
El incremento en los estilos de vida saludables por acción ha sido acompañado de mejoras significativas en los niveles de colesterol, factores de riesgo cardiovascular (FRV) y otros indicadores de salud cardiovascular. El programa SI! Salud Integral es una estrategia efectiva para el mejoramiento de los estilos de vida y la salud cardiovascular de los adolescentes.

> Patrones de estilo de vida y salud cardiovascular en adolescentes del Programa SI! de Secundaria.

Bodega P, Fernández-Alvira JM, Santos-Beneit G, Moreno LA, Lamuela-Raventós RM, Fuster V.

DETERMINACIÓN DEL ÓXIDO NÍTRICO EN ORINA COMO POSIBLE BIOMARCADOR DE RIESGO CARDIOVASCULAR Y SU ASOCIACIÓN CON LA DIETA EN ADOLESCENTES

Aranco C, Ramirez S, Tresserra A, Bodega P, de Cos-Gandoy A, Fuster V.

INTRODUCCIÓN
El incremento en los estilos de vida poco saludables por acción ha sido acompañado de mejoras significativas en los niveles de colesterol, factores de riesgo cardiovascular (FRV) y otros indicadores de salud cardiovascular. El programa SI! Salud Integral es una estrategia efectiva para el mejoramiento de los estilos de vida y la salud cardiovascular de los adolescentes.

OBJETIVOS
El objetivo de este estudio fue determinar la relación entre los niveles de óxido nítrico en orina con factores de riesgo cardiovascular y la dieta en adolescentes españoles.

MÉTODOS
Se identificaron cuatro patrones de EV en niños y niñas en riesgo de RCV. El patrón más saludable (P1) se caracterizó por un mayor consumo de frutas y verduras, menor consumo de alimentos ultraprocesados, mayor actividad física y menor sedentarismo. El patrón menos saludable (P4) se caracterizó por un mayor consumo de alimentos ultraprocesados, menor actividad física y mayor sedentarismo.

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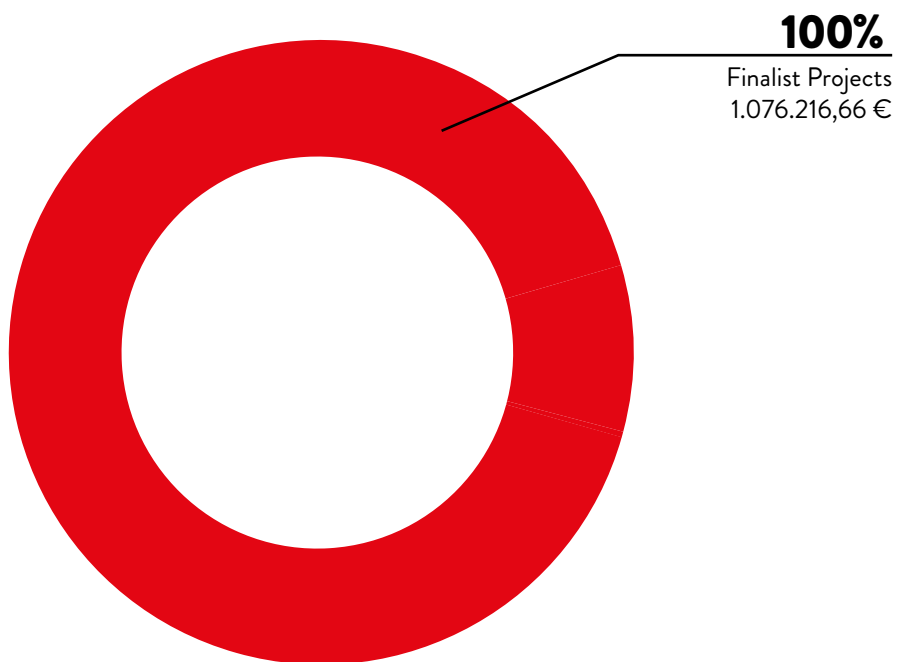
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El incremento en los estilos de vida saludables por acción ha sido acompañado de mejoras significativas en los niveles de colesterol, factores de riesgo cardiovascular (FRV) y otros indicadores de salud cardiovascular. El programa SI! Salud Integral es una estrategia efectiva para el mejoramiento de los estilos de vida y la salud cardiovascular de los adolescentes.

> Determinación del óxido Nítrico en orina como posible biomarcador de riesgo cardiovascular y su asociación con la dieta en adolescentes.

Aranco Riveros C, Ramírez S, Tresserra A, Bodega P, de Cos-Gandoy A, Fuster V.

05 SOURCE AND DESTINATION OF RESOURCES

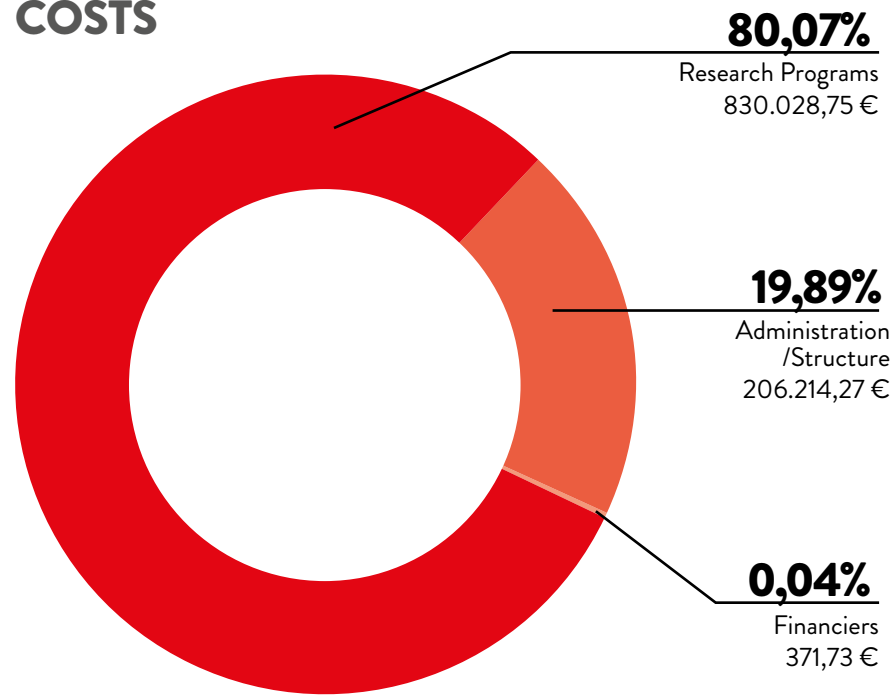
INCOME



SOURCE OF TOTAL INCOME **1.076.216,66 €**

Finalist Projects	1.076.216,66 €
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COSTS



DESTINATION OF TOTAL COSTS **1.036.614,75 €**

Research Programs	830.028,75 €
Administration / Structure	206.214,27 €
Financiers	371,73 €

Budget corresponding to period of 2021

06 TRUSTEES AND TEAM

TRUSTEES

Dr. Valentín Fuster de Carulla
Founding Trustee - Chairman

Mr. Carles Vilarrubí Carrió
Founding Trustee -
Deputy Chairman

Sr. Antoni Vila Bertrán
Trustee, “la Caixa”
Foundation

Sra. Isabel Carvajal Urquijo
Trustee

Sr. Higiní Clotas Cierco
Trustee, “la Caixa”
Foundation

Mr. Àngel Font
Trustee, “la Caixa”
Foundation

The Most Excellent Sr. Javier Solana de Madariaga
Founding Trustee

Mr. Lluís Torres Arro
Founding Trustee

Mr. Joan Font Torrent
Secretary Trustee

Mr. Antoni Guillén Vidal
Deputy Secretary

TEAM

PEDAGOGICAL AREA

Isabel Carvajal
Pedagogical Management

**Domingo Haro, Carla Rodríguez,
Xavier Òrrit, Anna Badia**
Pedagogical Team

SCIENTIFIC AREA

Gloria Santos
Scientific Management

**Patricia Bodega, Amaya de Cos,
Mercedes de Miguel**
Scientific Team

MANAGEMENT

Carles Peyra
General Management

Rafael Badia, Ester Pla
Administration and finance

COLLABORATORS

Pilar Altarriba
Quality

Vanesa Carral
Pedagogy



"la Caixa" Foundation