



**Programa
de Salud
Integral**

Marketplace Workshop on Best Practices in Nutrition and Physical Activity

Ispra, 15-16 March 2018



**Foundation
for Science, Health
and Education**



Obra Social "la Caixa"



SI! Program hallmarks

1.	Science, Health and Education	3
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*SHE Foundation is focused on **basic and clinical research** (Science), and is aimed at promoting **healthy habits** (Health) through **Communication and Education** (Education) of the population.*

SI! Program aims to promote health among children and adolescents by using their proximal environment (school, teachers, and families).

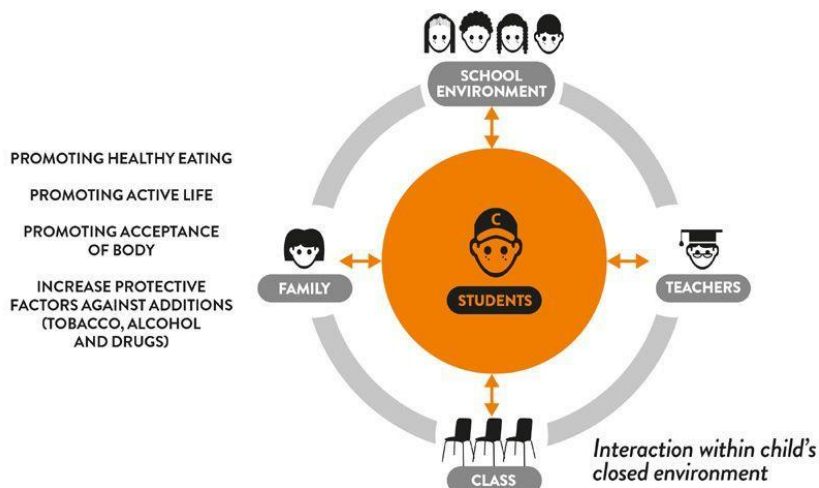
Its contents are adapted for different ages of child development, **covering from 3 to 16 years of age.**

We educate healthy **knowledge, attitudes and behaviours** related to:

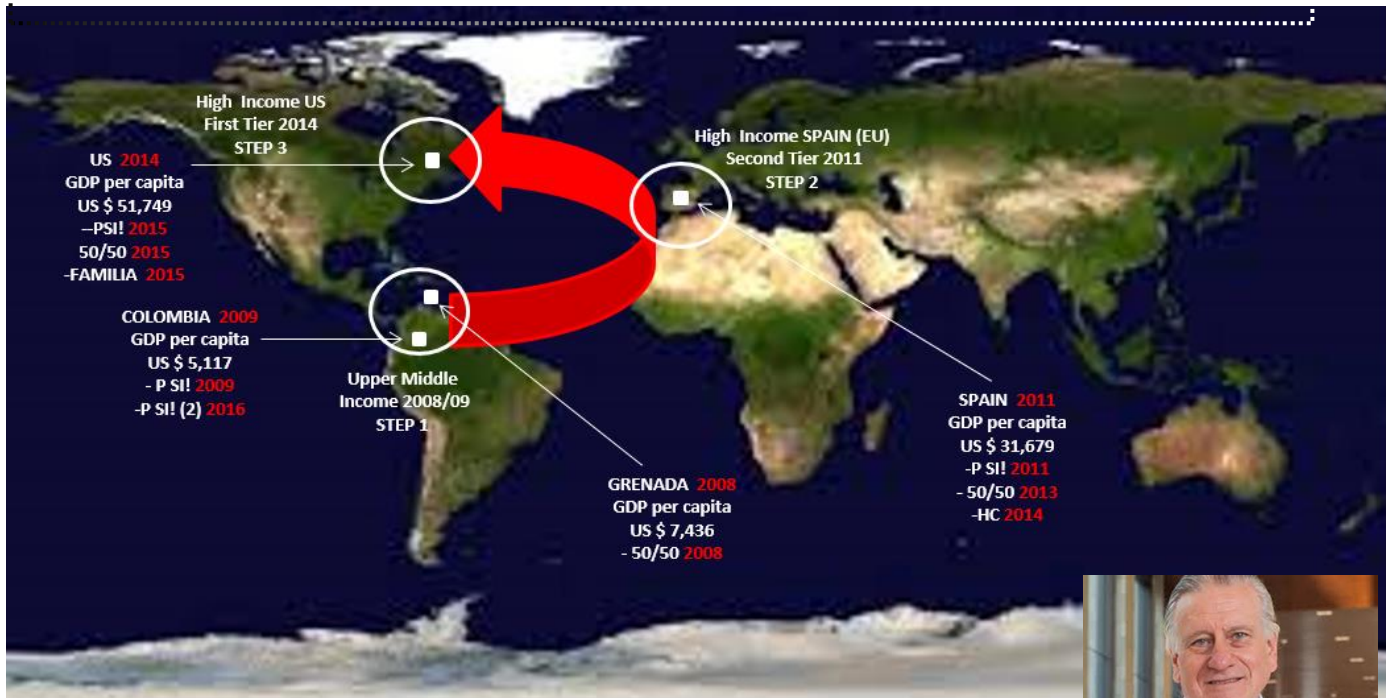
- Healthy **diet**
- Promotion of **physical activity**
- Understanding of the **human body and heart** work
- Management of **emotions** (addictions prevention, etc.)

It is evaluated through **randomized controlled trial**, after a pilot qualitative intervention.

COMPONENTS AND LEVELS OF INTERVENTION



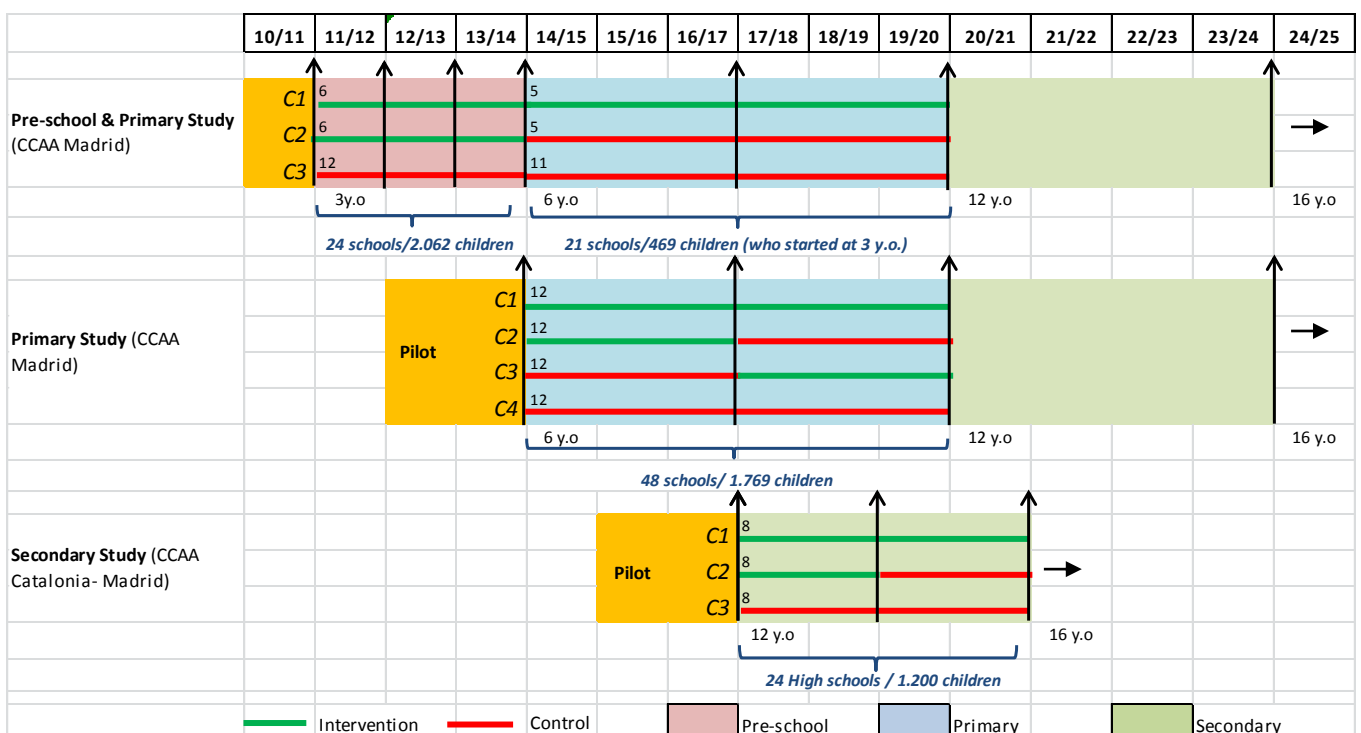
Overview of global health programs



Dr. Valentín Fuster

Scientific study design

Timeline for different educational stages (Spain)



SI! Program for children 3 to 5 years of age



¿PUEDO PROBAR?

Actividad clave 3
Primera comida del día: el desayuno

Desarrollo **SI!**

Programa de Salud Integral

Las comidas del día

DE PIES A CABEZA

Actividad clave 5
Alegria y tristeza

Síntesis **SI!**

Dado de emociones

Objetivo: Favorecer la identificación y expresión de las emociones a través de la expresión verbal y corporal empleando un juego colectivo.

Materiales: Caras del dado de emociones de Barrio Sésamo impresas, tijeras y pegamento.

Desarrollo:

1. Imprimimos 6 emociones de las propuestas por el Programa SI! con los materiales de Barrio Sésamo (para esta edad se recomienda imprimir las emociones primarias: alegría, tristeza, miedo, enfado y amor y sorpresa) o buscamos fotos de personas que expresen dichas emociones en revistas.
1. Pegamos las 6 emociones siguiendo el modelo propuesto.
1. Cada alumno y alumna tendrá un turno para tirar el dado teniendo que expresar con la cara y el cuerpo la emoción que les ha tocado.

Se les puede pedir que expresen la emoción que les ha tocado siendo modelo para el resto de la clase, o que el resto no vea qué emoción les ha salido y tengan que adivinarla a partir de sus gestos.

AC 03.01.05

**LOS CONSEJOS DEL DR. RUSTER:
LA SALUD DE TUS HIJOS EN 6 PASOS**

6 ¡¡Séate...

Establece unas rutinas de aseo y relajación diarias a la hora de acostar a los niños.

1 ¡Desayuna cada día!

Dad a vuestros hijos un desayuno completo antes de ir a la escuela.

leche, cereales, fruta, pan

5 ¡Puedes hacerlo!

Animadlos para que se vean y coman solos.

Logra que el niño se fomente de autonomía y aprenda a trabajar la responsabilidad.

2 ¡Come alimentos de muchos colores!

No olvidéis que los niños han de comer 5 veces al día: desayuno, tentempié, comida, merienda y cena.

Alimentos de "cada día"

cereales, carnes, huevos, frutas, verduras, pan, leche, legumbres, lácteos

Sólo algunas veces: bollería, helados, caramelos, galletitas y refrescos.

4 ¡Expresate!

Enseñad a vuestros hijos a expresar sus emociones.

Permitir que las expresen es muy importante para su salud. Comprenderlos y ofrecer una vía para expresarlas adecuadamente es esencial para que se sientan queridos y desarrollen una adecuada autonomía.

3 ¡Muévete y diviértete!

Animadlos a que vayan andando a la escuela, a salir a jugar, o a dar paseos en bici.

¡El ejercicio es divertido y nos mantiene sanos!

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SI!
Programa de Salud Integral

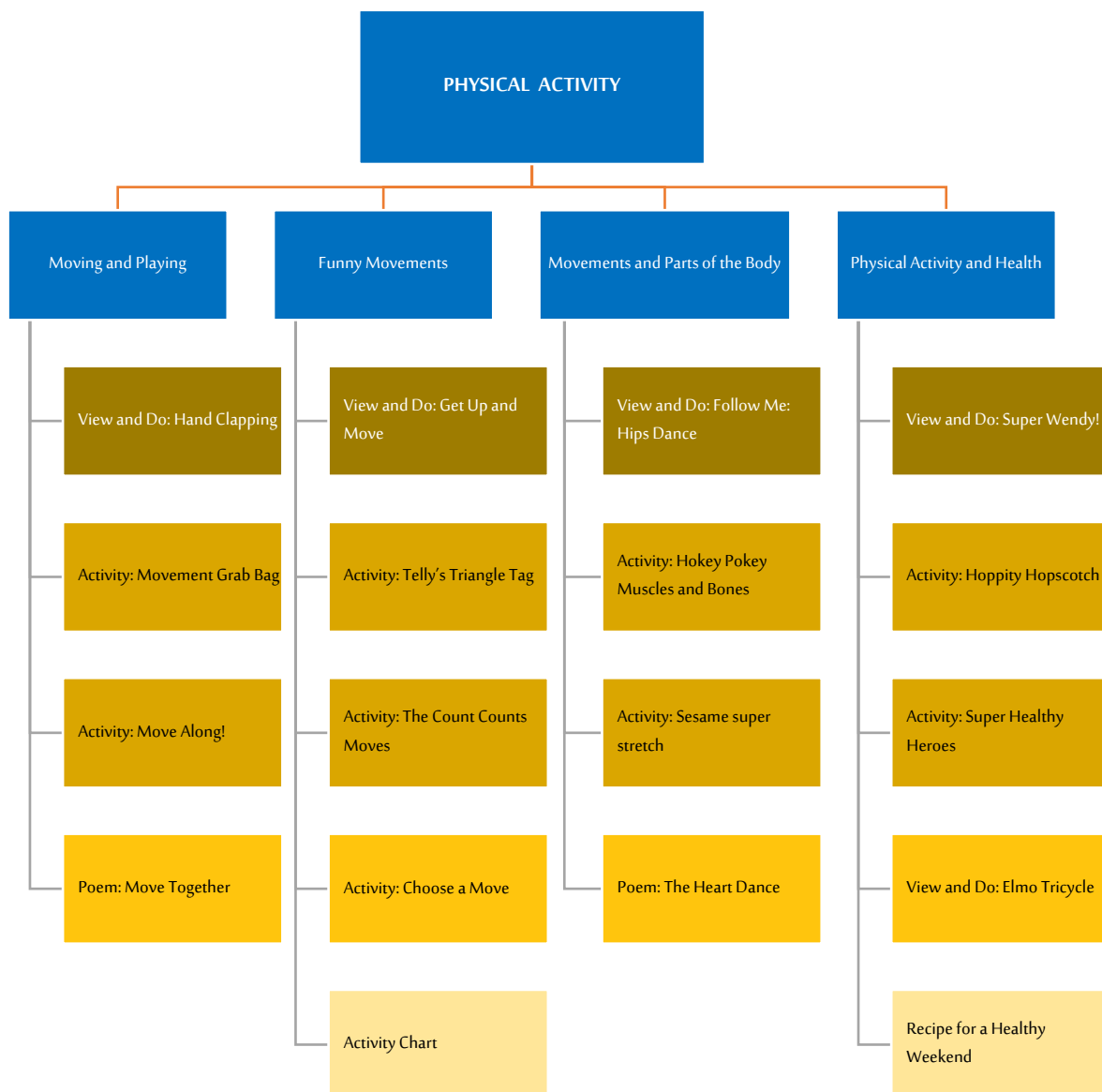
Sigue a Cardio en www.fundacionshe.org

EM
Comunidad de Madrid

Teaching Units, Healthy Week, Family Activities

70h per course





Introduction
 Development
 Summary
 Family

Movement Grab Bag

Pretending to be animals helps children discover new and energetic ways to move their bodies.

* Try This!

Use the animal cards to help children go from one activity to the next. Ask children to move like sleepy turtles when they are moving too quickly. If you need children to move faster, ask them to be "busy bees" so they can fly quickly to their coats before going outside.

Children will:

- < Get physically active, even during transition times
- < Become more aware of their bodies and how they move

Materials:

- < Index cards or small pieces of paper
- < Crayons
- < Old magazines
- < Glue
- < Paper bag

Ask children:

How do animals move? Which animals move fast? Which move slowly? Which animal is your favorite, and how does it move?

Activity:

1. Cut animal pictures from magazines and glue to index cards, or have children draw their own animal on an index card. Put all cards in a paper bag; now you have a Movement Grab Bag.
2. At different times during the day (perhaps when children are on the way to the dramatic play area or another center), ask a child to choose an animal card from the bag.
3. Call out the animal so that children can move like this animal. Help children to name the body parts they move.





Sesame Super Stretch

Stretching keeps us flexible, which means we're able to move and bend our bodies easily – without tightness or pain. Most kids are pretty flexible, but they still can enjoy the best part of stretching: It feels great!

* Try This!

After sitting still in circle time, this is a great way to get children up and moving.

Children will:

- < Stretch their bodies in a variety of ways
- < Learn that stretching helps “wake their bodies up”
- < Mirror movements they see in pictures

Materials:

- < Sesame Super Stretch Chart (copy page 32)
- < Small block

Ask children:

Can you pretend you are waking up in the morning? How does your body feel? Now pretend you are sitting in the car for a long time. How do you feel? How does your body feel right now?

Activity:

1. Do some warm-up exercises (run or jump in place).
2. Introduce different stretching moves:
 - Stretch UP! (reach up to the ceiling)
 - Stretch DOWN! (reach down to your toes)
 - Stretch all AROUND! (hold your arms out to the sides and move them around slowly in BIG circles)
3. Have children take turns tossing the block onto the Stretch Chart to see which stretch it lands on. All children then stretch the way their Sesame Street friend is stretching on the chart.
4. Ask, “What does it feel like after you stretch your muscles? Check your body – are there any spots you want to stretch more so you can move more easily?”

Informal Evaluation

In this Teaching Unit children
have been:

Exploring and having fun with
new moves, stretching and
dancing as they explore their
bodies and the importance of
being physical active.

Review with your children the most important
concepts,

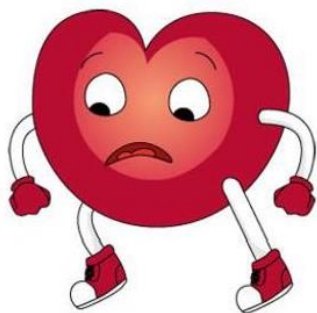
Does Cardio feel very well when...

- I run, play and move?
- I stretch my body?
- I dance?
- I am active?



Does Cardio feel very bad when...

- I watch too much TV without move?
- I'm not very active?
- I play alone with the computer?
- I am not active?



Dr. Ruster says

*“If you want to take care of your body and your heart,
run, play and dance as much as you can!”*

Healthy Diet

This section offers easy and fun ideas and activities to help children learn about fruits, vegetables, healthy choices and balanced diet.

Key Activities:

1. What are fruits and vegetables 1
2. What are fruits and vegetables 2
3. Every day food
4. Balanced diet

Healthy food keeps us happy and strong!

There are so many foods to choose from, but which are best for growing children?

You can guide children to the right choices by helping them learn about healthy eating and allowing them to choose from a variety of nutritious foods.

Food is colorful and it's delicious. Enjoy it together!



WEEK 3

DURATION	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
	Key activity 1: What are fruits and vegetables 1		Key activity 2: What are fruits and vegetables 2		Emotions Key activity 2: I feel sad
30 minutes	View and do: Fruit dance	View and do: Fruit dance	View and do: Veggie dance	View and do: Veggie dance	Word garden
45 minutes	Activity: Pick and pull	Activity: Anytime apples	Activity: Mystery food box	Activity: Build me a salad	Explore
HEALTHY BREAK					
45 minutes	Poem: I say fruits and vegetables	Poem: I say fruits and vegetables	View and do: Colors of the rainbow	View and do: Colors of the rainbow	Show it

WEEK 6

DURATION	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
	Key activity 3: Every day food		Key activity 4: Balanced diet		Emotions Key activity 3: I feel happy
30 minutes	View and do: Cookie is a sometime food	View and do: Cookie is a sometime food	View and do: Mango Tango	View and do: Mango Tango	Routines
45 minutes	Activity: Cookie, Cookie, cucumber	Activity: Healthy day hunt	Activity: A bit of this, a bit of that	Activity: A meal for a monster and me	Watch and play
HEALTHY BREAK					
45 minutes	Activity: Healthy land	Activity: Healthy land	Activity: Adding up to five	Activity: Adding up to five	Show it

I Say Fruits and Vegetables

We eat a rainbow
of colors every day.
They help make us
strong so we can play!

I say red.
We say apples and cherries!
I say blue.
We say big blueberries!
I say green.
We say zucchini would be yummy!
I say purple.
We say plums will please our tummy!
I say yellow.
We say squash would be nice!
I say orange.
Let's have a carrot by the slice!

We eat a rainbow of colors
every day.
They help make us strong
so we can play!



Say it, do it! < Copy this poem, post it, and use it over and over again. Say the poem together in an area where everyone has the space to move.

When you come to a fruit or vegetable, encourage children to strike a pose. If you say cherries, children might ball up on the floor. If you say carrot, they might stand up on their tiptoes. Name various movements rapidly so children are moving around!

Add your own colorful foods to the poem. Say the first part of each line ("I say red..." or "I say green...") and encourage children to call out their own healthy red or green fruits and vegetables.

Together Time

Start with a story: It's the one time of day during which everyone is together, but no one seems to talk or interact during dinner. "Why do we all have to sit here?" Carla wants to know. "I want to go play," she whines.

Talk about it: Ask, "What are your favorite things to do at the dinner table? What are some new things we might do to help make dinner even more fun? Let's come up with a list of questions to ask one another as we sit together."



Family Newsletter



Hello, families!

In our program, we've been making sure that we are eating lots of nutritious foods that are low in sugar, fat, and salt.

In the program, children have been:

Learning about sometime and anytime foods and drinks and the importance of eating five fruits and vegetables every day.

Rhyming, sorting, counting, and adding and subtracting.

* Did You Know?

Children who get all five servings of fruits and vegetables each day are more likely to get the nutrients they need.

We call these healthy foods "anytime foods" because we can eat them every day. We've also been learning that foods like cookies, chips, sodas, and other snacks that are high in sugar, fat, and salt are called "sometime foods" because we should only eat them once in awhile.

You can help at home! Children need healthy options in order to make healthy choices. At home, give children lots of healthy foods and drinks to choose from so that no matter what they pick, you'll know they are getting the nutrients they need to grow and learn every day ("Would you like an apple or a banana? Would you like some salad or some yogurt?") You can empower children as they make their own choices.

ANYTIME foods and SOMETIME foods Take a tour around the kitchen together and look at the foods you are eating every day to make sure you have lots of the anytime foods such as fruits, vegetables, whole grains, lowfat milk/cheese/yogurt, and lean meats. If you discover any chips, cookies, candy, sodas, or sports drinks, pause to remember that these foods are high in sugar, fat, and/or salt and are only sometime foods.

Measurements

Children

- **Questionnaire of Knowledge, Attitudes and Habits** related to Diet, Physical activity and Understanding of Body and Heart ¹
- **Test of emotional comprehension** ²
- **Anthropometry and blood pressure**



Skinfold thickness



Blood pressure



Height



Weight



Waist circumference

Other intervention levels

- Questionnaires for **parents, teachers and principals**¹

¹ Céspedes J et al. *Am J Med* 2013; ² Pons F & Harris P. Oxford University Press 2000.

SI! Program for children 6 to 11 years of age



RCT ongoing

Expresión corporal **2 Experimentamos** ¿hacemos teatro?

A cada grupo le tocará representar una de las situaciones anteriores ante el resto de la clase.

Para hacerlo, es necesario seguir los pasos:

1. Pedir el material disponible en la representación.
2. La temita que presentará.
3. Terminamos con
4. El nombre que se le da.
5. Los personajes.

¿Para qué comemos pescado?

Con todo lo que habéis aprendido, en grupos de dos o tres, haz un cartel anunciando el pescado que más os gusta.

Pensad, ¿qué características destacaríais?

MI PESCADO FAVORITO

Para hacer el cartel.

No olvidéis hacer los rótulos con letra grande y clara. Usad colores necesarios y que contrasten claramente.

Comprobad que el cartel se pueda leer a una cierta distancia.

Equilibrad el espacio ocupado en el cartel para facilitar la lectura.

Centro escolar: _____ Curso y clase: _____ Nombre: _____

CÓMO MANTENER UN CORAZÓN SANO

Cuerpo y corazón

Escúchate
Escucha, con atención, lo que dice tu cuerpo y tu corazón.

Carga las pilas durmiendo
Si descansas tendrás energía a lo largo del día.

No olvides tu higiene
Tu higiene personal es parte de tu salud.

Actividad física

Muévete en tu día a día
Aprovecha todas las oportunidades para ser activo: subir escaleras, desplazarte caminando, salir a pasear, evitar el ascensor...

Limita las horas de pantalla
No te aisles con la tecnología.

Corre, salta y baila
Es importante practicar diferentes actividades físicas y deportes.

Alimentación

El desayuno te da energía para empezar bien el día
Alimentar bien tu cerebro para rendir más en clase.

Come 5 veces al día (y como mínimo una en familia)
Repartir la alimentación en 5 comidas te ayudará a comer más variado y equilibrado.

Come fruta y verdura cada día
La fruta y verdura son la principal fuente de vitaminas y fibra de nuestra alimentación imprescindibles para estar sanos y fuertes.

Gestión emocional

Ponte en su lugar
Presta atención a las emociones de los que te rodean.

Aprende a enfrentar tus retos
Pide ayuda cuando la necesites.

Expresa cómo te sientes
Comparte cómo te encuentras y lo que para ti es importante.

SI! Programa de Salud Integral

Sigue a Cerdio en www.fundacionshe.org

SHE Foundation for Science, Health and Education



Classroom Activities, Healthy Week, Family Activities

6-7 years of age: 32h per course
8-11 years of age: 24h per course

OUR TEN STEP GUIDE FOR A HEALTHY SCHOOL ENVIRONMENT

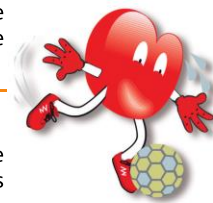
1 We organise healthy celebrations

The SI! Programme proposes breaking the connection between celebrations and food and creating new connections with alternatives such as physical activity and emotions, to avoid the consumption above recommended levels of 'occasional' foods such as sweets, soft drinks and pastries.



2 We promote active school break periods

Having an active life means taking the opportunity to exercise throughout the day, not just during the PE class. Releasing energy through play allows us to wake ourselves up and provides oxygen to our body and brain.



3 We encourage body awareness

It is important to know how to interpret the messages our body sends us. Meeting the biological, rest and relationship requirements of our body helps us pace ourselves through the day.

4 We look after personal hygiene needs at school

The school should encourage and promote hygiene, and not just washing the hands and face.

5 We recommend healthy snacks

If your school usually has a mid-morning snack, you can make recommendations to families to make sure the children alternate between fruit, sandwiches, drinking yoghurt, cereal bars and nuts.



6 We respect the importance of reflection

One of Dr. Fuster's recommendations is to devote a few minutes every day to reflection before activity. We recommend that the school respects established rest periods and encourages time for reflection.

7 We maintain a good atmosphere in school

Relationships created in school act as a framework for the work and study environment. Conflict is part of normal life; crises can encourage personal and school growth, but should always be managed to ensure dialogue, understanding and agreement.



8 We involve the school canteen in school activities

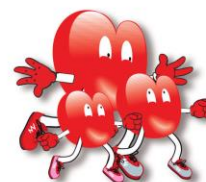
Involving the school canteen is more than just checking the school menu and the way the food is cooked. It means using the space and the staff, listening to their ideas and working with them as a team.

9 We encourage family involvement in programme activities

Improving children's lifestyles requires team work. Encourage parents to put forward ideas and to take part in implementing them.

10 We encourage the children to come to school on foot or by bicycle

Promoting healthy and sustainable transport is recommended. This means we can raise environmental awareness, encourage independence and improve motor skills and physical health, in addition to creating healthy habits which can last a lifetime.



Measurements

Children

- **Questionnaire of Knowledge, Attitudes and Habits** related to Diet, Physical activity, Understanding of Body and Heart, and Emotions ¹
- **Anthropometry and blood pressure**

The image shows a digital questionnaire interface. It has a header with the 'Si!' logo and the text 'Programa de Salud Integral'. Below the header, there are several sections of questions, each with a corresponding icon (e.g., a car for physical activity, a heart for health). The questions are in Spanish and include options like 'si', 'no', 'a veces', and 'nunca'. At the bottom, there are navigation icons for back, forward, and search.



Skinfold thickness



Blood pressure



Weight



Waist circumference



Height

Other intervention levels

- Questionnaires for **parents, teachers and principals**²

¹ Santos-Beneit G et al. BMC Public Health 2015; ² Gomez-Pardo E et al. J Am Coll Cardiol 2016; Remor E. Span. J. Psychol 2006; Serra-Majem L et al. Public Health Nutr 2004; Encuesta Nacional de Salud de España 2011/12; Goodman R J Child Psychol 1997; Sotos-Prieto M et al. Nutr Hosp 2015

SI! Program for children 12 to 16 years of age



RCT ongoing

ACTIVIDAD 5
NUESTRA PÓCIMA MÁGICA

Aquí os dejo algunas ideas; puedes utilizar frutas, verduras, alguna planta o hiebro aromático, lácteos, agua... También puedes buscar recetas de batidos o zumos por internet.

Investiga y prueba la mezcla de sabores sin miedo! Pero recuerda: **NO AÑADAS AZÚCAR A TUS ELABORACIONES!**

Durante los festejos preparabamos pócimas muy sanas con frutas u verduras. Ahora te toca a ti elaborar tu propia pócima. Debes elaborarla con las características de los alimentos que se utilizan. Recuerda! ¡alimentos de temporada, de proximidad, de muchos colores u muy saludables!

frutas + hortalizas + leche

Jugo o agua

ACTIVIDAD 4
COMPARA TU DIETA CON LA DE LOS DRUIDAS

Los druidas teníamos una alimentación muy equilibrada, basada en productos de la tierra. Ahora que has repasado tu dieta habitual, compáralo con nuestro número de raciones de cada grupo de alimentos.

¿Crees que el reparto de tus comidas es adecuado?

alimento	¿dónde lo puedo encontrar?

Esta pócima la hemos elaborado:

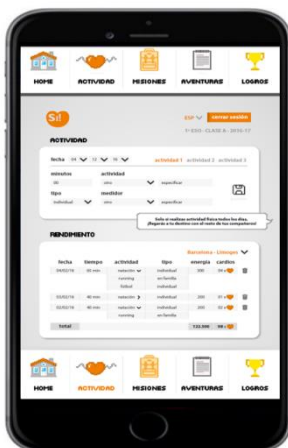
Carnes procesadas y dulces
consumo ocasional

carnes, huevo, pescado y lácteos
2-3 al día

hortalizas, verduras, leguminosas verdes y frutas
2-3 al día

cereales, tubérculos y legumbres
3-4 al día

agua
4-8 al día



Classroom Activities, Healthy Week, Family Newsletter

12-18h per course

Gamification to promote Physical Activity Extra curricular

Measurements

Children

- **Questionnaire of Diet** ¹, Physical activity ², emotions ³, Addictive substances ⁴ and Food Frequency ⁵
- **Anthropometry, Blood pressure, Bioelectrical impedance, Dual energy X-ray absorptiometry, Blood analysis** (Glucose, cholesterol and triglyceride levels), **Salivary and Urine analysis** (mainly polyphenol intake), **Accelerometers**.



BIA



Blood pressure



Accelerometers



Blood analysis



Weight

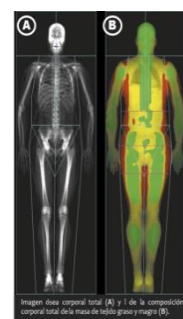


Waist circumference

Height



Urine and salive analysis



DEXA

Other intervention levels

- Questionnaires for **parents** and **principals**⁶

¹Lima-Serrano et al. Rev Esp Salud Publica 2012; ² Hagstromer et al. Int J Obes (Lond) 2008; ³ Stunkard et al. JAMA 1990; Jauregui-Lobera et al. Nutrients 2014; Vázquez Fernández et al. Pediatría Atención Primaria 2013; ⁴ Lima-Serrano et al. An Sist Sanit Navar 2013; Lana AT, Consejería de Sanidad de Canarias 2010; Moreno C, MSSSI 2012; ⁵ Tresserra-Rimbau et al. Nutr Metab Cardiovasc Dis 2013; ⁶ Gomez-Pardo E et al. J Am Coll Cardiol 2016.

Strengths

- **Evidence-Based.** The SHE Foundation has reviewed many European healthy programs to develop the PSI!, basing on their benefits and trying to overcome their weaknesses.
- **Emotion management work with children and their families**, as a protector factor of disruptive behaviors in adulthood. Some of these behaviors are directly related with CVD, such as anxiety disorders and poor anger management, or drugs use.
- **Contents, materials and strategies developed by experts from different areas of knowledge** (education, psychology, pedagogy, medicine, biology, physical activity and human nutrition), and based on health promotion and social learning models.
- **Simple and fun activities, to generate motivation and interest on children, teachers and families.** All activities start from the basis of experimentation, imitation and game, to convey the contents of the program.
- **Embedded in the school curriculum.** It has a systematic structure, transversal contents and adaptable activities to different academic systems.
- **Use of a principal character and its story**, is a central feature in all the program activities, functioning as a motivational guide with whom children can easily identify and learn about the importance of taking care of their bodies, managing emotions, physical activity, and diet.
- **Family activities**, which help to continue the work on health promotion also at home.
- **Practical and theoretical training for teachers**, in accordance with administrative requirements for official accreditation.
- **Flexible and adaptable**, successfully implemented in 3 countries (Spain, USA and Colombia), in different cultural and socioeconomic backgrounds. Available in Spanish and English.

Dedicated development and support



Chair: Valentin Fuster M.D., Ph.D.

Foundation for Science, Health and Education (SHE)
Spanish National Center for Cardiovascular Research (CNIC)
Icahn School of Medicine at Mount Sinai

SHE Team: Biologists, Biostatisticians, Nutritionists, Educators, Physical Education and Sports Experts, Psychologists, Economists.

CNIC Team: Medical doctors, Biostatistician, Epidemiologists.

Collaborations: School teachers, Public Educational Departments, Universities, Private Organizations.



Scientifically proved

“The SI! Program for promoting heart-healthy habits in children aged 3 to 5 years: basis and evaluation of the educational intervention” Carral V et al. **J Educ Res Under review**

“Rationale and Design of Family-Based Approach in a Minority Community Integrating Systems-Biology for Promotion of Health (FAMILIA)” Bansilal S et al. **Am Heart J** 2017; 187:170-181.

“Family-Based Approaches to Cardiovascular Health Promotion” Vedanthan R et al. **J Am Coll Cardiol.** 2016; 67(14):1725-1737.

“El Programa SI! de Salud Integral” Santos-Beneit G et al. En *Una mejor salud para los jóvenes: de la obesidad a la sostenibilidad*. **Avances en Alimentación, Nutrición y Dietética 2016**. Martínez JR y Villarino A. (eds.). Punto Didot, Madrid. pp. 25-39 ISBN 978-84-16893-72-0

“The SI! Program for cardiovascular health promotion in early childhood: A cluster randomized trial” Peñalvo JL et al. **J Am Coll Cardiol** 2015; 66 (14): 1525-1534.

“Association between anthropometry and high blood pressure in a representative sample of preschoolers in Madrid” Santos-Beneit G et al. **Rev Esp Cardiol** 2015; 68(6):477-484.

“Development and validation of a questionnaire to evaluate lifestyle-related behaviors in elementary school children” Santos-Beneit G et al. **BMC Public Health** 2015; 15: 901-907.

“Parental and self-reported dietary and physical activity habits in preschoolers and their socio-economic determinants” Sotos-Prieto M et al. **Public Health Nutr** 2014; 3:1-11.

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

“Promotion of cardiovascular health in preschool children: 36-month cohort follow-up” Céspedes J et al. **Am J Med.** 2013;126(12):1122-1126.

“Mediterranean dietary patterns in 3-5 year old children and their parents: the Program SI! Study” Sotos-Prieto M et al. **Ann Nutr Metab** 2013; 63(1): 921-922.

“Anthropometry and blood pressure in 3-5 year old children of Madrid: Program SI! Study” Santos-Beneit G et al. **Ann Nutr Metab** 2013; 63(1): 921.

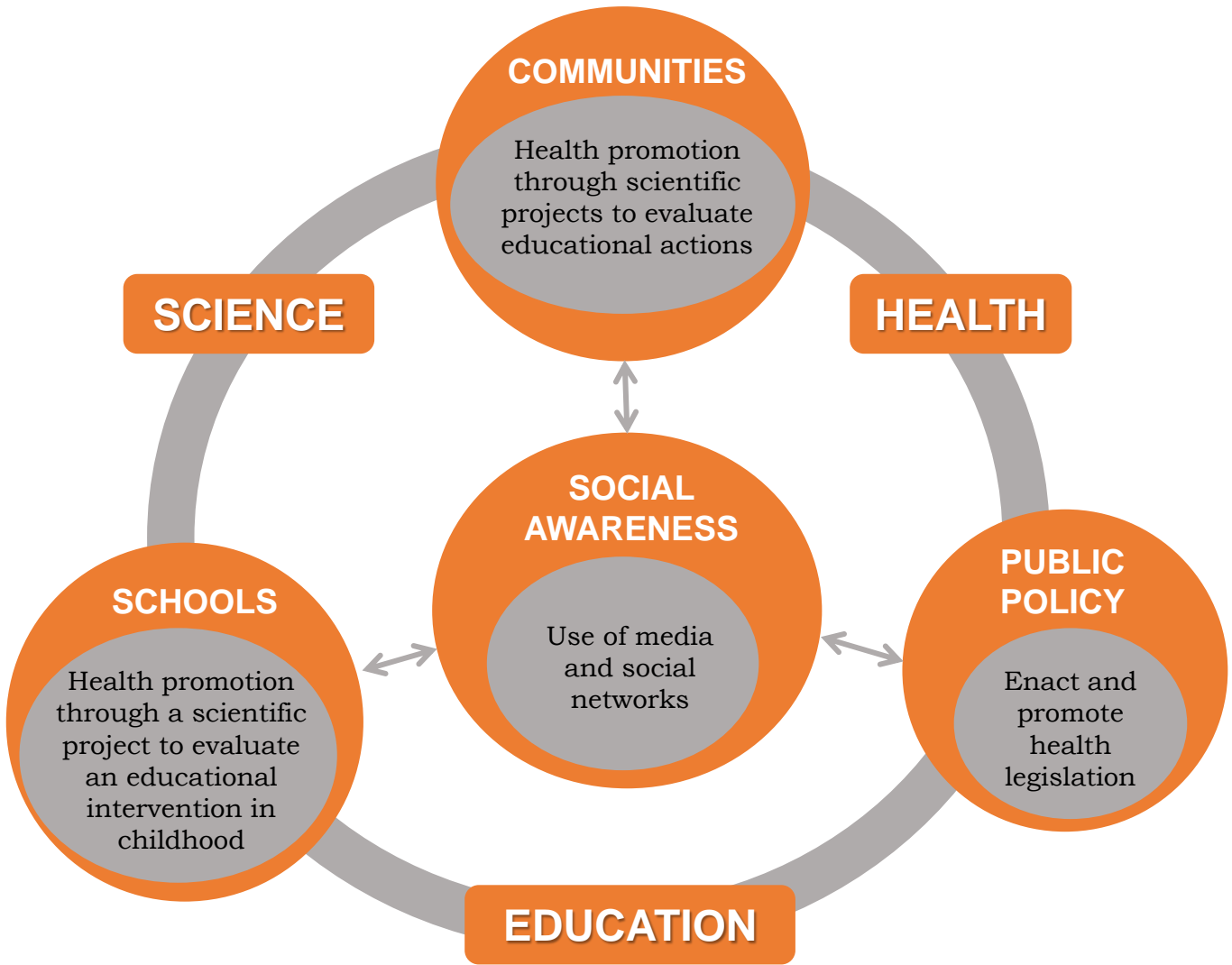
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Feasibility to be scaled-up



How to implement the SI! Program



1. Local Partners: The successful replication of the SI! Program requires careful consideration of local conditions and securing technically competent partners who are committed to the program.

- **Financial infrastructure.** LOCAL partners should be able to finance the entire structure of a pilot study plus an overhead for Valentin Fuster – Mount Sinai Foundation for Science, Health and Empowerment to accompany the process with external technical support and guidance.
- **Institutional relationships.** Partners should demonstrate links with public institutions involved in the project (school districts, local board of education, etc.) in order to facilitate sustainability.
- **Previous related experience.**

Expert personnel. Prospects should provide evidence (CVs) of team members with the knowledge and skills necessary to implement the program.

2. Initiate with a pilot. Outsourcing the program will only take place after a pilot is put in place locally, financed by the sponsor. The pilot will follow Standard Operating Procedures provided by Valentin Fuster –Mount Sinai Foundation for Science, Health and Empowerment. The pilot will include local schools and school officials and allow for the adaptation of the materials to local sociodemographic realities.

3. Reporting to Valentin Fuster –Mount Sinai Foundation for SHE. Monthly (or quarterly) reporting on the progress of the pilot.

4. Quality control, follow-up and scientific commitment. Prospects should commit to collect some data on implementation to monitor quality control, to enter the data in a common electronic database platform with global access, and to perform periodic follow-up of the participants included in the program. The prospects will agree that these data can be used for joint scientific activities and the diffusion of results (mainly in the form of abstracts and manuscripts).

5. Program SI! is a unique opportunity to create a diverse set of international cohort of kids intervened to be followed-up until adult age. The first step involves proving the concept in an initial preschool-age group by demonstrating actual decrease in cardiovascular risk factors, subclinical disease and clinical events.

6. For the mid-long term, the program will rely on self-reported data, and an electronic brief newsletter/questionnaire every 3 years to calculate general scores.

7. In order to promote the scientific diffusion of the program, we propose creating some kind of platform (like in other studies) with committees addressing proposals for ancillary studies, use of data collected, publications and so forth.

8. Communication, intellectual property, credits and branding. local partners will agree to guidelines associated with use of intellectual property associated with the program and communication and branding criteria.

Implementation example

- **March/April/May 2019**
 - Secured funds (March 2019- March 2022)
 - Signed and MOU between the players
 - Dr. Fuster kick off meeting
 - Develop work plan
 - To prepare materials (Sept 2019)
 - To create the database (Sept 2019)

- **December 2019**
 - Recruit schools for the Pilot

- **March/June 2020**
 - To start the pilot in 2/3 schools (April)
 - Focus groups, training teachers

- **July 2020/March 2021**
 - Results from pilot trial: barriers/facilitators, focus groups, etc.
 - Correction and adequate materials
 - Materials edition
 - Recruit intervention schools
 - Training teachers, coordinators, web

- **April 2021-December 2021**
 - Start of the randomized-control group proof-of concept trial in 600-1200 children (sample size calculation needed)
 - Baseline measurements and randomization
 - Educational intervention
 - Follow-up measurements

- **January 2022/June 2022**
 - First results of the proof-of-concept randomized educational intervention trial. Publications
 - Potential roll out

Valentin Fuster, M.D., Ph.D.

Dr. Valentin Fuster serves The Mount Sinai Medical Hospital as Physician-in-Chief, as well as Director of Mount Sinai Heart Center. Dr. Fuster is the General Director of the Spanish National Center for Cardiovascular Research (CNIC). He is also President of the Advisory Health Council of the Spanish Ministry of Health, Social Services, and Equality.

The innumerable positions he has held include those of President of the American Heart Association, President of the World Heart Federation, member of the US National Academy of Medicine, where he chaired the Committee for the document on "Promotion of Cardiovascular Health Worldwide and presently Co-Chairs the Advisory Committee on "the Role of the United States on Global Health" as advisor to the new President, Member of the European Horizon 2020 Scientific Panel of Health, Council member of the US National Heart, Lung and Blood Institute and President of the Training Program of the American College of Cardiology.

Dr. Fuster has been named Doctor Honoris Causa by Thirty-three universities. He is an author on more than 1000 scientific articles (H1-145). He was named Editor-in-Chief of the journal Nature Reviews in Cardiology and recently Editor-in-Chief of the Journal of the American College of Cardiology, the ACC's flagship publication and the main American source of clinical information on cardiovascular medicine (Impact factor 17.7). His research into the origin of cardiovascular events, which have contributed to improved treatment of heart attack patients, was recognized in 1996 by the Prince of Asturias Award for Technical and Scientific Research (highest award in Spanish speaking countries). And in June 2011 he was awarded the Grand Prix Scientifique of the Institute of France (considered a most prestigious award in cardiology), for his translational research into atherothrombotic disease.

Among his many achievements, it is noteworthy that Dr. Fuster is the only cardiologist to have received the highest awards for research from the three leading cardiovascular organizations: the American Heart Association (Gold Medal and Research Achievement Award), the American College of Cardiology (Living Legend and Life Achievement Award 2017) and the European Society of Cardiology (Gold Medal).

This vocation and the clear need to promote healthy lifestyle habits recently led to Dr. Fuster launching the **Science, Health and Education Foundation (SHE)**, with the goal of improving public health, especially among young people.



Contact details

Link to the website of the SI! Program and SHE Foundation:

<http://www.programasi.org/en/>

<http://fundacionshe.org/en/home/>

Valentin Fuster, MD PhD

vfuster@cnic.es

Spanish National Centre for Cardiovascular Research (CNIC)

Melchor Fernández Almagro, 3

28029 - Madrid (Spain)

Tel: (+34) 914531200, Ext. 4260

More information at <https://www.cnic.es/en/sobre-cnic/general-management>

Isabel Carvajal, PhD

icarvajal@fundacionshe.org

C/ Balmes 155-157, 5º 1ª - 08008 – Barcelona (Spain)

Tel: +34 932.18.54.44 / +34 629 215 937

Rodrigo Fernandez-Jimenez, MD PhD

rfernandez@cnic.es

Spanish National Centre for Cardiovascular Research (CNIC)

Melchor Fernández Almagro, 3

28029 - Madrid (Spain)

Tel: (+34) 914531200, Ext. 1162

SHE Foundation Administrative Support Services

Ester Pla

epla@fundacionshe.org

C/ Balmes 155-157, 5º 1ª - 08008 – Barcelona (Spain)

Tel: +34 932.18.54.44 / +34 626 57 28 05