

#### **Sintra Grows Healthy**

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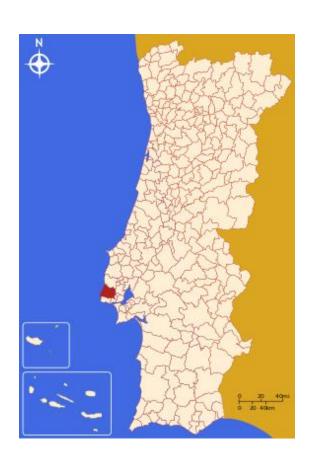






# Sintra, Portugal







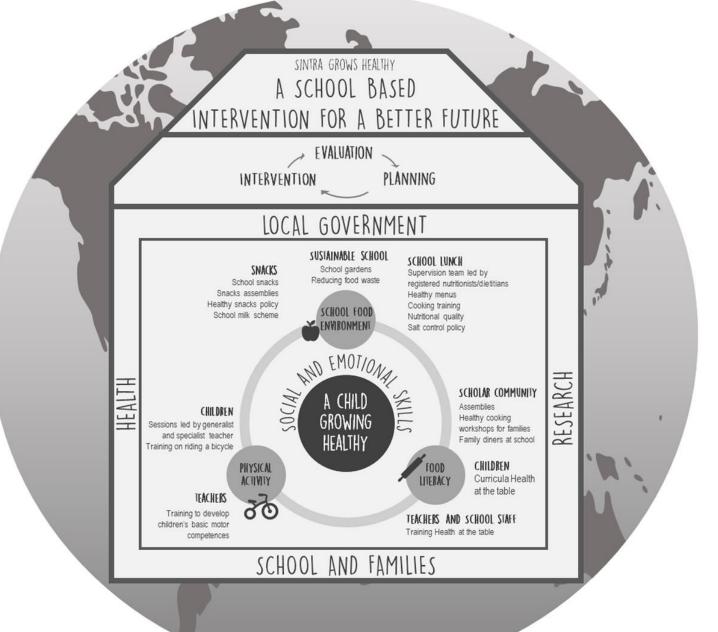
# Sintra, Portugal



- North of the Metropolitan Area of Lisbon
- Second most populated and the second youngest municipality in Portugal
- A total population of 388 434 around 3.8% of the Portugal's population
- More than 100 000 inhabitants having less than 25 years old (INE 2018)
- Sintra's primary public schools register a total of 18 035 children, 4570 in public pre-school and 13 465 in primary school.
- Sintra's municipality oversees the management of public-school meal service in 90 establishments, from pre-school to primary school, providing approximately 15 000 school meals-a-day.







(Ferreira et al. 2020)

## **About Sintra Grows Healthy**

- Sintra Grows Healthy is an intervention project with a community-based participatory research (CBPR) for healthy lifestyle promotion in primary school-aged children of the Sintra Municipality.
- Sintra Grows Healthy aims to promote healthy lifestyles to prevent childhood obesity and improve children's health-related quality of life and social and emotional skills, through the development of a school evidence-based and sustainable model.

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BMC Public Health

STUDY PROTOCOL

Open Access

A school-based intervention for a better future: study protocol of Sintra Grows
Healthy

Raquel J. Ferreira 1.2†, Telma Nogueira 3.4\*† , Vitória Dias da Silva³, Mariana Liñan Pinto³, Joana Sousa 3,4,

(Ferreira et al. 2020)



#### How it started?



Over the years, Sintra Municipality has been investing in children's nutritional health with:

- Supervision of school meals quality
- Nutritional Balanced Menus, planned by nutritionists
- Salt Reduction Policy in school meals
- Continuous training of cooks
- Family dinners at school
- Monthly cookery workshops for families

They were convinced that they could do more and better if they joined hands together with the community, families, academy and other institutions of reference.

### Who are we?

Sintra Grows Healthy is promoted by the Sintra Municipality, together with the following partners:

- Sintra Health Centers Group
- School of Communication and Media Studies (Polytechnic Institute of Lisbon)
- Lisbon School of Health Technology (Polytechnic Institute of Lisbon)
- Faculty of Medicine | Laboratory of Nutrition (University of Lisbon)
- Faculty of Human Kinetics (University of Lisbon)



### Who are we?

The project has institutional support of the following organizations:

- Ministry of Health
  - National Programme for the Promotion of Healthy Eating (PNPAS)
  - National Programme for Physical Activity Promotion (PNPAF)
- Ministry of Education
- Nutritionists' Order
- Psychologists' Order
- Food and Agriculture Organization of the United Nations (FAO)
- National School of Public Health (NOVA University Lisbon)
- Food, Farming and Forestry College (F3)



# Why?

We take responsibility of the current global challenges and we want to take action contributing to solve them. Some guiding documents for our action:

- National Programme for the Promotion of Healthy Eating (PNPAS)
- Portuguese Interministerial Strategy for the Promotion of Healthy Eating
- National Strategy and Action Plan to Combat Food Waste
- National Programme for Physical Activity Promotion (PNPAF)
- Referential for Health Education (DGE)
- Action Plan for Health Literacy 2019-2021
- Local Health Plan of Sintra

- Exit Profile of Students Leaving Compulsory Education
- National Strategy for Citizenship Education
- Schools for Health in Europe (SHE)
- Ambition and Action in Nutrition 2016/2025, WHO 2017
- European Food and Nutrition Action Plan 2015-2020
- Global Strategic Framework for Food Security and Nutrition
- Transforming Our World: The 2030 Agenda for Sustainable Development

## Intervention

Saúde na Mesa (Health at the table)

**Physical Activity** 

**School Food Environment** 

**Food Policy** 



## Intervention

Saúde na Mesa (Health at the table)

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**Food Policy** 





- Weekly nutrition education sessions are dynamized by the teacher at school, as a Curricular Complementary Offer.
- The sessions are mostly practical and are included in the Manual Saúde na Mesa, which provides the contents, organized by school grade, and also allows the connection with the mandatory curricular activities.
- For the implementation of Saúde na Mesa, a certified training of 50 hours is required.

#### Aims:

- To promote the acquisition of healthy lifestyle habits and behavior (in order to remain in adulthood), contributing to the prevention of noncommunicable diseases;
- To contribute to the intake of healthy and nutritious foods, valuing the diversity of local products and reducing food waste;
- To recover the Mediterranean diet traditions;
- To raise awareness for the right to an adequate and healthy food at all stages of the life cycle;
- To promote autonomy in food choice, respect and appreciation of cultural differences.

#### **Thematic Modules**

Food and Culture

Food, Nutrition and Health

Food and Emotions

Food Cycle: from producer to consumer

Safety Cooking

Food Sustainability



























## Intervention

Saúde na Mesa (Health at the table)

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# Intervention: Physical activity

• Teachers receive certified training to promote the development of students' basic motor skills.

• Each child received a bicycle and is learning to ride a bicycle.



## Intervention

Saúde na Mesa (Health at the table)

**Physical Activity** 

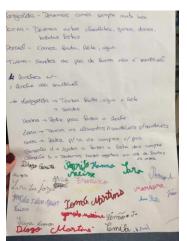
**School Food Environment** 

**Food Policy** 



- Food waste is measured at the school canteen.
- At the beginning of the school year we evaluate the snack intake at schools:
  - Qualitative and quantitative evaluation
  - Control and intervention group
- Based on that diagnosis, children, families, teachers and school staff define the school food policy with assemblies, to be implemented and continuously monitored.

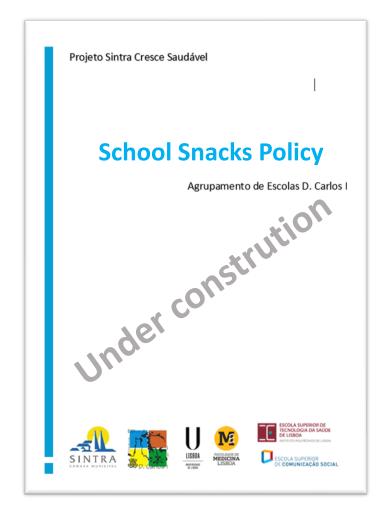






- The food assemblies with children aims to:
  - Discuss the importance of snacks;
  - Identify causes for consumption of unhealthy snacks;
  - Identify actions that ensure children consume healthy snacks;
  - Build a document, signed by the children, with main conclusions of the debate.





#### Alimentos para Lanches Escolares

✓ Leite escolar

✓ Leite meio gordo simples

✓ Togurtes naturais e/ou aromas

Pão "do dia" (tipo mafra ou rio maior

de mistura ou centeio com fiambre

ou queijo ou manteiga ou queijo

✓ Bolachas de milho e de arroz sem

✓ Hortícolas (tomate, cenoura, alface,

adicão de acúcar e sal

✓ Queijo flamengo

adicionado ✓ Sumos de fruta naturais ✓ Purés de fruta sem açúcar adicionado

✓ Fruta fresca (da época).

✓ Frutos gordos ao natural (ex:

amêndoas, nozes, caju...)

✓ Sumos do tipo 100% sem açúcar

fundido ou creme vegetal ou ovo)

#### Posso trazer sempre! Posso trazer pontualmente! Alimentos a Promover (diariamente) Alimentos a Limitar (máx. 1 vez por semana)

- ✓ Leite com chocolate
- ✓ Pão de leite
- ✓ Croissants tipo brioche sem recheio
- ✓ Pão de forma
- ✓ Bolachas tipo Maria/torrada/água e sal.
- ✓ Bolachas de Aveia
- √ Barritas de cereais
- ✓ Cereais de pequeno almoço
- ✓ Marmelada e compotas
- ✓ Bolos à fatia (caseiros)
- ✓ Pastelaria (bolo de arroz, pastel de nata, bom bocado, queque, entre outros...)
- ✓ Néctares de fruta
- ✓ Chocolate preto

#### Não posso trazer!

Alimentos a não Disponibilizar (nunca)

- ✓ Refrigerantes, incluindo as bebidas com cola, iced-tea, néctares, águas aromatizadas;
- ✓ Chouriço, salsicha, mortadela, linguiça
- ✓ Napolitanas e croissants com recheio
- ✓ Pastelaria: palmiers, jesuítas, mil folhas, bola de Berlim, donuts
- massa folhada
- ✓ Rissóis, croquetes, pastéis de bacalhau e produtos afins
- ✓ Bolos com creme
- ✓ Tiras de milho, batatas fritas, aperitivos e pipocas doces ou salgadas
- ✓ Hambúrgueres, pizzas, cachorros-quentes
- ✓ Bebidas energéticas e bebidas desportivas.
- ✓ Rebuçados, caramelos, chupas, pastilhas elásticas e gomas
- ✓ Chocolates excepto preto

Para mais informações ou dúvidas, contacte nos através do correio eletrónico crescesaudavel@adcarlosi.pt

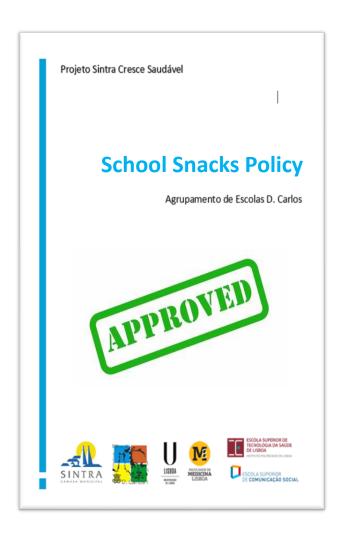


- At the food assemblies of the scholar community:
  - We present the document produced on assemblies of children
  - And ask feedback from the scholar community to define the school food policy









- Approval in Pedagogic Council of the Group of the Schools
- The document is sent by e-mail or paper to the families
- Scholar community monitor the practice of school snack policy through the class snacks map



# Research questions, intervention axes and expected results and outcomes

**Table 1** Research questions, intervention axes, and expected results and outcomes

Research	Does the Sintra Grows Healthy model prevent the increase of childhood obesity prevalence?			
Questions	Does the Sintra Grows Healthy model improve children's social and emotional skills?			
	Does the Sintra Grows Healthy model improve children's health-related quality of life?			
Intervention Axes	Curricula Health at the Table	School Food Environment	Physical Activity	
	Weekly sessions of food education given by the teacher in a curricular context as a complementary offer.	Implementation and monitoring of a healthy snacks policy.	Weekly sessions of physical education in collaboration between general teacher and specialist teacher.	
Expected Results	To develop and measure the impact of a school evidence-based and sustainable model to promote healthy lifestyles that could be reproducible in similar contexts.			
Outcomes	Prevent the increase of childhood obesity prevalence and improve children's social and emotional skills and health-related quality of life.			

(Ferreira et al. 2020)



## Data collection

- Monitoring
- Process evaluation
- Outcome and impact evaluation:
   Control and intervention groups

Table 2 Information collected at each moment of data collection

Data	Beginning of the school year	End of the school year
Written informed consent	Xa	_
Anthropometric data	Xb	Xb
Basic Motor Competences	Xb	Xb
Sociodemographic data	Xa	_
Health-related data, eating habits and behaviours, movement behaviours	Xa	Xa
Health-related quality of life social and emotional skills	Xa,b,c	Xa,b,c
Snacks evaluations	Xb	Xb
Process evaluation	_	Xa, b, c, d

a: children's legal guardians, b: children; c: teachers; d: school staff

(Ferreira et al. 2020)





























#### How do we innovate

- Promoting the interaction of the three intervention axes, based on community-based participatory research (CBPR);
- Empowering the schools with health promotion skills (healthy eating and physical activity);
- Developing skills such as self-regulation, problem solving, communication and critical thinking as asked in the Exit Profile of Students Leaving Compulsory Education;
- Boosting change behaviors with short- and long-term health benefits, in the school-familylocal power triad;
- By the intervention methodology, the monitoring and evaluation based on scientific evidence and supported by the academy.

The Laboratory of Nutrition of the Faculty of Medicine assumes the technical and scientific leadership of the project, being responsible for its evaluation.

# Sustainability strategy

- The SCS project has the particularity of achieving the school's own identity for example, the definition, approval and implementation of a school food policy represents a compromise and the integration of these rules in the Internal Regulation of the School Group.
- The emphasis on teacher training contributes to ensuring the continuity of the dynamics established in the scope of the project, extending to subsequent generations.
- The SCS project can be a way to comply with the guiding references of action in these
  matters, such as the Exit Profile of Students Leaving Compulsory Education, the Portuguese
  Interministerial Strategy for the Promotion of Healthy Eating and the National Programmes
  for the Promotion of Healthy Eating and for Physical Activity Promotion.

# Sintra Grows Healthy News

Monthly sent to families and scholar community







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**BMC** Public Health

#### STUDY PROTOCOL

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#### A school-based intervention for a better future: study protocol of Sintra Grows Healthy



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https://bmcpublichealth.biomedcentral.com/articles/1 0.1186/s12889-020-09715-0



There is evidence to support interventions in school settings as strategies for obesity prevention. Up-to-date homogeneous and community-based interventions for preventing childhood obesity are lacking, therefore Sintra Grows Healthy intends to fill this gap.

Furthermore, Sintra Grows Healthy aims to contribute with relevant scientific findings that will allow the development of better strategies for policymakers and society to manage this major public health problem.





TO BE CONTINUED...







www.crescesaudavel.sintra.pt



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# Thank you!

#### **Partners**



























**Institutional Support** 

















