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## Incorporation of the presumption of inequalities in the promotion of health at school

Barcelona Public Health Agency (ASPB)<sup>1</sup> and CIBERESP<sup>2</sup>

**CHANGES** is a programme for promoting healthy eating and physical activity, personal evaluation and the influence of social media at school. It is targeted at teenage students in their second year of compulsory secondary education (13-14 years old). The Barcelona Public Health Agency (ASPB) provides free materials, as well as training and ongoing advice to teachers who run the programme. **CHANGES** was updated and piloted in the 2017-18 school year. The update incorporated an intersectional perspective. Online materials and alternative activities have also been provided to help adapt the programme to Barcelona's diverse social contexts. During the 2019-20 school year, special education teachers will work with staff from the ASPB and the Municipal Institute for Persons with Disabilities (IMPD) to identify aspects that will enable the programme to be used with teenagers with functional diversity.

### Introduction

Overweight and obesity in childhood and adolescence is a serious public health problem (Lobstein, 2004). Moreover, it is associated with morbidity and mortality in adulthood (Guo, Wu, Chumlea i Roche, 2002). The perception of the physical, psychological, emotional and social changes that come with puberty in a society that demands a thin body and, at the same time, encourages overeating and sedentary leisure activities can lead to behavioural disorders in some people (Smolak, 2004). In an attempt to find an answer to these problems, and following the line of other programmes promoting health in school developed by the ASPB, a team of experts working with teachers, psychologists and medical and nursing staff developed the **CHANGES** programme in 2000. This programme is targeted at compulsory secondary education (ESO) second-year students and is intended to facilitate the work carried out by teachers with students in relation to the physical, psychological, physiological and social changes that occur in adolescence. It includes classroom activities and interventions in the community.

The initial version of the **CHANGES** was developed according to a theoretical model of behavioural change that believes attitudes, the influence of others and our perception of our own abilities determine our behaviour (Bandura, 1986; Prochaska i Velicer,

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1. Olga Juárez, María Salvador, Iolanda Robles, Andrea Bastida, Francesca Sánchez-Martínez.

2. Lucia Artazcoz (CIBER of Epidemiology and Public Health (CIBERESP), Spain; Pompeu Fabra University, Barcelona; San Pau Institute of Biomedical Research (IIB Sant Pau), Barcelona.

1997). The same model provides tools for changing behaviour, which form the basis of the activities in the classroom. This type of approach is based on the belief that behaviour is, ultimately, under the control of the individual concerned (Burke, Galen, Pasick i Barker, 2009). The social setting is important, in part because it provides models and influences behaviour. Based on this logic, people who have the necessary information and believe they can take action on the basis of that information can restructure their lives to avoid detrimental outcomes and they can select socially beneficial environments that foster the desired behaviour. Despite that, this conception of the social context as a normative social environment that allows free choice within the limits of self-sufficiency is narrower than understanding behaviour from the perspective of the determining factors and social inequalities in health, which identify various levels, proximal and distal, as well as the intersection between various axes of inequality (Burke et al., 2009; Glass i McAtee, 2006).

CHANGES was updated in the academic year 2017-18 when it was decided to broaden this initial theoretical model and recognise the importance that population stratification has in shaping health outcomes and opportunities. Therefore, the updated version adopts an intersectional perspective, which includes interculturalism and functional diversity. It also involved an exhaustive review and updating of the contents, with the incorporation of various new features as well. These changes are in response to suggestions from teachers that we have been collecting over the years the programme has been running, as well as those of participating students and the Barcelona Public Health Agency's community health teams. They are also in response to the desire to include new knowledge in the contents. In addition to a review with an intersectional perspective, we also wanted to reflect the different realities of Barcelona's schools to facilitate the programme's implementation. So the emphasis was on using participatory methodologies that would enable a dialogue between the diverse student positions and avoid a single, dominant view. It should be noted that content has been added too, such as the importance of rest and the affect of screens and social media during these life stages. Efforts have also been made to respond to demands for the programme to be supplemented with suggestions for both audiovisual materials and technological ones (apps). These suggested supplementary materials are published online<sup>3</sup> facilitating access and enabling the site to be swiftly updated, which is necessary due to the constant changes that occur in these kinds of materials.

## **1. Programme objectives and methodology**

### **Objectives**

- To improve self-knowledge, personal evaluation and acceptance of the diversity of bodies in this period of changes.
- To promote healthy eating through better knowledge, attitudes, skills and behavioural intentions, as well as providing resources to support the community.
- To promote behaviour in physical activity and rest through better knowledge, attitudes, skills and behavioural intentions, as well as providing resources to support the community.

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3. Programme website: <https://www.aspb.cat/canvis/>

- To incorporate a gender perspective, interculturalism and functional diversity when considering the influence of stereotypes and social pressure on the experience of changes that occur in adolescence on personal evaluation and self-image.

## Methodology

### a) Population

The programme is targeted at second-year ESO students at all Barcelona schools. It could be adapted for other years depending on the characteristics of the school or the group of students. Implementation of the programme, as with all health promotion programmes in schools, is voluntary. CHANGES is currently being implemented in state-run, private and state-maintained schools. Teachers and other school staff (psychopedagogical and social education staff) should carry out the intervention after they have received the training offered by the ASPB, since it is considered essential for implementing the school programmes in the right way (Jourdan, 2011; Moynihan, Paakkari, Välimaa, Jourdan i Mannix-McNamara, 2015). The activities are carried out using the free teaching resources available (teacher's guide and student material) and teachers can also receive support and advice throughout the school year from the ASPB team of public health professionals.

### b) Intervention settings

The programme provides for interventions in different areas; in the classroom, in school and in the community. Classroom intervention is based on sessions with activities developed by teachers, while school interventions consist of actions to foster conditions that enable schools to promote and facilitate healthy behaviours, thus boosting and reinforcing the work done in the classroom. Intervention in the community involves community activities that help to enrich, boost and reinforce the programme, by establishing healthy relations with the immediate environment.

### c) Content and duration of the programme

The content covered by the programme can be divided into four distinctive blocks.

1. The first block focuses on physical, psychological and social changes that occur during adolescence. It is important that students recognise and anticipate these changes so they can adapt positively to them on a personal level and see them as a normal process when they arrive. It is also a matter of adolescents understanding that they are going through a stage where lots of changes occur at all levels, and that not everybody experiences them at the same time, that there is a lot of diversity.
2. The second block identifies and analyses how society influences personal evaluation, self-image and self-esteem with the idea that there is an "ideal" or standard body. The programme looks at how to respect, value and accept the diversity of bodies, both our own and those of other people.
3. The third block focuses on the influence that screens and social media can have on adolescents. Classical advertising has lost weight in terms of the influence it can have on adolescents, while social media have assumed an important, almost vital role (Groesz, Levine i Murnen, 2002; Perloff, 2014). Some influencers have such an impact on adolescents that they can significantly mark and influence their identity: changes in their habits, beliefs, and so on. In this block, the channels or influencers with the most impact on the class group are identified and analysed, and alternatives with healthier messages are put forward.
4. The fourth block is based on promoting healthy types of behaviour with regard to eating, physical activity and rest. This is the period when adolescents begin to decide, partly, what they eat, what physical activity they do and when they rest.

Thus it is a question of fostering healthy habits and training students so they can make healthy decisions. At the same time, care is taken to ensure the school has a policy that is consistent with the programme.

It is recommended that there are two sessions for each block with a total time of eight hours. Where it is not possible for teachers to devote this time, they can reduce the number of sessions to a minimum intervention of one session for each block with a total of four hours.

## 2. Main results

### a) Evaluating the effectiveness of the original version.

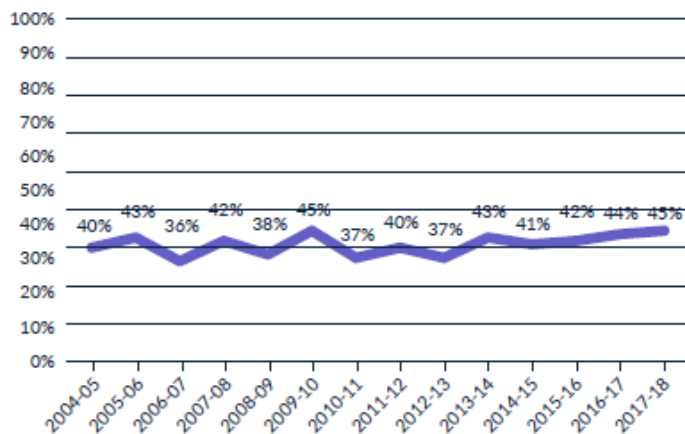
The programme was evaluated in 2000 by 2,800 second-year ESO students in Barcelona. The study enabled the food and eating-related knowledge, attitudes and behaviour of the group who had followed the programme to be compared with a control group that had not. The results showed that the intervention group had significantly improved their nutritional knowledge and, more importantly, their food preferences or even some habits. While the suggestions added later to increase physical activity have not been evaluated by means of an experimental study, they are based on studies with proven results and the recommendations of national and international bodies.

### b) Process evaluation

Every academic year a process evaluation is carried out using two sources; the school registration database and the database of the evaluation questionnaire, completed at the end of the year by teachers who have implemented the programme. The registration database is used to analyse the schools, classes and students covered, as well as their territorial distribution. The evaluation questionnaire enables training, implementation and satisfaction with the programme to be evaluated, as well as identifying its strong points and areas for improvement. Attendance and satisfaction data gathered at the training sessions are also extracted.

Chart 1 shows how the coverage of CHANGES developed between 2004 and 2019, remaining stable at around 40% of students. This is the highest coverage level of all the school health promotion programmes offered by the ASPB. A slight increase in registrations can be seen in recent years, reaching 45% of students in the 2017-18 school year.

**Graph 1. Change in the percentage of second-year ESO students taking part in the CHANGES programme**

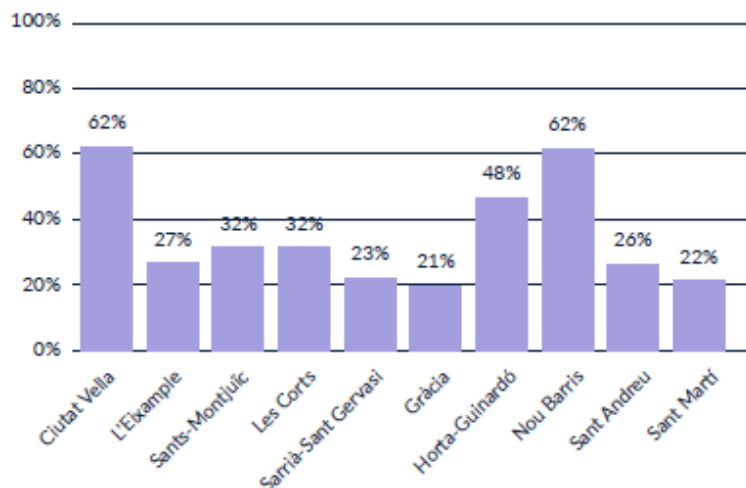


Source: Programme registrations.

A total of 78 ESO schools participated in the programme in the 2018-19 school year, in other words 35% of all compulsory secondary education schools in Barcelona, as well as one special education school. The intervention reached 5,918 students in 224 classes, which means 45% of the city's second-year secondary students.

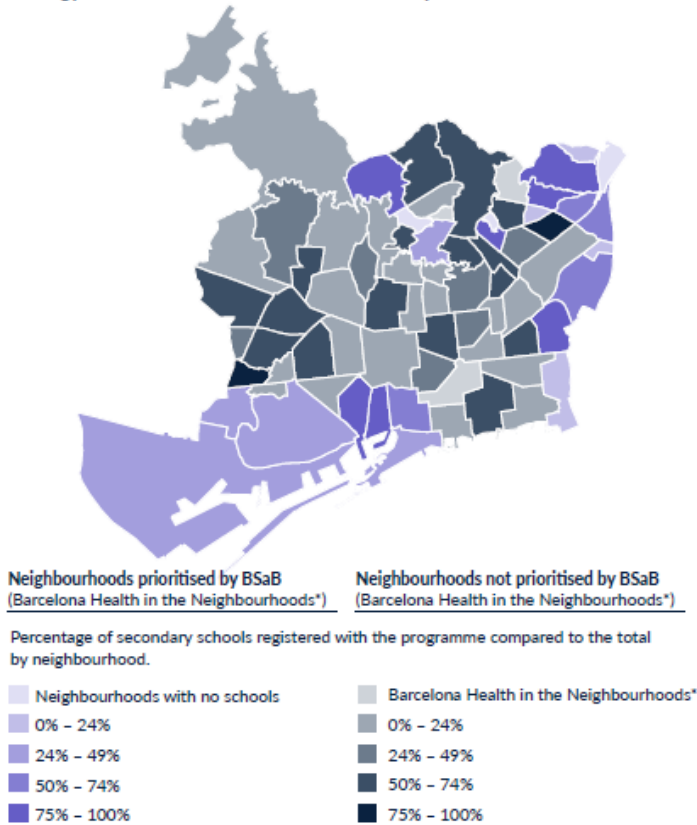
The territorial distribution of the schools covered, as Graph 2 shows, was unequal, ranging from 21% in Gràcia, 22% in Sant Martí and 23% in Sarrià - Sant Gervasi, to 62% in Nou Barris and Ciutat Vella. A neighbourhood breakdown shows 22 secondary schools in neighbourhoods covered by the Barcelona Health in the Neighbourhoods (BSaB) strategy registered with the programme. That means a coverage of 46%, compared to 32% of neighbourhoods not covered by the strategy, where 56 secondary schools and a special school registered (Figure 1). BSaB is a community health strategy that prioritises the most disadvantaged neighbourhoods in the city to reduce health inequalities.

**Graph 2. Breakdown of the percentage of schools registered with the CHANGES programme by district. Barcelona from the 2017-2018 school year**



Source: Programme registrations.

**Figura 1. Breakdown of the schools registered with the CHANGES programme according to neighbourhood and participation in the BSaB strategy. Barcelona from the 2017-2018 school year**

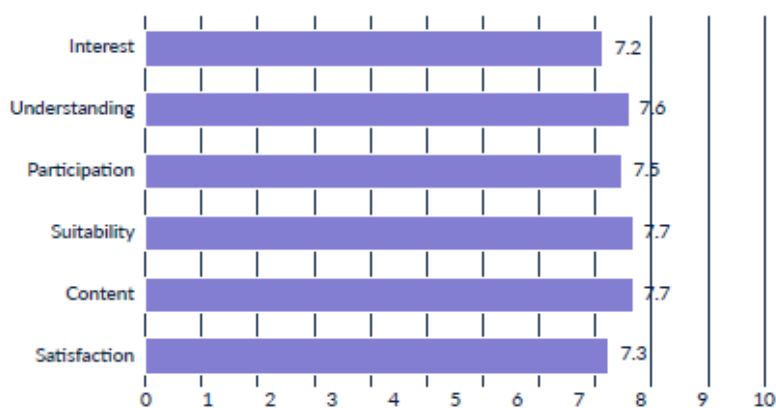


Source: Programme registrations, 2017-2018.

\*BSaB (Barcelona Health in the Neighbourhoods), community health strategy that prioritises the most disadvantaged neighbourhoods in the city to reduce health inequalities.

Prior training was given in November 2017. It consisted of a workshop held three times and attended by 63 teachers. All the teachers attending the training given by the ASPB team of professionals found the workshops very interesting, 98% very useful, 95% very practical and 97% very clear. On a scale of 0 to 10, the average score for overall satisfaction with the workshops was 8.8. Overall, both the teachers' perception of the students' reaction to the activities and the evaluation of the programme's contents received good scores (Graph 3).

**Graph 3. Evaluation of the CHANGES programme teachers. Barcelona from the 2017-2018 school year**



Source: Programme evaluation questionnaire, 2017-2018.

### 3. Update pilot test

The programme update was prepared during the 2016-17 school year by the ASPB Community Health Team, in collaboration with teachers and students who had implemented the programme, and expert bodies such as the Surt Foundation, the Centre for African and Intercultural studies and the IMPD. During the 2017-18 school year, the updated version was approved in 77 classes at 60 schools in all the city's districts with a total of 2,732 students, 75% second-year ESO and the rest first- and third-year at special schools. The evaluations were very good, with a score of around 8 points out to 10 while 91% of teachers answered would do the programme again. The positive aspects they highlighted include student participation, with the chance to talk about their concerns and offer the perspective adolescents have on certain situations. The most negative aspect was problems with accessing material, which enabled the problem to be identified and a solution found. Various meetings were also held with the teachers involved and they provided information for improving some activities or offering alternatives when doing them. The experience with a special school was very positive and encouraged us to begin developing a new experience that will take shape in the 2019-20 school year, when special education professionals will coordinate with ASPB and IMPD staff to identify aspects that will enable the programme to be applied with adolescents who have functional diversity.

### 4. Conclusions and future challenges

School is the ideal framework for promoting health, given that pre-adolescence is a key period for learning. Compulsory schooling means it is accessible to students, their families and the whole community.

The CHANGES programme has showed itself as a useful resource for schools when it comes to promoting healthy eating, physical activity and rest, as well as considering personal evaluation and the influence of social media. The programme allows schools to deal with subjects that are not necessarily included in the school curriculum, but which are very important for students. Thus, CHANGES goes beyond healthy eating and tackles subjects that perhaps would not be dealt with in other ways, such as self-image and personal evaluation. Moreover, topical subjects are added to it that engage students, such as the influence of social media. Another notable aspect is the programme's community perspective, based on the relationship between the ASPB health community, the school teachers and other association and institutional projects.

The 14th edition of the programme, published in October 2017, includes an exhaustive review and update of the content. The purpose of this review is to respond to the needs posed by teachers, social changes and the diversity of students in Barcelona. In addition, incorporating gender and intercultural perspectives gives the programme the opportunity to work on reducing the health inequalities in our city from the classroom. This updated version has been successfully piloted and has given rise to new challenges such as intersectional work to improve its application in special schools, where work will start in the 2019-20 school year.

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