

THE CATCH PROGRAM (CO-ORDINATED APPROACH TO CHILD HEALTH): A US. OBESITY-RELATED INITIATIVE FOR SCHOOL CHILDREN

1. Origin of the CATCH Program – The CATCH Main Research Trial

The CATCH Program was originally known as the *Child and Adolescent Trial for Cardiovascular Health*. It was a multi-component, multi-year coordinated school health promotion program for elementary school children designed to decrease fat, saturated fat and salt in children's diets, increase physical activity and prevent tobacco use. This original controlled clinical trial was evaluated between 1991 and 1994 in 96 schools (56 intervention schools and 40 control schools) in the four states of California, Louisiana, Minnesota and Texas. It was the largest school-based health promotion study ever funded in the US¹ and included "*school environmental modifications related to food consumption, physical activity, and tobacco use. CATCH cafeterias were instructed to serve foods lower in fat, saturated fat and sodium; the physical education teachers were instructed to ...increase moderate to vigorous physical activity for at least 50% of class time; and school-wide policies were implemented to establish non-tobacco use*"².

Study results showed that as a result of CATCH, "*students in the intervention schools significantly increased time spent in moderate to vigorous physical activity within physical education classes (from 40% to 50%) and considerably decreased their consumption of fat in school meals (from 39% to 32%)*"³.

Five years after the main trial ended a study showed that the school-based CATCH program could be sustained and identified the factors of staff training, a program champion, adequate administrative support and adequate resources as being essential for maintaining the program successfully over time⁴. A 3-year follow-up study between 1995 and 1998 of 73% of the original CATCH participants found that they had "*maintained a diet considerably lower in fat and saturated fat and participated in more vigorous physical activities in grades six through eight than did students in control groups*"⁵.

In 1999 CATCH was renamed Coordinated Approach to Child Health to reflect the shift from research trial to proven, sustainable schools program.

¹ Funded by the National Heart, Lung and Blood Institute

² CATCH Texas, Science of CATCH, www.sph.uth.tmc.edu/catch/about_science.htm

³ Franks, A.L. et. al. (2007), School-based Programs: Lessons Learned from CATCH, Planet Health, and Not-on-Tobacco, Preventing Chronic Disease 4(2), A33

⁴ CATCH Texas, Science of CATCH, www.sph.uth.tmc.edu/catch/about_science.htm

⁵ Franks, A.L. et. al. (2007), School-based Programs: Lessons Learned from CATCH, Planet Health, and Not-on-Tobacco, Preventing Chronic Disease 4(2), A33

2. The CATCH Program (Coordinated Approach to Child Health)

2.1 Introduction

The present CATCH Program is built on the foundation of the original research trial and in 2006 received the Innovation in Prevention Award from the US Department of Health and Human Services' National Prevention Summit. Currently CATCH is implemented in over 7000 schools and is marketed through Flaghouse Inc. who publish and distribute the program to schools and community organisations in the US and Canada⁶.

Subsequent to the success of the original research trial, and with support from the CDC⁷, the University of Texas (Houston) Prevention Research Centre has "endeavored to disseminate, implement and institutionalize the CATCH Program in schools". Specific CATCH Staff were employed to do so and such staff "became motivated to educate policymakers in Texas, which resulted in the development and passage of Senate Bill 19 in 2001 mandating that all elementary schools have a coordinated school health program by 2007"⁸. With the University of Texas (Houston) as the driving force of CATCH, Texan schools form the central hub of the Program and one third of all Texan elementary schools have adopted CATCH. Schools in Illinois, Maine, Florida, Georgia, North Dakota, North Carolina, and New Mexico, however, now also use the Program.

*"CATCH is proving to be sustainable and feasible in a wide variety of settings. The program provides hands-on training and is designed to minimize the burden on teachers. Dissemination is well under way, and interest continues to grow"*⁹.

2.2 CATCH – Overview of the Program

This information is extracted from the main CATCH website¹⁰.

The CATCH Program brings schools, families, and communities together to teach children how to be healthy for a lifetime. CATCH is effective because healthy behaviours are reinforced through a coordinated approach in the five areas of the Classroom, the Cafeteria, Physical Education, at Home, and After School.

In the Classroom - The CATCH Go for Health Series is a classroom health education curriculum that teaches children to identify, practice, and adopt healthy eating and physical activity habits. Hands-on activities encourage changes in behavior that

⁶ Spreading CATCH – Coordinated Approach to Child Health through America, www.changemakers.net/node/1124

⁷ Centers for Disease Control and Prevention (US)

⁸ CATCH for Improved Physical Activity and Diet in Elementary School Children: Effective and Successfully Disseminated, CDC, Prevention Research Centers (2007), <http://www.cdc.gov/PRC/selected-interventions/adoptable-interventions/catch-improved-physical-activity-diet-elementary-school.htm>

⁹ CATCH for Improved Physical Activity and Diet in Elementary School Children: Effective and Successfully Disseminated, CDC, Prevention Research Centers (2007), <http://www.cdc.gov/PRC/selected-interventions/adoptable-interventions/catch-improved-physical-activity-diet-elementary-school.htm>

¹⁰ What is CATCH? www.catchinfo.org/whatis.asp?

support healthful eating and physical activity patterns-primary risk factors of heart disease, osteoporosis, high blood pressure, and obesity.

In Physical Education - CATCH PE combines high energy, non-elimination activities with teaching strategies that keep kids moving and having fun. CATCH PE significantly increases physical activity levels of students during PE class, and provides for a variety of experiences for students of all abilities.

In the Cafeteria - The CATCH Program considers school cafeterias an extension of the classroom. Through the *Eat Smart* component, breakfast and lunch become opportunities for children to learn, practice, and adopt healthy eating habits. School Food Service personnel prepare healthier meals and help coordinate healthy messages with the rest of the school.

At Home - The CATCH Family component is designed to get students, parents, and extended family members involved in practicing and adopting healthy eating and physical activity at home. By doing so, the home environment becomes an extension of the CATCH Program at school.

In the Community - Implemented in community-based programs across North America, CATCH Kids Club, has been designed for after-school and summer-school settings. Developed from the CATCH Program, healthy messages are reinforced beyond the school day via physical activity and nutrition education sessions.

2.3 The Five Component Areas – Further Detail

The information in this section is extracted and summarised from the Texas CATCH website¹¹.

2.3.1 The Classroom

The CATCH *Go for Health Series* is the classroom health education curriculum that teaches children to identify and adopt healthy eating and physical activity habits, with children learning the facts about healthy living every day as “*lessons blend health topics with performance standards of core academic subjects such as graphing, understanding informational text, quantitative reasoning and formulating testable hypotheses*”¹².

The *Go for Health Series* is based on Social Learning Theory “*which targets changes in specific environmental, personality and behavioural factors that influence children’s health behaviour. A sequential storyline throughout the curricula revolves around a group of cartoon characters, Hearty Heart and Friends*”¹³.

The Curriculum materials for teachers ensure minimal preparation time and contain detailed descriptions of lesson procedures. Lessons can stand-alone or may be used to supplement other core content areas such as mathematics or language. Teaching guides contain ready-to-use materials such as reproducible hand-outs and transparency masters.

2.3.2 Physical Education

¹¹ <http://www.sph.uth.tmc.edu/catch/>

¹² CATCH Classroom Curriculum, www.sph.uth.tmc.edu/catch/curriculum_go_for_health.htm

¹³ CATCH Classroom Curriculum, www.sph.uth.tmc.edu/catch/curriculum_go_for_health.htm

CATCH PE is an age appropriate physical education program which develops health related fitness, skill competency, and cognitive understanding about the importance of physical activity. CATCH PE kits for schools provide instruction via a variety of learning experiences, which address the wide-range of student ability in physical education class. The content enhances, not just sports skills, but also movement skills, physical fitness, social development, and aims to promote lifelong physical activity. The aim of CATCH PE is to provide¹⁴:

- movement which targets individual fitness and skill levels of all learners;
- Increased moderate-to-vigorous physical activity in physical education class;
- Adequate amounts of physical activity now and throughout life;
- Maximise time on task and learning opportunities; and
- Engage students in fun and motivating activities.

2.3.3 The Cafeteria¹⁵

The CATCH *Eat Smart* school cafeteria is described as a hands-on learning environment. At mealtime, children learn and practice healthy eating habits. The CATCH classroom and physical education lessons “*come to life*” as children experience first hand the concepts of “*GO, SLOW and WHOA*” foods. The foods on the school menu are marked as GO, SLOW or WHOA. For example, fruits and vegetables are GO foods, if fat is added to them they become SLOW foods and if they are fried they are WHOA foods. The concept is that GO, SLOW and WHOA foods can be eaten every day but the main foods in the diet should be GO foods.

Overall CATCH Eat Smart:

- Provides children with tasty meals that are lower in fat and saturated fat;
- Maintains required levels of essential nutrients and student participation;
- Coordinates healthy nutrition messages with other areas of the school; and
- Guides the entire school towards creating a healthy school environment.

The CATCH *Eat Smart* School Nutrition Program Guide is a tool for child nutrition service providers. The guide provides menu planning and food preparation suggestions. Suggestions are provided on how to gradually modify recipes to lower the fat, saturated fat, and sodium. The importance of program promotion is discussed and promotional methods are included. Nutritional fact sheets and supplemental activities which support the CATCH Classroom program help coordinate the cafeteria health message school-wide.

2.3.4 Family Component¹⁶

The CATCH Family component is designed to get students, parents and extended family members involved in practicing and adopting healthy eating and physical activity behaviors at home. The home environment becomes an extension of the CATCH Program at school and by creating this strong link between teachers and parents enhances the chances that the lessons learned at school will become a permanent part of a child’s life.

The CATCH ‘Home Team’ in the school:

- Provides multiple opportunities for parents and family member to visit the school and actively participate in CATCH activities;

¹⁴ CATCH Physical Education, www.sph.uth.tmc.edu/catch/curriculum_pe.htm

¹⁵ CATCH Eat Smart Cafeteria, www.sph.uth.tmc.edu/catch/curriculum_eat_smart.htm

¹⁶ CATCH Family Component, www.sph.uth.tmc.edu/catch/curriculum_home_team.htm

- Serves as an educational program that motivates parents to change their own behaviours;
- Influences environmental change in the home that reflects the change in environment in the school; and
- Get families involved as much and as often as possible.

An integral component of the CATCH curriculum is parental involvement through homework assignments the children complete with their parents or an adult at home or away from school. Specific assignments are embedded in the lessons of each year's classroom curriculum. Upon completion of each assignment, children earn points that are monitored by the classroom teacher. Extra points are earned when a parent or adult participates in the assignment. Parental involvement is also through participation in activities at school. CATCH Family Fun Nights provide a fun atmosphere for parents, community members, school personnel and children to come together and celebrate healthy living principles with CATCH oriented physically active games, snacks and children's performances. CATCH schools are encouraged to plan and conduct a Family Fun Night each year.

2.3.5 In the Community – CATCH Kids Club¹⁷

The CATCH Kids Club (CKC) is a physical activity and nutrition education program designed for elementary school aged children in an after-school/summer setting. CKC is composed of nutrition education materials (including snack activities) and a physical activity component. The CKC program offers an easy-to-use format that both children and staff enjoy and is ready to implement in the after-school and summer settings.

During 1999-2000, the CKC underwent pilot testing and formative evaluation in 16 after-school sites in Texas. The results showed that CATCH Kids Club is inclusive (everybody plays), and it has been demonstrated to increase children's physical activity and their nutrition knowledge and intentions. The education component aims to equip children with the knowledge, skills, self-efficacy, and intentions to make healthy dietary and physical activity decisions.

3. Lessons Learned From The CATCH Program

A recent review of the CATCH program has indicated the following lessons learned from the development and dissemination of the program¹⁸:

- The inclusion of teachers, school food service employees, school administrative staff, pupils and parents, during the development of the CATCH program has ensured the acceptability of the program;
- Successful dissemination of the CATCH program has required professional program staff who contact decision-makers, present the program at meetings, conduct training for schools and ensure quality control of the program;
- Within schools the supportive involvement of a school principal or other senior administrator is crucial;
- The effective training of interdisciplinary teams within schools (i.e. classroom and physical education teachers and food service staff) is important for success; and

¹⁷ CATCH Community Component, www.sph.uth.tmc.edu/catch/KidsClub.htm

¹⁸ Franks, A.L. et. al. (2007), School-based Programs: Lessons Learned from CATCH, Planet Health, and Not-on-Tobacco, Preventing Chronic Disease 4(2), A33

- To gain support of teachers, the prepared CATCH lessons are aligned with applicable education standards and are provided with sufficient training for teachers.

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