

# An effective strategy to promote breakfast and to prevent obesity in school children

## Summer sport school “Giocampus” (SSSG) preliminary experience

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### Introduction

Several Schoolchildren are used to skipping breakfast. In 2005, 22% of school children - participating in Summer Sport School “Giocampus” program (SSSG) - who skipped breakfast 5 times a week, showed overweight and obesity more frequently than children who ate breakfast every day (*Acta Biomed. 2005*). To evaluate the efficacy of a campaign promoting breakfast carried out in Parma between 2007 and 2010.

### Methods

A campaign promoting breakfast was carried out in Parma (Italy) between 2007 and 2010, using the following methods:

- **Communication actions** at local primary schools, radios, TV channels and newspapers, in collaboration with Paediatricians, Nutritionists and Dieticians.
- **Distribution of a children guidebook for healthy eating** to 10,000 families with a child attending a primary school in Parma.
- **School activity:** Taste-Teachers (Students in Gastronomic sciences degree) helped school-teachers 20 hours per year, in order to train children in choosing food for breakfast.
- **Participation for 15 days from June to September in the SSSG**, part of a primary school-targeted nutrition and sport educational program, called “Giocampus”, a Summer Sport School (SSSG), supported by Town Council, School Inspectorate, University, Sport Clubs and Barilla Food company.

### Materials

1,120 children, 6-14 years old from the 2010 SSSG edition were asked to answer the same multiple choice questionnaire used in 2005 on breakfast habits. Stature and body weight were measured by trained staff.

### Results

Compared to 2005, the breakfast skippers fell from 22 to 8% ( $p=0.001$ ) and the percentage of obese children decreased from 10 to 6% ( $p=0.04$ ). In children between 8 to 11 (the target of the breakfast promotion strategy), the trend of BMI value was blocked, while children in the other age range had an increasing trend of BMI value. Conversely, in comparison to 2005, an increase in children having breakfast alone (10 vs 30%;  $p=0.0001$ ) or watching TV (18 vs 30%;  $p=0.06$ ), and a decrease in the mother involvement in preparing breakfast (80 vs 64%;  $p=0.02$ ) were observed. Fruit consumption (5 vs 8%) continues to be below the European standards.

Figure 1. Percentage of breakfast skippers in the two different years

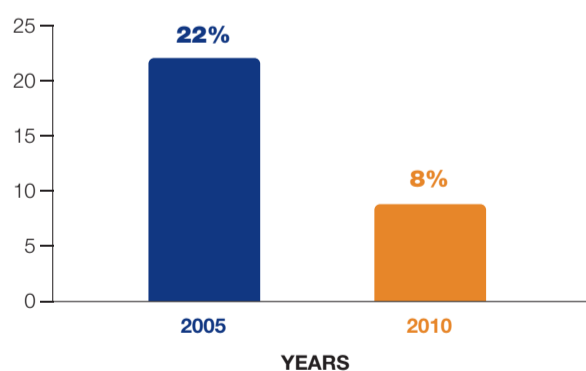
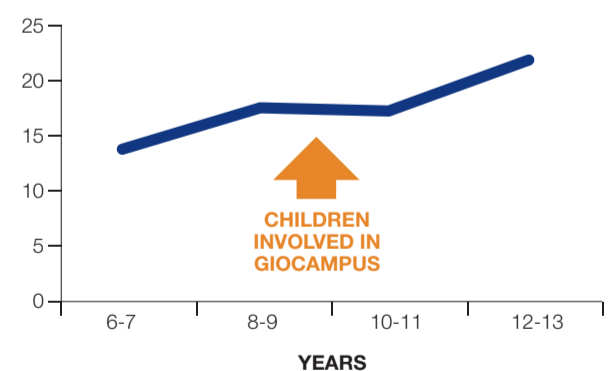


Figure 2. Trend of BMI value in the different age range



### Conclusion

An intensive breakfast-centred strategy seems to have been effective in breakfast promotion and in the decrease of the obesity risk among breakfast skippers. However much is still to be done as to the registered percentage of children eating alone. This habit, which increases the risk of breakfast skipping, is probably connected with the increasingly high number of working mothers, due to the present socio-economical conditions.

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