What is this research about?
Previous research has shown that children who live in low socio-economic conditions tend to have poorer oral health when compared with children from higher income families (Locker, 2000). Moreover, the consequences of untreated dental issues such as cavities have been shown to include pain, sleeplessness, and school absences (Slade, 2001).

While many school-based oral health initiatives have targeted specific behaviors such as tooth brushing, this study examined the impact of the broader Ontario’s “Healthy Schools” initiative on the oral health of students. Launched in 2006, this program focuses on broader issues of health promotion including healthy eating, substance use, physical activity, and personal safety amongst others. The program is voluntary and managed by each school board individually.

The study assessed whether differences existed between the oral health of students in schools that participated in the “Healthy Schools” program, and those in schools that did not participate in the program. The researchers were particularly interested in whether or not any observed differences varied between low and high-income schools.

What you need to know:
This study examined the impact of both the “Healthy Schools” program and neighbourhood socio-economic factors on the oral health of elementary students. The results indicated that, in general, students from participating low income schools had significantly better oral health than students from non-participating low-income schools.

According to Statistics Canada, a low-income family of four living in an area the size of York Region, is a family that earns less than $33,250 before taxes. Schools included in this study were categorized as
“low-income” if the percentage of low-income families in the surrounding neighbourhood was greater than 16.5% (the average percentage of low-income families in Ontario). Schools below this percentage were categorized as high-income.

What did the researchers do?
The researchers collected data from three primary sources:

1. Student oral health data was obtained from the York Region Public Health Unit. This unit conducted school dental screenings in all 243 York Region elementary schools during the 2007-2008 school year. The data was presented at the school level and included the percentage of students requiring: cleanings and fluoride treatments; urgent and non-urgent dental treatments; and students with more than two decayed teeth. The percentage of students screened in each school ranged from 31.6% to 87.4%.

2. A list of the elementary schools participating in the “Healthy Schools” program (2007-2008) was obtained from the Ontario Ministry of Education’s website;

3. Neighbourhood socio-economic information, was extracted from census data using the postal codes of neighbourhoods serviced by the school. 143 schools were considered to be “high-income” (66 of which participated in the program) and 99 were considered “low-income” (63 of which participated in the program).

Statistical data analysis of the oral health data was conducted across 4 categories; a) high-income “Healthy Schools”, b) high-income non-participating schools, c) low-income “Healthy Schools”, and d) low-income non-participating schools.

What did the researchers find?
The researchers found that:

- In general, schools that engaged in three or more health promotion activities per year (such as healthy eating and healthy growth and development) had the lowest percentage of children with more than two decaying teeth and requiring urgent dental treatment.
• In general, students in schools that participated in the “Healthy Schools” program had better oral health than students in schools that did not participate, particularly with respect to the number of students requiring urgent dental care and those who had 2 or more decayed teeth.

• The discrepancy between the oral health of students in participating schools and those in non-participating schools was greater in low-income schools than it was in high-income schools.

The researcher concluded that low-income schools may benefit from participation in the “Healthy Schools” program more than high-income schools.

**How can you use this research?**

Teachers and administrators may wish to consider the following:

• Participating in Ontario’s “Healthy School’s” initiative, if the school is not currently involved in the program;

• Engaging in three or more health promotion activities each year;

• Specifically focusing on dental health as part of the “Healthy Schools” program;

• Consulting the wider body of research on oral health and related benefits.

**About the researchers:**
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**References:**


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Oral and dental health, Ontario Healthy Schools program, socio-economic factors

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**About this summary**
The Ontario Education Research Exchange (OERE) is a project of the Knowledge Network for Applied Education Research, an Ontario network promoting the use of research in education. The OERE’s clear language summaries of academic research aim to support this mandate.

This summary has been adapted from the ResearchSnapshot series developed by York University and ResearchImpact and has been developed according to writing and design principles unique to OERE. For more information about this summary or the OERE network please contact oere.knaer.oise@utoronto.ca.

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