



# Sugary Drinks and Rotten Teeth Early Childhood Caries in New Zealand

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# + Background

- Dental caries “rotten teeth” is the most common chronic disease of childhood
- Dental caries is one of the most common reasons for hospital admissions for children in New Zealand
- Significant numbers of children (especially pre-school-aged) experience pain and infection as a result of caries
- Many groups of the population are experiencing a decrease in caries experience
  - Not the case for New Zealand preschoolers





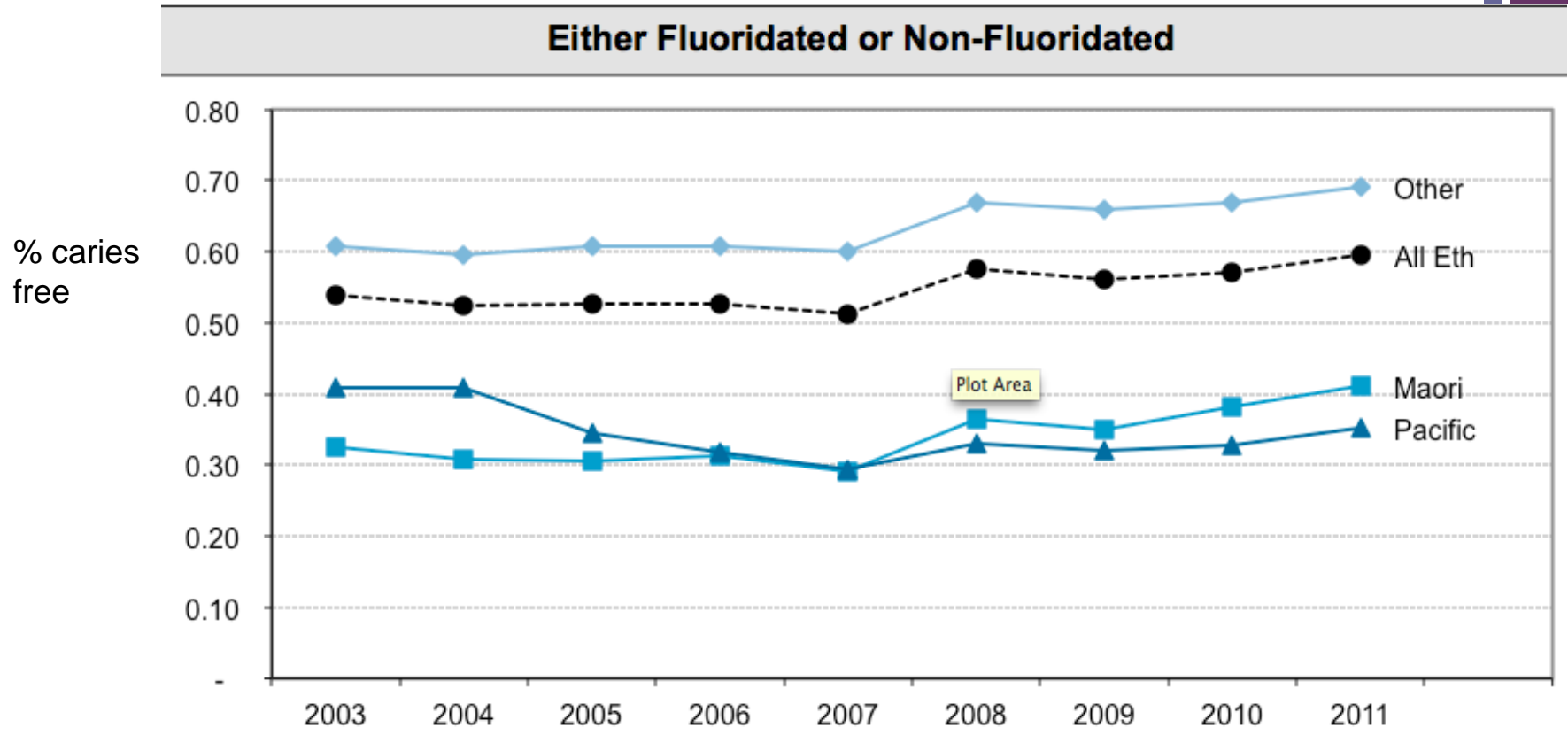
# How many five-year-olds are affected?



- In 2013
  - 43% of five-year-olds in New Zealand had holes in their teeth
  - Increased to 66% in Northland
  - Decreased to 32% in the Wairarapa
  
- Significant inequalities in number five-year-olds with holes in their teeth in the greater Auckland region
  - Waitemata 33%
  - Auckland 38%
  - Counties Manukau 49%



# Five-year-olds free from disease - New Zealand Wide



# + Hospital admissions

- Leading cause of potentially avoidable hospital admissions in NZ
- Over 2000 children a year admitted in Auckland alone for elective dental procedures
  - Most under seven years of age
  - Huge cost to public system
  - Long waiting lists



# + Dietary risk factors

- Main dietary risk factors are in regards to sugar consumption
  - Especially sucrose
- Strongest risk factor is frequency and form of carbohydrate intake
- Children with severe disease are likely to consume sugary beverages between meals
- Bottle feeding with soft drinks and juice significantly increases risk



Sandra  
Somerville '05



# + Dietary risk factors

- New Zealand children are consuming increasing amounts of sugar – powdered drinks, soft drinks and cordials
- Increased intake of soft drinks is associated with decreased intake of dairy and other milk products
- Obvious fermentable carbohydrates
  - Lollies, chocolates, biscuits, juice, soft drinks





# + Consequences in children

- Dental caries has significant effects children's oral and general health and quality of life
- Common outcomes
  - Pain
  - Infection
  - Loss of sleep
  - Difficulty eating
    - restriction of foods eaten
  - Missed school
- Dental caries may have a role in failure-to-thrive in otherwise healthy children



