Low fluoride children's toothpaste fails to combat tooth decay

Children's toothpaste that contain low concentrations of fluoride fail to effectively combat tooth decay, according to a recent study.

Researchers found that toothpaste containing fluoride concentrations of less than 1,000 parts per million are as ineffective as toothpaste with no fluoride at all.

For optimal prevention of cavities in children over age six, toothpastes should contain at least 1,000 parts per million of fluoride, according to the study carried out by the University of Manchester School of Dentistry.

The review, published in the latest issue of The Cochrane Library, a publication of The Cochrane Collaboration, examined results from 79 controlled clinical studies on 75,000 children, found the benefits of fluoride are reduced for toothpastes that contain less than 1,000 parts per million of fluoride.

“ Toothpastes with lower fluoride levels, in the 440 to 550 range, give results that are no better than the results seen with toothpaste that does not contain fluoride,” said co-authors Professor Helen Worthington and Dr Anne-Marie Glenny.

The study also found that brushing a child’s teeth with a fluoride toothpaste before the age of 12 months could lead to an increased risk of developing mild fluorosis.

Children’s toothpastes currently range from 100 parts per million to 1,400 parts per million.

Dr Glenny said: “From a public health point of view, the risk of tooth decay and its consequences such as pain and extractions is greater than the small risk of fluorosis. Children would have to swallow a lot of toothpaste over a long period of time to get the severe brown mottling on the teeth, as opposed to the more typical mild white patches.”

She added: “For children that are considered to be at a high risk of tooth decay by their dentist, the benefit to health of preventing decay is likely to outweigh the risk of fluorosis.

“In such cases, careful brushing of their children’s teeth by parents with a small amount of toothpaste containing higher levels of fluoride would be beneficial.

“If in any doubt, we would advise parents to speak to their family dentist.”

EARTHQUAKE APPEAL

We have all been shocked by the emergency situation in the Republic of Haiti after the earthquake which has claimed thousands of lives and left the survivors in turmoil. Dental Tribune is appealing to all readers who wish to help by donating much needed funds to help the relief effort to Médecins Sans Frontières (MSF), an international, independent, medical humanitarian organisation that delivers emergency aid to people affected by armed conflict, epidemics, healthcare exclusion and natural or man-made disasters. What makes this all the more poignant is that the team at MSF responding to this disaster is still trying to account for colleagues who were already working in Haiti, and who may have not survived.

To help, go to www.msf.org.uk/supportus.aspx and click on the link to donate to the Haiti relief fund. Thanks in advance for your support.