No long-term change found in caries prevalence in early South-East Asians

Archaeological findings question relationship between rise of agriculture and oral health

Researchers from Germany have discovered that fluoride decreases the adhesive forces of oral bacteria and cariogenic pathogens in particular. Testing the adhesion of caries-inducing *Streptococcus mutans*, *Streptococcus oralis* and *Staphylococcus aureus* to smooth, high-density hydroxyapatite surfaces, which were produced especially for the experiments and resembled tooth enamel in their composition, they observed lower adhesive forces after fluoride treat ment of the surfaces in all bacteria species. Compared with untreated surfaces, the adhesion was only half as strong.

In contrast to prior studies that traced the cavity-preventive effect of fluoride back to effects on de-mineralisation, the findings suggest that the decrease in adhesive forces is a key factor of the cariostatic effect of fluoride. This could help improve dental fillings, den tures and implants in the future, the researchers concluded.

Fluoride reduces bacterial adhesion

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**DUNedin, New Zealand/Honolulu, Hawaii, USA**: Crop cultivation like the growing of wet rice is still commonly believed to have had a significant impact on caries prevalence in South-East Asia over the last 4,000 years. In the depiction of infants and children found in archaeological sites in Thailand and Cambodia, however, clinicians and anthropologists have recently found no evidence to support the theory that oral health in this region declined over time owing to the intensification of agriculture.

While caries prevalence in the samples differed from site to site, there was no chronological relationship between them, the researchers reported, suggesting that agriculture and change in diet did not have a long-term impact on the oral health of South-East Asians as previously believed. However, caries prevalence in deciduous teeth was consistently found to be higher than in permanent teeth, which the researchers believe could be due to the more cariogenic food, such as fruit and root grubs, that children were given at a very early age before switching to less-cariogenic food like rice.

Children seemed to have increasingly relied on rice as the main source of food later in life, as caries levels in permanent teeth were found to be relatively low throughout all samples.

Increased cancer risk for early smokers

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People who smoke a cigarette upon waking in the morning are significantly more likely to develop oral or lung cancer, according to new research. NNAL, a chemical compound found in tobacco products, was found to be as twice as high in participants who smoked within 5 minutes of waking compared with those who waited for at least 1 hour.

Mattheos to replace Lang at ITI

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The International Team for Implantology in Switzerland has announced that Associate Professor Dr Nikos Mattheos from the University of Hong Kong Faculty of Dentistry is going to succeed Prof. Niklaus Lang as director of its Education Week Hong Kong. The annual course on implant dentistry is scheduled to be held in early September.

Taiwan, Philippines renew partnership

The dental associations of Taiwan and the Philippines have extended their partnership that provides basic dental services to Filipinos with no or limited access to oral health care. According to both organisations, the new programmes will start in July and primarily target people living in Luzon, the largest island of the country inhabited by 60 million.

The agreement was signed during the 10th annual convention of the Philippine Dental Association in April and is the third renewal of the partnership that was established in 2008. Since then, both organisations have been providing support to and medical equipment for dental programmes conducted in various parts of the Philippines.

Farmers in Mae Hong Son in Thailand harvesting rice. (DTIFoto Peerakit Jirachetthakun)

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