031 (TW1) Site-specific colonization and genotypic diversity of *S. mutans* in different individuals.

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The aim of this study was to clarify the distribution and genotypic diversity of mutans streptococci on different tooth sites in caries-free and caries-affected individuals. Fourteen subjects, aged 22-24 years, were examined. Salivary levels of mutans streptococci, caries prevalence, oral hygiene habits and status of tooth surfaces sampled were recorded. Plaque samples were obtained from three sites, the buccal smooth surface of the right upper teeth, the fissures (B) of the non-caries occusal surfaces (O) and carious lesions (C). Up to 10 colonies/site were isolated when present and genotyped by arbitrarily primed PCR(AP-PCR) analysis. All 49 samples obtained were culture-positive. Mutans streptococci in 47 samples originate from all 14 subjects. Mutans streptococci were not detected in 2 samples from caries-free sites. Four samples, obtained from one individual, showed both S. mutans and S. sobrinus isolates. Among the 410 isolates were 40 AP-PCR profiles representing. Caries-free subjects have a larger number of genotypes of S. mutans. In caries-affected subjects major frequency of genotypes found in the other sites was also observed in caries. S. mutans genotypes were more prevalent in caries-free individuals than in caries-affected individuals. The frequency of genotypes which found in saliva between caries-free and caries-affected individuals was significantly different. This study was supported by the scientific and technological project of Hubei province, Grant 2005AA304B13.

032 (TW2) Implementation of the KTSND questionnaire on Australian dental undergraduates

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Objectives: To assess the reliability of the English version of the Kano Test for Social Nicotine Dependence (KTSND) questionnaire in order to establish the association between age, gender, smoking status, relationship with smokers and KTSND scores, in a sample of Australian dental undergraduates.

Methods: A sample of 255 dental undergraduates at the University of Western Australia was used. Each was examined with an English version of the KTSND questionnaire twice in an interval of a month.

Results: The prevalence of smoking among Australian dental undergraduates was 4.7% (95% CI=2.6%, 8.3%). Seven out of the ten questions in the English version of the KTSND questionnaire (Q1, Q3, Q4, Q5, Q7, Q8, Q10) showed an adequate test-retest reliability (Cronbach's alpha≥0.64). The internal consistency of the 10 questions was 0.69 and it reached to a maximum at 0.77 when only six questions (Q3-Q8) were included. Current smokers showed stronger belief in Q3-"cigarettes bring enjoyment of flavour and stimulation" (OR=2.42, 95% CI=1.05, 5.56, p=0.037), Q5-"cigarette smoking enriches some smokers' life" (OR=3.15, 95% CI=1.25, 7.89, p=0.015), Q7-"cigarettes can relieve stress" (OR=6.30, 95% CI=1.67, 23.75, p=0.007), and Q8-"cigarettes help smokers' brain work better" (OR=3.73, 95% CI=1.46, 9.57, p=0.006). All other questions failed to differentiate between smokers and non-smokers (p≥0.202). Age, gender, relationship with smokers, and years of dental study were not associated with smoking status (p≥0.445).

Conclusions: The prevalence of smoking was lower among Australian dental undergraduates than general population. Smoking status was not associated with age, gender, relationship with smokers and years of dental study in this sample. The reliability of the English version of the KTSND questionnaire is adequate. Future investigation in its validity is indicated.

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