Tooth stain index (TSI) development according to the Korean preferred food

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Bright tooth is preferred as one of the standard of beautiful tooth. Thus, tooth staining is considered to be opposite to cosmetic desire, and it is a main area of cosmetic dentistry to investigate the staining caused by foods. The purpose of this study is to develop the tooth stain index (TSI) by scoring according to the coloring degree after repeated intake of the preferred foods by in-vitro test. Hydroxyapatite discs (Diameter: 10 mm, Thickness: 2.0 mm) were soaked in 19 kinds of food (Ten discs per each food). The staining was measured before (control) and at 30, 60, 120, 240 and 420 min after food treatment using SHADEYE NCC® based on the vita shade guide. The darkest color (16th stage) was scored to -100, and initial color was scored to 0, and the relative staining degree was compared. The order of the tooth staining degree was as follows: A (Black tea), B (Chocolate, (Americano Coffee)+Chocolate, Kimchistew, Instant noodles), C (Soy sauce, Americano Coffee), D (Red ginseng, Americano Coffee+ Curry, Caffe latte), E (Red wine, Black-bean-sauce, noodles, Tomato sauce), Z (Curry, Red pepper paste, Tomato sauce + Red wine, Orange juice, Kimchi, Coke). Black tea showed the highest staining degree. The food containing coffee or green tea caused tooth staining highly, while juice and coke revealed very little relation with tooth staining. Black tea, chocolate and Kimchistew showed high staining sensitivity (staining rapidity), and Americano coffee stained gradually and finally cause drastic tooth staining.

Biography

Hyo-Kwang Ahn has completed his DMD in 2005 and his Medical Science Master Degree at 2011 in Kyung Hee University. Now, he is a second year in a PhD in Dental Science in Kyung Hee University directed by Prof. Yong-Duk Park. He has published more than 5 papers in reputed journals.

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