

## OSC35: Relationship between Occlusal Support and Total Dietary Fiber Intake

Shinji Fukahori, Yusuke Kondo, Akiko Tamura,  
Shintaro Tsuka, Taro Mukaibo, Chihiro Masaki,  
Ryuji Hosokawa

Division of Oral Reconstruction and Rehabilitation, Kyushu Dental  
University, Kitakyushu, Japan

**Aim:** Previous studies have revealed that reconstruction of occlusal support enhanced chewing ability, resulted in improvement of the nutritional status, however, most of these studies evaluated nutritional status by body mass index, energy intake or serum albumin level. In this study, we aimed to clarify the detailed relationship between occlusal support of molar teeth and ingested food and nutrients.

**Materials and Methods:** Subjects were formed by patients who visited Kyushu dental university hospital (11 men, 34 women, average age 58.9 years). They were classified into two groups depending on occlusal support of molar teeth: Normal group (occlusal support of molar teeth was maintained on both sides, 6 men and 24 women, mean age 59.5 years) and Defective group (occlusal support of molar teeth was lost on one side or both sides, 5 males and 10 females, mean age 57.6 years). Occlusal support by dental prostheses such as removable or fixed denture was equated with occlusion support by natural teeth. Ingested foods and nutrients were evaluated using brief-type self-administered diet history questionnaire. Mann-Whitney's U test was used for statistical analysis.

**Results:** The amount of intake energy, carbohydrate, protein and lipid intake were comparable in both groups. Total dietary fiber intake was significantly lower in the Defective group ( $p=0.022$ ), and both the soluble and insoluble dietary fiber intake were significantly lower in the Defective group.

**Conclusion:** Total dietary fiber intake decreases in subjects who lost posterior occlusal support, and it might be derived by the change of food ingestion habits.

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