

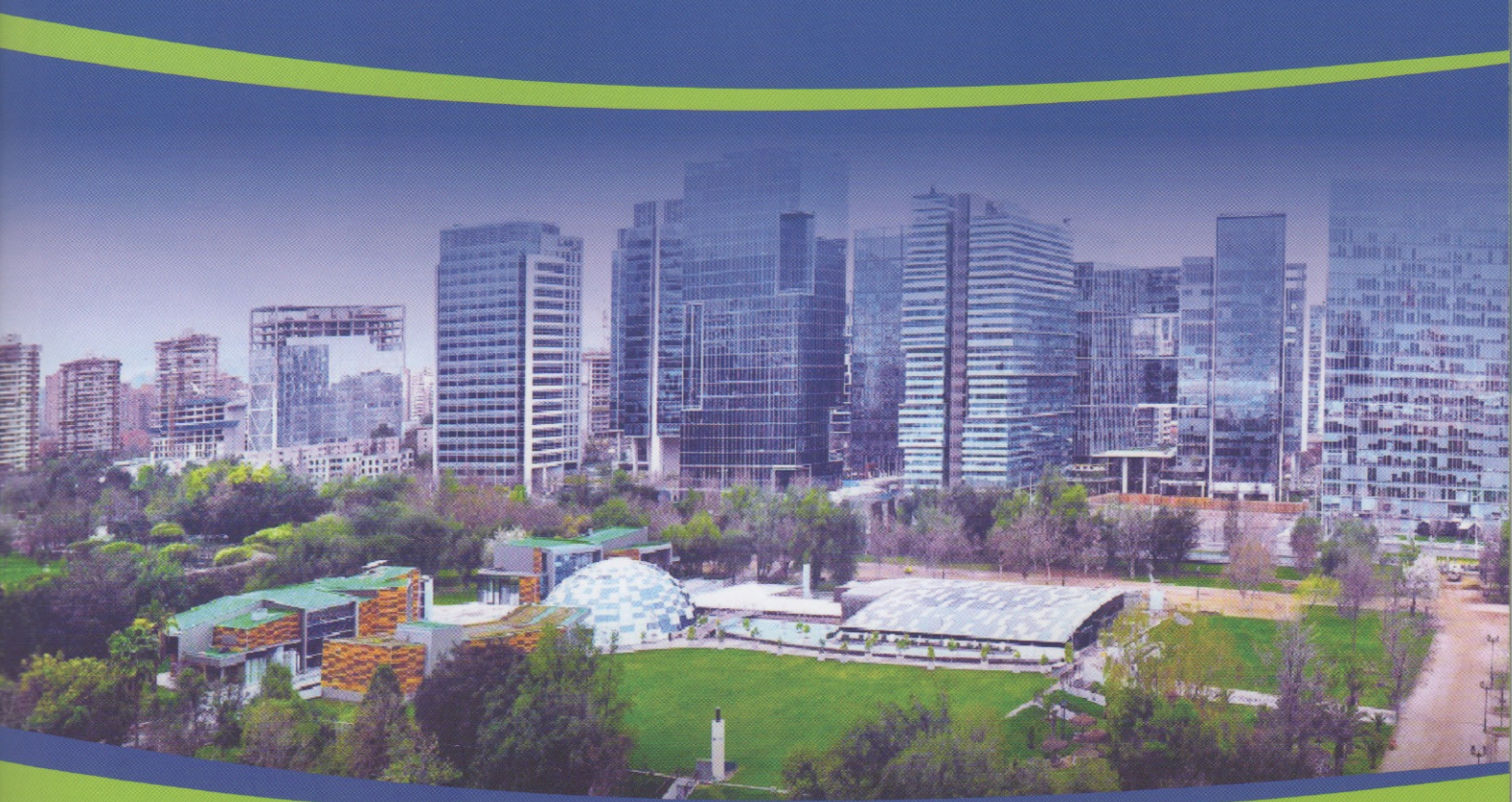


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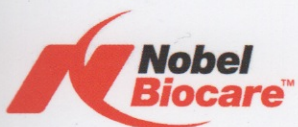
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## ASSESSMENT OF SWALLOWING AND MASTICATORY PERFORMANCE IN OBTURATOR WEARERS: A CLINICAL STUDY

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**Keywords:** obturator, Swallowing, Mastication

**Purpose/Aim:** To assess function by identifying changes in swallowing and masticatory performance in maxillary obturator prosthesis wearers.

**Materials and Methods:** Sixty subjects were recruited for the study, of which 20 were obturator wearers, 20 were completely dentulous and 20 had removable partial/complete dentures with similar Eichner's Index. Swallowing ability was evaluated with and without obturator using the "Water Drinking Test"; Masticatory performance was evaluated with the Sieve test; and maximum occlusal force was recorded with the help of a digital bite sensor. The data was analyzed using the Statistical Package for Social Science version 15.0 with a confidence level at 95%.

**Results:** Profile, behavior of drinking and time taken to drink were significantly improved ( $P < .001$ ) in subjects after wearing obturator. Masticatory performance was not significantly different ( $P = .252$ ) in obturator wearer when compared with dentulous or removable partial/ complete denture wearer, but significantly ( $P < .001$ ) high inter group difference in maximum occlusal force existed. Correlation between masticatory performance and maximum occlusal force was not significant ( $P = .124$ ).

**Conclusions:** Swallowing ability was significantly improved after wearing obturator but masticatory performance was not significantly different from those having similar occlusal support zone in their dentition.

## MASTICATORY FUNCTION AND NUTRIENTS INTAKE IN THE ELDERLY: A REVIEW OF THE LITERATURE

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**Keywords:** nutrients intake, masticatory efficiency

**Purpose/Aim:** With ageing, the progressive teeth loss determines a change of nutrition habits, depending on the compensation performed by the dentist intervention. If lost teeth are not replaced, a modification of the masticatory system occurs. Removable prosthetic rehabilitation is unable to fully restore the masticatory function to that of a dentate patient, regardless of the congruity of the prosthesis itself. Thus, the impaired masticatory performance of these patients has been considered associated with macro and micronutrients deficiency in their diet. The aim of the study was to investigate the association between mastication and nutrients intake by means of a literature systematic review.

**Materials and Methods:** The following data base were used: PubMed, Web of Science, Cochrane Library e Tripdatabase. Articles were selected using the key words "denture" OR "mastication" AND "nutrition" OR "elderly". The search comprised articles written in English and published between 1991 and 2015. Overall, 841 studies were analysed, 44 fulfilled the inclusion criteria, among which 34 trasversal studies and 10 clinical trials, 6 of them RCTs

**Results:** 27 out of 34 trasversal studies reported that a better masticatory performance provides the elderly with a higher micro and macro-nutrients intake, in particular vegetables and fibers, while the other 7 studies didn't highlight any differences. 3 RCTs showed an increased macro and micro-nutrients intake after inserting a new prosthesis or following the improvement of masticatory conditions, while the other 3 RCTs didn't show any variations.

**Conclusions:** Nutrients intake in the elderly depends not only on oral conditions and masticatory performance, but the influence of other factors is suggested. Nevertheless, nutritional counselling is an important factor to improve nutrients intake in the elderly and it is recommended to be associated with the prosthetic rehabilitation treatment.