

## Maximum voluntary bite force in subjects with normal occlusion

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**Introduction:** The aim of this study were to determine the maximum voluntary molar and incisor bite force with normal occlusion in healthy subjects and to assess the influence of gender and age.

**Methodology:** The sample comprised of 400 healthy subjects aged between 20 to 40 year with angle class I occlusion and normal overbite and overjet and absence of previous orthodontic treatment. bite force measurements were undertaken using a portable device called BYTE on both the left and right 1st molar and central incisor during maximum clenching. data were subjected to statistical analysis.

**Result:** Maximum voluntary bite force were age and gender related ( $p < 0.005$ ). males showed higher bite force value than female and it increased with age progressively in both the gender. Mean bite force recorded was about 122 in central incisor region and 320 N in 1st molar region. there were incidences of recording very high bite force in few subjects.

**Conclusion:** It is proposed that routine measurement of individual bite force should be done to assess the prognosis of restorations and success of prostheses. further research is required to understand the role of edentulism and type of prostheses in assessment of maximum voluntary bite force.

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