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Oral

**Standard Versus Real Versus Fake Braces: An Elemental Composition Analysis**

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**Introduction:** Orthodontic fixed appliance is now considered as fashion accessory and a symbol of wealth. Due to overwhelming demand, 'fake' and 'real' braces services have been offered through social media by unqualified personnel using poor quality orthodontic brackets and cases of metal toxicity from using these type of braces has been reported. **Materials and Methods:** This study was conducted to explore the elemental analysis of several types of 'fake', 'real' and standard braces. The metal composition of 9 upper right central incisor brackets were measured using high pressure environmental scanning electron microscope equipped with an energy dispersive X-ray spectrometer (ESEM/EDX). The quantitative analysis of the percentage of weight concentration of the elements were calculated. **Results:** The elemental analysis using ANOVA revealed that there was no statistically difference metal weight composition between 'fake', 'real' and standard braces. All brackets were manufactured from different types of alloys. Nonetheless, no toxic elements such as plumbum or mercury were detected in the composition of 'fake' and 'real' braces. **Conclusion(s):** In conclusion, the metal compositions of 'fake' and 'real' braces were not statistically different from conventional brackets and no pernicious elements were detected.

**KEYWORDS:** fake braces, real braces, brackets, alloys