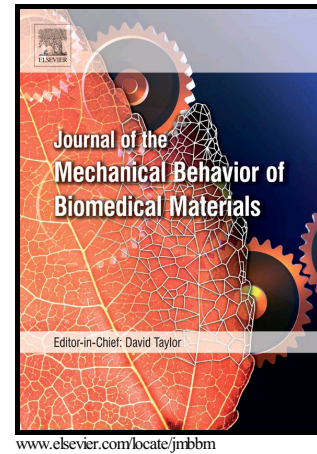


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**Dynamic analysis of bulk-fill composites: Effect of food-simulating liquids****Ahmed Hesham Eweis<sup>a</sup>, Adrian U-Jin Yap<sup>a,b</sup>, Noor Azlin Yahya<sup>a\*</sup>**

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**ABSTRACT**

This study investigated the effect of food simulating liquids on visco-elastic properties of bulk-fill restoratives using dynamic mechanical analysis. One conventional composite (Filtek Z350 [FZ]), two bulk-fill composites (Filtek Bulk-fill [FB] and Tetric N Ceram [TN]) and a bulk-fill giomer (Beautifil-Bulk Restorative [BB]) were evaluated. Specimens (12 x 2 x 2mm) were fabricated using customized stainless steel molds. The specimens were light-cured, removed from their molds, finished, measured and randomly divided into six groups. The groups (n=10) were conditioned in the following mediums for 7 days at 37°C: air (control), artificial saliva (SAGF), distilled water, 0.02N citric acid, heptane, 50% ethanol-water solution. Specimens were assessed using dynamic mechanical testing in flexural three-point bending mode and their respective mediums at 37°C and a frequency range of 0.1 to 10 Hz. The distance between the supports were fixed at 10mm and an axial load of 5N was employed. Data for elastic modulus, viscous modulus and loss tangent were subjected to ANOVA/Tukey's tests at significance level

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