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[\[Image PDF \(488K\)\]](#) [\[References\]](#)**Effects of abrasive and fiber components in medium on wear of composite resins**[Kiyoshi KAKUTA](#)¹⁾ and [Hideo OGURA](#)¹⁾

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Abstract:

Effects of abrasive and fiber components in a medium on the wear behavior of composite resins were evaluated. Calcium diphosphate and methyl cellulose were included in the medium as abrasive and fiber components respectively. A range of 0, 4, or 8% abrasive- or fiber-containing media were applied on a composite resin specimen during a simulated occlusal wear test. Four composite resins, Clearfil AP-X, Z100 Restorative, SOLARE P, and SOLIDEX F, were tested to evaluate the effects of these components in the medium. Presence of abrasive material in the medium increased the wear of composite resins significantly, but its effect differed among the composite resins. Presence of fiber material in the medium significantly decreased the wear of two composite resins, whereas the other two composites showed no significant differences. Nonetheless, presence of fiber in the medium generally tended to prevent the wear of composite resins.

Key words:[Composite resin](#), [Wear](#), [Medium](#)[\[Image PDF \(488K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

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