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[\[PDF \(4175K\)\]](#) [\[References\]](#)**Effects of different food colorants and polishing techniques on color stability of provisional prosthetic materials**[Vygandas RUTKUNAS](#)<sup>1)</sup>, [Vaidotas SABALIAUSKAS](#)<sup>1)</sup> and [Hiroshi MIZUTANI](#)<sup>2)</sup>

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**Abstract:**

The main objective was to investigate the effects of different polishing techniques on the color stability of provisional prosthetic materials upon exposure to different staining agents by mimicking the oral environment *in vitro*. Fifty-six cylindrical specimens were prepared for each type of material: bis-acryl and light-polymerized composite resins, and methyl methacrylate- and ethyl methacrylatebased resins. The specimens were polished using seven different polishing techniques and then immersed in four different staining agents. Color was measured with a spectrophotometer before and after immersion, and color changes ( $\Delta E$ ) were calculated. The effects of the type of provisional material, polishing procedure, staining agent, and their interactions on color stability were significant ( $p < 0.05$ ). Amongst these factors, the staining agent exerted the strongest effect on color stability. Amongst the provisional materials tested, methacrylate-based resins exhibited the highest color stability irrespective of polishing technique and staining agent.

**Key words:**[Color stability](#), [Provisional prostheses](#), [Food colorants](#)[\[PDF \(4175K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)

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