

Supplementary Materials: In Vitro Evaluation of Dental Resin Monomers, Triethylene Glycol Dimethacrylate (TEGDMA), and 2-Hydroxyethyl Methacrylate (HEMA) in Primary Human Melanocytes: A Pilot Study

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Supplementary Methods

Cytotoxicity Assay in Melanocytes from Another Donor

1×10^4 cells from a different donor (a neonatal, darkly pigmented donor, HEMn-DP; Cascade Biologics Cat# C2025C) were cultured in a 96-well plate for 48 h. Both monomers (TEGDMA and HEMA) were added to cells over a concentration range (0.25–3 mM), and cultures were maintained for 72 h. After this, 50 μ L of culture medium was collected and subjected to an LDH cytotoxicity assay similar to the method described in the methods section of the main text. MTS dye-containing medium was added for cells remaining in wells, and the plate was incubated for 2 h at 37 °C. The absorbance of aliquots (100 μ L) was read at 490 nm using a microplate reader.

Supplementary Figures

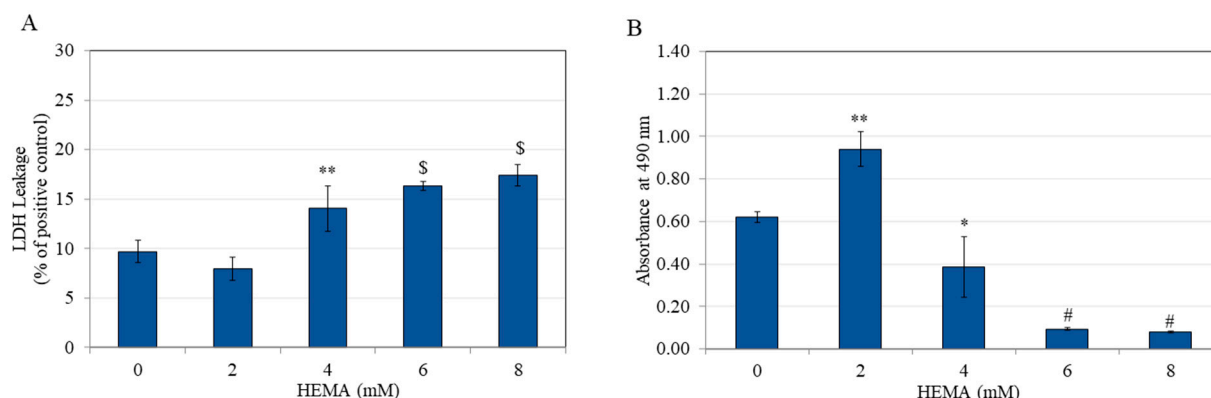


Figure S1. (A) Cytotoxicity (LDH leakage) and (B) Viability (absorbance at 490 nm) of melanocytes treated with HEMA monomer over a higher concentration range of 2–8 mM for 72 h; * $p < 0.05$, ** $p < 0.01$, \$ $p < 0.001$, and # $p < 0.0001$ vs. control (0 mM group); one-way ANOVA with Dunnett's post-hoc test; Data are mean \pm SD of one representative experiment in triplicates of two separate experiments.

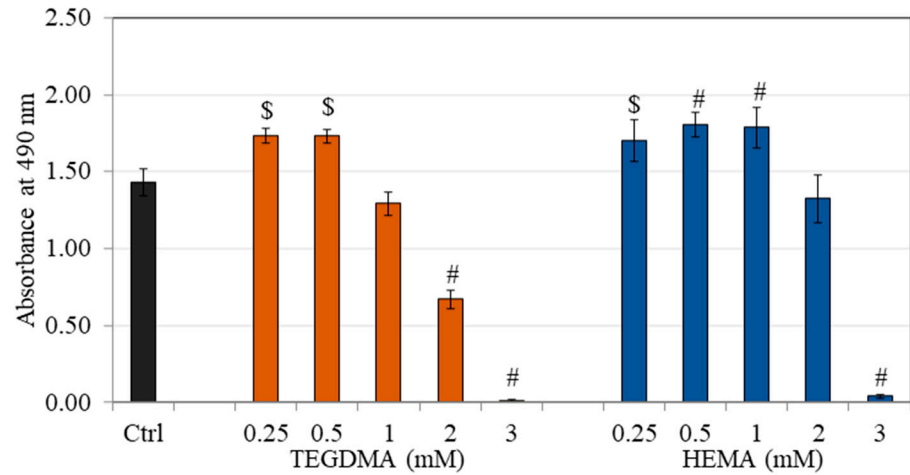


Figure S2. Viability of melanocytes from a different donor (HEMn-DP cells) treated with monomers TEGDMA and HEMA over a concentration range of 0.25–3 mM for 72 h; \$ $p < 0.001$ and # $p < 0.0001$ vs. control group (Ctrl); one-way ANOVA with Dunnett's post-hoc test; Data are mean \pm SD of quadruplicate determinations ($n = 4$ per group).

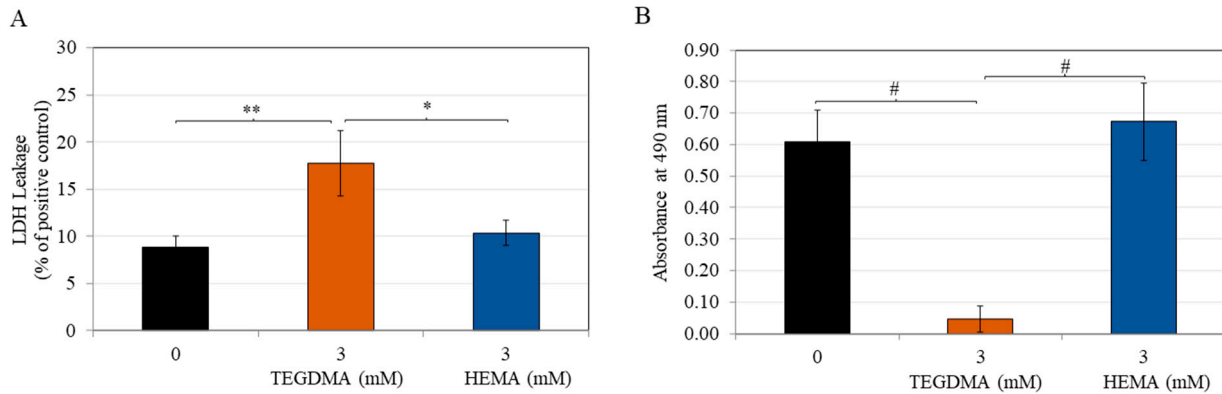


Figure S3. (A) Cytotoxicity (LDH leakage) and **(B)** Viability of melanocytes treated with TEGDMA and HEMA monomers each at a concentration of 3 mM for 72 h; * $p < 0.05$, ** $p < 0.01$, and # $p < 0.0001$; one-way ANOVA with Tukey's post-hoc test; Data are mean \pm SD of three independent experiments for A) and four independent experiments for B).