

# Ask the Experts

## COMPOSITE RESIN FLUORESCENCE

### Guest Expert

Michael Miller, DDS\*

**QUESTION:** Natural teeth are inherently fluorescent. Can this fluorescence be duplicated with current composite resins?

**ANSWER:** Fluorescence is indeed one important property of natural teeth that has been largely overlooked by many manufacturers of dental materials. This is unfortunate because an esthetic material must duplicate the fluorescence of natural teeth to avoid metamerism issues. With many popular venues featuring a variety of lighting effects, including black light, those materials that do not fluoresce at or near the level of natural teeth could cause embarrassment to the recipients of restorations fabricated

from them. This embarrassment could cause grief for clinicians, who might be asked to remake restorations that do not exhibit this property.

Fortunately, more manufacturers are starting to recognize the importance of fluorescence and are incorporating additives into their materials that help them fluoresce. For example, in our tests at least one hybrid and one microfilled composite already fluoresce at a level virtually the same as that of natural teeth. Nevertheless, until clinicians demand that all materials incorporate this property, the duplication of natural fluorescence will remain a hit-or-miss proposition.

### SUGGESTED READING

Miller MB. *Reality* 2004; 18:443, 599.

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**Editor's Note:** If you have a question on any aspect of esthetic dentistry, please direct it to the associate editor, Edward J. Swift Jr, DMD, MS. We will forward questions to appropriate experts and print the answers in this regular feature.

### Ask the Experts

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