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Light Curing Within Dentistry

Outline

• **Background/History**
  - What kind of light? – Wavelength

• **Intro to Composite Resin**
  - Resins
  - Fillers
  - Flowable vs. Packable

• **Types of Light Curing Units**
  - Plasma Arcs
  - Lasers
  - Tungsten Halogen
  - Light Emitting Diodes

• **Science of Light Curing**
  - Polymerization Failure
    - Irradiance
    - Curing time/regimens
      - Conventional Technique
      - Slow Start Techniques
    - Wavelength/bandwidth
      - Photoinitiators

• **Risk of Ocular Damage**

• **Curing Light Maintenance**
  - Infection Control
  - Regular Testing
  - Cleaning

• **Qualities of an Ideal Curing Light**
Sources


Alshaafi M. “Effects of different infection control methods on the intensity output of LED Light-Curing Units.” King Saud University Journal of Dental Sciences. 4 (2013): 27-31. 10.1016/j.ksujds.2012.11.005


