

FDI POLICY STATEMENT

Minimally Invasive Intervention for Caries Management (MIICM)

Revised version adopted by the FDI General Assembly: 2026, Prague, Czech Republic

Revised version adopted by the FDI General Assembly: 2016, Poznań, Poland

Original version adopted by the FDI General Assembly: 2002, Vienna, Austria

CONTEXT

Dental caries remains one of the most prevalent noncommunicable diseases worldwide. Since the 2016 revision of this policy statement, advancements in evidence-based caries management and a refined understanding of Minimal Intervention Dentistry have emerged. Minimally Invasive Intervention for Caries Management (MIICM) prioritizes early caries detection and conservative treatment strategies to maintain tooth integrity while improving patient outcomes. This sustainable approach aligns with contemporary demands for patient-centered dental care through preventive protocols and minimally disruptive therapeutic interventions.

Dental caries is a demineralization process. It can be arrested or reversed in its early stages through patient-centered strategies, including dietary sugar reduction, twice-daily biofilm removal with tooth brushing and interdental cleaning, and use of fluoride toothpaste along with bioactive materials. Professionally applied fluoride therapies (varnish or gel) and dental sealants remain foundational. Researchers continue to explore advanced dental materials to remineralize initial carious lesions¹.

MIICM integrates contemporary diagnostic tools, risk assessment protocols, and preventive-therapeutic strategies to manage initial dental caries. MIICM focuses on early detection and prevention of initial caries. Visual-tactile examination with aid of advanced technologies facilitates precise detection of carious lesions and assessment of carious lesion activity and risk². Validated risk assessment tools guide clinicians in selecting evidence-based interventions and tailoring intervals of supporting care.

SCOPE

Minimally invasive dentistry focuses on selectively removing only irreversibly demineralized enamel and dentin while preserving healthy tissue³. This approach intentionally leaves carious dentin beneath restorations, as evidence shows such retained lesions remain stable without causing clinical complications⁴. In its early stages, the demineralization process of caries activity can be arrested or even reversed⁵. Evidence supports repairing defective restorations over replacement, reducing unnecessary treatment, and preserving tooth integrity⁶.

The MIICM approach focuses on conserving tooth structure through six core principles: preventive strategies to maintain sound teeth, early detection of carious lesions, assessment of caries risk and activity, remineralization of non-cavitated lesions, personalized recall intervals, minimally invasive operative techniques, and restoration repair over replacement where clinically appropriate.

UNIVERSAL POLICY PRINCIPLES

MIICM is a prevention-oriented, patient-centered, evidence-based practice. Its core principles include equitable access, clinical sustainability, and scientific integrity, ensuring treatments are both biologically effective and socially responsible.

POLICY

The FDI supports the integration of MIICM into prevention-focused, person-centered oral-health systems. MIICM aligns with evidence-based practice by prioritizing early identification, risk-based decision making, and minimally invasive care. Stakeholders at all levels are encouraged to promote MIICM through education, implementation, and research that strengthen equitable access and long-term oral-health outcomes.

KEYWORDS

Minimal Intervention Dentistry, dental caries, caries prevention, caries management, minimally invasive restoration.

DISCLAIMER

This statement reflects the best available evidence at the time of publication. Implementation should consider cultural, economic, and clinical contexts.

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