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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

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CONTEXT

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4 Dental caries remains one of the most prevalent noncommunicable diseases
5 worldwide. Since the 2016 revision of this policy statement, significant advances in
6 evidence-based caries management and a refined understanding of Minimal
7 Intervention Dentistry have emerged. Minimally Invasive Intervention for Caries
8 Management (MIICM) prioritizes the early detection of carious lesions, prevention
9 and control of carious lesions, minimally invasive conservative treatment strategies
10 and personalized recall assessment to maintain tooth integrity (biology and
11 biomechanical resistance) while improving patient outcomes. This sustainable
12 approach aligns with contemporary demands for patient-centered dental care using
13 preventive protocols and minimally invasive therapeutic interventions.

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15 Dental caries is caused by an imbalanced demineralization process. It can be
16 arrested or reversed in its early stages through patient-centered, self-administered
17 strategies, including dietary sugar reduction, twice-daily biofilm removal with tooth
18 brushing and interdental cleaning, and use of fluoride toothpaste along with
19 evidence-supported remineralizing materials. Strategies which address social
20 determinants of health and barriers to preventive care that influence caries risk and
21 activity should also be implemented. Professionally applied fluoride therapies (gel,
22 mouthrinse, toothpaste, varnish, or silver diamine fluoride) and dental sealants
23 remain foundational. Researchers continue to explore advanced dental materials to
24 remineralize, repair or regenerate initial carious lesions¹.

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26 MIICM integrates contemporary diagnostic tools, risk assessment protocols, and
27 preventive-therapeutic strategies to manage dental caries at its earliest stages.
28 MIICM focuses on early detection and prevention/management of initial caries.
29 Visual-tactile examination and bitewing radiographs, if indicated, with the aid of
30 advanced technologies such as LASER fluorescence or quantitative light-induced
31 fluorescence (QLF), facilitates precise detection of carious lesions and assessment
32 of carious risk and activity². Validated risk assessment tools guide clinicians in

selecting evidence-based interventions and tailoring intervals of supporting care for active monitoring of caries risk and progression³.

SCOPE

Minimally invasive dentistry focuses on selective caries removal in deep carious lesions to preserve pulp vitality and avoid unnecessary pulp exposure^{4,5}. When clinically appropriate, this approach intentionally leaves and seals carious-affected dentin, as evidence shows such retained lesions may remain arrested, when sealed under a well-placed restoration and appropriately monitored, without causing clinical complications⁶. In its early stages, the demineralization process can be arrested or even reversed⁷. Evidence supports repairing defective restorations over replacement, reducing unnecessary treatment, preserving tooth integrity and creating less waste to the environment⁸.

The MIICM approach focuses on conserving tooth structure through six core principles: (1) preventive strategies to maintain sound teeth, (2) early detection of carious lesions, (3) assessment of caries risk and activity, (4) remineralization of non-cavitated lesions, (5) minimally invasive operative techniques such as selective caries removal and restoration repair over replacement, where clinically appropriate, and (6) personalized recall intervals.

UNIVERSAL POLICY PRINCIPLES

MIICM is a prevention-oriented, patient-centered, evidence-based practice. Its core principles include equitable access, affordability, clinical and environmental sustainability, and scientific integrity, ensuring treatments are both biologically and biomechanically effective, as well as socially responsible across all population groups.

POLICY

The FDI supports the integration of MIICM into prevention-focused, person-centred oral healthcare 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, research, workforce training, interdisciplinary implementation, and school or community-based services 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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