

Nihla N.

THE IMPORTANCE OF BABY TEETH DESPITE BEING TEMPORARY

Tutor: senior lecturer Vinogradova T.G.

*Department of General Dentistry with a course in orthopedic dentistry, advanced training
and refresher courses*

*Department of General Dentistry
Vitebsk State Medical University, Vitebsk*

Primary teeth begin erupting around 6 months of age and are fully exfoliated by 12-13 years. Their temporary nature often leads to the perception that they are expendable. However, dental caries in primary teeth affects over 530 million children worldwide according to the World Health Organization (WHO, 2022). A healthy primary dentition is a prerequisite for normal orofacial growth, proper occlusion, speech acquisition, and psychosocial development. This review synthesizes current evidence to demonstrate why the "temporary" nature of these teeth does not equate to being "unimportant" in the context of overall pediatric health. Baby teeth perform several essential functions that are critical during a child's early development. They ensure efficient chewing and digestion by breaking down food particles appropriately for a developing gastrointestinal tract. Furthermore, they participate actively in speech formation and maintain the necessary space for the permanent teeth to erupt correctly. These teeth also stimulate the growth of the maxillofacial skeleton through physiological occlusal forces. Conversely, their premature loss leads to malocclusion, delayed eruption of permanent teeth, significant diction disorders, and various psychological problems. Mastication and nutrition are heavily dependent on the integrity of the primary dentition, which provides 60-80% of chewing efficiency in preschool children. The loss of posterior primary teeth specifically reduces the breakdown of fibrous foods, potentially impacting nutritional intake. Beyond nutrition, each primary tooth serves as a natural space maintainer within the dental arch. Premature extraction often results in the mesial drift of adjacent teeth, leading to crowding. Statistics indicate that the loss of a primary first molar before age seven leads to a space loss of 2.1-3.5 mm on average, with 78% of such cases requiring orthodontic space regaining. The development of the craniofacial complex and occlusion is intricately linked to the presence of baby teeth. Physiological occlusal forces from primary teeth influence mandibular growth patterns. Research has shown that children with severe early childhood caries and multiple extractions exhibit noticeably reduced vertical facial growth. Additionally, primary incisors and canines are essential for producing specific speech sounds. The premature loss of maxillary incisors causes compensatory tongue positioning, which frequently leads to interdental lisping and other articulation disorders that can persist if not addressed. Psychosocial aspects and clinical implications further underscore the importance of maintaining primary teeth. Visible caries or missing anterior primary teeth can negatively affect a child's self-esteem and social interactions. Evidence suggests that children with untreated anterior caries are less likely to be chosen as play partners by their peers. Furthermore, parents report higher levels of dental-related school absences due to pain or discomfort. To mitigate these issues, clinical recommendations emphasize caries risk assessment from age one, the application of fluoride varnish, and dietary counseling. Practitioners are encouraged to use stainless steel crowns instead of extractions and to utilize space maintainers when extraction is unavoidable. In conclusion, baby teeth are indispensable for mastication, arch integrity, craniofacial growth, speech, and psychological well-being. Their temporary existence does not diminish their clinical significance in any way. Premature loss leads to preventable malocclusions, speech defects, and nutritional deficiencies that can have long-term consequences. Dental professionals must dedicate effort to educating families, adopting minimally invasive restorative techniques, and ensuring the use