

## ABSTRACTS OF ORAL PRESENTATIONS

## UPOTREBA SREDSTAVA ZA ORALNU HIGIJENU I KVALITET ORALNOG ZDRAVLJA KOD ŠESTOGODIŠNJAKA NA PODRUČJU GRADA ŽIVINICE U 2022. GODINI

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### SAŽETAK

**Uvod:** Oralno zdravlje je važan segment opšteg zdravstvenog stanja, te u velikoj mjeri utiče na kvalitet života i funkcionisanje individue. Cilj istraživanja je analizirati zatečeno stanje oralnog zdravlja, i saznati koja sredstva za oralnu higijenu upotrebljavaju šestogodišnjaci na području grada Živinice.

**Metodologija istraživanja:** Istraživanje je obuhvatilo pregled mliječnih zuba ispitanika prema uputama priručnika Svjetske zdravstvene organizacije (SZO), te anketiranje njegovih roditelja/staratelja. Ispitanici su bila djeca uzrasta od 6 godina sa područja grada Živinice, koja su dolazila na stomatološke preglede u JZU "Dom zdravlja" Živinice. Izvršenim pregledom ustanovljen je keop indeks mliječnih zuba. Anketiranjem roditelja dobiveni su podaci o učestalosti upotrebe sredstava za oralnu higijenu.

**Rezultati:** Istraživanje je obuhvatilo 50 djece, od čega je bilo 25 dječaka, i 25 djevojčica. keop indeks za ispitivanu skupinu iznosio je 12,56. Svi ispitanici su koristili četkicu za zube i pastu za zube; 26% roditelja se izjasnilo da ne zna da li djetetova pasta za zube sadrži fluor, dok 24% njih da ne sadrži fluor; 18% roditelja je potvrdilo da njihovo dijete koristi konac za zube, a samo 12% interdentalne četkice.

**Zaključak:** Kod veoma malog broja djece koristila dodatna sredstva za održavanje oralne higijene, a keop indeks šestogodišnjaka na području grada Živinice je bio visok u odnosu na preporuke SZO. Na osnovu ovoga se može reći da oralno zdravlje šestogodišnjaka nije bilo zadovoljavajuće.

**Glavne riječi:** keop indeks, oralno zdravlje, djeca dobi 6 godina

## USE OF ORAL HYGIENE PRODUCTS AND QUALITY OF ORAL HEALTH AMONG SIX-YEAR-OLDS IN THE CITY AREA OF ŽIVINICE

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### ABSTRACT

**Introduction:** Oral health is a part of general human health having great impact to life quality and function of the individual. This research aims to analyze state of oral health and to find out which oral hygiene products are used by six-year-old children in the Živinice city area.

**Methodology:** Research covered oral examination (primary teeth) of examinees using instructions of the WHO and polling of their parents. Examinees were children at the age of six living in the Živinice city area, who came for dental check-ups in Public Health Institution "Health Center" Živinice. After oral examinations were conducted, DMFT of primary teeth was determined. Survey among parents gave us results about the frequency of use of various products.

**Results:** Research covered 50 children (25 boys and 25 girls). DMFT index for this group was 12.56. All respondents used toothbrushes and toothpaste, and 26% of the parents reported that they are not aware if their child's toothpaste contains fluorides. 24% said that their child's toothpaste is not based on fluorides, and 18% claimed their child uses dental floss and only 12% of interdental toothbrushes

**Conclusion:** Small number of children used additional oral hygiene products and DMFT index among six-year-olds was high in comparison to WHO recommendations. After analyzing results of this research, we can claim that oral health among six-year-olds was not at satisfactory level.

**Keywords:** DMFT index, oral health, six-year-old children

## TERAPIJSKI PROTOKOL PRIMJENE LSTR METODE U LIJEČENJU KARIOZNE LEZIJE SA PULPALNOM ILI PERIAPIKALNOM PROPAGACIJOM

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### SAŽETAK

**Uvod:** Komplikacije dubokih karioznih lezija kod mliječnih zuba gotovo su redovan nalaz u kliničkoj praksi i veliki izazov za pedodontu. Primarni oblik pulpalne infekcije je najčešće asimptomatski i neprimijećen do momenta periapikalne propagacije i pojave kliničkih simptoma. Ireverzibilne promjene pulpoperiodalnog kompleksa, popratni subjektivni i objektivni simptomi, otežana ili onemogućena saradnja potrebna za endodontski tretman vodi ka jedinoj mogućoj intervenciji-prijevremenoj ekstrakciji. Posljedice: kolaps dentalnog luka, poremećaj funkcije i fiziološkog razvoja orofacijalnih struktura, osjećaj poraza i nemoći terapeuta.

Lesion Sterilization Tissue repair (LSTR) jeste tretman mliječnih zuba koji podrazumjeva obeskličavanje rezidualnog pulpalnog tkiva kombinacijom antibiotika (sa ili bez prisustva kortikosteroida) a posljedično dovodi do stabilizacije upalnog procesa, eliminacije subjektivnih i objektivnih simptoma, te mogućnost reparacije pulpoperiodalnog kompleksa. Metoda je minimalno invazivna (atraumatična), i kao takva prihvatljiva malim, slabo kooperativnim pacijentima, do sada je u kliničkoj praksi pokazala izrazito pozitivna iskustva.

**Materijali i metode:** Procedura se provodi na Klinici za dječiju i preventivnu stomatologiju Stomatološkog fakulteta sa stomatološkim kliničkim centrom, u toku redovnog rada, na djeci predškolske i rane školske dobi.

**Zaključak:** Primjenom ove minimalno invazivne metode, eliminišu se efekti upalnih procesa u pulpoperiodalnom tkivu, potiče proces reparacije, te produžava vijek mliječnih zuba do perioda fiziološke smjene. Atraumatski efekat ima značajno pozitivan uticaj na kooperativnost malih pacijenata.

**Ključne riječi:** LSTR, mliječni zubi, stabilizacija, reparacija

## THERAPEUTIC PROTOCOL FOR THE APPLICATION OF THE LSTR METHOD IN THE TREATMENT OF CARIOUS LESIONS WITH PULPAL LESIONS OR BY PERIAPICAL PROPAGATION

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### ABSTRACT

**Introduction:** Complications of deep carious lesions in primary teeth are almost a regular finding in clinical practice and challenge for pedodontist. The primary form of pulpal infection is most often asymptomatic and unnoticed until the moment of periapical propagation and the appearance of clinical symptoms. Irreversible changes in the pulpoperiodonal complex, and difficult or impossible cooperation required for endodontic treatment leads to the only possible intervention - premature extraction.

**Consequences:** the collapse of the dental arch, disruption of the function and physiological development of the orofacial structures and the therapist's feeling of defeat and helplessness are among them.

Lesion Sterilization Tissue Repair (LSTR) is a treatment of primary teeth involving devitrification of residual pulpal tissue with a combination of antibiotics (with or without the presence of corticosteroids) and consequently leads to stabilization of the inflammatory process, elimination of subjective and objective symptoms and possibility of reparation of the pulpoperiodontal complex. The method is minimally invasive (atraumatic), and as such, acceptable to small, poorly cooperative patients which so far it has shown extremely positive experiences in clinical practice.

**Material and Methods:** The procedure is applied at the Clinic for Children's and Preventive Dentistry of the Faculty of Dentistry with the Dental Clinical Center, during regular work, to children of the preschool and early school age.

**Conclusion:** Using this minimally invasive method, the effects of inflammatory processes in the pulpoperiodontal tissue are eliminated, the reparation process is stimulated and the life of primary teeth is extended until the period of physiological change. The atraumatic effect has a significantly positive effect on the cooperation of small patients.

**Keywords:** LSTR, milk teeth, stabilization, repair

## KLINIČKI ASPEKT TERAPIJE MOLARNO INCIZIVNIH HIPOMINERALIZACIJA

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### SAŽETAK

**Uvod:** Molarno incizivna hipomineralizacija (MIH) kao pojam prihvaćena je 2003. godine od Evropske akademije dječje stomatologije (EAPD-a), a definiše se kao idiopatski kvalitativni poremećaj cakline koji zahvata prve stalne molare i incizive usljed promjena u početnoj fazi mineralizacije ili za vrijeme maturacije ameloblasta. Etiologija molarno incizivne hipomineralizacije je još uvijek nepoznata. Prema dostupnoj literaturi prevalenca ove pojave varira između 2,5% i 40 % svjetske dječije populacije. Rezultati istraživanja u BiH pokazuju prevalecu ovog oboljenja 12,3%.

**Cilj rada:** Ukazati na važnost rane dijagnostike i adekvatne terapije pacijenata sa molarno incizivnim hipomineralizacijama, koje za pacijenta predstavljaju veliki estetsko funkcionalni problem, a za stomatologa izazov.

**Materijal i metode:** Pretraga baze podataka na engleskom jeziku PubMed za MIH, u smislu ispitivanja MIH vizuelno taktilnim metodama prema standardnim uslovima Svjetske zdravstvene organizacije i kliničkog aspekta terapije prema aktuelnim smjernicama AAPD i EAPD.

**Zaključak:** Molarno incizivna hipomineralizacija (MIH) predstavlja globalni problem te izazov u modernoj dentalnoj medicini. Dobro poznavanje kliničke slike MIH-a zbog same osjetljivosti zahvaćenih zubi i brzog napredovanja karijesnih lezija te pravilno postavljanje dijagnoze omogućava dobru prevenciju i pravodobnu terapiju, a samim tim i izbjegavanje daljnjih komplikacija.

**Ključne riječi:** molarno incizivna hipomineralizacija, djeca, terapija

## CLINICAL ASPECT OF MOLAR INCISOR HYPOMINERALIZATION THERAPY

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### ABSTRACT

**Introduction:** Molar incisor hypomineralization (MIH) as a term accepted in 2003 by the European Academy of Pediatric Dentistry (EAPD). It is defined as an idiopathic qualitative disorder of the enamel affecting the first permanent molars and incisors due to changes in the initial phase of mineralization or during ameloblast maturation. Etiology of MIH is still unknown. According to the available literature, prevalence of these phenomena varies between 2.5% and 40% of the world's child population. Research results in BiH shows a prevalence of this disease of 12.3%.

**The aim:** To point out the importance of early diagnosis and adequate therapy of patients with MIH representing great aesthetic and functional problem and being a challenge for the dentist.

**Materials and methods:** Search of the English-language PubMed database for MIH regarding testing MIH by visual and tactile methods according to the standard conditions of the World Health Organization and clinical aspect of therapy according to current AAPD and EAPD guidelines.

**Conclusion:** Molar-incisor hypomineralization (MIH) represents a global problem and a challenge in modern dental medicine. Correct diagnosis, proper prevention and early therapy disables rapid progression of carious lesions and consequently further complications.

**Keywords:** molar incisor hypomineralization, children, therapy

## NAČINI PROTETSKOG ZBRINJAVANJA TOTALNE BEZUBOSTI KOD IZRAZITIH ATROFIJA ALVEOLARNOG GREBENA

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### SAŽETAK

**Uvod:** Totalna bezubost predstavlja stanje koje karakteriše nedostatak svih zuba obje vilice. Osim što je estetski problem, narušava i zdravlje čitavog organizma. Gubitak zuba otežava žvakanje i sav pritisk prebacuje na desni i viličnu kost, što vremenom dovodi do njihovog oštećenja i deformisanje viličnih kostiju.

**Materijali i metode:** Pacijent star 67 godina, sa izrazitom atrofijom donjeg alveolarnog grebena, bez nepokretne sluznice i plica čije insercije dosežu sami vrh grebena. S obzirom da donja totalna proteza nije imala nikakvu retenciju ugrađena su dva implantata na pozicijama 34 i 43 i napravljena proteza na lokatore.

Pacijent star 50 godina sa izrazitom atrofijom gornjeg alveolarnog grebena i plitkim paratubarnim prostorima i plikama koje inseriraju do vrha grebena. Posebnim postupkom izrade uz korišćenje posebnih otisnih materijala izrađena je gornja totalna proteza sa maksimalno ekstenzanim rubovima koja prelazi preko plica i čiji rubovi zahvataju pokretnu i nepokretnu sluznicu, koja je stabilna i funkcionalna.

Pacijent star 68 godina sa atrofijom donjeg alveolarnog grebena koji je u nivou sa podom usne šupljine. Urađena je implantacija na pozicijama 43, 41 i 33. Napravljena je proteza na prečku.

**Rezultati:** implantacijom dva odnosno tri implantata smo postigli retenciju i stabilnost te dobili funkcionalnu protezu.

**Zaključak:** imajući u vidu da atrofičan greben predstavlja veliki problem kako za pacijenta tako i za terapeuta ovim načinima protetskog zbrinjavanja bezubih alveolarnih grebena postiže se ponovno uspostavljanje funkcije i estetike.

**Ključne riječi:** totalna bezubost, proteza na lokatore, proteza na prečku, proteza sa maksimalno ekstenzanim rubovima

## WAYS OF PROSTHETIC CARE OF TOTAL TOOTHLESSNESS IN THE PRONOUNCED ATROPHY OF THE ALVEOLAR REEF

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### ABSTRACT

**Introduction:** Complete toothlessness is a condition characterized by the absence of all teeth in both jaws. It is not only an aesthetic problem but a complex condition that impairs the health of the entire organism. Tooth loss makes chewing difficult leading over time to pressure transfer to the gums and jaws resulting in their deformation.

**Materials and methods:** A 67-year-old patient, with a distinct atrophy of the lower alveolar ridge, without an immovable mucosa and plica whose in-services reach the very tip of the ridge. Lower total denture had no retention, two implants were placed on position 34 and 43 and the prostheses were built upon the pin implants.

A 50-year-old patient with a distinct atrophy of the upper alveolar ridge and shallow periodontal spaces and plicas invading to the top of the ridge. A special procedure with the use of unique impression materials creates the total top denture with maximally extended edges crossing the ridge and whose edges capture the mobile and immobile mucosa, which is stable and functional.

A 68-year-old patient with an atrophy of the lower alveolar ridge at the level with the floor of the oral cavity. Implantation is performed on positions 43, 41 and 33. A prosthesis on the crossbar was made.

**Results:** Through the implantation of two respectively three implants, we achieved retention and stability and received functional dentures.

**Conclusion:** Given that the atrophic ridge is a major problem for both patient and therapist, these mentioned ways of prosthetic care for toothless alveolar ridges re-establish aspects both function and aesthetics.

**Keywords:** total toothlessness, prosthesis on pin implants, cross-stroke, prosthesis with maximum extended edges



## NADOKNADA ZUBA NAKON EKSTRAKCIJE IMPAKTIRANOG DONJEG DRUGOG PREMOLARA I DONJEG PRVOG MOLARA SA PERFORACIJOM KANALNIM KOČIĆEM I HRONIČNIM APIKALNIM APSCEOM

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### SAŽETAK

**Uvod:** Impaktirani zubi su zubi koji su potpuno oblikovani i razvijeni, ali nisu iznikli nigdje u usnoj šupljini, nego se nalaze u kosti.

Hronični apikalni apsces predstavlja asimptomatsku nakupinu gnoja oko vrha korijena zuba koja je sporog toka.

Perforacija kanalnim kočićem najčešće nastaje zbog pogrešne procjene pravca pružanja korijena u toku uklanjanja gutaperke i pripreme prostora za kanalne kočiće, koristeći velike i rigidne rotirajuće instrumente.

**Prikaz slučaja:** Pacijentica starosti 27 godina se javlja zbog osjećaja nelagode i pritiska u području donjeg lijevog kvadranta. Na OPG snimku se uoči impaktiran zub 35 i već endodontski tretiran zub 36 sa foss-routom i rasvjetljenjem u području oko apexa zuba. Kliničkim pregledom se ustanovi prisustvo paradontalnog džepa između ova dva zuba, te blaga osjetljivost zuba 36 na palpaciju i perkusiju.

**Terapija:** Nakon što su sva moguća terapijska rješenja iznijeta pacijentici, odlučeno je da se pristupi vađenju zuba 35 i 36 u jednoj posjeti. Zatim je kiretirana rana sa upalnim procesom, te zbog istog, umjesto imedijatne, indicirana kasna implantacija. Nakon 4 mjeseca ugrađen je implantat u području zuba 36, a nakon toga protetska priprema i definitivni protetski rad, metal-keramička solo-kruna.

**Zaključak:** Vađenjem zuba 35 i 36, te implantacijom i izradom definitivnog rada na implantatu, pacijentica je dobila dugoročno protetsko rješenje sa minimalnim brojem posjeta stomatologu. Upala u vidu hroničnog apikalnog apscesa kao izvora infekcije, te impaktiran zub su uklonjeni u jednoj posjeti.

**Ključne riječi:** impaktiran zub, hronični apikalni apsces, foss-route, perforacija kanalnim kočićem, implantat, protetski rad

## TOOTH REPLACEMENT AFTER EXTRACTION OF IMPACTED LOWER SECOND PREMOLAR AND LOWER FIRST MOLAR WITH PERFORATION BY CANAL STAKE AND CHRONIC APICAL ABSCESS

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### ABSTRACT

**Introduction:** Impacted teeth are teeth that are fully formed and developed but have not erupted anywhere in the oral cavity but are located in the bone.

A chronic apical abscess is an asymptomatic accumulation of pus around the apex of a tooth root that is slow-flowing.

Perforation by canal stake occurs often due to a misjudgment of the direction of root extension during the removal of gutta-percha and preparation of space for root canals, using large and rigid rotating instruments.

**Case report:** A 27-year-old female patient presents with discomfort and pressure in the lower left quadrant. The OPG image shows the impacted tooth 35 and the already endodontically treated tooth 36 with a foss-route and illumination in the area around the apex of the tooth. A clinical examination showed the presence of a periodontal pocket between these two teeth and mild sensitivity of tooth 36 to palpation and percussion.

**Therapy:** All possible therapeutic solutions were presented to the patient and it was decided to extract teeth 35 and 36 in one visit. Then the wound with the inflammatory process was cured. Caused by the process, instead of immediate a postponed implantation was indicated. After 4th month, an implant was installed in the area of tooth 36, followed by prosthetic preparation and definitive prosthetic work with metal-ceramic solo-crown.

**Conclusion:** By extracting teeth 35 and 36, and implanting and making definitive work on the implant, the patient got a long-term protective solution with a minimal number of visits to the dentist. Inflammation in the form of a chronic apical abscess as a source of infection, and the impacted tooth were removed in one visit.

**Keywords:** impacted tooth, chronic apical abscess, perforation with canal stake, implant, prosthetic work.

## REHABILITACIJA KOMPLEKSNIH PROTETSKIH STANJA (PERIODONTALNA I ORALNO-HIRURŠKA PRIPREMA)

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### SAŽETAK

**Uvod:** Parodontopatija je kompleksno oboljenje potpornog aparata zuba kojim su zahvaćena sva parodontalna tkiva. Patognomonični simptom parodontopatije je parodontalni džep koji nastaje kao posljedica produblivanja gingivalnog sulkusa.

**Materijali i metode:** Pacijent starosti 37 godina, anamnestički navodi krvarenje desni, neprijatan zadah iz usta i klačenje pojedinih zuba. Kliničkim pregledom uočavamo inflamiranu gingivu, izmijenjenog oblika i veličine, prisustvo supra i subgingivalnih konkrementa, kao i purulentni ekshudat iz gingivalnog sulkusa. Sondiranjem utvrđujemo prisustvo parodontalnih džepova 6-8 mm prosječne dubine i klačenje pojedinih zuba. Rendgenografijom ustanovljujemo horizontalni i vertikalni tip destrukcije alveolarne kosti. Urađena kauzalna faza terapije i pacijentu date upute za održavanje oralne higijene. Nakon tri mjeseca urađeno ponovno mjerenje dubine parodontalnih džepova. S obzirom da su dubine parodontalnih džepova bile veće od 4 mm, pacijent je indikovao za hiruršku terapiju.

**Rezultati:** Hirurškom terapijom smo postigli eliminaciju džepova, korekciju mukogingivalnih anomalija i remodelaciju kosti. Nakon toga urađena preprotetska priprema, brušenje i postavljanje privremenih krunica.

Nakon godinu dana uočavamo odsustvo inflamacije gingive i uspostavljanje sekundarnog gingivalnog sulkusa. Urađeno ponovno mjerenje dubine parodontalnih džepova koja na kontrolnom pregledu iznosi 4-5 mm u prosjeku, a rendgenografijom uočavamo regeneraciju alveolarne kosti.

**Zaključak:** Hirurška metoda liječenja parodontopatije se pokazala jako korisna u očuvanju zuba kod kojih je prisutna uznapredovala parodontopatija i koji su bili indikovani za vađenje. Pacijent je dobio fiksni protetski rad, motiviran je i obučan za pravilno održavanje oralne higijene.

**Gljučne riječi:** parodontopatija, parodontalni džep, hirurška terapija parodontopatije

## REHABILITATION OF COMPLEX PROSTHETIC CONDITIONS (PERIODONTAL AND ORAL SURGICAL PREPARATION)

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### ABSTRACT

**Introduction:** Periodontal disease is a complex disease of the supporting apparatus of the teeth that affects all periodontal tissues. A pathognomonic symptom of periodontal disease is a periodontal pocket occurring as a result of the deepening of the gingival sulcus.

**Materials and methods:** A 37-year-old patient in anamnesis reports bleeding gums, bad breath and loosening of certain teeth. The clinical examination reveals inflamed gingiva, altered in shape and size, with presence of supra- and subgingival concretions, as well as purulent exudate from the gingival sulcus. By probing, we determine the presence of periodontal pockets with an average depth of 6-8 mm and the loosening of individual teeth. X-rays show the horizontal and vertical type of alveolar bone destruction. The causal phase of the therapy is done (elimination of inflammation). The patient was given instructions for maintaining oral hygiene. After three months, re-measurement of the depth of the periodontal pockets was done. Given that the depth of the periodontal pockets was greater than 4 mm, the patient was indicated for surgical therapy.

**Results:** With surgical therapy, we achieve elimination of pockets, correction of mucogingival anomalies and bone remodeling. After that, pre-prosthetic preparation, grinding and placing of temporary crowns were performed. After one year, we observe the absence of inflammation of the gingiva and the establishment of a secondary gingival sulcus. The depth of the periodontal pockets was re-measured being 4-5 mm on average at the follow-up examination and the regeneration of the alveolar bone was observed via x-ray.

**Conclusion:** The surgical method of treating periodontitis proved to be very useful in preserving teeth with advanced periodontitis and which were indicated for extraction. The patient received fixed prosthetic work, was motivated and trained to maintain proper oral hygiene.

**Keywords:** periodontopathy, periodontal pocket, surgical therapy of periodontopathy

## NOVI KONCEPTI POVEZANOSTI ISHRANE I ORALNOG ZDRAVLJA

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### SAŽETAK

Nove naučne discipline, kao što je nutricionizam i mogućnosti istraživanja na molekularnom i genetičkom nivou daju priliku za analizu višestukih i obostranih povezanosti oralnog zdravlja i ishrane, što omogućava širi pristup od uobičajenog posmatranja ishrane kao uticaja šećera na nastanak karijesa.

Dešifrovanje humanog genoma otvorilo je novu eru istraživanja gena koji utiču na individualne sklonosti u smislu potrebe za određenom vrstom namirnica. Polimorfizmi gena koji regulišu osjet okusa gorkog dovode se u vezu sa učestalim problemom gojaznosti kod djece i incidencom karijesa. Predmet izučavanja su i epigenetske promjene i njihov uticaj na oralno zdravlje. Epigenetske promjene su reverzibilne promjene na ljudskom genomu, bez promjena DNK sekvenci, a nastaju pod uticajem faktora okoline i načina života.

Trend široke upotrebe brojnih vrsta suplemenata, vitamina, mikroelemenata, probiotika, nameće pitanje njihovog učinka na oralno zdravlje. Gojaznost kao jedan od najučestalijih problema današnjice, prema najnovijim istraživanjima, ukazuje na sveobuhvatni uticaj na oralno zdravlje, a ne samo na učestalost karijesa. Sve je više naučnih dokaza koji ukazuju na vezu metabolički aktivnih tvari iz masnog tkiva kao endokrinog organa na nastanak i progresiju parodontalnih oboljenja.

Sa druge strane, narušavanje oralnog zdravlja utiče na funkciju ishrane, sistemsko stanje organizma i kvalitet života.

**Cilj rada** je predstaviti savremene aspekte međusobnog uticaja ishrane i oralnog zdravlja.

**Ključne riječi:** oralno zdravlje, ishrana, gojaznost, humani genom, epigenetika

## NEW CONCEPTS OF THE RELATIONSHIP BETWEEN NUTRITION AND ORAL HEALTH

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### ABSTRACT

New scientific fields, such as nutritionism along with innovative research being conducted at the molecular level, give us a chance to analyze relations between oral health and nutrition. Thus, it gives us broader knowledge of nutritional influence on oral health, in comparison to the previous understanding of sugar's role in the development of dental caries.

Decoding of the human genome opened up new possibilities of discovering and researching the gene being responsible for cravings of specific foods. Gene polymorphism regulating the taste of bitterness is connected to the consistent problem of obesity in children and the occurrence of dental caries. The topics of research are epigenetic changes and their influence on oral health. The epigenetic changes are reversible changes on the human genome, without the changes on DNA sequence, that occur under the influence of the environment and lifestyle.

Trend of using a variety of supplements, vitamins, microelements and probiotics imposes the question of their influence on oral health. According to the new research, as one of the most prominent problems in everyday life, obesity indicates the influence it has on oral health beside the caries development. There are numerous scientific discoveries showing the relation between the active metabolic substances from fatty tissue that act as endocrine organs and the progression of periodontal diseases.

On the other hand, the impairment of oral health influences the function of nutrition, general health status and the quality of life.

**The purpose of this paper** is to show the contemporary influence between nutrition and oral health.

**Keywords:** oral health, nutrition, obesity, human genome, epigenetics.