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Study at King's College London

Fasting reduces periodontitis

Researchers at King's College London have investigated the extent to which a fasting-like diet can have a positive effect on gum diseases such as periodontitis. Whilst standard treatment focuses on cleaning infected areas around the teeth, researchers are increasingly investigating whether diet can play a role in improving outcomes. Fasting is associated with reduced inflammation in the body. This study establishes a link with gum disease for the first time. The findings offer new insights into the close interconnection between oral and general health. People who follow a short-term low-calorie diet may have reduced levels of inflammatory markers associated with gum disease. The study involved 28 patients from various hospitals in Spain, divided into two groups: those who followed a five-day restrictive diet, compared with a control group who continued their usual diet. Patients who fasted consumed 1,100 calories for two days, then 750 calories for three days. On the sixth day, more calories were gradually introduced in the form of soft foods—then their diet returned to normal on the seventh day. This cycle was repeated three times over a six-month period, with patients reporting that the diet was easy to follow. After six months, samples from the patients were analysed. Those who fasted moderately had reduced markers of inflammation in blood and gum tissue samples compared with those whose diet remained unchanged, including lower levels of C-reactive protein, a general indicator of inflammation in the body. The fasting group also showed a reduction in molecules specifically associated with inflammation in the gums compared with controls. "Our study suggests that lifestyle changes, alongside proper tooth brushing, could be important for patients," said lead author Prof. Luigi Nibali of King's College London. The study was published in the *Journal of Clinical Periodontology (JCP)* and builds on many years of research by King's College London investigating the link between gum disease and general health.

Sources: zm-online, JCP

General Court (European Union)

Change of President

Following the early departure of Marc van der Woude from the office of President of the General Court of the European Union, Savvas Papasavvas has been elected by his fellow judges as President of the General Court for the remainder of the term of office, i.e. from 16 September 2026 to 31 August 2028. Savvas S. Papasavvas was born in Nicosia (Cyprus) in 1969. In 1991, he obtained a degree (Ptychion) from the Faculty of Law of the Ethniko kai Kapodistriako Panepistimio Athinon (National and Kapodistrian University of Athens, Greece). As part of his postgraduate studies, he obtained a Diplôme d'études approfondies (DEA) in public law from the Université de Paris II (France) in 1992 and a Doctor of Laws from the Université d'Aix-Marseille III (France) in 1995. In 1993, he was admitted to the bar in Cyprus (Nicosia Bar Association). He practised as a solicitor until he was appointed a judge at the General Court of the European Union in 2004.

He also devoted himself to teaching, serving as a lecturer from 1997 to 2002 and as a senior lecturer in constitutional law from 2002 to 2004 at the Panepistimio Kyprou (University of Cyprus). Savvas S. Papasavvas was appointed a judge at the General Court on 12 May 2004 and served as president of a chamber for two consecutive terms, from 15 September 2010 to 25 September 2016. He was elected vice-president by his fellow judges on 27 September 2019 and held that office until his election as President of the Court.

Source: Court of Justice of the European Union

Pilot project in France

Head to the pharmacy with toothache

In France, pharmacies in certain areas are to support dental care as part of a pilot project. In accordance with a set protocol, they are to dispense painkillers and antibiotics. The dispensing of antibiotics and stronger painkillers is permitted only to trained pharmacists and only in certain regions of France. In two French departments, access to dental care is becoming increasingly difficult. Consequently, as part of a new care model, selected pharmacies in these areas will now be able to carry out a standardised initial assessment for certain conditions and dispense appropriate painkillers and, where necessary, antibiotics in accordance with a set protocol. The pharmacists authorised to do so have previously been trained by dentists. This has been possible since the beginning of June for non-severe conditions such as inflammation of the dental pulp (pulpitis, colloquially known as a tooth nerve infection), problems relating to a wisdom tooth, or abscesses. If an antibiotic is required, amoxicillin is prescribed as standard treatment; clindamycin is prescribed in cases of penicillin allergy. There are also exclusion criteria specifying when pharmacists are not permitted to prescribe antibiotics. Participation by pharmacies is voluntary. So far, 12 pharmacies in the centrally located department of Creuse and 25 in the department of Drôme in south-eastern France are taking part. Local media reports for Creuse state that there is a shortage of GPs and dentists. In the first month alone, 28 patients there had already made use of the new service. Work on the protocol, which was approved by the regional health authority, took over a year. It was based on protocols that already enable pharmacists in France to provide better care for urinary tract infections and tonsillitis.

Source: Pharmazeutische Zeitung

Preventive healthcare

AI in early cancer diagnosis

Several European research projects are working to detect cancer risks at an earlier stage with the help of AI. At Hanover Medical School, the "ROKAVI" project is investigating whether AI models can be developed from health insurance data to predict individual cancer risks and enable more targeted preventive measures.

In the ROKAVI project, the researchers are first identifying which types of cancer—such as prostate, breast, lung or bowel cancer—are particularly well suited to a predictive model. They then develop a traditional statistical model and an innovative model based on artificial intelligence (AI) for a selected type of cancer. The impetus for the project came from the Gesundheitsdatennutzungsgesetz (GDNG, Health Data Use Act), which came into force in 2024. It allows statutory health insurance funds to use routine data to inform insured persons about their individual health risks. Cancer is a key area of this data-driven health prevention.

Source: DeutschesGesundheitsPortal

Horizon Europe project

Virtual twins in development

The Horizon Europe project is developing virtual twins for personalised clinical care. Whilst the focus is not on dentistry, the underlying technologies for individual patient modelling could also become relevant in the future for implantology, orthodontics or surgical planning. Virtual human twins hold great potential for promoting health innovation and personalised care—a priority for the EU. According to the European Commission, this will accelerate tangible benefits for citizens and patients whilst securing and expanding the EU's leadership in science and technology. Virtual human twins already exist in many EU countries. The scientific community, large-scale industry and innovative SMEs have already developed various versions. However, although the number of stakeholders interested in VHTs is growing, the ecosystem in the EU remains highly fragmented. As part of the European Virtual Human Twins Initiative, the Commission intends to strengthen advanced supercomputing capabilities and artificial intelligence to facilitate joint research and technology development in the field of VHTs. This will make it possible to develop, operate and better simulate the models in ways that were previously impossible, thereby accelerating the development of VHTs by enabling the training of large AI foundation models specifically for human health and diseases.

Source: European Commission press release