Fighting obesity and caries with

Healthier snack choices for kids

Making the right food choices in a busy life can be challenging but especially for children a healthy, balanced diet is important. A new campaign has thus been started in the UK aiming at helping parents in taking control of their children's snacking and reducing their sugar intake, which is currently at around seven sugar cubes a day. The majority coming from unhealthy snacks and drinks, often leading to obesity and dental caries.

Initiated by Public Health England (PHE), the Change4Life campaign encourages parents to provide a maximum of two 100-calorie snacks per day. According to PHE, children on average are consuming at least three unhealthy snacks and sugary drinks a day, one third consuming four or more, resulting in an intake of three times more sugar than the recommended limit.

Several British supermarkets are supporting the intuitive and have committed to providing tasty and healthy snack products. Parents can also obtain discount vouchers from Change4Life for healthier snack options, including malt loaf, lower-sugar cream cheese and drinks with no added sugar. The Change4Life Food Scanner app shows parents the number of calories and the amount of sugar, salt and saturated fat in foods to make healthier choices easier. PHE is further working with the food industry aiming at cutting 20 per cent of sugar from the products children consume most by 2020.



© Nataliya Arzamasova/Shutterstock.com



© Neil Lockhart/Shutterstock.com

Dog-assisted therapy also holds

Potential for dentistry

The positive effect of dogs on humans has prompted their introduction in several medical fields including dentistry. In the first study of its kind in Scandinavia, Dr Anne Margrete Gussgard, associate professor at the University of Tromsø, Norway, has begun looking into the impacts of animal-assisted therapy. "We know what effect dogs have on people. Their heart rate becomes calmer and the blood pressure decreases. There is more oxytocin in the blood and less cortisol. Nevertheless, there are no studies specifically related to therapy dogs during dental treatment," stated Gussgard. The research team consists of paediatric dentists, a psychologist and a pharmacologist.

Gussgard completed her periodontal studies at the University of Toronto in Canada and also has ten years of experience in working as a dentist for animals. She and her research partner labradoodle Barley prepared for the study through an intensive one-year dog therapy training. The research, currently focused entirely on paediatric patients, aims at determining the impact of a dog's presence by comparing the outcomes of two scenarios—either performing treatments with or without the therapy dog. In the next step the research shall be conducted with adult patients.

Source: DTI



© D7INAMI7S/Shutterstock.com

Environmentally friendly alternatives to replace

Microplastics in toothpaste and other cosmetics

The environmental impact of microplastics used in personal care products, such as toothpaste, has long been subject to discussion. Owing to the small particle size of less than 5 mm, microplastic entering the wastewater through the disposal of cosmetics cannot be sufficiently removed at sewerage treatment plants. It thus gets into the water system and pollutes the environment.

Researchers at the Fraunhofer Institute for Microstructure of Materials and Systems (IMWS) in Halle (Saale), Germany, who have recently completed the KosLigCel research project conducted within the framework of the leading-edge BioEconomy cluster, hope to contribute to replacing microplastics in cosmetic products. In cooperation with industry partners they have successfully developed and tested alternatives made of biodegradable materials. The goal was a cost-effective production of cellulose particles from beech wood, oats, wheat and maize that meet the requirements for abrasiveness and cleaning performance in dental and skincare products. Alternatives for body scrubs and toothpastes were specifically tested. The particular challenge was to design the cellulose particles in such a way that their size, shape, hardness and surface structure meet the desired product properties. The research team was able to scientifically confirm that cellulose particles, as a substitute for polyethylene, have comparable effects in cosmetic products. They are biodegradable in water, can be produced at low cost and could further be applied to other fields such as medical products.

Source: DTI

laser now also available in

Newly improved e-paper player

e-paper

laser—international magazine of laser dentistry can now also easily and comfortably be read online in a freshly improved e-paper design. The new version was launched at the beginning of 2018—the e-paper player having been completely refurbished—and is now offering readers an even more user-friendly experience with new features and an even clearer navigation structure. The entire print portfolio of the OEMUS MEDIA publishing house is available online through the improved player.

The interactive content menu assures an easy orientation within the entire issue proving a comfortable navigation already at the first click. Additional multimedia information—like videos, photo galleries, literature references and product information—is now accessible through a slim flyout menu located above the e-paper, thus the reader is not redirected to a new tab, but at a glance gets a clear overview. Author and company profiles on ZWP online have been optically improved and are highlighted through the new design. The innovative e-paper player is, hence, corresponding to the extended communicative and technical possibilities of the dynamic developments in dental online media.

Source: OEMUS MEDIA AG



Revision of human migration triggered by

Discovery of fossilized jawbone


© sruilk/Shutterstock.com

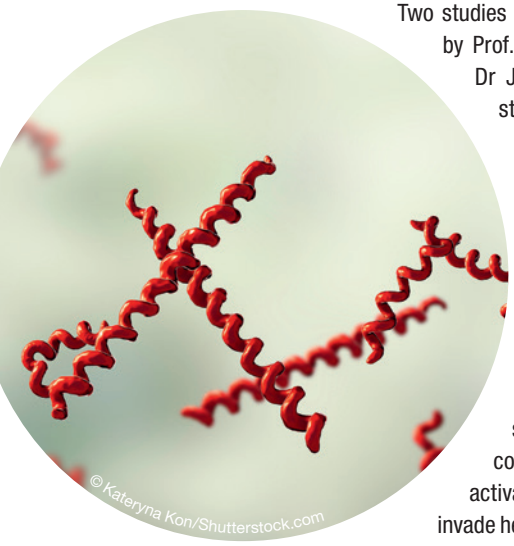
An international team of researchers from Israel and America has discovered a fossilized jawbone said to be the earliest modern human fossil ever found outside of Africa. The maxilla with several teeth was discovered at the Misliya Cave site in Israel. Based on several dating techniques, the researchers have suggested that the jawbone is between 175,000 and 194,000 years old. Paleoanthropologist Dr Rolf Quam, one of the head researchers in the study titled "The earliest modern humans outside Africa," and associate professor at Binghamton University, USA, stated "It provides the clearest evidence yet that our ancestors first migrated out of Africa much earlier than we previously believed. It also means that modern humans were potentially meeting and interacting […] with other archaic human groups, providing more opportunity for cultural and biological exchanges." While older fossils of modern humans have been found in Africa, the timing and routes of modern human migration out of Africa are key issues for understanding the evolution of our own species.

Owing to several recent archaeological and fossil discoveries in Asia also indicating an earlier first appearance of modern humans in the region, the discussion regarding the migration out of Africa remains wide open.

Source: DTI

Treponema denticola might be

Triggering cancer


© Kateryna Kon/Shutterstock.com

Two studies of the University of Helsinki, led by Prof. Timo Sorsa, Prof. Caj Haglund, Dr Jari Haukka and Dr Jaana Hagström investigated the role of *Treponema denticola* in the formation of oral and certain other cancer types and discovered a link between periodontitis and cancer mortality. The research has proven the existence of a mechanism at molecular level through which *T. denticola*, a bacterium associated with periodontitis, may contribute to carcinogenesis by activating enzymes cancer cells use to invade healthy tissue and at the same time reducing the body's immune system. It was found that the primary virulence factor of *T. denticola* also occurs in malignant tumours of the gastrointestinal tract, e.g. in pancreatic cancer.

Approx. 70,000 Finns took part in the follow-up study which showed a strong link to mortality due to pancreatic cancer. The scientists concluded that low-grade systemic inflammation related to periodontitis facilitates the dispersal of oral bacteria and their virulence factors to other parts of the body. Prevention and early diagnosis of periodontitis thus prove to be very important, both for patients' oral health and general well-being. The studies are continued at the University of Helsinki and Karolinska Institute.

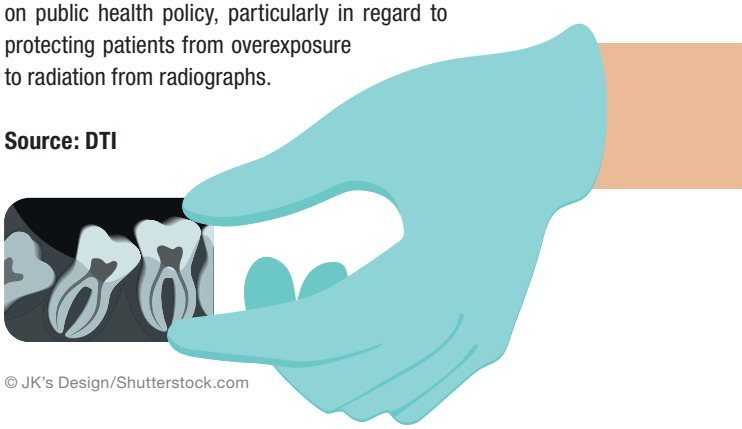
Study indicates financial incentives impact

Frequency of taken radiographs

Radiographs are useful in diagnostics, but they expose patients to potentially harmful radiation. Thus, with every radiograph, dentists are advised to carefully calculate the benefits versus the risks for the patient. Research conducted by the University of York has now indicated that dentists are more likely to request or take radiographs when they are paid for each radiograph taken. The study titled "First do no harm—The impact of financial incentives on dental X-rays" further found, that when patients were exempt from charges, the number of radiographs also went up significantly, whereas fewer radiographs were taken, when dentists were on a fixed salary.

The extensive analysis at the University of York's Centre for Health Economics investigated data from Scotland on National Health Service dentists who were either salaried or received fee-for-service payment. More than one million treatments over a ten-year period were included in the study. Earlier but more limited research on the effects that different reimbursement schemes for dentists can have on the intensity of treatment and prevalence of check-ups were confirmed. Although further research is recommended, the findings could already have significant impact on public health policy, particularly in regard to protecting patients from overexposure to radiation from radiographs.

Source: DTI


© JK's Design/Shutterstock.com

Return address:
Deutsche Gesellschaft für Laserzahnheilkunde e.V.
c/o Universitätsklinikum Aachen
Klinik für Zahnerhaltung
Pauwelsstraße 30
52074 Aachen, Germany

Tel.: +49 241 8088164
Fax: +49 241 803388164
Credit institute: Sparkasse Aachen
IBAN: DE56 3905 0000 0042 0339 44
BIC: AACSDE 33

Membership application form

Name/title: _____

Surname: _____

Date of birth: _____

Approbation: _____

Status: ☐ self-employed ☐ employed ☐ civil servant ☐ student ☐ dental assistant

Address:

Street: _____ Phone: _____

ZIP/city: _____ Fax: _____

Country: _____ E-Mail: _____

With the application for membership I ensure that

☐ I am owing an own practice since _____ and are working with the laser type _____ (exact name).

☐ I am employed at the practice _____

☐ I am employed at the University _____

I apply for membership in the German Association of Laser Dentistry (Deutsche Gesellschaft für Laserzahnheilkunde e.V.)

_____

Place, date Signature

Annual fee: for voting members with direct debit € 150

In case of no direct debit authorisation, an administration charge of € 31 p.a. becomes due.

DIRECT DEBIT AUTHORISATION

I agree that the members fee is debited from my bank account

Name: _____ IBAN: _____

BIC: _____ Credit institute: _____

_____

Signature of account holder This declaration is valid until written notice of its revocation

FÜR JEDE KLINISCHE INDIKATION DAS OPTIMALE SYSTEM

LASER EINFACH, SICHER & SANFT



A.R.C. LASER

Fotona
choose perfection

www.henryschein-dental.de

HENRY SCHEIN DENTAL – IHR PARTNER IN DER LASERZAHNHEILKUNDE

Wir bieten Ihnen ein breites und exklusives Sortiment marktführender Lasermodelle verschiedener Hersteller an.

Unsere Laserspezialisten beraten Sie gern über die vielfältigen Möglichkeiten und das für Sie individuell am besten geeignete System.
Laser ist nicht gleich Laser und genau hier liegt bei uns der Unterschied:
Sie, Ihre Patienten und Ihre gemeinsamen Bedürfnisse stehen bei uns an erster Stelle.

Bei Henry Schein profitieren Sie vom Laserausbildungskonzept!
Von der Grundlagenvermittlung über hochqualifizierte Praxistrainings und Workshops zu allen Wellenlängen bis hin zu Laseranwendertreffen.

Unsere Laser-Spezialisten in Ihrer Nähe beraten Sie gerne.

FreeTel: 0800–1400044 oder FreeFax: 08000–404444

Erfolg verbindet.

HENRY SCHEIN® DENTAL