# Dentistry



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#### Clinical trials continue. Data presented to oral medicine conference

Cleaning your mouth and cleaning your arteries could be as simple as a once-a-day oral rinse if additional studies confirm preliminary findings about a new product.

Biomedical Development Corporation (BDC) on April 23 will present data to the American Academy of Oral Medicine showing that its oral rinse was safe and effective at fighting gingivitis in a recent clinical trial. But the most surprising finding of the study was that users of the oral rinse showed lower LDL cholesterol levels than the placebo group.

"We didn't expect to see any difference in LDL cholesterol," said Dr. Charles Gauntt, the study's principal investigator. "We expected to see improvements in oral health, and we did. But we also monitored a number of biological markers for inflammation The results showed the oral rinse had no adverse effects and users exhibited lower levels of LDL, or what many people know as bad cholesterol. This definitely merits further study."

The three-month, phase II trial was funded by the National Heart, Lung and Blood Institute (NHL-BI). The trial was preceded by a phase I clinical trial for safety and a phase II pilot efficacy clinical trial. Another, longer phase II trial is now under way and will evaluate gingivitis patients over a six-month period. This new trial, conducted by the Center for Oral Health Research at the University of Kentucky, will monitor gingivitis and LDL cholesterol levels as the previous trial did. The NHLBI is funding the research, which is also supported by the Kentucky SBIR/STTR Matching Funds Program.

BDC's product is designed as a once-daily, 30-second oral rinse. The active ingredient is a proprietary formula based on iodine. The National Institutes of Health Office of Dietary Supplements fact sheet on iodine addresses a variety of important roles for iodine in the human body, from helping the thyroid function

properly to appearing to play a part in the body's immune response system. About 40 percent of the world's population is thought to be at risk of iodine deficiency.

Gauntt also notes that iodine is known to *be effective in inactivating viruses, bacteria* and funguses. He is intrigued by recent clinical studies showing what appears to be a closer link between oral health and cardiovascular health. Although scientists cannot vet fully explain how the two are connected, there is ample statistical evidence to suggest that gum disease and heart disease are closely related. According to the American Academy of *Periodontology, people with* periodontal disease (gum *disease) are almost twice as* likely to have coronary artery disease. The academy also notes that one study showed stroke victims were more likely than the general population to also have oral infections.

Gauntt believes that future research might make it much clearer that a healthy mouth, free of gum disease and its associated toxins and bacteria is critical to a healthy cardiovascular system. Although further study is required, he adds, he believes BDC's oral rinse may eventually prove to be an important tool in keeping both mouths and cardiovascular systems healthy, in addition to proper nutrition and exercise. Phyllis Siegel, CEO of BDC, said that while results of its ongoing clinical trials are pending, a specific formulation of the product called iCLEAN®, designed for general mouth cleaning, will soon be available.

### Dental surgery and treat-

Dentistry usually encompasses very important practices related to the oral cavity. Oral diseases are major public health problems due to their high incidence and prevalence across the globe with the disadvantaged affected more than other socio-economic groups.[2] The majoritv of

dental treatments carried out to prevent or treat the two most common oral diseases which are dental caries (tooth decay) and periodontal disease (gum disease or pyorrhea). Common treatments involve the restoration of teeth as a treatment for dental caries (fillings), extraction or surgical removal of teeth

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which cannot be restored, scaling of teeth to treat periodontal problems and endodontic root canal treatment to treat abscessed teeth.

All dentists in the United States undergo at least two years of undergraduate studies, but most complete a bachelors degree. This schooling is followed by four years of dental school to qualify as a "Doctor of Dental Surgery" (DDS) or "Doctor of Dental Medicine" (DMD). Dentists need to complete additional qualifications or training to carry out more complex treatments

such as sedation, oral and maxillofacial surgery, and dental implants. By nature of their general training they can carry out the majority of dental treatments such as restorative (fillings, crowns, bridges), prosthetic (dentures), endodontic (root canal) therapy, periodontal (gum) therapy, and exodontia (extraction of teeth), as well as performing examinations, radiographs (x-rays) and diagnosis. Dentists can also prescribe medications such as antibiotics, sedatives, and any other drugs used in patient management.

#### Prevention

Dentists also encourage prevention of oral diseases through proper hygiene and regular, twice yearly, checkups for professional cleaning and evaluation. Conditions in the oral cavity may be indicative of systemic diseases such as osteoporosis, diabetes, or cancer. Many studies have also shown that gum disease is associated with an increased risk of diabetes, heart disease. and preterm birth.

**Education and licensing** Early dental chair in Pioneer West Museum in Shamrock, Texas

Dr. John M. Harris started the world's first dental school in Bainbridge, Ohio, and helped to establish dentistry as a health profession. It opened on 21 February 1828, and today is a dental museum.[3] The first dental college, Baltimore College of Dental Surgery, opened in Baltimore, Maryland, USA in 1840. Philadelphia Dental College was founded in 1863 and is the second in the United States. In 1907 Temple University accepted a bid to incorporate the school.

Studies showed that dentists graduated from different countries.[4] or even from different dental schools in one country, [5] may have different clinical decisions for the same clinical condition. For example, dentists graduated from Israeli dental schools may recommend more often for the removal of asymptomatic impacted third molar (wisdom teeth) than dentists graduated from Latin American or Eastern European dental schools.[6] In the United Kingdom, the 1878 British Dentists Act and 1879 Dentists Register limited the title of "dentist" and "dental surgeon" to qualified and registered practitioners.[7][8] However, others could legally describe themselves as "dental experts" or "dental consultants".[9] The practice of dentistry in the United Kingdom became fully regulated with the 1921 Dentists Act, which required the registration of anyone practicing dentistry. [10] The British Dental Association, formed in 1880 with Sir John Tomes as president, played a major role in prosecuting dentists practising illegally.[7] There are sixteen dental schools in the UK, five of which are for postgraduate applicants only. Thus the competition for places can be fierce.[11] Because of the low numbers of dental schools,

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developments in the schools can be very high. Well known UK universities providing dental courses are the Universities of Leeds, Glasgow, Cardiff, Queen's Belfast, Birmingham, Bristol, Dundee, Manchester, Sheffield and King's College London.[12] In Korea, Taiwan, Japan, Finland, Sweden, the United States, and Canada, a dentist is a healthcare professional qualified to practice dentistry after graduating with a degree of either Doctor of Dental Surgery (DDS) or Doctor of Dental Medicine (DMD). This is equivalent to the Bachelor of Dental Surgery/Baccalaureus Dentalis Chirurgiae (BDS, BDent, BChD, BDSc) that is awarded in the UK and British Commonwealth countries. In most western countries, to become a qualified dentist one must usually complete at least four years of postgraduate study[citation needed]; within the European Union the education has to be at least five years. Dentists usually complete between five and eight years of post-secondary education before practising. Though not mandatory, many dentists choose to complete an internship or residency focusing on specific aspects of dental care after they have received their dental degree.

funding for building and service

#### **Specialties**

Main article: Specialty (dentistry) The American Dental Association recognizes nine dental specialties: public health dentistry, endodontics, oral and maxillofacial pathology, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics, pediatric dentistry, periodontics, prosthodontics, and general dentistry.[13][14] There are other dental niches such as oral medicine, dental aesthetics, dental im-

plantation, dental anesthesiology, and orofacial pain and temporomandibular disorders; some of them are recognized as dental specialties in other countries. In the European Union all member states must recognize the specialties of orthodontics and oral and maxillofacial surgery.

#### History

Farmer at the dentist, Johann Liss, c. 1616 - 17

The Indus Valley Civilization (IVC) has yielded evidence of dentistry being practiced as far back as 7000 BC.[15] IVC sites in Pakistan indicate that this earliest form of dentistry involved curing tooth related disorders with bow drills operated, perhaps, by skilled bead craftsmen.[16] The reconstruction of this ancient form of dentistry showed that the methods used were reliable and effective.[17] A Sumerian text from 5000 BC describes a "tooth worm" as the cause of dental caries.[18] Evidence of this belief has also been found in ancient India, Egypt, Japan, and China. The legend of the worm is also found in the writings of Homer, and as late as the 14th century AD the surgeon Guy de Chauliac still promoted the belief that worms cause tooth decay.[19] The Edwin Smith Papyrus, written in the 17th century BC but which may reflect previous manuscripts from as early as 3000 BC, includes the treatment of several dental ailments. [20][21] In the 18th century BC, the Code of Hammurabi referenced dental extraction twice as it related to punishment.[22] Examination of the remains of some ancient Egyptians and Greco-Romans reveals early attempts at dental prosthetics and surgery.[23]

Ancient Greek scholars Hippocrates

and Aristotle wrote about dentistry, including the eruption pattern of teeth, treating decayed teeth and gum disease, extracting teeth with forceps, and using wires to stabilize loose teeth and fractured jaws.[24] Some say the first use of dental appliances or bridges comes from the Etruscans from as early as 700 BC.[25] Further research suggested that 3000 B.C. In ancient Egypt, Hesi-Re is the first named "dentist" (greatest of the teeth). The Egyptians bind replacement teeth together with gold wire. Roman medical writer Cornelius Celsus wrote extensively of oral diseases as well as dental treatments such as narcotic-containing emollients and astringents.[26][27] Historically, dental extractions have been used to treat a variety of illnesses. During the Middle Ages and throughout the 19th century, dentistry was not a profession in itself, and often dental procedures were performed by barbers or general physicians. Barbers usually limited their practice to extracting teeth which alleviated pain and associated chronic tooth infection Instruments used for dental extractions date back several centuries. In the 14th century, Guy de Chauliac invented the dental pelican[28] (resembling a pelican's beak) which was used up until the late 18th century. The pelican was replaced by the dental key[28] which, in turn, was replaced by modern forceps in the 20th century.[citation needed]

#### A modern Dentist's chair

The first book focused solely on dentistry was the "Artzney Buchlein" in 1530,[29] and the first dental textbook written in English was called "Operator for the Teeth" by Charles Allen in 1685.[8] It was between 1650 and 1800 that the science of modern

dentistry developed. The English physician Thomas Browne in his A Letter to a Friend (pub. post. 1690) made an early dental observation with characteristic humour –

The Egyptian Mummies that I have seen, have had their Mouths open, and somewhat gaping, which affordeth a good opportunity to view and observe their Teeth, wherein 'tis not easie to find any wanting or decayed: and therefore in Egypt, where one Man practised but one Operation, or the Diseases but of single Parts, it must needs be a barren Profession to confine unto that of drawing of Teeth, and little better than to have been Tooth-drawer unto King Pyrrhus, who had but two in his Head.



#### **Priority patients**

UK NHS priority patients include patients with congenital abnormalities (such as cleft palates and hypodontia), patients who have suffered orofacial trauma and those being treated for cancer in the head and neck region. These are treated in a multidisciplinary team approach with other hospital based dental specialities orthodontics and maxillofacial surgery. Other priority patients include those with infections (either third molars or necrotic teeth) or avulsed permanent teeth, as well as patients with a history of smoking or smokeless tobacco with ulcers in the oral cavity also.

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Gentle Family & Cosmetic Care

#### Welcome to Our Practice

Thomas snyder DDSOur office is committed to providing you with the highest quality of care in a gentle, painless manner. We will make every effort to ensure that every visit with us is a comfortable, pleasant, and caring experience for you. Our practice has purposely kept itself to one dentist and a small core of support staff as we feel this is the optimum for us to provide the standard of care and service we aspire to, while still keeping the personal touch.

We hope you will find as many others have, that our dental practice is uniquely different from any dental practice you might have ever experienced. We will provide you with pleasant surroundings, highly skilled professional staff, and high quality care. We are committed to helping every individual with whom we work achieve the highest possible level of dental health and wellness to which they aspire.

New patients of all ages are welcome and we look forward to meeting you and your family.

#### **Sterilization Policy**

All instruments and handpieces (drills) used in this office are HEAT-STEAM STERILIZED in an AUTOCLAVE after each patient. Other supplies used in your treatment are made of plastic or paper and are used only once, on you, and then disposed of. We do not use cold sterilization (chemicals) to "sterilize" our instruments.

All instruments and handpieces (drills) are autoclaved in a manner identical to instruments in a hospital operating room:

- The metal instrument containers, as well as the instruments and handpieces, occasionally may appear to be slightly tarnished or "corroded". This is due to the repeated high temperature sterilization procedure they are subjected to between each patient and cannot be helped.
- The discolorations which may appear on counter tops, plastic or upholstery items are due to the strong disinfectar • solutions used after each patient.
- · All of our sterilization procedures conform to or exceed those recommended guidelines from the Center for Disease Control, A.S.H.A., and the American Dental Association.

#### **Our Mission**

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We are dedicated to building long-term relationships with our patients and provide high quality, consumer friendly dental services for your entire family in the gentlest way possible.

Our philosophy of practice is to treat you as if you were our own family. We will only use professional judgment and experience as our guides when making treatment recommendations.

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Dentist Appointment 10:30





# Tooth brushing

From Wikipedia, the free encyclopedia Jump to: navigation, search A photo from 1899 showing the use of toothbrush.

Tooth brushing is a form of hygiene, in which a person cleans their teeth with a toothbrush.

Modern medical research has shown[who?] that brushing teeth properly can prevent cavities, and periodontal, or gum disease, which causes at least one-third of adult tooth loss. If teeth are not brushed correctly and frequently, it could lead to the calcification of saliva minerals, forming tartar. Poor dental health has been associated with heart disease and shortened life expectancy. [1][2][3]

Brushing one's teeth has long been considered an important part of dental care. As long ago as 3000 BC ancient Egyptians constructed crude toothbrushes from twigs and leaves to clean their teeth. Similarly, other cultures such as the Greeks, Romans, and Indians cleaned their teeth with twigs. Some would fray one end of the twig so that it could penetrate between the teeth more effectively.

Modern day toothbrushing as a regular habit became prevalent in Europe from the end of the 17th century. The first mass-produced toothbrush was developed in England in 1780. In the United States, although toothbrushes were available at the end of the 19th century, the practice did not become widespread until after the Second World War, when US soldiers continued the toothbrushing that had been required during their military service.[4]



Tooth Dowder

Tooth powder (or 'toothpaste powder') is an alternative to toothpaste. It may be recommended for people with sensitive teeth. Tooth powder typically does not contain the chemical sodium lauryl sulphate which can be a skin irritant.[5] The function of sodium lauryl sulphate is to form suds when teeth are brushed. It is a common chemical in toothpaste. Those with dentures may also use denture cleaner which can also come in powder format.



### Toothbrush Head of a toothbrush

The toothbrush is an instrument used to clean teeth, consisting of a small brush on a handle. Toothpaste, often containing fluoride, is commonly added to a toothbrush to aid in cleaning. Toothbrushes are offered with varying textures of bristles, and come in many different forms and sizes. Most dentists recommend using a toothbrush labelled "Soft", since firmer bristled toothbrushes can damage tooth enamel and irritate gums as indicated by the American Dental Association. [citation needed] Toothbrushes are often made from synthetic fibers, although natural toothbrushes are also known in many parts of the world. Those with dentures may also brush their teeth with traditional tooth brushes, specially made denture brushes or denture cleaners.

## Toothpaste Modern toothnaste gel

Toothpaste is a paste or gel dentifrice used to clean and improve the aesthetic appearance and health of teeth. It is almost always used in conjunction with a toothbrush. Toothpaste use can promote good oral hygiene: it can aid in the removal of dental plaque and food from the teeth, it can aid in the elimination and/ or masking of halitosis when tonsil stones are not the cause, and it can deliver active ingredients such as fluoride to prevent tooth and gum (Gingiva) disease.