Primary Dentition

10 Avoidable Risk Factors
in their primary teeth, 83% re-
the children who had no decay
permanent tooth in 2000. For
decayed primary molars
were monitored. In 1992, 85%
ese children aged 3 to 5 years
their permanent teeth.
more likely to develop caries in
molars are about three times
with caries on their primary
study from China, children
stabilized at the University of Bris-
tol. asthma will be a part of the
child's future. The study is
asthma—a later effect of child-
and immune development in
utero can greatly influence
and exposure is another clue sug-
trace elements and minerals.
where tooth enamel absorbs
to the minerals.
can check pre-birth exposure
in the minerals.
A child's top two front teeth
begin to develop in the womb, where tooth enamel absorbs
trace elements and minerals.
This permanent record of ex-
plosions are the first steps to ana-
yzing and resolving the inevitable
dilemma of difficult patients.

Avoid Breakage
The development of new ro-
tary instruments should not be en-
cumbered by traditional concepts of
design. John McSpadden ex-
plores the theme by clarifying the important points consider—e.g.,
torsion, flexibility, and fatigue—
when it comes to improving de-
sign. The nature of each point is
explained as well as its causes.

Dental Tribune International
By Richard Goldman

I imagine a place where dental care
is free to anyone under 18
years of age, where primary and
secondary school kids get yearly
or bi-yearly check-ups through
school dental clinics. Once their
teachers begin to come in, even pre-
schoolers can visit these school
dental clinics. In addition, sec-
ondary school-aged kids can even
get free treatment from private den-
tists.

Poor Oral Health
in New Zealand
Should Parents Shoulder the Blame?

Dental Tribune International
By Cordula Körner

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Steep rise in the practice of chew-
ing betel quids.

In recent years, a variety of mass-
packed pre-packaged areca-nut products
has become available in many countries
around the world. Aggressive ad-
vertising has enhanced the sales
and use of these products. In some
parts of India, up to 10% of the
children and teenagers chew these
products regularly or occasionally.
Some have viewed the areca-
nut products, which are without
tobacco (for example, pan masala),
as a safe alternative to betel quids.
However, evidence shows that
these products have led to oral dis-
ase even among children. Mean-
while, several states in India have
begun to regulate their distribu-
tion, and reductions in oral disease
and oral cancer can be expected
to follow from restrictions in their
use.
GC targets different markets: Asia, Europe, USA. In what things in particular do these markets differ from one another?

We have subsidiary companies in each of these areas that concentrate on different aspects. Europe is the most broadly based with approximately half of the business spread between laboratory stones and investments, ceramics and acrylic crown and bridge materials. The other half is surgery items such as glass ionomers composite and impression materials. In the USA there is a great deal of focus on aesthetic dentistry and our product sales mix reflects this.

In Asia we concentrate on surgery consumables which cover a wide spectrum of traditional as well as state of the art products and techniques. This is not surprising when one considers the geographic area we cover from our base in Singapore. It stretches from India and Pakistan in the north to Australia/New Zealand in the south and everything in between.

Which regional markets do you foresee will grow most significantly over the next few years?

Without a doubt China and India, the two largest populations of the world each with over 1 billion people. Both countries have a huge and underserved market which will provide many opportunities for entrepreneurial organizations prepared to invest in the future.

What upcoming trends, if any, do you see for the Asia Pacific dental market?

Aesthetic dentistry will soon begin to have a major impact in Asia. Already the DMFT are in short supply, with ever increasing patient expectations and revenue to be made from such events. How do you qualify the Asian Pacific market? How do you supply and demand for continuing education programs, meetings, and congresses?

There are a number of questions here. Continuing education is difficult to expand in this region at present because the profession (generally unprepared) to devote time to attend a full-day course or meetings during a weekdays. They are also reluctant to pay a reasonable fee to attend. This is in contrast to Australia/New Zealand, where it is common to spend around US $500 per day for a continuing education program for perhaps 20 specialists, or attend a more general program such as Aesthetic Dentistry, costing US $200 for the day, where up to 400-500 delegates will attend. The current level of continuing education course/sessions and high quality speakers in Asia is directly related to economic viability.

On the question of congresses, first there are too many and they are too frequent. Second, there are few we regard as being regional let alone international. Third, we understand that each national dental association wants to have their own local annual meeting, but let's be clear, that's what they are, local national meetings. We are very happy to demonstrate and present to the organizing committee is prepared to have an open dialogue with the dental trade and be realistic about expectations and revenue to be made from such events.

Complexity of dentistry as a discipline requires more and more specialized training from the dentist. In what areas of specialization do you see the biggest potential for the future?

The usual specialized areas will continue to expand, periodontics, ortho, oral surgery, etc. Two areas that will command far more attention are aesthetic specialists and dental hygienists. We are sure the status of the dental auxiliary will be coming more important when the profession begin, understanding the role of saliva as a preventive tool and the damage that can happen when saliva stops protecting the tooth surface. It will be a auxiliary who will be able to identify such problems and find solutions to make the saliva healthy again.

How does GC’s R&D department work? Do you collaborate with individual dentists or research centers?

We probably work like every one else and have fingers in all sorts of areas. For example, we cooperate with leading universities around the world. We talk with individual dentists and evaluate dozens of ‘fantastic opportunities or breakthroughs’ sent in to us each month. In addition, we have over 100 dedicated researchers working on specific areas that the company has decided are key to the future of the business.

How does GC stay connected to the ‘grass roots’ of dentistry through relationships with individual dentists or research centers?

In Japan we have GC Circle – a dental clinic club with more than 30,000 active members. We organize lecture program forums and new product evaluation meetings. Each new product is supplied to members before introduction, so we have a real feel at all stages of the reaction of the profession.

Overseas we have key opinion leader groups which meet with us and we discuss anything and everything about dentistry. We have different opinion leaders for different topics.

An opinion leader is usually identified as someone who is good at his job or is always thinking about how things could be made better. It is not necessary for him to work in a university or run a 20-person dental practice.

Prevention and infection control are both very hot topics at the moment. Does GC react to developments in these areas?

As you say, they are both hot topics but for different reasons. Infection control is being pushed by legislation and therefore, both manufacturers and the profession must react to comply with new regulations.

Adelaide Dental is hoping to raise money to improve a vital resource for dental and oral health workers in South Australia and to keep up-to-date with the latest dental research and teaching in the country. University libraries throughout the world are having to cut back the number of journals they receive because of increasing costs.

At the University of Adelaide’s Barr Smith Library, the number of dental journals has dropped from 79 in 1995 to 33 in 2003. Members of the dental profession, industry and academia in South Australia have now joined forces with the Barr Smith Library to boost the number of dental journals and they’re seeking help from the public to do so.

The new “Filling the Shelves Appeal” was launched by Univer- sity of Adelaide Dental School Professor James McWha at the Barr Smith Library on Thursday, May 22. Queries should be referred to Barr Smith Library.

Dentists to Give Library New Fillings

Thank you very much for taking the time to speak with us, Mr. Williams.
Drink White Tea for Better Oral Health

Researchers at the University of Michigan may have found how gene therapy can help restore the damaged tissue in a chronic disease—periodontal disease—a chronic bacterial infection that destroys the gum tissue surrounding the teeth, allowing millions of Americans to keep their natural teeth for a lifetime, according to a new study in the Journal of Periodontology.

For many, no therapies exist that can predictably regenerate tooth-supporting structures destroyed due to periodontal disease, "said William Giannobile, D.D.S., M.S., associate professor of oral medicine at the University of Michigan and lead investigator of the study. "This study presents a tissue engineering approach to repair periodontal defects in animals. Human trials will ultimately determine whether the feasibility of gene therapy to treat periodontal and other oral diseases." The main cause of periodontal disease is a hard substance deposited on the teeth-bygingivitis, which allows plaque bacteria to penetrate the periodontal tissue and infect bone, the attachment between the tooth and the jawbone.

The possibility of gene therapy in dentistry has been around for nearly 50 years. Researchers inserted a gene called bone morphogenetic protein-7 into a mineralized scaffold to encourage bone growth in a rat. The virus then infected the genes into bone, which then regenerated the lost bone.

When it comes to the amount of antioxidants found in tea, the number is higher than that found in more familiar vitamins such as A, C and E. Specifically, tea antioxidant is 20-100 times stronger than vitamin E and 2,000-10,000 times stronger than vitamin C, just one cup of tea with two teaspoons of sugar was found to decrease the risk of heart attacks by 44%, and that there is an inverse correlation between consumption of tea polyphenol and heart attacks.

The final result is a subtle milky green color, with a sweet note of honey and a hint of citrus. The drink forms are becoming available in the United States, and a free brochure on periodontal disease is available by calling 800-FLOSS-EM or visiting the AAP's Web site at www.perio.org.

A Cup of Tea a Day

Polyphenols are called antioxidants, and they may prevent cancer and heart disease. White tea is the richest in antioxidants with three times the amount as found in green tea.

In addition, polyphenols can suppress the growth of cavity-causing bacteria, reduce their production of acid, and even hinder their ability to stick to teeth. The presence of polyphenols can also kill the bacteria altogether.

In support of tea's effects against breast cancer, it has been found that tea drinkers have a decreased risk of stomach and bladder cancers for men, a 40% reduction in their risk of prostate cancer. One study worked on five different populations who had pro-cancerous lesions on their mouths and glands. The participants not only drank a mixture of green and black tea, but also applied the mixture topically. The result was that 37% of the patients showed partial regression in the lesion.

Other studies showed that a cup of tea a day decreased women's heart attack risk by 44%, and that there is an inverse correlation between consumption of tea polyphenol and heart attacks.

A referral to a periodontist and improved lifestyle changes could double the possibility of gene therapy in dentistry. The virus then infected the genes into bone, which then regenerated the lost bone.

The long-term view for these children would be able to serve as a battle with gum disease and expensive surgeries as adults. The current study is the first to show that children who have access to fluoride toothpaste and treatment are less likely to experience gum disease.

The statewide average in the Northland region is a reference point for the dental health provider, Hauora Whanui, giving children fluoride and toothbrushes to be used at lunchtime.

Prior to the program, there were five-year-old students with teeth in such a rotten condition that the teeth had to be pulled out. Although participating schools’ witnesses lowered tooth decay, Dr. Crum is critical of the need for teachers to do what parents should be doing.

"With the new incarcmenation of dental school services, we will be able to serve you and your children. Such tailoring took place in the realm of general health systems, and may have witnessed great success in the real world of millions of Americans each year—periodontal disease."

For more information or a copy of this study, contact the AAP Public Affairs Department at +1-312-922-3343 or +1-312-922-3342.