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COMMERCIAL DENTAL HEALTH PROMOTION FOR 3-7 YEAR OLDS

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SUMMARY

There is little literature on the maintenance and reinforcement of positive dietary and oral health behaviours for 3-7 year olds. However, promotion of self-care strategies to pre- and early primary school children appears to be the logical start in the process of developing and maintaining good oral health throughout life.

Through our increased understanding of the link to oral diseases and human behaviours, and the increasing spread of multi-media and information technologies, oral health promotion in all its forms needs to become the driving force behind behavioural interventions and social strategies directed at the different lifestyles of specific age groups. Increasingly, professional bodies, such as the Australian Dental Association (NSW Branch), are looking to the commercial sector to implement and analyse various oral health programs, as well as marketing and raising the profile of the dental profession. Commercial dental health promotion for 3-7 year olds is a subject that has been neglected in dental public health studies; as evidenced by the lack of literature, research material or scientifically based studies. Yet, there is an abundance of oral health care media advertisements, products and merchandising from the commercial sector that the average 3-7 year old, and their parents, come into contact with each day, without any cohesive social format.

This social format should include:

a) a wide variety of approved oral and general health care products;

b) marketing and advertising of these products, with the appropriate means and messages, that can enhance and reinforce school or target group programs;

c) television programming for young children that only encourage healthy lifestyles and habits;

d) the role of the dental health profession.

As seen from the literature, most school-based dental education and promotion programs have no longitudinal reinforcement or assessment.
These are areas where commercial dental health promotion, in the form of:

a) media advertisements for "junior" toothpaste, and associated products such as toothbrushes, floss, and fluoride which incorporate basic dental health information and techniques, and are replayed in various forms many times daily;

b) the 3-7 year olds first dental appointment in private practice;

c) programs requested by the ADA (NSW Branch), from the private sector, such as the Tooth Fairy Program;

d) commercial, education, entertainment vehicles such as the Tooth Brush Family (TBF) cartoons series 1&2;

could provide the increased awareness, motivation and reinforcement that school-based programs cannot maintain.

Government policy should interact with the commercial sector by promoting:

a) sales and tax benefits for sugar substitutes in sweets, drinks and oral health care products;

b) television advertisements during 3-7 year old, prime-time viewing that encourage a preconceived social format of general health, with the appropriate means and messages provided;

c) television programs for 3-7 year olds that reinforce and help maintain oral and general health programs that have been initiated in pre- and primary schools;

d) the private and public dental sectors in new and unique ways via funds and technology allocated to programs such as the Commonwealth Dental Health Program (CDHP). These programs, if structured correctly could become self-funding.

Knowledge of social and developmental factors can improve the development of commercial oral health promotion. These factors assist in identifying the appropriate behavioural messages that need to be promoted to 3-7 year olds. The result is likely to be increased efficacy, cost containment, and satisfaction by the decision-makers and the community at large.
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To my mother, for being there, through difficult times.
DEDICATED TO THE MEMORY OF MY FATHER

WHOSE SPIRIT FLOWS THROUGH THESE PAGES
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1. INTRODUCTION

Oral diseases affect all age, racial, ethnic and gender groups; and tend to concentrate in the lower socioeconomic groups (Tones 1990). Evidence suggests that these groups will benefit from oral health promotion. Inter- and intra- cultural, socio-demographic, and economic risk factors need to be assessed in order to promote the most appropriate interventions in the most appropriate way.

Dentistry in Australia, as in the rest of the world, is a relative newcomer to the field of public health, because good preventive measures have only been introduced over the last 40 years, and because dental disease is only indirectly attributed to patient mortality. Yet the role of dentistry in a public health program has been well documented, and preventive measures have now resulted in an obvious decrease of dental caries incidence among school-children in Australia (Barnard 1988, WHO 1988, Dooland 1992, Riordan 1993).

A greater understanding of the aetiology and pathology of oral diseases has enabled the profession to diagnose simple and advanced oral diseases, and provide a high standard of clinical care. Through this understanding and dedication the discipline of oral health promotion has developed. The main impetus for concentrating on promoting oral health was the realisation that dental diseases as diverse as oral cancer, periodontal disease, and caries were linked to human behaviour. If children adopt the appropriate oral health behaviour then their chances of developing oral health problems are greatly reduced (Soogard 1988, Cohen 1990, Schou 1991). Therefore, it is crucially important that the development and adoption of positive oral health habits is facilitated earlier in life, rather than trying to change detrimental habits later.

Education has been the most common method of promoting good oral health, and is an important method for improving knowledge, and for changing attitudes and values. However, it has been shown to be quite inefficient for changing behaviour (Green 1984, Hoostgarten et al 1985, Bandura 1986). Various social learning models, and theories of health behaviour have been described (Earp 1991, Soogard 1993).
Dental care facilities and programs in Australia need to be regularly updated and restructured in order to meet the changing needs of these child populations. However, technical (in the form of marketing and advertising expertise, and facilities available) and economic restrictions in the government service have led to increased reliance on the commercial and private sectors, to provide multisectorial resources to promote oral health to various sectors of the Australian community.

These multifactorial challenges not only arouse our interest in the science of public health dentistry but in the art of public health practice. Part of this art involves dental health promotion to specific age groups; in order to provide motivation for regular maintenance of good oral hygiene and dietary measures, through greater awareness and continuing education.

Behavioural interventions and social strategies need to be directed at the different lifestyles of specific age groups. Promotion of self-care strategies to pre- and early primary school children appears to be the logical start in the process of developing and maintaining good oral health throughout life.

In many countries, developed and under-developed, inequities in preventive education and care are primarily associated with regulation and payment processes. Economic and political forces can relate directly to dental illness and access to appropriate oral care (Gift 1993).

By transferring some of the technical and economic "burden" of oral health promotion for 3-7 year olds, to the commercial sector; international, national, local and community policies that help reduce social risk may be enhanced. Financial barriers are reduced, and thus larger populations have access to the appropriate behavioural interventions. In this way the family, the key social unit of care, is reached. Creating oral awareness, and the promotion and maintenance of good oral hygiene habits, can be provided through the commercial sector via the development of appropriate means and messages.

Knowledge of social and developmental factors can improve the development of commercial oral health promotion. These factors assist in identifying the
appropriate behavioural messages that need to be promoted to 3-7 year olds. The result is likely to be increased efficacy, cost containment, and satisfaction by the decision-makers and the community at large.

Commercial dental health promotion for 3-7 year olds is a subject that has been neglected in public health dentistry studies. Children in these age groups are the most vulnerable to the acceptance, or non-acceptance of good oral hygiene and dietary habits (Weisenberg et al. 1980, Holm 1990, Rise 1991).

Behavioural and environmental strategies that attempt to reduce negative oral health and dietary behaviours, among 3-7 year olds, have been investigated (Blinkhorn 1980, Emery 1981, Towner 1984, Schou 1987, Schou 1990 ); however with no interim or long term follow up. This has been mainly due to the lack of emergence of a consistent theory or model explaining oral health behaviours (Earp 1991, Soogard 1993). However, writers have all emphasised the need to investigate new models of promoting oral health in a meaningful way, to both children and parents.

There is little literature on the maintenance and reinforcement of positive dietary and dental behaviour, for 3-7 year olds, through the commercial sector. In light of these factors this thesis aims to review background literature on:-

1) the psychology and development of the 3-7 year old,  
   including the role of television influences on behaviour,

2) commercial oral health promotion for 3-7 year olds,  
   particularly in the areas of :
   a) corporate services in Australia,  
      including marketing, advertising, and water fluoridation;  
   b) appropriate presentation and content of  
      educational material;  
   c) the child’s first dental appointment,

and to determine the value of two examples of commercial dental health promotion for 3-7 year olds through:

1) a professional body, the Australian Dental Association ( ADA NSW ),  
2) a commercial, entertainment, education vehicle such as  
   the Toothbrush Family (TBF) cartoons I & 2.
2. DEVELOPMENT OF 3-7 YEAR OLDS

2.1 DEVELOPMENTAL THEORIES

2.1.1 BACKGROUND

The growth and development of a child is a continuous process leading to an independent and self-reliant individual. However, no individual is ever totally independent, because he or she needs a social context for their existence; as well as social networks and friends for their social and psychological well-being.

The developmental framework of children between the ages of 3-7 years, and their socialisation, should be considered as a basis for the provision of appropriate dental services. Children in this age group have the need for preventive, diagnostic, and treatment services. Thus, successful commercial dental health promotion relies on utilising this developmental framework in the context of the changing oral needs of this age group.

2.1.2 PIAGET'S THEORY

In Piaget's categorisation of cognitive intelligence, the years between ages 3-6 are called preoperational. This phase of cognitive development begins at the end of stage 6 of the sensorimotor period, 18-24 mths, and lasts until 6-7 yrs of age. The child's power of reasoning grows substantially. The simplistic "why" questions are replaced by more specific and sophisticated enquiries, such as "where did it come from?" (Pontius 1982).

Examples of developmental behaviour demands during this age period include:-

a) development of basic trust,

b) formation of social ties,

c) sensoromotor intelligence,

d) preconceptual thinking,

e) basic sensory and motor skills,

f) symbolic and verbal expression.
2.1.3 SOCIALISATION THEORIES

Ages 3-6 represent a time of enormous social growth in children. By age 3 a child can understand turn taking; by age 4 cooperative play is possible; and by age 6 a child is capable of team game participation (Pontius 1982).

'Primary socialisation' is the term applied to the early influence of home, parents, relatives, and close friends. The process of primary socialisation operates via a system of reward and punishment, and involves a modelling process. Parents reward or punish their children for developing desirable or undesirable attitudes and values; and children model their behaviours on parental example and internalise key values (Tones 1979). It has been shown that towards the end of the first year of life, most children are weaned and start to eat solid food. Children adapt to the family eating pattern, which also means that sugar-eating patterns are established at this age (Holm 1990).

The move from families to the more formalised community based networks takes place during the secondary socialisation phase. Other agencies transmit norms, including school and all media forms. Children may adopt the norms of a valued peer group as a kind of entry qualification. Social norms consistently influence behaviour such as: tooth brushing, dental visiting, and use of sugary foods (Traen and Rise 1990).

There are many theories that try to describe the dramatic psychosocial transformations in 3-7 year olds (Weisenberg et al. 1980). The medical-psychoanalytical theory asserts that personal identification is realised via the superego (mother or father). Social learning theories explain these changes as the product of parenting and parental behaviour (Blinkhorn 1980).

Preschool children can be taught methods of self control and to monitor their own behaviour. During these years the conscience of the child develops, as do feelings of guilt and anxiety. The process of developing coping capacities must be considered when planning the improvement of childrens' learning and the adoption of new behaviour (Honkala 1993).
2.2 TELEVISION INFLUENCES ON BEHAVIOUR

The relationship between children and television is an issue that has frequently provoked deep-seated and passionate feelings. Concerns about the effects of television on young children often serve as a focus for broader hopes and anxieties about the future of society, and about continuity and change. In one perspective, television is seen as a harmful influence on young children, encouraging false values, and leading to anti-social behaviour. On the other hand, it is seen as a potential tool for education and enlightenment, and as a source of great enjoyment. Television is frequently accused of destroying childhood, yet in most countries around the world, it offers cultural experiences that children often claim as uniquely their own (Final Report, World Summit on Television and Children 1995).

Tonge (1983) has reviewed studies on the impact of television on children and their families, on child development, and on the practice of child psychiatry. Both positive and negative influences are discussed. The effects of television are likely to be mediated and influenced by a range of other interactive variables such as: parental care and behaviour; the child’s peer groups; hobbies; and opportunities for play and activity.

Pinkham (1988) has argued that media, such as television, may in a given situation, provide information that stereotypes a child’s behaviour, and in some circumstances have more influences than the parents.

If these media based influences could be harnessed to promote general health, hygiene and oral awareness among preschool children, a large educational, social, and financial void would be filled. An international, multilingual "entertainment vehicle " such as The New Toothbrush Family could fill this void.
2.2.1 FIRST WORLD SUMMIT ON TELEVISION AND CHILDREN

The first World Summit on Television and Children was held in Melbourne, Australia, from the 12-17th March 1995. There were 637 delegates from 71 countries, with 166 taking part as keynote speakers, on panels, and within forums. It was sponsored by The Australian Children’s Television Foundation, with the following aims:

a) to achieve a greater understanding of developments in children’s television around the world;

b) to raise the status of childrens programming;

c) to agree on a charter of guiding principles in children’s television;

d) to ensure the provision of programs for children will be guaranteed as the communications revolution proceeds;

e) to assist the developing nations to provide opportunities for children’s programming in the future.

The following quotations have been taken from various papers presented at the Summit, which the writer feels emphasise various worldwide trends in the media revolution needed for the development of appropriate dental health promotional vehicles for 3-7 year olds.

Television and children’s rights:

"The initial question is whether children should have ‘rights’ at all. To some it is much easier to say that children have needs, and adults have duties to meet those needs. I believe this is no longer a tenable view. Adults have duties to children undoubtedly, but unless we admit that children have rights, children do not have an equal claim to control or limit or require actions of other people..............By saying that children have rights we stop trivialising their claims as special or benevolent treatment options.”

Moira Rayner, Former Victorian Equal Opportunity Commissioner, Australia.

A charter for children’s television:

"There is an African proverb that says ‘It takes an entire village to raise a child’. Today, thanks in great part to the broadcasting industry, we live in a global village. Increasingly it will take the entire global village to raise every child................." Guido Bertaloso, Deputy Executive Director, UNICEF.
Cultural identity in the age of global television:
“....a child needs to see different cultures of the world, needs to take the best out of those cultures, needs to enjoy those cultures, needs to feel them and needs to respect different people of the world and needs to know that the majority of the people in this world are not white, and white, too, is a colour.”
Asma Jahangir, Advocate, Supreme Court, Pakistan.

Children’s television in the digital age:
“Kids will take the technologies of the communications revolution for granted. They will use them with unself-conscious ease, and with a level of skill that derives from early and prolonged exposure to what is to us, at best a second and laboriously acquired language. They will also take for granted a richer communications world.............Children will take for granted a medium of communications which much more closely mimics the range and variety of face to face interaction, at the same time as it taps into the collective memory and understanding of the world, which is stored with and accessible as part of the communications experience.”
Chris Vonwiller, Director, Interactive Multimedia Services, Telstra Corporation, Australia.

Financing children’s television in a commercial world:
“Young children need programs that address their developmental needs in the social, emotional and intellectual realms......If we truly are to put children’s real needs in the forefront, the commercial providers cannot be depended upon to provide for children’s deeper needs. The point is not that commercial organisations lack the ability to create sound informational and educational programs, because they have proved that when they care to they can do so. The point, rather, is that they have no incentive to take any type of systematic approach in doing so.”
Ed Palmer, World Media Partners, USA.
“There is absolutely nothing wrong with making money from secondary exploitation, provided certain principles are observed. A high proportion of the profit must be reinvested in new production, the commercial tail must not wag the editorial dog and the original programming must be of high quality.”
Anna Home, Head of Children’s Programmes, BBC TV, UK.
The regulation of children’s television:

"The specialness of a child audience rests, of course, on the enormous insight into child development we have gleaned over the past century. While there have been recurring attempts to proclaim the ‘death of childhood’ in recent years, there is a more widespread belief, rooted in educational practice and supported by research, that children are not miniature adults. Rather, children acquire cognitive competence, social knowledge and emotional maturity over the course of childhood. Outcomes of this lesson have been a demand for, and development of, more media programming which addresses the special needs of children - in particular, age-graded educational and informational planning”.

Ellen Wartella, Dean, College of Communications, University of Texas, USA.

Educating the audience:

"Those of us who care about putting children first in the emerging electronic technology revolution must make unprecedented efforts to educate parents and children as television consumers."

Ed Palmer, World Media Partners USA.

"And while I would not deny children can learn something from anything, I really do believe that educational television has more to it than that. I think it just can’t leave things to chance, it must set itself some clear objectives and it carries with it a number of responsibilities."

Eurfron Gwynne Jones, Former Director of Education, BBC TV, UK.

The World Summit on Children and Television, from which the previous quotes were taken, embodied a shared commitment to children as a special audience for television. Media education needs to be seen as a partnership between educators and broadcasters; not as a means of defending children against television, but as a way of enlightening and inspiring children about its potential benefits. Education is lifelong, and should be an integral part of children’s experience of television.
2.2.2 PSYCHOLOGY OF MARKETING AND ADVERTISING

The psychology of advertising is to familiarise potential product consumers with a specific product, such that, all else being equal (for example no cost barrier to selection) the consumer purchases the product recognised (Emery 1981).

The study by Longstreet and Orme in 1967 showed there is evidence young children influence their parents in the purchase of advertised products. Their data reported that 70% of children aged 4-15 yrs asked their parents to buy products advertised on television. Furthermore 89% of these parents bought the product.

At a conference held at New College at the University of New South Wales in Sydney, July 1994, entitled “Children and Advertising: a Fair Game?”; Dr. Dale Kunkel, Associate Professor in the Department of Communication of the University of California, Santa Barbara USA, presented a paper highlighting recent studies on advertising and child development (Briggs Frith 1994). The following is an adapted summary of this paper:

The earliest research evidence about children’s understanding of advertising’s persuasive intent traces back to studies commissioned by the US Surgeon General in the mid 1960’s (Kunkel 1994). Their conclusion was that children below the age of about 8 years demonstrated little comprehension of the persuasive intent of commercials.

Most of these studies interviewed children to determine their knowledge in this realm. The researchers asked questions at both the abstract / conceptual level: “What do commercials want you to do?”; and at the more concrete / applied level: “What does this commercial for product X want you to do?”. Approximately 70% of children responded correctly to the latter type of question, however only about 50% of 6 and 7 year olds indicated that a commercial wanted them to buy a product. When asked “Why are commercials on television?”, almost no children younger than 7 indicated an awareness of advertising’s persuasive intent. Is it persuasiveness through association via recognised family habits and values?
These outcomes are consistent with basic child development theory, that has previously been discussed in Chapter 1. Young children don’t do better at appreciating persuasive intent because they lack the necessary cognitive abilities to reason at that level.

Because of the political implications of these early studies, their findings and conclusions were subsequently challenged by researchers associated with the advertising industry. In an effort to undercut the empirical basis that was being used to establish increasing regulation of advertising to children in the USA; these researchers forwarded the claim that young children often know more than they can tell, but this knowledge cannot be effectively conveyed because of their limited verbal capacities. They asserted that even very young children could identify the selling intent of a TV commercial; if tested in a context that would allow the child to demonstrate his or her knowledge in a non-verbal fashion.

A new research strategy was then employed in an effort to support this assertion. A common example of this approach involved showing a child a commercial and then following it up by presenting 3 still photographs. The first picture was that of a child buying the advertised product at a store; the other 2 pictures were of a child engaged in some unrelated task, such as watching TV or playing at school. According to this argument, those children who can point to the first picture, in response to the question “What does the commercial you just watched want you to do?” are deemed to understand the persuasive intent of advertising. According to Dr Kunkel several studies reported children as young as 3 years understood advertising’s persuasive intent. Some of these studies were argued to be important findings in the Australian advertising industry’s reply to the Advertising Directed at Children discussion paper presented by the Federal Bureau of Consumer Affairs (1993).

To Dr Kunkel’s knowledge, none of this type of industry-sponsored research has ever been published in a peer reviewed, scientific journal in the fields of psychology or communication. It apparently appears only in books sponsored by the advertising industry; such as June Esserman’s 1981 Television Advertising and Children: Issues, Research, and Findings; or in publications
directly associated with the USA advertising industry, such as the Journal of Advertising Research.

This type of argument and evidence, however, did prompt researchers to devise a more sophisticated conceptual definition of the skills a child must possess in order to fully understand persuasive intent. Professor Donald Roberts of Stanford University offers the most widely accepted characterisation in this realm. He asserts that children must be able to recognise that:

a) the source of an advertisement has perspectives and interests other than those of the receiver;
b) the source intends to persuade;
c) persuasive messages are inherently biased;
d) biased messages need different interpretive strategies than unbiased messages.

This has led to Dr. Kunkel’s 3 key findings:

1) Young children below the age of about 5 years lack the ability to discriminate consistently between programs and commercials.

2) Young children below the age of about 8 years possess little or no ability to recognise the persuasive intent of television advertising.

3) Young children who are unaware of the persuasive content of television advertising are more easily influenced by commercial claims and appeals.

Because most children under the age of 7 or 8 years make relatively few product purchases themselves, the best measure of advertising’s influence involves children’s attempts to influence parental purchase decisions. Younger children who lack awareness of advertisements persuasive intent have been found to make more numerous purchase influence attempts than older children, after viewing commercials for toys, food products, and a wide range of other child-oriented items (Biggins Firth 1994).
2.3 CORPORATE SERVICES

Market Considerations
Corporate producers of health goods and services for 3-7 year old children play an important role in promoting general and oral health, as well as maintaining it. This highlights the need for close liaison between the dental profession and the relevant corporate bodies in providing goods and services that meet the changing needs of these children. The manufacturers of hygiene products, toothbrushes, toothpastes, infant formulas, and baby foods all have a role to play.

Social Considerations
A democratic, capitalist society produces competitive markets where the range of preschool oral care and health products are of the highest standards and latest technology. Regulation, research, profits and corporate kudos provide the impetus for maintaining these standards.

Preventive Dental Services
In 1990 approximately 65% of Australian preschool children were living with natural and / or artificially fluoridated water supplies (NHMRC 1991) and more than 95% were using a fluoride containing toothpaste (Barnard 1988).

The Child Fluoride Study reported that children and their parents are able to perceive fluorosis at mild levels and these children show adverse psychological response to their dental appearance. Riordan (1993) has stated that negative perceptions of fluorosis by individuals and the community could jeopardise the continuation of fluoride based prevention strategies, including water fluoridation. This reinforces the need for fluorosis to be minimised, while retaining the caries-preventive benefits of fluoride.

At the recent conference on “Appropriate Fluoride Exposure for Infants and Children” these corporate manufacturers recognised the value of fluoride as well as the issue of fluorosis. At least one major infant formula manufacturer indicated the recent defluoridation of water used in their manufacturing processes. The Colgate Company has taken progressive leadership in
marketing in Australia and New Zealand a 400 ppmF toothpaste designed for children up to 10 yrs old.

**Marketing and Advertising**

The market for a paediatric toothpaste is not large, and purchasing habits are slow to alter, especially during difficult economic periods, when strict budgeting is necessary. At present, 90% of Australian households buy a single tube of toothpaste for the whole family, and only 13% of children from birth to 6 yrs regularly use a low fluoride toothpaste (Messer 1994).

Colgate has designed a new advertising campaign which will provide families with information on the correct use of a fluoride toothpaste, and will promote community reassurance that such a toothpaste offers real benefits. New packaging will advocate the use of a “smear” (instead of a “pea”) of toothpaste on the brush head for 3-7 yr olds.

The role that organised corporate advertising plays in influencing oral health behaviour and dental health has not been widely researched; yet its impact appears self evident.
3, PRESENTATION AND CONTENT OF EDUCATIONAL MATERIAL

3.1 GENERAL PRINCIPLES

Whenever efforts are made to change young children’s behaviour through commercial based oral health promotion vehicles, the key issues are program planning, implementation, and evaluation. The following general principles governing the presentation and content of educational material for the development of oral health promotion programs for young children have been considered by Sheiham (1990). They have provided the skeletal framework that the writer has adapted to enhance the relevance, and role that commercially based vehicles can play in promoting oral and general health to 3-7 yr olds.

1) Diverse educational approaches are needed because individuals have different needs and are at different stages of development. Individual instruction, group discussion, mass media, and community development methods can be used but they need to be cumulative and consistent. Encouragement of modelling and reinforcement are important elements of behavioural change. The electronic media and information services have an important role to play in this area.

Commercial dental health promotion could provide the impetus for this reinforcement and consistency. Commercial based programmes, such as the Toothbrush Family 1&2; and the ADA’s (NSW Branch) Tooth Fairy Programme can provide the “reinforcing links” for promoting positive oral, and general health behaviour to young children. Via commercial marketing of relevant oral care products, acceptable outcomes may be achieved due to the appropriate content and presentation of educational material.

Content factors include:

1) Brush teeth regularly with a junior brush
2) Use “junior” (400ppmF) toothpaste
3) General hygiene procedures
2) The earlier the intervention in the oral health education of a child, the more effective is the result. Primary and secondary socialisation have a paramount influence in establishing these habits, and therefore parents, teachers and peer groups have a role to play. Corporate marketing through the media helps provide “common ground” for the interaction between these groups and young children. This may be in the form of advertising and merchandising of various products or programs.

3) More emphasis should be placed on the educational vehicles and processes than on the substantive content of the program. Health promotion efforts for young children should optimise awareness, salience, credibility, habit-formation, long-term change, and reinforcement.

4) Encourage self-efficacy: empowerment of the child means encouraging his or her self-esteem, and making change more a matter of personal control.

5) Community, public, and staff participation in the planning process should increase the probability of success. Fostering of negotiation between the learner and the educator involves child participation in the planning and implementation of the program.

6) Oral health education should be integrated with general health education into the activities of teachers, all health workers, community leaders, sports people and all members of the dental team. Oral hygiene education should be integrated with general health education dealing with general body cleanliness, grooming, and self esteem.

7) Healthier choices mean easier choices: the program should include practical measures for making the environment of children healthier at home and at school. Appropriate school meals should be one goal for any health promotion program.
8) Dental anxiety prevents children from taking full advantage of the oral health education message. These messages should be positive and provide reinforcement, allaying any dental fears.

9) Educational and behavioural outcomes should be clearly stated. With a commercial vehicle for young children, these outcomes will be proportionate to the "attention-holding" processes of the program.

10) The evaluation of a program is necessary for its continuation and further development.

In general, a program of oral health education and promotion for young children should emphasise lay competence, be supportive, and should not "blame the victim" (Sheiham 1990). This also means that these programmes should involve groups other than health professionals; to be effective they need to be multisectorial. In addition, they should be planned to fit into the everyday life of young children, and be concerned with the situations and organisations in which the children live.
3.2 PRIVATE DENTAL PRACTICE

The preschool child’s first dental appointment in private (commercial) practice can be used as a model to show the interaction of commercial and corporate dental health promotion; thus providing the appropriate means and messages to enable a young child to:

a) be aware of their mouths,

b) be motivated to maintain good oral hygiene and diet,

c) feel comfortable in a private practice dental environment.

The developmental framework of children between the ages of 3-6 years, and their socialisation, should be considered as a basis for the provision of appropriate dental services. Children in this age group have the need for preventive, diagnostic, and treatment services; so a basic understanding of child behavioural development combined with rational preventive dentistry can lead to the successful implementation of the appropriate treatment needs.

During my experiences in private practice, many parents of preschoolers would ask, “When should my child go to the dentist for the first time?”, and “How should I look after my child’s teeth?”.  

In response to the first question, I used to recommend the following procedures. If the child does not complain of any problems, and routine parental examination reveals no staining, no tooth breakdown, no malpositioning, the correct number of teeth for their age, and a general well-being of the oral cavity and persona; then when the child is between 4-5 yrs and the parent makes an appointment for a routine check-up, they should inform the receptionist they were bringing their child for an “acquaintance appointment “.

On the day of the appointment, if the child did not mind being separated from the parent, the chairside assistant would perform the following 15 minute tour:-

a) general practice tour

b) ride in the dental chair
c) inspection of plastic mirror and probe
d) examination of "air-jet", and tactile sense of the air stream on their hand
e) brief lecture on oral hygiene and diet, with models and pictures
f) provision of "child dental pack", including appropriate toothbrush, junior toothpaste (400 ppmF), poster and dental stickers.

On completion of the tour the chairside assistant would bring the child into the surgery where the parent was being examined. They would be introduced to the dentist and asked if they had any questions about the tour. If the parent wanted the child to be examined I would permit the child to sit on the parent’s lap, and a cursory examination to take place.

If the child does not want to be initially separated from the parent, then the parent can accompany the child on the tour, or the child can sit in the operatory while the parent is being examined. A commentary of what is occurring to the parent usually arouses the appropriate interest and awareness which then leads into the "dental tour".

This "periodic sensitisation" should be completed by age 6-8 yrs, when the child should have basic oral awareness, reasonable oral hygiene, and can be examined and treated without the parent in the operatory.

Home maintenance of good oral hygiene practises and diet is dependent on the attitude and motivation of the parents. This leads into the question of "How should I take care of my preschoolers teeth?".

In discussing my dental teams' responsibility for diagnosing the child’s treatment and preventive needs, education and motivation of the parents is of equal importance; no matter the language or culture. I have found that providing parents with a chart of the oral cavity, showing a range of eruption dates for the primary and permanent dentition, creates a good foundation for parental awareness and motivation.
Combined with this should be the basic following steps for maintaining oral health and awareness of their preschool children:

a) develop a routine for brushing at about the same time, morning and night.

b) develop a meal schedule which helps minimise “snacking” on sugary materials; recommend fruit, vegetable sticks, nuts. Provide some flexibility.

c) use a brush recommended by myself, or by my auxiliary staff.

d) use “junior” toothpaste (400ppmF F) ; with a “pea” size amount only.

e) brush your child’s teeth using the techniques shown by myself or my auxiliary staff.

f) each time you brush their teeth, quietly explain what you are doing and why, ensuring the same routine is followed at each cleaning.

g) stress the importance of not swallowing the toothpaste.

Eventually each preschooler will want to brush their own teeth, and this usually occurs around the age 4-5 years. My usual recommendation to parents is that this should be a gradual process of transition. Initially the parent should monitor the child’s technique daily, providing appropriate adjustments and help as necessary. Over a period of weeks, as the child grows in confidence and establishes a satisfactory routine, monitoring should be confined to post-cleaning examinations in the evening. This provides a method of regular examination for: number of teeth, staining, malpositioning, trauma injuries and effectiveness of unmonitored brushing.

Appropriately trained auxiliaries can carry the message of oral health and awareness to parents, for themselves and their children, and provide appropriate diagnosis and treatment interventions to the preschool age group.

Entertainment, education vehicles such as the Toothbrush Family can assist the dental team in creating oral awareness and providing the appropriate dental messages in the correct way. Motivational marketing and advertising of oral and general health care products, by the corporate producers, ensured
that young children recognise most oral health care products relevant to their age group. Institutions such as the Dental Health Education and Research Foundation have a wide variety of educational and promotional material that I have used successfully with the preschool age group.

The Child Health Survey carried out by the Australian Institute for Health Dental Statistics and Research Unit, in 1991, has shown more than 50% of Australian 6 year old have a df (decayed / filled) index of less than 1. Despite the emergence of the "caries-free child", there are many preschoolers that sometimes need extensive restorative care.

The “sensitisation” of preschoolers to private practice dentistry must be taken in the context of each individuals’ physical and psychological environment. This is manifest in the child’s socialisation processes. Thus, developmental stages do not necessarily parallel chronological age, but tend to reflect the attitudes and behaviours of the parents. Once again, these attitudes and behaviours generally reflect education levels, socioeconomic background, family stability, and provide the basic approach and rationale for treating each individual preschool child.
4. COMMERCIAL DENTAL HEALTH PROMOTION

4.1 NEW LOOK DENTISTRY PROGRAM

In 1992 the Australian Dental Association (ADA) NSW Branch, requested Professional Public Relations (PPR) to develop and implement a corporate marketing campaign. The New Look Dentistry program consisted of 2 main campaigns: i) an external awareness and education campaign

ii) an internal communication campaign.

The major objective of the program was to make the public more aware of the importance of dental health. In doing so, awareness and recognition was gained for the profession, specifically that of ADA (NSW Branch) members, in helping the community achieve better oral health.

A secondary objective for the ADA (NSW Branch) was to impress upon its own members that professional marketing was needed to maintain and improve the position of dentistry; to assist members to attract new clients; maintain existing clientele, and create demand for a wider and better range of services through evolving research and technology.

Each of the campaigns proposed had a variety of activities designed to meet the preceding objectives via a specific theme and target audience. Chosen activities were then implemented by PPR dependent on sponsorship contributions and budgetary restrictions. The campaigns which focused on 3-7 year old children were the Tooth Fairy Program and the Shaggy Toothbrush Competition (Lazar 1994).
4.2 TOOTH FAIRY PROGRAM

The Tooth Fairy Program was specifically aimed to influence children, 5-7yrs, who have lost their very first tooth, and to involve their parents. The Program sought to encourage children to become more aware of their changing oral environment and increased “oral responsibilities”. It also recognised that a visit to the dentist can be an interesting and beneficial experience for children and parents.

The Program was launched at Coffs Harbour (far north NSW coast) by the federal MP, Gary Nehl, together with Dr. Rita Kadi and Dr. Ian Burns, on March 29th 1994. It was initially planned as a 3 month pilot program, but was concluded in March 1995.

A toll-free hotline was provided for children to call and register with “the tooth fairy” for a special pack of appropriate basic oral hygiene products, which was sponsored by Colgate Oral Care. A letter from “the tooth fairy” was then sent to the child indicating where and when they could pick up their pack. All packs had to be collected from an ADA (NSWBranch) members’ clinic.

The Program launch received widespread publicity on the north coast, with dual television station coverage. The media presented the Program in a positive manner and highlighted the ADA's involvement. A media release was sent to all north coast newspapers, on May 3rd, 1994, notifying the public on the results / success of the Program. As of the 20th July 1994, 252 calls had been received on the hotline. The average was between 5-7 calls per day.

Data from the North Coast Department of Education indicated there were approximately 11,553 children aged between 5-7 in the Coffs Harbour region. A division of the number of calls into the total number of children suggested a redemption rate during the pilot period of just under 2%. However, a child on average will lose his/her first tooth at any time between the ages of 5-7, i.e. - on any one of 1,095 days. To the 20th July the Program had been running for 111 days; or 10% of the time in which a child’s first tooth may fall out. Taking this into account the rate was much more encouraging (Lazar 1994).
Additional research into dentists’ attitudes towards the Tooth Fairy Program showed that the majority of dentists were using the Tooth Fairy packs as a marketing tool. Children who had lost, or were about to lose a tooth were given a kit. Thus the number of kits distributed was around 400.

Surveyed data indicated that in nearly all cases the dental assistants were responsible for liaising with children or their parents when they picked up their Tooth Fairy Packs. All dentists surveyed believed there was a strong need for a program that targets children, and the Tooth Fairy Program should be more widely publicised. Public awareness of oral health campaigns are usually most effective when run over a minimum of 12-18 months (Towner 1984, Soogard 1988).

4.3 SHAGGYTOOTHTBRUSHCOMPETITION

This was a light-hearted activity to attract the attention of 3-10 year olds, and provide oral hygiene awareness. The Sparkle Shark colouring-in competition was designed to show children the importance of a good toothbrush as opposed to a shaggy toothbrush. The competition ran in the Sun-Herald newspaper on July 3, 1994. This message was carried in the picture and accompanying editorial. Colgate Oral Care sponsored the competition with prizes of children’s and electric toothbrushes.

The Sun-Herald newspaper has a circulation of 609,570, and a hand-on readership of 2.6 per copy (Lazar 1994). A total of more than 1.6 million readers. A similar number again were impacted from the paper when the winners names were announced, in the children’s pages of the comics section.
4.4 ACTIVITIES NOT IMPLEMENTED

A range of activities were listed in the New Look Dentistry Program for young children; their implementation being dependent on the ability to secure sponsorship funds. The activities implemented by PPR were chosen as the best method of utilising the available sponsorship funds; as well as maximising benefits for the ADA (NSW Branch).

The following is a list of activities that could not be implemented in year one:
  a) Schools Balloon Program - this program was researched but proved too costly in terms of maximum effect and minimal budget.
  b) Industry-Link Promotions:
     i) McDonald's Traymats - 1994 year fully booked.
     ii) Milk-Marketing - would be interested in promotional advertising in the future.
     iii) Batlow Apples - would be keen sponsors towards some form of national campaign.

PPR believed the Program had been successful in promoting a positive relationship between young children and their dentist, as well as making their parents more orally aware. Groups such as preschools and school dental clinics wished to become involved, however it remained restricted to ADA (NSW Branch) members as planned.

Many current and future sponsors indicated their preference for a coordinated national campaign of oral health promotion, focused on various target groups (Lazar 1994).
4.5 CORPORATE ADVERTISING AND THE COMMONWEALTH DENTAL HEALTH SCHEME

The writer currently believes an immediate, coordinated, national media campaign (estimated cost $2m. ie. - $4 per week per ADA Inc. member) promoting all dentists as integral community members who are professional and responsible; linked with education and information about the Government's Commonwealth Dental Health Program (CDHP), would greatly benefit and elevate the profession.

Figures from the Department of Social Security in 1991 indicated there were approximately 3 million Health Card holders and their dependents in Australia. Approximately 20% of these eligible adults received publicly funded dental care in the previous 12 mths (Neesham 1991).

If an appropriate and meaningful national media campaign increased the utilisation of private practice services, under the CDHP, by making people more aware of their service treatment, and provider options, dental hospital waiting lists could be reduced by 50%. An increased utilisation of private practice dental services by 10% of eligible CDHP members would proportionally add approximately 300,000 patients to about 2000 dental practices. This is a boost for the profession, its administration and the community.
5. THE TOOTHBRUSH FAMILY

In a presentation to the 17th Asian Pacific Dental Congress, Barnard (1994) stated that there was a need to develop appropriate dental health education material, containing correct information and strong motivation for preschool children, towards their own oral health behaviour.

The widespread input from television in developing and developed countries, has seen young children adopting behavioural patterns presented by their favourite characters in regular TV programs. The effects of TV are likely to be mediated and influenced by a range of interactive variables. These include parental care and behaviour, child’s peer group, interests, and opportunities for play and activity (Tonge 1983).

This chapter presents a detailed review of a TV and Video cartoon series which is aimed at entertaining young children, and making them aware of their oral environment.

5.1 THE TOOTHBRUSH FAMILY (TBF) SERIES 1

Marcia Hatfield (1977), the writer, believed that if you can entertain young children you can grab and hold their attention. This follows the basic principles of Piaget and Bandura, and is reflected in the study of Tonge (1983).

The following extract is taken from a paper presented by Marcia Hatfield, on the role of the media in health promotion, at the Australian Hospitals Association Congress, Canberra 1979.

The Toothbrush Family story began in 1965 when her youngest child refused to clean his teeth:

"Like so many children aged 5, he found tooth-cleaning a tedious chore. He needed motivation. Being a writer I took the easy way out. I created some funny little characters called the 'Toothbrush Family', and wrote several stories about them and their adventures in the bathroom.
The basic idea was that the toothbrushes came alive when the real family of the household went to sleep. A magic moonbeam entered the bathroom and gave life to the inanimate toothbrushes hanging on the wall. Whatever the real children had left in the bathroom at bathtime became the focal point of the Toothbrush Family’s adventure for that night.

So the Toothbrush Family was born. After a short period of time my son accepted the characters and their message of oral health, as did my other children; and the usual domestic hygiene chores in the family bathroom resumed their daily importance."

The story of the Toothbrush Family resumed in 1974, with the production of seven TBF records by the E.M.I. Recording Company. The Dental Health Education and Research Foundation endorsed the product as a useful teaching tool, as well as the book that followed.

In 1975 Marcia Hatfield was invited to attend the trade fair to be held in conjunction with the 21st Australian Dental Congress, in Adelaide. Within 3 days the Advertiser newspaper ran a seven column story announcing that the TBF was the "major attraction at the Trade Fair." By the end of the week the TBF had received widespread acceptance from the profession. Within 3 weeks Marcia Hatfield had received letters from Japan, Scandinavia, and the United States, expressing interest in the TBF. They had all heard of the characters from their representatives attending the Adelaide conference.

Only then did Marcia Hatfield see the enormous potential of her concept. She realised that the problem she had encountered in her bathroom was one that most families encountered, all over the world, at some stage in their children’s development. She sought assistance from the Department of Trade and Resources; who advised her to register the TBF name and characters in Australia and overseas. Although the dental profession was interested at that stage, no commercial organisation was prepared to finance a promotion.

In 1976 Marcia left Australia armed with introductions to film and television studios; as well as letters of introduction to bodies like: the Tokyo Dental
College; British and American Dental Associations; and the General Dental Council. Professor Noel Martin, Dean of the Faculty of Dentistry at Sydney University, provided letters of introduction to Dr. Jan Ahlberg, then Executive Director of the Federation Dentaire Internationale; and Dr. David Barmes, Chief of Oral Health, World Health Organization.

The impact of such professional backup claiming that "this development in health education is too large to be ignored" was enough to generate a positive reaction in the United States. After a number of meetings, the CBS network agreed to purchase the TBF concept for television.

To be successful, the TBF had to grab its intended audience with a health promoting message, and hold it. Even the youngest viewers knew that with the press of a button they could tune in to other entertainments. Unlike the schoolroom situation (Towner 1984, Blinkhorn 1987, Wright 1990), the TBF would have to earn its audience; and hold that audiences attention, minute by minute, day by day. The program had to mean something to the young viewers.

It has been agreed that television is one of the most powerful teaching mediums ever devised. If the TBF could be presented in the same way as Mickey Mouse or Yogi Bear, greater impact could be added to the concept. The TBF had to stand up beside other cartoon characters. It had to be trendy. Young children had to be made aware of the characters in such a way that they would identify them as their own popular group of personalities. In fact, the TBF had to sell oral health, making it a unique marketable commodity. In that way the TBF could compete with Huckleberry Hound and Bugs Bunny.

If young children could accept the TBF on entertainment value, they could easily accept the concept of oral and general health; which is what TBF represented. Entertainment as a vehicle for teaching young children, can be the most effective method (Longstreet 1967, Hatfield 1979, Pontius 1982, Sweeney 1983, Sheiham 1983).
An appendix for Toothbrush Family series 1 is provided to emphasise the success of a commercial entertainment, education vehicle, that was socially and culturally acceptable internationally. Various professional health organisations such as: World Health Organization (WHO), Federation Dentaire Internationale (FDI) American Dental Association, Dental Health Education and Research Foundation (Australia) supported and expounded the style and effect that Toothbrush Family series 1 was having on millions of young children throughout the world. Australian government bodies, state and federal, as well as local and international media networks saw the Toothbrush Family series 1 as evidence of the vital role media specialists can play, in health education and promotion, on a global scale.

One of the main reasons attributed to the TBF’s success, was that Marcia Hatfield, involved dental experts in editing the stories. The Dental Health Education and Research Foundation at Sydney University provided advice on the appropriate dental means and messages. The profession suggested changing the name of Timothy Toothpaste to Flash Fluoride, to encourage the use of fluoride toothpaste; as well as promoting soft bristles. The original drawings had saw-toothed bristles, and these were changed to flat ones. The brushing technique advocated in the “theme song” was also approved by the profession.

Apart from Flash Fluoride, the TBF included:

1) Hot Rod Harry - the electric toothbrush,
2) Tess and Tom Toothbrush - mother / father image,
3) Tim and Toby Toothbrush - their children,
4) Gramps Toothbrush - senior citizen,
5) Shaggy Dog Toothbrush - typifying all that a toothbrush should not be,
6) Cecily Comb, Nev Nailbrush, Bertie Brush, and Susie Sponge were additional "general hygiene" characters who interacted with the TBF. This highlighted the overall "message" for young children, that oral health is part of general health and body cleanliness.
The main theme of the Toothbrush Family was contained in a song that is sung to the tune of "Three Blind Mice":

"Brush your teeth: Round and round. Circles small; Gums and all. A small soft toothbrush the round, round way, will keep your gums healthy and stop tooth decay, so clean very carefully three times a day, go round and round; round and round."

The words and tunes were relatively easy for young children to learn, and then repeat; especially in unison with the Toothbrush Family singing (Sebel 1996). Children were found singing the song in the bath, and parents singing the theme song, while their children brushed their teeth with their Toothbrush Family toothbrushes, in their Toothbrush Family sleepwear and socks, which had been developed (Hatfield 1979).

The original Toothbrush Family cartoon was a unique educational concept developed in Australia for 3-7 year old children. It proved an acceptable vehicle for promoting positive hygiene and oral health messages across a variety of cultures and languages, including braille.

The cartoon featured for 4 years on top American children programs, including the Captain Kangaroo Show. This program was viewed through 200 television stations by 5 million children twice a week for 4 years. The original Toothbrush Family was meaningful to both children and parents; it was good entertainment (see appendix); and was approved by the Health and Education Authorities.

The program had an ongoing merchandising potential with proven international acceptance (see appendix). There was a fresh audience every 3-4 years and it was a never ending story.
Some of the countries that televised the Toothbrush Family's first series included:

1) United States of America  
2) Australia  
3) New Zealand  
4) Hong Kong  
5) Saudi Arabia  
6) India  
7) United Kingdom  
8) Zimbabwe  
9) New Guinea.

The Toothbrush Family Book was translated into braille and many languages, including:

1) Swedish  
2) Finnish  
3) Norwegian  
4) Danish  
5) French  
6) Thai  
7) Spanish  
8) Italian  
9) Arabic.

International media was stimulated, and professional interest was created by the first series.

Merchandising resulting from the first series included:

1) Dodwell & Co.  
   * Sheets  
   * Pillow cases  
   * Towels  
   * Face Washers  
   * Place mats

2) Kortex Hoisery Mills  
   * Underwear  
   * Sleepwear
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<th>3) Class Hoisery Mills</th>
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| 4) Starworks Pty Ltd.   | * T-shirts  
|                        | * Tops  
|                        | * Shorts  
|                        | * Hats / caps  
|                        | * Bags  
|                        | * Posters  
|                        | * Buttons / stickers |
| 5) E.M.I. (Aust.) P/L  | * Records  
|                        | * Tapes |
| 6) Paul Hamlyn         | * Original story-book |
| 7) Johnson & Johnson   | * Toothbrushes |

The original Toothbrush Family was a great success commercially; however socio-behavioural changes were never studied. Dr D Barmes (1977), Chief of Oral Health of the World Health Organization, said in personal correspondence to Marcia Hatfield: “the Toothbrush Family gives the profession a magnificent opportunity to make a very important evaluation of what such an injection of dental health education material through the media might achieve”.
5.2 TOOTHBRUSH FAMILY SERIES 2

The Toothbrush Family Series 2 is currently being developed to accommodate the social, cultural, and technical changes that have occurred in the preschool age group, since the first series was made over 20 years ago.

Presently, the creative, financial, and reconciliation processes are in progress; so that a five minute pilot episode, "The Hanging Basket", is anticipated for October 1996. In the creative area, fourteen new storylines are being developed. These stories will have a unique sense of fun and invention, in that they involve transformations as seen through the eyes of the characters: in effect, watching them use their own imaginations.

The following are summaries of the pilot and seven new storylines that are in the final draft and "sketch" stage.

The Hanging Basket

Flash Fluoride, Connie the Comb, Moppet and Max are happily playing a ball game on the vanity unit, until Max skies the cough drop they use as a ball, and it disappears into the basket of indoor plants which hangs from the ceiling.

Max is determined to retrieve the cough drop but Flash is worried by the wild creatures, including dinosaurs, which might inhabit the jungle above their heads, but still charges off after Max. The others insist on coming, and soon the party thread their way up through the medicine cabinet until they reach the top. Then it is only a simple matter of threading their way along the shower curtain rail until they are directly over the jungle below.

As Flash Fluoride lowers himself down into the jungle by means of dental superfloss, which ropes everyone together, his weight pulls all of them off the railing, and they end up hanging down the side of the basket with the floor like an abyss far below them.

Eventually they climb into the basket and find themselves in a forbidding
jungle where plastic birds suddenly take flight, and they wonder what else may lurk behind the foliage.

They head off following the depressions the bouncing coughdrop left in the ground. When they rest on a large tapering tree root, too late do they realise they are sitting on a dinosaur's tail. The dinosaur stampedes through the jungle in fright and everyone clings onto the tail except for Max, who is thrown off and lost.

Eventually the dinosaur stops its stampede, and as it chews leaves, Moppet realises its friendly. Meanwhile the jungle shakes and trees quiver, and Flash Fluoride takes stance to protect the group from a possible unfriendly dinosaur. As the foliage parts Max appears with the coughdrop.

The friendly dinosaur takes them to the edge of the jungle, where water from the shower rose provides a spectacular waterfall. They use dental floss to abseil back into the bathroom.

A final glance shows the dinosaur's head sticking out of the jungle but it looks plasticy once more. Altogether they had a marvellous adventure.

The Travelling Toothbrush

One morning Flash Fluoride, Moppet and Max find a Travelling Toothbrush neatly packed into a tooled leather travelling kit. However, when Moppet invites the toothbrush to visit their house he has to decline; as one of the pitfalls of travelling is that he always has to stick by the kit as he doesn't know when they'll be travelling.

Flash Fluoride offers to guard the travelling kit and yell out if anyone comes. Soon the Travelling Toothbrush is admiring the toothbrush house, as he has never seen anything like it in all his travels.

When they return to the travelling kit, however Flash Fluoride has fallen asleep, and the kit is no longer there. Now the Travelling Toothbrush is
stranded in the bathroom and begins to wail as he is part of a set.

Flash Fluoride suggests the travelling kit is out in the hall with the other bags, and realises this is a job for Susie Sponge. A few minutes later Susie Sponge, driving a toy car, whisks the two little toothbrushes out into the hall, the first time they have ever left the bathroom.

They find the kit on a tall side table and Susie Sponge crashes into it rocking the table and causing the kit to fall into the car.

Back in the bathroom, the Travelling Toothbrush folds himself up and packs himself away ready for his next journey. He thanks Flash Fluoride and the two toothbrushes for their help. It has been one of the best travelling experiences of his life.

Max and Moppet are pleased because they’ve seen the hallway and finally got to travel too. They wander off telling Flash Fluoride all about their exciting experiences.

**The Tooth Fairy**

One night an exhausted tooth Tooth Fairy battles its way through a stormy night; until it is squashed by a raindrop, and lands on the window sill a sorry, sodden mess.

The next morning Max, in high excitement, leads the others by a tortuous route from the vanity unit up onto the window sill. He points out the strange figure lying in the splattered raindrop. Flash Fluoride realises it is the Tooth Fairy, but can’t understand why she is there.

Back on the vanity unit, they lay her in an abalone shell and dry her out using the hair dryer. When she comes too she tells them there is a tooth somewhere in the bathroom, as it says so in her bleeper. Connie the Comb, Max, and Moppet set out to find the tooth. After rummaging through a drawer they return with a set of dentures. However the Tooth Fairy is after a real tooth,
and after Moppet suggests using her bleeper as a tooth detector they set out to find it. Max tries to hint to them that he knows where it is, but they ignore him and he heads off in another direction.

Finally the tooth detector leads them to the toothbrush house, and Max appears with a tooth which fell out the night before while Max was busy cleaning teeth. He is under the impression it was his fault. The Tooth Fairy explains to Max that young teeth have to fall out to make way for bigger, longer lasting teeth.

A few minutes later they use a stretched elastic band to catapult the Tooth Fairy back out the window with her precious cargo.

Back at the toothbrush house, Max finds a coin and wants to keep it; but Connie the Comb explains the coin is for the owner of the tooth, and not the little toothbrush that cleans them. Max subsides into a flood of tears and Flash Fluoride Connie the Comb and Moppet start laughing as they try to console him by letting him play with it until toothbrushing time.

**The New Toothbrushes**

One night Flash Fluoride and Connie the Comb celebrate the little toothbrushes first month in the bathroom with a special treat. Flash Fluoride congratulates them and tells them it was a close call that they even got to be toothbrushes. In a flashback, Flash Fluoride tells them how on opening the new packets, he and Connie the Comb found the toothbrushes were missing. They follow a trail of cellophane to find Bertie Brush has taken the toothbrushes with the idea of turning them into willing scrubbing brushes on his boat. Flash Fluoride rescues them just in time, and he and Connie the Comb institute a crash course on toothbrushing using a set of dentures, as toothbrushing time looms. Moppet and Max are so entranced by the story they force Flash Fluoride to tell it all over again.
The Tooth Fairy's Holiday

One stormy night Flash Fluoride and the toothbrushes spot the Tooth Fairy battling through the wind and rain heading for their window. They guide her in using a pencil torch and she makes a terrible crash-landing spilling her bag of teeth everywhere. The Tooth Fairy is obviously extremely exhausted and Flash Fluoride suggests she needs a holiday. The Tooth Fairy is too frantic with worry to calm down; within 24 hours she has everyone else frantic polishing teeth and staying on the move. Finally the Tooth Fairy falls asleep and has a rest; but by the time the others have settled down to rest as well, the Tooth Fairy wakes fully rested and renewed. She flies off and Flash Fluoride announces that they all need a holiday to recover from the Tooth Fairy's holiday.

The Lolly

While exploring the bathroom, Max discovers a boiled lolly hidden away in one of the drawers and is immediately captivated by it. Flash Fluoride, is immediately uneasy and agitated. Lollies are perilous to teeth and he decides to get rid of it immediately, although Max is determined to keep it. Flash Fluoride throws it away as Max slouches off. However, the lolly bounces off several surfaces, rolls this way and that and arrives at Max's feet, much to his surprise. Flash Fluoride decides Max has found another lolly and throws it into the bathroom treadle bin. Max accidentally snags it on his "floss" fishing line, and Flash Fluoride thinks Max has found a third lolly. Flash Fluoride throws it out the window this time. Later, as he enjoys a well-earned rest, he upsets a packet of boiled lollies in the medicine cabinet. As they seemingly chase him along the vanity unit, he can't believe so many boiled lollies can exist in the world.

The Lost Dinosaur

When a huge plastic brontosaurus falls out of the hanging basket and plops onto the vanity unit, Flash Fluoride and friends have the onerous task of getting the friendly, awkward dinosaur back into its jungly home before it eats
up and knocks over everything in the bathroom. First they lure it into a box, but it doesn’t hold it for long. Then they lasso it with dental floss but that doesn’t work either. Finally they use a hairnet to trap and hoist it back up into the clothes basket. Flash Fluoride spends the night wondering what other strange creature might fall into the bathroom.

Entertainment is still to be the prime directive, as this is a commercial vehicle for oral and general health promotion; however more storylines will tend to highlight pro-social messages, in order to motivate the action; thus making them a unique, marketable commodity. These messages include:

a) turn taking,
b) toys must be put back after play,
c) respect for elders,
d) oral and general cleanliness;

and can be presented via a universally acceptable, multilingual, commercial vehicle that reflects cross-culturally, the 3-7 yr. olds pre-operational thinking and transductive reasoning. In this way they can be “trained” through into the concrete-thinking stage (7-12 yrs.), where a sense of responsibility for one’s own oral health should develop. This can hopefully be achieved independently of regulation and payment processes; and economic and political forces.

Paediatric psychology has long been aware that “developmental changes in young childrens’ ability to understand health and illness, especially causal relationships, move the child toward the ability to assume even greater control over his or her health” (Weisenberg et al 1980).

The importance of the appropriate content and presentation of relevant dental “educational” material, as previously discussed in section three, has led the writer of this thesis to be a consultant to the script writer during the initial drafts of Toothbrush Family series 2.

The Toothbrush Family series 2 has a slightly different cast of characters to the initial series. Flash Fluoride, the leader, with the fearful/cautious nature is still there; however, Max and Molly/Moppet are the two “toothbrush” members of
the family. Molly is to be a strong leader, brave and adventurous; while Max is the irrepressible energetic. Cecily Comb has become Connie the Comb. Her character is similar to that in TBF 1: older, ironic, and slightly cynical; the perfect foil for Flash. Bertie Brush has a token "rascal" role in TBF 2.

The scriptwriter, John Patterson, has altered the cast in TBF 2 because "in this day and age prosocial drama for 3-7 year olds becomes too complex with more than 4 main characters." The theme song used so successfully in TBF 1, is to be "modernised" in TBF 2 in accordance with the overall perspective of the program. Hopefully this will only involve changes to the music and production, rather than the words themselves.

There will be a new audience every 3-4 years, so the new "health messages" must be valid for the next 10 years. The basic messages should include:-

a) Oral hygiene, self cleaning, parents assist, rinsing of mouth, toothbrush with fluoride paste; 400ppmF; amount of paste; not swallow paste; use own toothbrush; soft brush;

b) restrict refined carbohydrates, reduce intake of sugar, reduce frequency of sugar, reduce sugar in sticky form;

c) avoid dummies coated with sugar or honey, avoid bottle feeding with high sugar liquid left overnight;

d) infection control, problems with loss of deciduous teeth, habits which alter tooth alignment;

e) seek professional or auxiliary dental health services (Barnard 1994).

Merchandising is commercial, but a vital adjunct today to the overall concept of health promotion (Tonge 1983, World Summit on Television and Children 1995). From research (Towner 1984, Tones et al 1990, Soogard 1993), we know that parents are more likely to reinforce official health education messages this
way. It makes their job easier, and the message more forceful. If a child is wearing TBF pyjamas; using TBF toothbrushes, toothpaste, face washers, and towel; he or she is not likely to ignore the message of general cleanliness and oral health. It becomes part of the act of going to bed, or getting up, and gives children the necessary motivation they need to stimulate real interest, and reinforcement of preventive dentistry action. These actions are hopefully reinforced and enhanced via school, family, social, peer group and environmental contacts.

With a successful modern production, associated commercial merchandising is necessary for stimulation and maintenance of positive oral health behaviours amongst preschoolers. Besides enhancing parental motivation (Longstreet and Orme 1967, Kunkel 1994), revenue is raised for further programs and research. In this way, with the success of TBF 2, appropriate marketing and merchandising, will add impetus to the basic messages and ideas that have been created. The ultimate goal is for the essence and character of TBF 2 to become part of a preconceived social format for 3-7 year olds; nationally and internationally. In order for this to occur it must successfully compete with the likes of Bugs Bunny, Donald Duck, Ninja Turtles, Bananas in Pyjamas, and similar forms of entertainment, for 3-7 year olds, that are culturally and socially acceptable internationally.
6. DISCUSSION

There is little literature on the maintenance and reinforcement of positive dietary and oral health behaviours for 3-7 year olds.

Through our increased understanding of the link to oral diseases and human behaviours, and the increasing spread of multi-media and information technologies, oral health promotion in all its forms needs to become the driving force behind behavioural interventions and social strategies directed at the different lifestyles of specific age groups. Increasingly, professional bodies, such as the ADA (NSW Branch), are looking to the commercial sector to implement and analyse various oral health programs (New Look Dentistry Campaign 1992); as well as marketing and raising the profile of the dental profession (Cohen 1990). Commercial dental health promotion for 3-7 year olds is a subject that has been neglected in dental public health studies; as evidenced by the lack of literature, research material or scientifically based studies. Yet, there is an abundance of oral health care media advertisements, products and merchandising from the commercial sector that the average 3-7 year old, and their parents, come into contact with each day, without any cohesive social format. This social format should include:

   a) a wide variety of approved oral and general health care products;
   b) marketing and advertising of these products, with the appropriate means and messages, that can enhance and reinforce school or target group programs;
   c) television programming for young children that only encourage healthy lifestyles and habits;
   d) the role of the dental health profession.

According to Piaget's theory of cognitive intelligence, promotion of self-care strategies to pre- and early primary school-children appears the logical start in the process of developing and maintaining good oral health throughout life. The effects of primary and secondary socialisation of 3-7 year olds have been shown to consistently influence positive and negative oral and dietary habits, as well as dental visiting (Giff 1990, Holm 1990, Rise et al 1991, Honkala 1993, Kunkel 1994). The family unit, and all forms of media, especially television,
appear to be the prime influences in the development of these behaviour patterns, whether positive or negative (Tonge 1983, Pinkham 1988).

At the World Summit on Television and Children (Melbourne 1995), Ed Palmer, from World Media Partners stated that "young children need programs that address their developmental needs.................If we we truly put children's real needs in the forefront, the commercial providers cannot be depended upon to provide for children's deeper needs. The point is not that commercial organisations lack the ability to create sound informational and educational programs, because that when they care to they can do so. The point, rather, is that they have no incentive to take any type of systematic approach in doing so."

A coordinated government, industry, and professional programme developing successful commercial vehicles with a preconceived social format, that have the appropriate presentation and content of educational material, could provide the "incentives" that the commercial sector needs for continuing development. The Toothbrush Family series 1 is a prime example of what can be achieved socially, professionally and commercially (see appendix). There is no reason why, except lack of production sponsorship, that Toothbrush Family 2 will not be a greater social, commercial, and professional success: material presented as an international, multilingual "entertainment vehicle", that is socially, culturally and politically acceptable, with ongoing merchandising potential.

Many school-based dental health education programmes have reported significant changes in knowledge and attitude toward dental health, as well as emphasising the complexity of establishing consistent models of oral health behaviour among young children (Towner 1984, Soogard 1988, Schou 1990, Rise 1991).

Towner's United Kingdom study of 1533 Birmingham, infant-school children, in 1984, concluded that a school-based programme of 4-5 weeks duration is not going to drastically alter those daily routines and dietary habits that have been built up over 5 or 6 years of a child's life. Her study showed favourable short-
term behaviour changes, improvements in knowledge and attitudes, and considerable interest in and awareness about caring for teeth.

This program, called the "Gleam Team" campaign provided an introduction to dental health promotion upon which subsequent junior and secondary school programmes could build, and via the information gleaned through a longitudinal oral health study throughout a child's school life; various models explaining oral health behaviours could have already been well established. In the literature it appears the program was never fully established or followed-up.

Soogard and Holst (1988) concluded, in their study of 1167 15 year old, Norwegian school children, that a variety of learning methods must be included in any dental awareness program; in order to achieve behaviour change. They also stated that short term, school-based campaigns should not be expected to reach a learning level above that of awareness and recognition. The essence of their conclusion is that school-based campaigns should only be initiated when the basic dental care program can provide the necessary follow-up reinforcement. As seen from the literature, most school-based dental education and promotion programs have no longitudinal reinforcement or assessment. These are the areas where commercial dental health promotion, in the form of:

a) media advertisements for "junior" toothpaste, and associated products such as toothbrushes, floss and fluoride which incorporate basic dental health information and techniques, and are replayed in various forms many times daily;

b) the 3-7 year olds first dental appointment in private practice;

c) programs requested by the ADA (NSW Branch), from the private sector, such as the Tooth Fairy Program 1994;

d) commercial, education, entertainment vehicles such as the Toothbrush Family cartoons 1&2; could provide the increased awareness, motivation and reinforcement that school-based programs cannot maintain.
Schou et al (1990) analysed toothbrushing frequency and its relation to "lifestyle" factors among 4935 Lothian (Scotland) schoolchildren. They concluded that toothbrushing frequency was significantly related to the children's health perception, eating habits, bedtimes, and TV and video watching. Thus, toothbrushing appears to be an integrated part of a child's lifestyle, and should be regarded as such for future health promotion efforts. Commercial dental health promotion recognises this integration, by providing the appropriate means and messages in a way that appeals to young children, and thus motivates towards, and reinforces, positive oral health behaviours outside the school program.

Rise et al (1991) set out to identify determinants of dental health behaviours in Nordic schoolchildren. They concluded that while brushing is closely linked to the prevailing sex-role pattern, sugar behaviour is strongly related to peer group norms. Thus, the symbolic function of sweet consumption of the youth culture should have implications for the design of intervention strategies. For example, the provision of alternative behaviours will only be successful if the behaviours serve the same function as sugar consumption. In the same way, government policy should interact with the commercial sector by promoting:

a) sales and tax benefits for sugar substitutes in sweets, drinks and oral health care products;

b) television advertisements during 3-7 year old, prime-time viewing that encourage a preconceived social format of general health, with the appropriate means and messages provided;

c) television programs for 3-7 year olds that reinforce and help maintain oral and general health programs that have been initiated in pre- and primary schools;

d) the private and public dental sectors in new and unique ways via funds and technology allocated to programs such as the Commonwealth Dental Health Program (CDHP). These programs, if structured, and administered correctly could become self-funding.
The New Look Dentistry campaign, which was implemented in 1993-4, was an example of commercial dental health promotion; carried out by a professional body: ADA NSW Branch. The program received in one year a wide variety of media coverage; encompassing metropolitan and regional (NSW) coverage in print, radio and television. No mechanisms for evaluation were in place to assess the impact of this coverage on public awareness and dental health. Any future programs, for children or adults, must have mechanisms that ensure adequate assessment and evaluation (Cohen 1990, Gift 1993).

Relationship building was the major objective of the New Look Dentistry campaign, and in so doing awareness and recognition was gained for the profession in helping the community achieve better oral health. The aim was to impact the community and it is estimated that the ADA (NSW Branch) achieved 5 times the marketing value for its dollar outlay (Lazar 1994). This was only possible due to the interest and concern shown by Peter Lazar and his team at PPR, for the improvement of public oral health through corporate marketing. The secondary objective of supplying ADA (NSW Branch) members with a corporate marketing campaign was partially achieved, but requires more funds and work if the results are to be maximised.

In December 1994, the Community Education Committee of the ADA (NSW Branch), carried out an internal marketing survey of its corporate marketing campaign. Out of 572 replies, approximately 36% believed the current corporate marketing budget (approx. $100,000) should be greatly increased; while 49% felt the budget was correct, and 15% felt it should be reduced. The writer believes the profession, with the aid of the corporate sector, must budget for larger sums for the future development of commercial dental health promotion, especially on a national scale. The estimated minimum budget would be approximately $2 million. The profession must recognise the task is a national one in which all members have a stake.

The Tooth Fairy Program was part of the New Look Dentistry campaign, specifically aimed to influence children 5-7 years, and to involve their parents. The program, considered as a pilot to a national campaign, proved successful in promoting a positive relationship between young children and their dental
staff, on the NSW north coast. Feedback from the local community, and the sponsors was very positive. Many current and future sponsors indicated their preference for a national campaign, which would enhance the commercial promotion of oral health to 3-7 year olds through a preconceived social format: campaigns that heighten and reinforce school-based programs.

Schou (1990), Rise (1991), Soogard (1993), and Barnard (1994) have all emphasised the need to investigate new models of promoting oral health, in a meaningful way, to young children and parents. The Toothbrush Family series 2 should be considered as a model of a commercial, entertainment, education vehicle, that is culturally and socially acceptable internationally. This series should become part of the social format designed to enhance and reinforce school or target group programs in a unique way.

The widespread input from television in developing and developed countries has seen young children adopting behavioural patterns presented by their favourite characters in regular TV programs. If you can entertain young children, you can grab and hold their attention. If young children could accept the TBF on entertainment value, they could easily accept the concept of oral and general health. Development of self-care strategies to pre- and early primary school children is essential for maintaining good oral health throughout life.

Merchandising is commercial, but a vital adjunct to the overall concept of oral health promotion as a preconceived social format for young children. Parents are more likely to reinforce official health education messages this way. It makes their job easier and the message more forceful. If a child is wearing Toothbrush Family pyjamas; using TBF toothbrushes, toothpaste, face washers, and towel; he or she is not likely to ignore the message of general cleanliness and oral health. It becomes part of the act of going to bed, or getting up, and gives children the necessary motivation they need to stimulate real interest, and reinforcement of preventive dentistry action. These actions are hopefully reinforced and enhanced via school, family, social, peer group and environmental contacts.
7. CONCLUSION

Commercial dental health promotion for 3-7 year olds, in all its forms, should play an increasingly greater role in ensuring the development and maintenance of good oral health through the 21st century. International, national, local and community policies that help reduce social risk may be enhanced. Financial barriers are reduced, and thus larger populations have access to the appropriate behavioural interventions. In this way the family, the key social unit of care, is reached.

Creating oral awareness, and the promotion and maintenance of good oral hygiene habits for these age groups, can be provided through the commercial sector via the development of appropriate means and messages.

Knowledge of social and developmental factors can improve the development of commercial oral health promotion. These factors assist in identifying the appropriate behavioural messages that need to be promoted to 3-7 year olds. The result is likely to be increased efficacy, cost containment, and satisfaction by the decision-makers and the community at large.
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9. APPENDIX

Acceptance of Toothbrush Family Series 1

Selected examples of correspondence showing the success of a commercial entertainment, education vehicle, that was socially and culturally acceptable internationally.
EXCERPTS FROM THE ADDRESS BY THE HON. M.J.R. MacKELLAR, M.P., MINISTER FOR HEALTH TO THE MORAL RE-ARMAMENT CONFERENCE IN SYDNEY - 21 JANUARY 1980 - 'HEALTH AND MENTAL HEALTH - THE FAMILY AND LIFESTYLES IN AUSTRALIA TO THESE ISSUES'.

Clear evidence of the vital role that media specialists can play in health education and health promotion is demonstrated in the remarkable success of this sort of approach by Marcia Hatfield with her Toothbrush Family. From an initial innovative creation designed to meet a private situation, the Toothbrush Family has grown into an internationally-recognised health education tool, Marcia's clever characterisations stimulating and re-inforcing the health education messages they are designed to convey.
Ms Marcia Hatfield
Roymark Pty. Ltd.
Suite 6
1 Oswald Street
Cremorne
N.S.W. 2090
Australia

19 February 1980

Dear Marcia,

Thank you for your letter and press release which I received some time ago. A really diabolical duty travel programme in 1979 put me well behind with my correspondence for all but absolutely essential matters and it is only now that I have a welcome, but undoubtedly temporary, respite that I have the chance to catch up. In view of that last remark, it is somewhat ironical that I am actually doing my catching up with a portable dictating machine as I sit in my hotel room in Khartoum.

I was overjoyed to see of the success you are having, not only with the Toothbrush Family, but also in your new venture and I shall look forward to hearing further good news on the preventive front.

We are, as ever, putting a tremendous emphasis on prevention and I have just finished submitting several new proposals for an increased effort in the oral health sector by WHO towards a specific goal for the year 2000. Also, as ever, we battle on overworked and underfunded but are nevertheless optimistic about the way things are going.

It was lovely to hear from you. All the best.

Yours sincerely,

David E. Barmes
Chief
Oral Health

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November 20, 1980

Mrs. Marcia Hatfield
Australian Trade Commission
636 Fifth Avenue
New York, N.Y. 10111

Dear Marcia,

It was a pleasure to actually meet with you yesterday. We have been delighted with our audience's response to your "Tooth Brush Family" series since its inception in 1977.

I await with open arms any new materials you can manage to produce and supply to the Captain Kangaroo Show. Your proposal for the new "Health" series sounds wonderful. It is definitely the type of material we can continue to look for. If you can put a "package" together, I would certainly want it for our show.

Please keep me informed of your progress.

Sincerely,

Joel Kosofsky
Producer

JK:tv
"NO, NOT THE TOOTHBRUSH, MUM — IT WAS THE BATH, IT SAID ... YOU DON'T NEED A BATH TONIGHT, FREDDY..."

Sydney 'DAILY MIRROR' Cartoon - Page 3
21 October 1980

Mrs Maroa Hatfield
Managing Director
Roymark Pty Ltd
Suite 6
No 1 Oswald Street
Cremorne
New South Wales
Australia 2090

Dear Mrs Hatfield

I enjoyed your visit to the office a few days ago and your information about the success of "The Toothbrush Family" and your plans for development of health education programmes along similar lines.

I must admit that I am very impressed with the great coverage that you have achieved with the Toothbrush Family internationally and with the impact that this obviously has had among millions of children.

I would certainly like to express my personal hope that you will be equally successful in developing programmes for general health education. There is no doubt in my mind that there are many important fields where the establishment of sound habits in early childhood would make a considerable and presumably life-long impact on the general health of future generations.

I will be looking forward to hearing from you about this development. If you feel that I may be of any assistance, please feel free to call on me again.

Yours sincerely

J E Ahlberg
Executive Director
Ms. Marcia Hatfield  
Suite 6, No. 1 Oswald St.  
Cremorne, New South Wales  
Australia 2090

July 8, 1981

Dear Marcia:

I want to inform you that the CAPTAIN KANGAROO SHOW was selected this year as an Emmy Award winner for the Outstanding Children's Entertainment Series by the National Academy of Television Arts and Sciences.

Once again, I would like to thank you for the part that you and your "Toothbrush Family" series played in that selection.

Sincerely,

Joel Kosofsky  
Producer

JK:BD  
Enclosure: picture

cc: Monte Morris

"The Toothbrush Family" has been a regular segment on the CBS Network program "Captain Kangaroo" from September 1977 to September 1981.
Dear Mrs. Hatfield,

Teaching dental health education is no easy task and motivating children to act on the information gained is even harder.

It is considered that your "Toothbrush Family" has made a valuable contribution to dental health education in this State. It has played a significant role in dispersing oral hygiene instruction to a very wide audience through the popular press, children's literature and records as well as the television screen.

It is personally pleasing to note that you chose a dental problem as the subject of your first excursion into the health field - it is hoped that your proposed extension into paediatric preventive health will be as successful as your initial venture.

The efforts of persons providing health education is to be encouraged and to this extent I would like to convey my personal appreciation of your work in the oral health field through the activities of the "Toothbrush Family".

Yours faithfully,

N.T. WRIGHT,
Principal Adviser,
Dental Services.
November 24, 1980

Ms. Marcia Hatfield  
% Roymark Pty. Ltd.  
Suite 6  
One Oswald Street  
Cremorne, NSW  
Australia

Dear Marcia:

It was indeed a pleasure to talk with you last Friday and to learn of your new made-for-television health education project. The success of the Toothbrush Family and its continued contribution to the Captain Kangaroo program here in the states speaks well for you and your untiring efforts. We were pleased to assist in a small way with Toothbrush Family and appreciate the contributions it makes to dental health education.

The 3-H Project (Health, Happiness and Hygiene) sounds most interesting and challenging. Reaching the pre-school and elementary audience with critical health information is vital. I am confident this project will be produced with as much innovation which maintaining sound educational principals as was the Toothbrush Family. If we may be of assistance in the review and evaluation of segments on dental health we would be happy to do so.

I wish you success with the 3-H Project and please keep me informed as to your progress or desire for assistance.

Kindest personal regards.

Sincerely,

Randall B. Grove  
Director  
Bureau of Health Education and Audiovisual Services

RBG:jb
Ms Marcia Hatfield  
Reg Grundy Productions Pty Ltd  
G.P.O. Box 2808  
Sydney, N.S.W. 2001  
Australia

Dear Ms Hatfield

THE TOOTHBRUSH FAMILY

Since writing to you on November 9th, I have had the opportunity to follow-up on some of the queries you raised.

Most importantly, I have been able to confirm that the Toothbrush Family continues to be run on the Captain Kangaroo children's programme and is programmed with the Colgate advertisement.

I spoke to the producer of Captain Kangaroo, Mr Joel Kosossky, who commented that the segment was probably the most significant part of that programme in terms of viewer recognition, and he would judge from the amount of correspondence that it generates, viewer response. Kosossky indicated this was something of a surprise to the staff of Captain Kangaroo in that they were not able to identify the quality that made the Toothbrush Family such a success with their audience.

If I can be of any further assistance before your visit, please do not hesitate to write again.

Yours sincerely

R.J. O'DONOVAN  
Assistant Trade Commissioner  
New York

"Captain Kangaroo", the world's longest running children's television program that went to air on over 200 channels on the US CBS Network - to five million children a day. The TOOTHBRUSH FAMILY animated cartoon series became a regular segment on the show from 1977 to 1981.
Mrs M. Hatfield,
Reg. Grundy Productions Pty Ltd,
GPO Box 2808,
SYDNEY NSW 2001

Dear Mrs Hatfield,

You recently discussed with me certain aspects of the "Toothbrush Family" particularly with regard to the dental health education activities within the Australian School Dental Scheme.

As you know, I place great emphasis on prevention and education, rather than on treatment which seems to be a negative approach to the problem of improving children's dental health. Of course, one aim of the Scheme is to foster in the community an appreciation of good dental health and regular dental care. Clearly this is a long term goal but one which is well worth pursuing.

A problem with successfully presenting the dental health education message is the conflict which arises between teaching good dental health habits and beautifully prepared "junk-food" advertisements, particularly on television. The recent Senate Committee Report, "Television and the Child" refers to these anomalies.

Returning to the "Toothbrush Family", the series which is currently showing on television in a number of States represents a real break through in dental health education of children. The series gives a very vital back-up to the message which is being taught through some 650 school dental clinics in Australia. Dental staff in the States have told me of their great appreciation of the series which I am sure must have a very real impact on children and probably also on older members of the family.

It is obviously a very difficult task to change peoples basic attitudes and values. It calls for a continuing effort on as wide a base as possible.

Judging from early results of our extensive clinical evaluation of the School Dental Scheme, and also for other reasons, I believe attitudes to dental health are changing for the better. While we will never know the answer, I feel the "Toothbrush Family" can accept some credit for that.

Thank you again for your help and interest in the School Dental program.

With kind regards,

Yours sincerely,

(L.M. Carr)
Assistant Director-General
Dental Health Branch
SUPERFICIALLY, there's nothing too different about Marcia Hatfield. She's a widowed mother of four children and works to support her family.

But when the history of Australia's TV industry comes to be written, Marcia Hatfield will surely go down as a pioneer.

This is because she's done what no Australian had done before her. She created an original idea and broke into the giant American TV market with it.

Marcia now has one animated feature series screening as part of America's most widely watched children's TV program. The feature series is adapted from her own Toothbrush Family books, and is produced by her own company, Roymark.

While the animation for the first Toothbrush Family series was done in Canada, the second series will probably be made in Australia, as will an entirely new series, Kangaroo the Roo Bird, again based on one of Marcia's books.

And work on an animated TV special for the U.S., called The Rabbit Dazzle Big Smile Palace, is already under way in Australia.

Marcia's achievement is not simply in selling to American TV – Australian animation has screened before on American TV, and there is at least one Australian animation company that regularly supplies features to the U.S. (adaptations of well-known children's stories).

Marcia's achievement is that all her material is her own, original, creation, and that she retains control of it.

These days she is retained by a large U.S. agency to develop new concepts for children's TV in that country.

And in a delicious irony, her first Toothbrush Family series is now screening in Australia (on the Nine network) before being shown on American and Japanese TV.

Newspapers prophesied last year when Marcia made her first sale to the U.S. (she'd peddled her ideas around Australian networks for years, to no avail) that she'd be a millionnaire before 12 months were out.

Not so, says Marcia.

With a little bit of luck, she'll make a modest profit after covering her enormous development costs.

The business world of entertainment is as cut-throat as any, and it's littered with people who claim to have once had a great idea — out of which somebody else made money.

Marcia Hatfield found it necessary to mortgage herself to the hilt to protect her interest in her own creation. Some of her expenses included: the big American publicity firm, retained to drum up interest and awareness in Marcia's product; the patent attorneys who secured her world-wide copyright; travel expenses involved in two trips to the U.S. and Canada, one of which was partly paid for by a travel grant.

Meanwhile, in Australia, there was her family to look after and feed.

According to Marcia, there were three people who made her success possible — her accountant, lawyer and her bank manager.

She attributes her final success to being "stubborn and bloody-minded."

"I had to find out whether my idea was as good as I thought it was — as good as my friends kept telling me it was," she said.

The Toothbrush Family originated as a series of stories Marcia devised to encourage her own children to clean their teeth.

Some years ago The Toothbrush Family stories were published as a book, and issued as talking stories in cassette form.

Marcia Hatfield, who has worked in journalism, public relations and advertising, moved into TV and movie scriptwriting, working on adult series, such as Homicide, Sound of Music, Number 96 and Certain Women.

But her main interest has been in children's series, such as ABC-TV's cartoon series, Eddie's Alphabet, Yellow House, Phoenix Five, and Jolly Swagman.

She's received Australian and overseas awards for her scripts for the children's films, Story of the Southern Cross and Molala Haral. And she's the Australian Writers' Guild representative on the Australian Council of Children's Film and Television.

For the past three and a half years she's been concentrated on promoting The Toothbrush Family.

Now, with success within her grasp, Marcia Hatfield has joined forces with the Rep Grundy Organisation, which will help with future projects and the merchandising of dental care products associated with The Toothbrush Family.

Why is it that Marcia Hatfield, having established a place for herself in the U.S. TV industry — the Mecca to which most of those engaged in the Australian industry turn — is not actually living in the U.S.?

For the petite creator of TV fantasies, the answer is simple. "I'm an Australian."
11th October, 1974

Mrs. M. Hatfield,
1 Oswald Street,
Cremorne, N.S.W.

Dear Mrs. Hatfield,

At its meeting last night the Foundation’s Executive Committee gave consideration to your request for permission to use the Foundation's "Toothbrush Song" in your children's story book and record series "The Toothbrush Family".

As a result of the Committee's deliberations it was resolved that you be granted permission to publish and/or use the Foundation's "Toothbrush Song" in conjunction with your "Toothbrush Family" series, subject to the Dental Health Education and Research Foundation receiving full credit in all instances.

Yours sincerely,

[Signature]

James M. Woolley
Executive Director.
فیلم کارتونی برای آموزش بهداشت دندان

"Toothbrush Family" brings dental health to children. (Sydney)
LA FAMILIA CEPILLO DE DIENTES

Esta familia tiene salud dental a los niños. Aquí te presentamos a algunos de sus miembros: Héctor, cepillo de aleta; Bart, cepillo de pelo el abuelo, cepillo de dientes; Pete, secador "el Malo", Bob, el cepillo eléctrico, y Cecilia, abuela.


Los cuentos de la Señora Harfield están casetando bíceps dental a millones de niños que siguen con interés las épicas del "Cepillo Categórico" dos veces a la semana. El programa se ve en más de dos millones de hogares en los Estados Unidos.

La Señora Harfield creó una gira mundial del mundo en octubre de 1977, está negociando la venta de las series en Gran Bretaña, Europa y Japón. Agradeció la ayuda que ha recibido de las autoridades dentales tanto de Australia como internacional.

El programa de telévisión está patrocinado por la Asociación Dental Americana. La Organización Mundial de la Salud quiere que se haga un estudio para valorar los beneficios que ha traido el programa.

Por GUADALUPE LARA.
TOOTHBRUSHERS SONG

TUNE: Three Blind Mice

Brush your teeth Round and round Cir--cles small Gums and all A
small soft toothbrush the round and round way Will keep your gums healthy and stop tooth decay So

clean very carefully three times a day Go round and round ... round and round.

Bottom Teeth - Small circles - brushing up from the gums

Top Teeth - Small circles - brushing down from the gums

Chewing Surfaces - Brush back and forth

DENTAL HEALTH EDUCATION & RESEARCH FOUNDATION