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# QUESTIONS AND ANSWERS ON THE CARE OF CHILDREN'S TEETH

Distributed by

THE BUREAU OF PUBLIC RELATIONS
AMERICAN DENTAL ASSOCIATION

222 E. Superior St., Chicago 11, Ill.

# Questions and Answers on the Care of Children's Teeth

By

The American Society of Dentistry for Children

Approved by the
Public Relations Committee
Council on Dental Health
American Dental Association

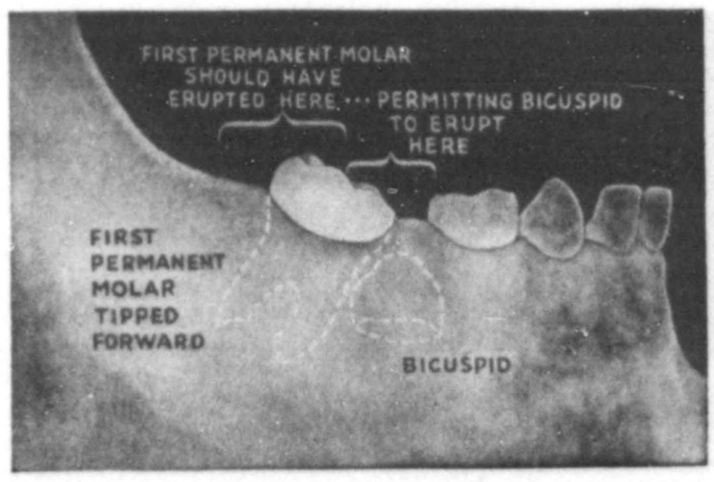
Cover photograph by
Harold M. Lambert Studios

1. *Q. How many teeth does one have?*

A. Usually, two sets of teeth are acquired during one's lifetime: the primary, often called baby, deciduous or first teeth, of which there are twenty, and the secondary, or permanent teeth, of which there are usually thirty-two. In some persons, one or more of these teeth may be absent.

2. *Q. Why is it important to fill and keep the teeth of the first set?*

A. There are several good reasons why these teeth should be given the very best of care:




Drifting teeth.

1. The child needs these teeth for chewing his food; and he cannot masticate thoroughly with decayed and infected teeth.

2. Growth and development of the jaws and the face are often disrupted by the too early loss of the primary teeth. When a tooth is lost too early, the teeth behind it tend to drift forward into the

space and an irregularity of the second or permanent teeth often results. The primary teeth, by maintaining the space, act as guides for the permanent teeth that succeed them.

3. Good care prevents toothache and possible infection.

3. *Q. What are the advantages of going to the dentist at frequent intervals instead of every two or three years?*

A. Regular and frequent visits to the dental office enable the dentist to discover new cavities at an early stage, as well as to find other signs of disease which, if left untreated, can do irreparable damage. Small cavities can be filled more quickly and inexpensively than large cavities. Early dental treatment may prevent pain and serious complications, as well as the loss of teeth, with resultant disfiguration.

4. *Q. Isn't it easier for a dentist to fill a child's tooth than an adult's tooth?*

A. The steps taken to fill a child's tooth are essentially the same as those taken in filling an adult's tooth. Generally speaking, primary teeth are really more difficult to fill because of the smallness of the tooth and the nearness of the pulp (nerve) to the outside surface of the tooth. In addition to this difficulty, the dentist has to work in a small mouth, in a patient who is frequently unable to hold his tongue still or to sit quietly for periods sufficiently long to prepare and place a filling.



5. *Q. Is it true that broken-down first teeth should not be extracted because the tooth will save the space for the permanent tooth?*

A. A healthy tooth is nature's space maintainer, but an infected tooth can be a menace to health, the adult's or the child's. A general rule is, "If the tooth cannot be properly treated and filled, it should be extracted."

6. *Q. Which is better, tooth paste or powder?*

A. The choice depends in a measure on individual likes or dislikes. Paste and powder are usually similar except for the material added to the powder to make it into a paste. Select one which bears the Seal of Acceptance of the American Dental Association.

7. *Q. Can one make his own tooth powder?*

A. Yes, a good homemade tooth powder can be made from one part of finely pulverized table salt and three parts of baking soda.

8. *Q. Does it do any good to take calcium (in tablet form) for one's teeth?*

A. According to certain authorities, the best form of calcium is that which comes from our daily diet. One authority states: "If every child got a quart of milk and every adult a pint daily,

with a reasonably good selection of food for the rest of the diet, all the calcium and phosphorus requirements of normal nutrition would be met." By 12 to 16 years of age, in the average child, the formation of the crowns of the permanent teeth will have been completed. Once the teeth are formed, calcium is of no use to them, but it is still important for proper bone formation.

9. *Q. Does gum chewing help or harm the teeth?*

A. It is often said that gum chewing supplies needed exercise for teeth and jaws and provides healthful stimulation to the gums. There is no scientific evidence of the truth of this statement, but there is evidence that the sugar in chewing gum does contribute to dental decay in susceptible persons.

10. *Q. Does filling the primary teeth weaken the second teeth?*

A. No, careful operations on the primary teeth cause no reaction in the second teeth.

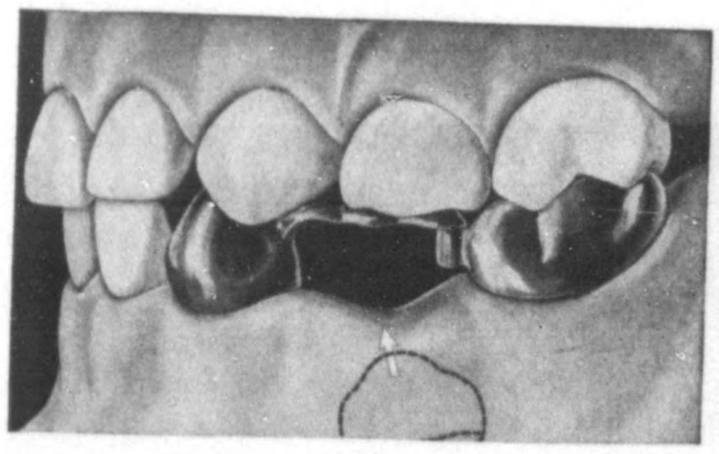
11. *Q. Should a primary tooth be removed when it appears that there will not be room enough for the second teeth to erupt?*

A. No, not as a rule. Because the primary teeth are usually smaller than the teeth that succeed them, their presence tends to stimulate the jaw to grow and thus make room for the second teeth. A dentist should be consulted.



12. *Q. Should a primary molar tooth that is lost several years too soon be replaced with a space maintainer?*

A. Sometimes the space caused by the premature loss of a baby molar does tend to close unless a space maintainer is used. Measurements should be taken by the dentist when the tooth is first lost, and regularly thereafter, to determine whether the space is becoming smaller. If it is evident that it is, a space maintainer should be inserted.



A space maintainer.

13. *Q. What causes black or green stain on children's teeth?*

A. Stains appear on the teeth of many children and young people. They occur in the mouths of healthy as well as unhealthy children. Their cause is not known, and they may reappear shortly after they have been removed.

14. *Q. What should one do if the central incisor tooth of a child 8 years old is broken accidentally?*

A. Since each fractured tooth is an individual problem, no definite plan of

treatment can be advised. The child should be taken at once to a dentist, who will examine the tooth with the x-ray and probably place some medicated cement over the sensitive part of the fractured tooth. Frequently, if no protection is given to the tooth when it is broken, the pulp dies, and the tooth may then have to be removed. Sometimes it is only necessary for the dentist to smooth the rough edges of the break. If the fracture is a serious one, it may be necessary, for protection of the pulp of the tooth from further injury, to cement over the broken edge of the tooth a band similar to the ones used when teeth are straightened.

15. *Q. What should be done about a wide space between the central incisor teeth of an 8 or 9 year old child?*

A. First of all, a dentist should be consulted. Usually, nothing need be done to bring these teeth together at this age, because the other permanent teeth, as they appear, usually push the central teeth together and thus provide self-correction.

16. *Q. Should something be done about the so-called "saw-edge" on the newly erupted incisor teeth?*

A. No. As a rule, when these teeth are in proper position, the pointed cusps begin to wear down as the child grows older, and the normal smooth "edge" is left.

17. *Q. Will such natural sweets as*



*honey and maple syrup contribute to tooth decay as refined sugar and candies do?*

A. A research group at the School of Dentistry, University of Michigan, has demonstrated that there is little difference between natural sugars and refined sugars, as far as tooth decay is concerned.

18. *Q. Will brushing the teeth immediately after eating sweets help to prevent decay?*

Candy, cake, jelly.

A. Yes, although even the most careful brushing cannot remove all the sugar from the places where decay most frequently begins.

19. *Q. Is not some sugar necessary for the balanced diet?*

A. Specialists in nutrition tell us that the diet of the average American is overbalanced on the side of sweets. Conse-

quently, the reduction of an excess of sugar such as is found in candy, jelly, frosting and syrups will help to make possible a better balanced diet.

20. *Q. Does a first permanent (six-year) molar tooth often have a cavity in it only a few months after it appears in the mouth?*

A. This tooth, like all teeth, grows from several different lobes or points, and these lobes unite to form the complete crown of the tooth. In the molar and bicuspid teeth, fissures normally remain after the tooth is fully developed. These fissures are caries-susceptible.

X-ray picture.

21. *Q. Should x-ray pictures be taken of children's teeth?*

A. Yes, as often as, or even more often



than, adults' teeth in order to discover disease conditions and to follow up the development of the tooth germ. Also, x-ray pictures of a child's mouth will show whether the permanent teeth are present and in proper position, and whether there are beginning cavities between the teeth. X-ray pictures will also disclose any supernumerary teeth that may be present.

22. *Q. Is thumb-sucking harmful?*

A. Most authorities, both dentists and child psychologists, agree that such undesirable habits as this one should be discouraged as soon as possible.

Child in dental office.

23. *Q. When should a child first be taken to the dentist?*

A. The child should pay his first visit to the dentist when all twenty primary teeth are present in the mouth, usually between 2 and 3 years of age. Even

though no cavities may be present at this time, it is wise to initiate a child into the routine of regular prophylaxis and examination in order to prevent later trouble.

24. *Q. If the primary teeth are poor will the second ones also be bad?*

A. Not necessarily. The second teeth are formed after the baby is born. If the child has an adequate diet after birth, these teeth should at least be well formed.

25. *Q. What is a gum boil, and why does it occur?*

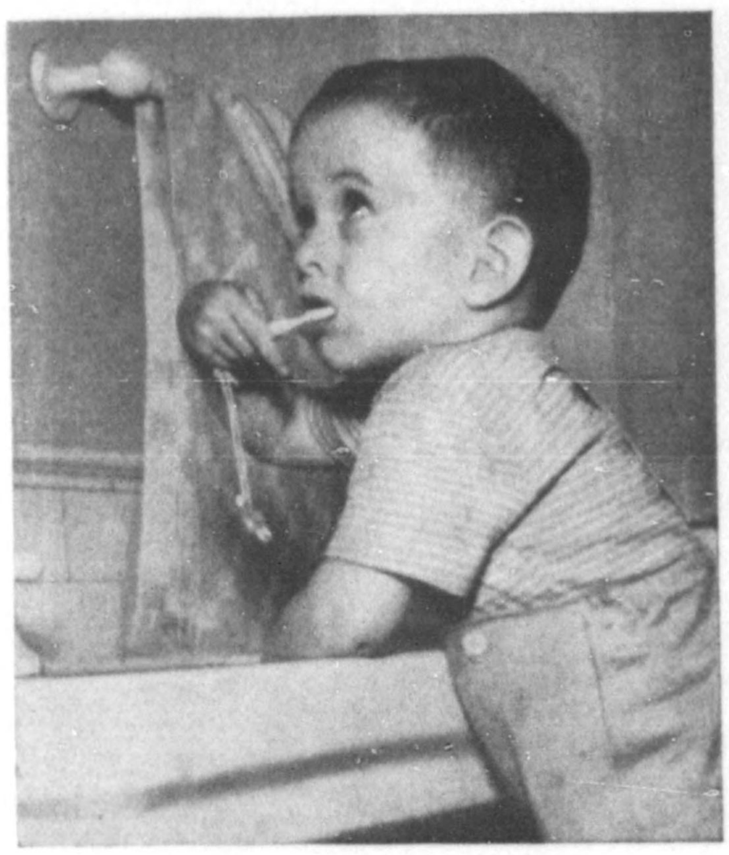
A. With the death of a pulp, which is found inside each tooth, from injury or tooth decay, decomposition sets in because bacteria are attracted to the dead tissue. Gas forms and forces its way through the end of the root, and the bone around the end of the root becomes infected. An abscess forms and, as pus collects, it works its way through the bone and distends the gum similarly to a boil.

26. *Q. At what age should a child start using a toothbrush? Should the parent help the child brush his teeth?*

A. A child should start as soon as all the primary teeth have erupted, which is about 2 or 2½ years of age, and the parent will have to do most of the brushing for some time. It is a good idea to let the child brush his own teeth, the parent going over them after him. Thus, the child is forming a habit of regular



toothbrushing while the parent is actually keeping the mouth clean.



Child with toothbrush.

27. *Q. How often should a child be brought to the dentist?*

A. It is impossible to set down a definite rule as to the times at which a child should visit the dentist since children, like adults, vary in mouth cleanliness and susceptibility to tooth decay. Each child must be judged individually. In general, it is desirable that the dental visits be made at least every six months. At grammar school age, and particularly teen age, the dental visits should be made at four-months intervals.

28. *Q. What is the proper age at which to begin straightening the teeth?*

A. It is advisable to consult an orthodontist as soon as any irregularities are noticed, because many conditions must be taken into consideration before such

**Dates of Eruption of Deciduous Teeth (Approximate)**

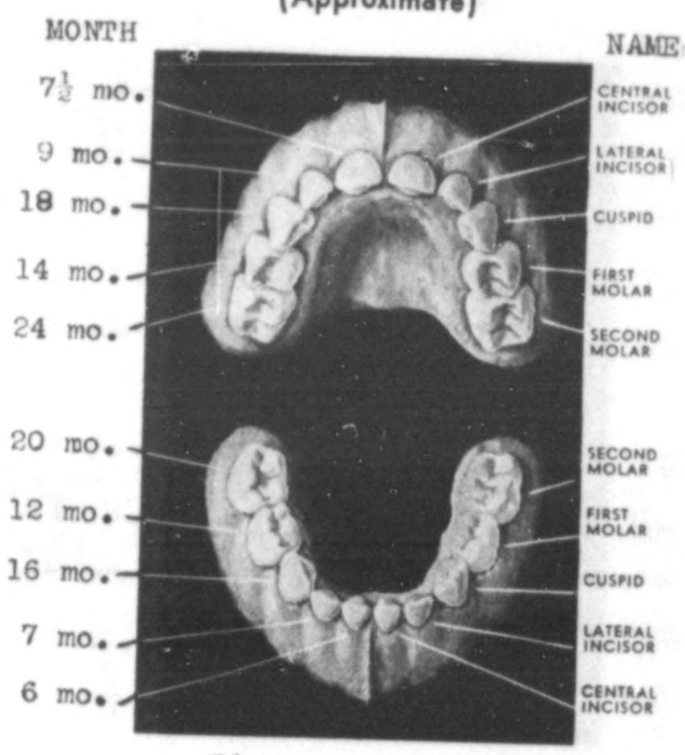



Chart of twenty deciduous (first) teeth

treatment is begun. Some cases need treatment when the child is only 3 years of age.

29. *Q. If a child's teeth seem to be slow in erupting, what should be done? Should the gums be lanced?*

A. Slow eruption may be familial, constitutional or a symptom of a systemic condition. The cause should be discovered before treatment is attempted.



The lancing of the gums is usually not indicated. Frequently, gums that have been lanced heal before the tooth comes through, and then it may be doubly hard for the tooth to erupt because the scar tissue is usually tougher than ordi-

**Dates of Eruption of Permanent Teeth (Approximate)**

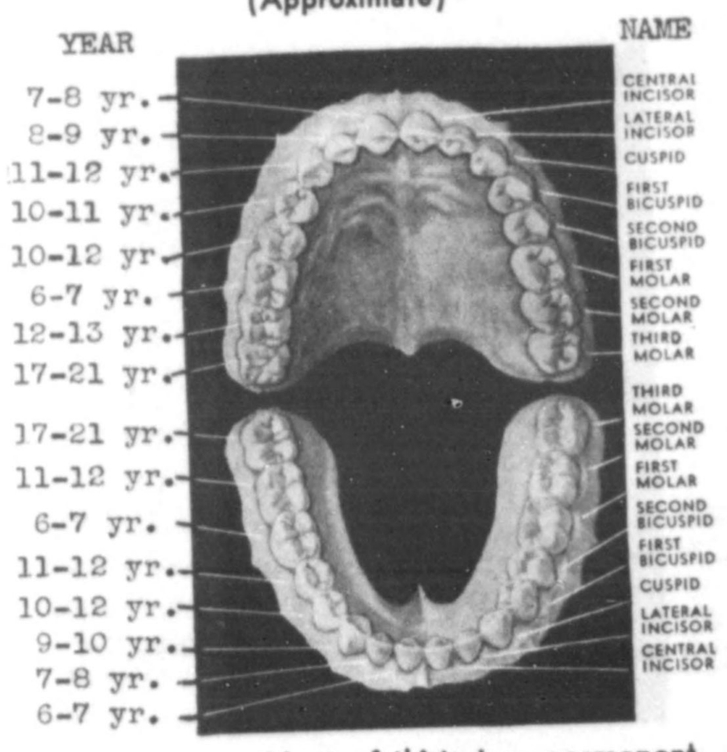



Chart of thirty-two permanent (second) teeth

nary tissue. Such cases should be kept under observation by the dentist.

30. *Q. When do the primary teeth come into the mouth?*

A. See illustration on page 14.

31. *Q. When do the permanent teeth come into the mouth?*

A. See illustration on page 15.

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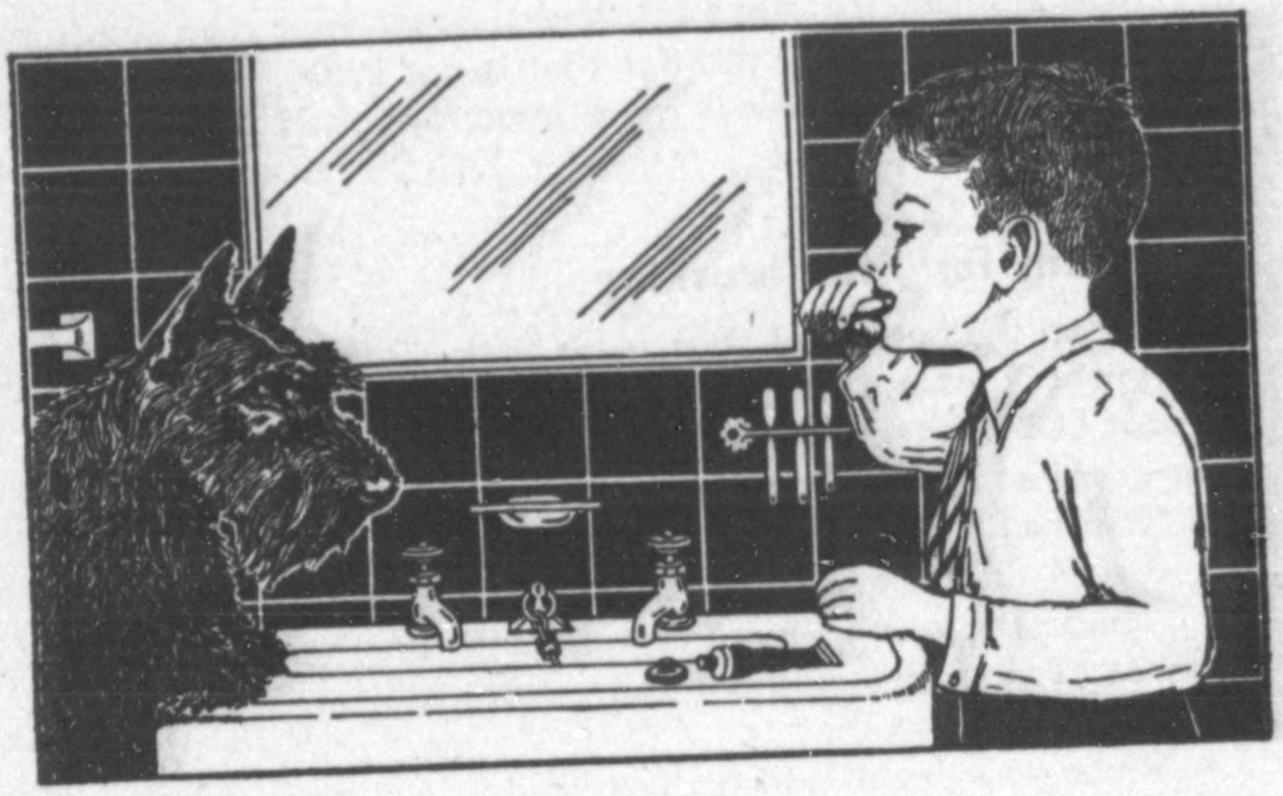
# THE HOME CARE OF YOUR TEETH



Everyone will like to see you smile if you have clean and shining teeth. If you give them the best of care, they will not only look nice but will help to keep you well.

Brush your teeth every morning before leaving for school and every night just before going to bed.

## Daily Care

The best daily care for teeth is to brush them after each meal. Toothbrushing makes your teeth shine and keeps your gums firm and pink, and your breath sweet.

Use a small, stiff toothbrush that is all your own, with a little salt, toothpaste, or powder that is not gritty.

The WAY you brush is more important than the paste or powder you use.

## Directions for Toothbrushing

Brush the outside of your teeth first. Put your brush well up on your gums and brush DOWN on your UPPER teeth and UP on your LOWER teeth with short quick strokes. This massages your gums and cleans your teeth.

Use just the motion of your wrist, not of your whole arm.

Brush the inside of your teeth in the same way.

Then, open your mouth wide and brush the chewing surfaces of your molars in and out.

Rinse your mouth.

Rinse your brush and hang it to dry in a clean place and once a week sprinkle it with salt and put it in the sun to clean it and stiffen the bristles.

If you cannot brush your teeth at noon eat something chewy, like an apple, and rinse your mouth thoroughly.

If your gums bleed or if there are stains on your teeth that do not come off with toothbrushing, see your dentist.

*Endorsed by*
*Dental Advisory Committee*

**MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH**
**Room 546, State House, Boston**

PUBLICATION OF THIS DOCUMENT APPROVED BY THE COMMISSION ON ADMINISTRATION AND FINANCE

20m-12-45-17571

The Commonwealth of Massachusetts

# The Mother's Teeth

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH
*Division of Child Hygiene*

PUBLICATION OF THIS DOCUMENT APPROVED BY THE COMMISSION ON ADMINISTRATION AND FINANCE

50M—7-41—6708

The expectant mother, especially, needs to have her teeth well cared for, not only for her own benefit but to help protect the baby. The following suggestions are important during pregnancy:

1. See your physician as soon as you know you are pregnant and see your dentist after seeing your physician. If you do not have a dentist ask your physician to whom you could go.

2. When you go to the dentist tell him when you expect your baby. He may want you to have an X-ray of your teeth. If possible, do have this X-ray as it is the only way to be sure that every tooth is free from abscess. Abscessed teeth are dangerous for both you and the baby and they are usually painful and cause you to lose hours of needed rest. The X-ray will also reveal hidden cavities in time to prevent toothache.

3. It is, of course, better to have all dental work done early in pregnancy but it is not impossible to have it done later if it is necessary. Ask your physician to talk with your dentist if you need to have any extractions done.

4. It is a good plan to see your dentist every three months. If he needs to see you oftener he will tell you so.

5. If you should have any vomiting during pregnancy, wash your teeth very carefully each time and rinse your mouth with an alkaline mouth wash. This will help to protect the teeth and gums from acids that might harm them.

6. Especially during pregnancy it is a good plan to brush the teeth after every meal.

7. Milk contains the necessary minerals for good teeth; and raw fruits, especially oranges and tomatoes, vegetables, butter, and eggs contain the vitamins. Eat plenty of these foods so that the baby's first teeth, whose crowns are all formed before he is born, will not be soft and poorly shaped and so that your own teeth and gums will be healthy.

8. After your baby is born, see your dentist as soon as you feel able, to make sure your teeth are all in good condition.

9. Your child should visit a dentist as soon as there are 20 baby teeth in the mouth. Usually this is between two and three years of age.

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*(August, 1944)*

NATIONAL DENTAL HYGIENE ASSOCIATION
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Washington 5, D. C.

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Subscriptions $1.00 per year ($1.25 outside U. S.)

**FACTS ABOUT TEETH AND THEIR CARE**—New illustrated edition, 16 pp. A booklet of essential factual information for nurses, teachers, hygienists, and others engaged in dental health education or for anyone writing or speaking on care of the teeth. Particularly valuable for high school teachers.
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**HOW TO SAVE TEETH—AND MONEY**—A short, practical question-and-answer leaflet for parents containing all essential information about children's dental health.
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**COMMUNITY COMMITTEES FOR DENTAL HEALTH**—For use by those directly concerned with the formation of community dental programs (not for general distribution). Free.

**BETTER CHECK UP**—A leaflet designed to encourage citizens to give attention to the care of their own teeth and those of their family. Primarily for distribution to employee groups.
50c per 100; $4.00 per 1,000.

**WITHOUT WARNING**—Striking facts about the deplorable dental conditions in America. Designed to encourage lay organizations to participate actively in dental health programs.
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## OTHER RECOMMENDED LITERATURE

**(Order Direct from the Sources Indicated)**

### Books:

American Dental Association. *Teeth, Health, and Appearance.* American Dental Association, 222 East Superior Street, Chicago, Illinois, 1940. $1.50.
This profusely illustrated, popularly written book gives practical advice on common dental problems. Approved by the United States Public Health Service.

Brekhus, P. J. *Your Teeth: their Past, Present, and Probable Future.* University of Minnesota Press, Minneapolis, Minn., 1941. $2.50.
Written in readable style and well illustrated, this book reviews practically all the known facts and theories about teeth.

Irwin, Vern D., and Wilson, Netta W. *An Evaluation of Dental Health Literature.* Bruce Publishing Company, 2642 University Avenue, St. Paul, Minn., 1942. $1.00.
Discusses nearly 2,500 factual, fallacious, and controversial statements in current dental health literature. A valuable booklet for teachers of all health subjects.

McCall, John O. *Fundamentals of Dentistry in Medicine and Public Health.* Macmillan, New York, 1938. $2.75.
Fundamental facts about teeth in health and disease. A book of special value for public health nurses, health educators, school physicians, and students.

Massler, Maury, and Schour, Isaac. *Atlas of the Mouth.* American Dental Association, 222 East Superior Street, Chicago, Ill., 1944. $2.50.
An excellent reference book for teachers, nurses, physicians, and high school or college students of the biological sciences. The text is somewhat technical, but the illustrations are clear and helpful.

### Pamphlets:

Cady, F. C., and Knutson, J. W. "Good Teeth." United States Public Health Service, 1940. For sale by Supt. of Documents, Washington, D. C. 5 cents.
A brief and authentic presentation of the main facts on dental health.

Cady, F. C., and Pelton, W. J. "The School Child's Teeth." American Dental Association, 222 East Superior Street, Chicago, Ill. 5 cents.
Describes an effective dental health program for school children.

Davis, William R. "What is the Truth About Teeth?" American Dental Association, 222 East Superior Street, Chicago, Ill. 5 cents.
Gives, in brief form, the main facts about the structure, development, and necessary care of the teeth.

Drenckhahn, V. V., and Taylor, C. R. "Your Child's Teeth." American Dental Association, 222 East Superior Street, Chicago, Ill. 10 cents.
A reliable, well-written, illustrated pamphlet, for parents and teachers of children from preschool through elementary school ages.

Morris, Emory W. "How Early Should Dental Care Begin?" American Dental Association, 222 East Superior Street, Chicago, Ill. 5 cents.
Discusses prenatal care, also dental care for young children.

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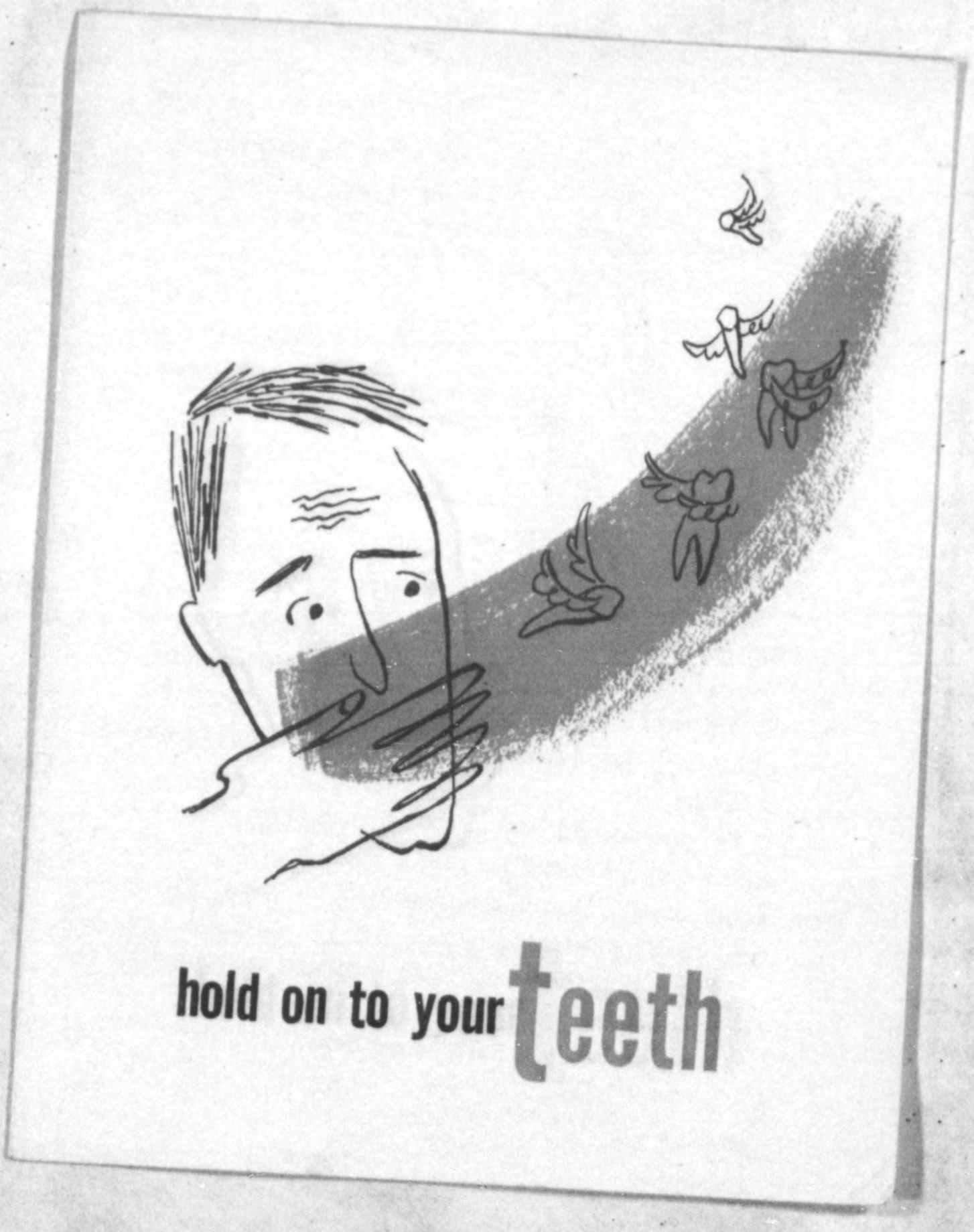

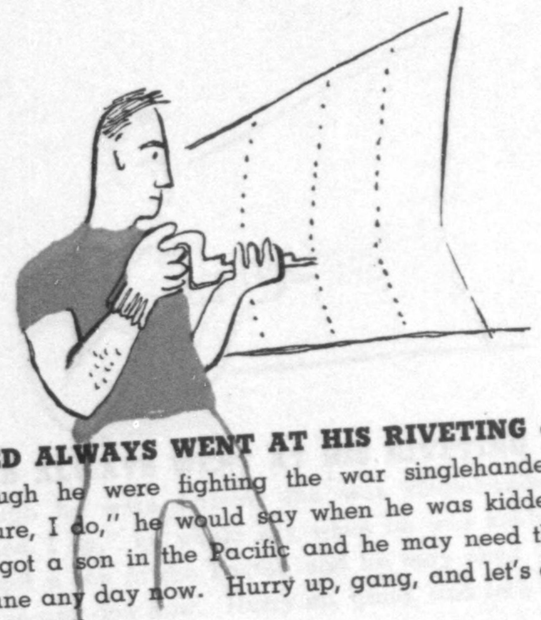

**ED ALWAYS WENT AT HIS RIVETING** as though he were fighting the war singlehanded. "Sure, I do," he would say when he was kidded, "I got a son in the Pacific and he may need this plane any day now. Hurry up, gang, and let's get it to him."

But one day Ed had to quit a rush job and go up to the nurse, holding his jaw. "Honest nurse, I hate to let the job down, but a guy can't work with a galloping toothache."

"Ed, is that the same tooth that was hurting you two weeks ago?"

"It sure is, only it hurts worse now."

"Did you go to the dentist?"

"No, it stopped aching."

"Ed, you're being positively dumb about this toothache. What you're doing is *letting your teeth down.*"

"You wouldn't kid a guy with the toothache, would you? How can you let your teeth down?"

**"You Don't Go to the Dentist Regularly.** You go when your tooth aches so bad you can't stand it. You expect him to stop the ache and save the tooth. But the responsibility is yours—you let the tooth decay."

"I didn't know it was decaying."

"The dentist would have known. It's his business to find decay early and stop it. It's your business to go to the dentist."

"I'm sure going now."

**"I'm a Reformed Character,"** Ed told the nurse next day. "From now on it's me for the dentist every six months. That sure was a good guy I went to. He told me all about this

tooth disease called dental caries, how it first makes a decayed spot so little you don't notice it. That's why he pokes around in your mouth with that little pick and mirror. It's a magnifying mirror. After he got through talking, I understood what you meant by letting my teeth down. I got two or three other teeth with holes in them. Gosh, I don't want to lose my ivories. I don't want that corn on the cob smile with a tooth gone here and a tooth gone there. It would spoil my beauty."

**Do You Want a Smile** full of teeth or a smile full of gaps? Your ivories can make or mar your appearance. And they work for you every meal every day of your life. They get the food ready for your stomach to do its job of digestion.

**Teeth Have Troubles.** Dental caries is the main tooth disease. It makes them decay and ache. If the decay goes on too long, you will lose the tooth. Very often the roots of decayed teeth get abscessed. The pus from an abscess may make you sick somewhere else in your body. *Pyorrhea* may sneak up on you and loosen your teeth. *Gingivitis*, or sore gums, may make eating a pain.

**Take Your Teeth to the Dentist Regularly.** He's trained in tooth and mouth troubles. Go as often as he says you should. Regular care by the dentist is the only way you have of protecting your teeth. Regular care is cheaper than fix-up jobs on teeth that have gone bad.

Some people will have to go oftener than others because their teeth are more liable to decay. And don't forget—there are many diseases of the mouth that don't attack the teeth. Your dentist knows how to treat those troubles, too. People in certain occupations are liable to more mouth trouble than others. Among these are people who work with lead, mercury, radium, acids and other chemicals—and those in dusty trades.

**Maybe You Know of Somebody's Grandpop** who lived to be 90 without ever going to the dentist and all his teeth stayed sound and white. Don't let that keep *you* away from the dentist. Only a few lucky people escape dental caries. It's a question why some escape and some don't. Check up on *your* luck regularly with the dentist.

**You Owe It to Your Teeth.** You owe your children tooth protection. Start them going to the dentist when they are 2 or 3 years old. Taking care of the first teeth will guard the second teeth.

**Brushing Isn't Enough.** You brush your teeth for the same reason that you wash your face. You look better and feel more self-respecting if you are clean. *But you can't scrub out decay.*

**You Can't Eat Your Way** to healthy teeth. Fruits and vegetables full of vitamins are good for your health. So are milk, eggs, butter and cheese, meat, fish, and whole wheat or enriched bread. Beware of too much sugar! Well balanced meals will help your total health. But to hold on to your teeth, you must go to the dentist.

**Dentists May Be Scarce** in your town. Many dentists have closed up their offices and gone into the Army and Navy. People have to wait a little longer than they did before for appointments. In some places workers and employers have talked things over with the dental societies and arranged for evening office hours for workers.

**Companies and Labor Unions** are getting more interested in the mouth health of workers. Some plants have a dentist on the health staff. In some plants, the workers pay regular fees for dental service. In others, payment is made by their sick-benefit associations. A few plants give dental care as part of the medical service.

**Make a pal of your dentist**
**and hold on to your teeth!**

**Workers' Health Series**

No. **1.** But Flu Is Tougher
No. **2.** Leonard's Appendix—And How It Burst
No. **3.** KO by CO Gas
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No. **10.** What You Don't Know CAN Hurt You
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FEDERAL SECURITY AGENCY
U. S. PUBLIC HEALTH SERVICE

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# A DENTAL HEALTH GUIDE

*For Teachers and Parents*

Distributed By
Georgia Department of Public Health
Through Courtesy of
American Dental Association

AP—10,904

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## NUTRITION AND DENTAL HEALTH

Teeth in the formative stages are sensitive to the many conditions that affect growth and health. An adequate diet is needed at all ages, and particularly during the growing and developing years.

Some foods are more nearly adequate than others for protecting health and promoting growth. They are called the "protective foods" and they should form the basis of meal planning. These foods include milk and milk products, vegetables and fruits, whole grain cereals and breads, eggs and lean meat, poultry and fish. In some sections of the country, iodized salt and, in most areas, fish liver oils may well be added to these foods.

An adequate diet will contain a sufficient amount of foods rich in carbohydrates, without the addition of large amounts in concentrated form, such as would be found in candies, jams and jellies.

In the dental field, many research workers agree that there is a relationship between eating candy or excessive amounts of sugar and dental caries. By restricting the use of sugar in the diet, it has been possible to control dental caries.

Special effort should be made every day to include raw or crisp foods requiring chewing, such as head lettuce, celery, raw fruits, raw carrots, raw cabbage, hard toast and bread crusts.

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2. Eating plenty of nourishing foods.
3. Eating some coarse foods that require chewing.
4. Getting plenty of fresh air and sunshine and also plenty of rest.
5. Visiting the dentist at least twice a year for a dental examination. He is your friend and will advise you as to what is needed.

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5. Mouth breathing.
6. Thumb, lip, finger or tongue sucking or biting.

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TEACHERS AND PARENTS

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The Bureau of Public Relations
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TEETH IS A *HANDICAPPED* CHILD

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The loss of even one of the first permanent or "sixth-year molars" may cause the other teeth to shift their positions; which may destroy the natural appearance and beauty of the child. The first permanent molars should be examined by a dentist just as soon as they erupt into the mouth, and they, as well as all of the other permanent teeth, should be preserved throughout life.

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The child should be taken to the dentist soon after all the baby teeth have appeared, at about the age of two and one-half or three years, and thereafter at least twice a year, or more often, for a dental examination. If decay is found early, the dentist can remove it with little or no pain and fill the cavity while it is small.

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To prevent this, even small defects in the teeth should be immediately corrected.

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# Diseases of the Gums and Other Supporting Tissues of the Teeth and Their Treatment

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THE BUREAU OF PUBLIC RELATIONS
AMERICAN DENTAL ASSOCIATION
222 E. Superior St., Chicago 11, Ill.

# Diseases of the Gums and Other Supporting Tissues of the Teeth and Their Treatment

By
Edgar D. Coolidge

Approved by the
PUBLIC RELATIONS COMMITTEE
AMERICAN DENTAL ASSOCIATION

Cover photograph by
HAROLD M. LAMBERT

AT birth, the infant has no erupted teeth and the bones that form the ridges from which the teeth are to erupt are covered with a thin layer of soft tissue called mucous membrane. Because the membrane is smooth and unbroken, and so offers little opportunity for food lodgment or for development of bacteria, there is seldom any difficulty in keeping the infant's mouth clean and healthy. At about the age of 6 months, the teeth begin to erupt, and usually by the twenty-fourth to the thirtieth month, twenty deciduous teeth have erupted.

As they erupt, the teeth pierce holes in the mucous membrane, a free border of the soft tissues, like a collar, remaining around the neck of the tooth. This collar is not firmly attached to the tooth, but fits snugly about the tooth neck, forming a shallow crevice or groove between the gums and the teeth. This is called the gingival crevice and the collar itself is called the gingiva (gin′-gi-va). It is this collar around the neck of the teeth that often becomes inflamed, the common condition known as gingivitis (gin′-gi-vi′-tis) resulting. (Fig. 1.)

## GINGIVITIS

Gingivitis is not commonly found in young children's mouths, but it is common in the mouths of adults and is occasionally seen during adolescence. The permanent teeth begin to erupt at approximately 6 years. At 16 years, there

should be twenty-eight teeth. Sometimes, the third molar teeth (wisdom teeth) have erupted by that time, the complete denture of thirty-two teeth then being present. Thus, there are thirty-two holes pierced through the mucous membrane when all these teeth have erupted. Also, there are thirty-two collars and thirty-two gingival crevices where saliva, often saturated with sugar and other food particles in solution, can continually seep in and out. Mouth bacteria of both the harmless and the harmful variety thrive and multiply in the food débris that lodges in the protected crevices between the gingivae and the teeth.

In the healthy mouth, where the gingival collar fits snugly against each tooth and the gum tissue is firm and pink, there is a maximum of resistance to infection and a minimum of bacterial growth. (Fig. 2.) Should the gingival collar become irritated by dental calculus (tartar) or by food lodged between the teeth, the mucous membrane forming this collar becomes thickened and swollen. As a result, the gums become soft and red (inflamed) and they bleed when brushed. In severe cases, they may bleed when pressed with the tongue. (Fig 3.)

Bleeding of the gums is a symptom of gingivitis, of which there are several forms. If the cause of the inflammation of the gum is the presence of dental calculus (tartar) on the teeth, the bleeding stops immediately when the calculus



is removed. Also, if caused by the packing of food between the teeth, inflammation can be cured by improving the contact of the teeth between which the food lodges. The contact can be improved by the insertion of an inlay or a filling. Sometimes, a crown must be constructed to bridge over the space where food continually lodges. Sometimes, the rough margin of an inlay or filling projects beyond the convex area of the tooth. This sharp edge irritates the gum and causes gingivitis in that area. Gingivitis

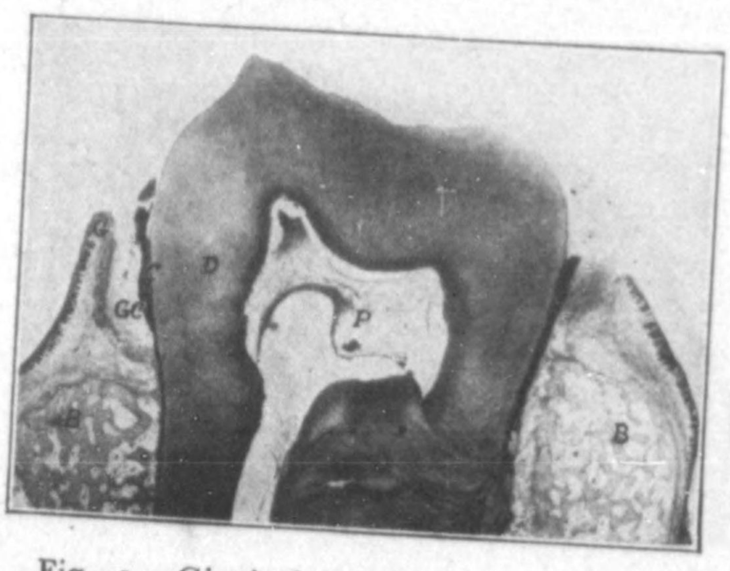


Fig. 1.—Gingival crevice of molar tooth (GC) filled with calculus (C) and infectious material. B, bone. D, dentin. P, pulp. G, gingiva. On the opposite surface of the tooth, no gingival crevice appears because the tissue is all attached to the tooth.

will continue as long as an irritating margin remains.

Bleeding of the gums caused by local irritation is usually quickly cured. Once the cause of the irritation is found and eliminated, the gums can be restored to

normal with very little treatment. Because the film of soft calculus deposit is often very sticky, persistent and correct brushing of the areas between the teeth with a stiff bristled toothbrush at least twice a day is required to remove the film. Interdental toothbrushing was popularized by W. J. Charters.[1]

The Charters toothbrushing method is advocated by many dentists who specialize in the treatment of gum conditions. The toothbrush is placed upon just two teeth at a time. The bristles are vibrated with a short, firm motion between the two teeth. The procedure seems a little awkward and slow at first, but soon one learns the technic, and finds that the teeth feel very clean and the gums tingle with a stimulated circulation, which keeps them vigorous and healthy. Each space between the teeth is brushed in this manner on both the buccal side (side toward the cheeks) and the lingual side (the side next the tongue) of the teeth. The brush is not given a long stroke, but a short vibratory stroke, with considerable pressure to force the toothbrush bristles into the spaces between the teeth.

Children and young adults rarely need to employ this toothbrushing method because usually, at an early age, the gums or gingival tissues completely fill the spaces between the teeth. In most instances, as middle adulthood is reached, the gingival tissues recede from the crowns of the teeth, vacant spaces remaining between the teeth to become lodging places for food and calculus. After the teeth have been brushed in this manner, the mouth should be flushed vigorously with water to remove all food particles and débris that have become loosened by the toothbrush. If the gums continue to bleed in spite of vigorous interdental brushing, the dentist should be consulted. Persistent bleeding of the



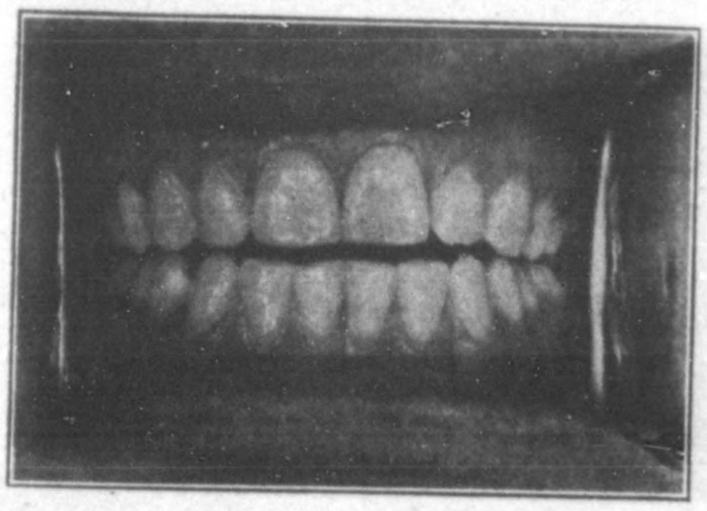

Fig. 2.—Healthy gingival tissue in woman aged 35. These tissues are in condition to resist infection.

gums in spite of thorough brushing of the teeth may indicate a mouth condition called Vincent's infection. This infection often becomes acute and painful when the general condition is not up to par and when the gums are not clean and healthy. The organisms that frequent the mouth become pathogenic under favoring conditions,[2] as when the resistance is low and the gums are soft and spongy.

While softening and bleeding of the

gums are usually the result of neglect or incorrect toothbrushing habits, there is some relationship between improper diet and soft gums. Nutrition, a broad subject, cannot be discussed in this article, yet everyone should realize that the gum

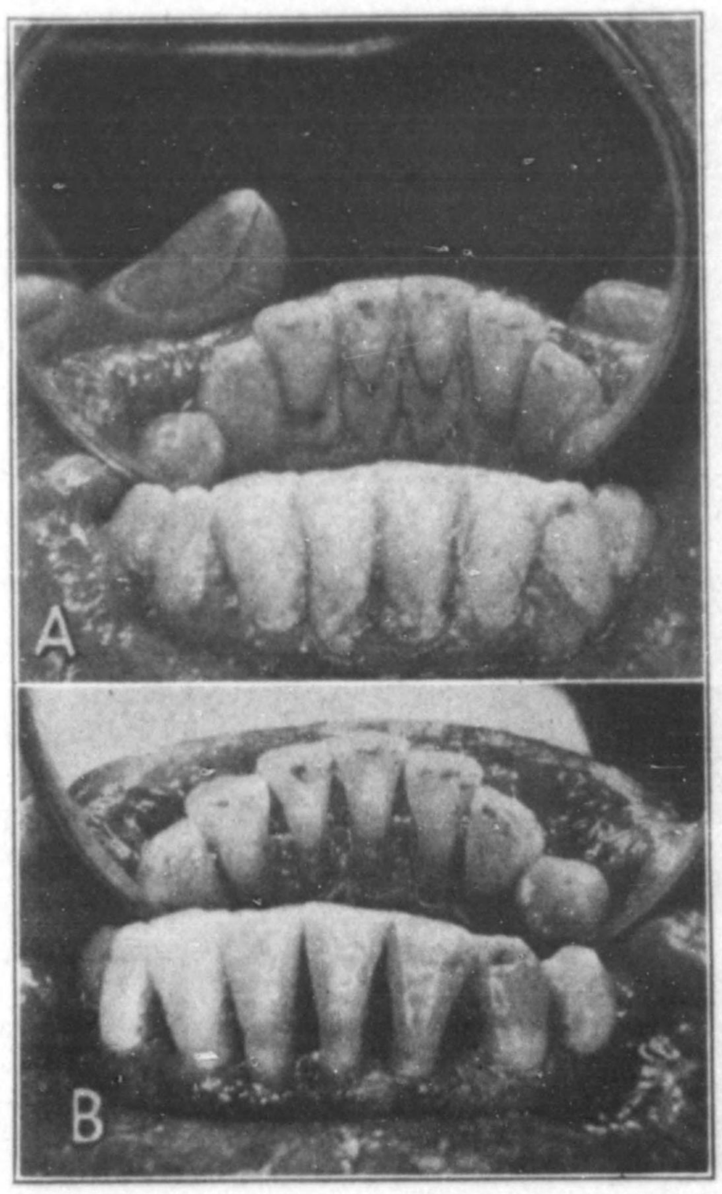


Fig. 3.—A: Teeth of middle-aged woman. Labial and lingual views show that the teeth are coated with dental calculus (tartar). B: Same teeth after scaling and removal of calculus, a common source of gingivitis and pyorrhea.



tissue requires certain foods to keep it vigorous and healthy, just as bone requires an adequate amount of calcium and phosphorus to keep it healthy. Every adult should know and every child should be taught that milk is needed for bone building all through life, and that grains, fruits and leafy vegetables, containing vitamins B and C, are needed daily for the health of the soft tissues, such as the mucous membrane of the gums and gingivae. Children who for economic reasons are denied essential foods are to be pitied, but children in moderate or well-to-do circumstances who are allowed to grow up with no desire for the essential foods are equally unfortunate. Usually, the latter group copy the wrong eating habits of their parents or are allowed to overindulge in candy and sweets, which destroys the appetite for essential foods.

### HYPERTROPHIC GINGIVITIS

Hy′-per-tro′-phic gin′-gi-vi′-tis is another form of gingivitis that is frequently seen during the early adolescent years.[3] It may also occur during pregnancy. In this form of gingivitis, the gums, or gingivae, become thick and protrude from between the teeth until they present an unsightly appearance. (Fig. 4.) As the tissue grows thicker and more protuberant, brushing becomes more difficult, and the food and soft calculus deposits are

permitted to remain around and between the teeth. The accumulating food débris and calculus irritate the gingivae and cause it to become inflamed. The inflamed gingivae become less resistant to harmful mouth organisms. The tissue soon becomes soft and spongy, and bleeds upon the slightest provocation, even when it comes in contact with food dur-

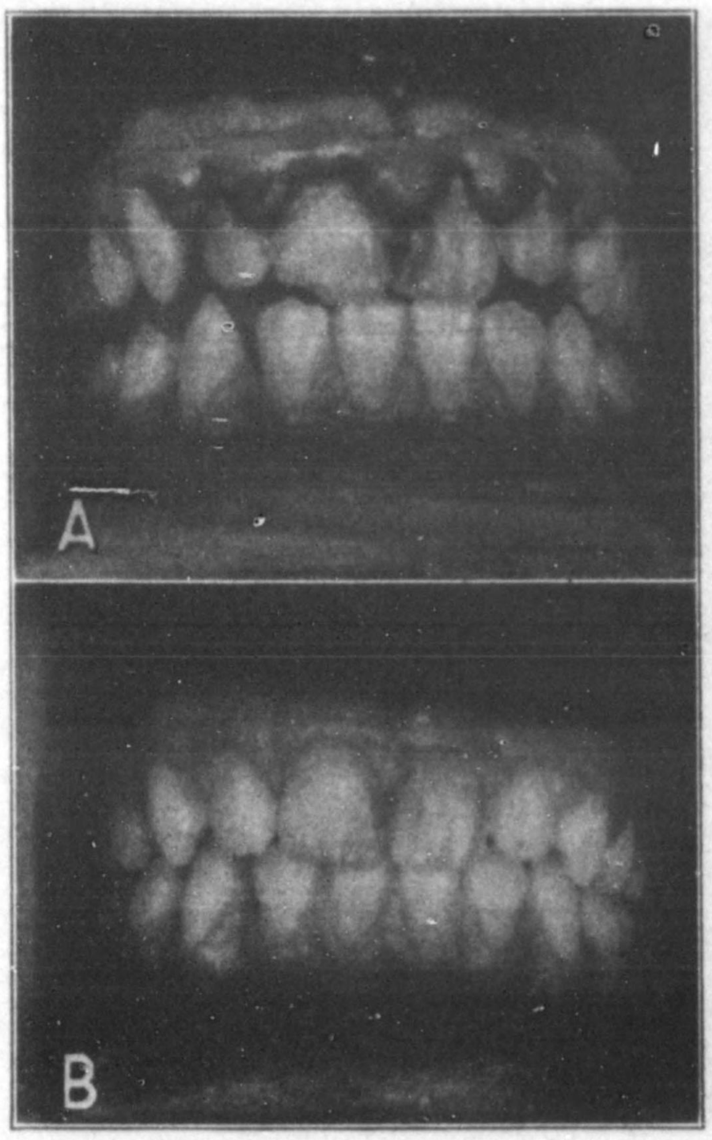


Fig. 4.—A: Hypertrophic gingivitis in girl aged 15. B: Same mouth six months after treatment.



ing the process of mastication. Toothbrushing is usually neglected or employed sparingly in this condition. This type of gingivitis may be started by a disturbance of the internal secreting glands. But, as the condition progresses, the gingivae become increasingly susceptible to local irritants, which become secondary, but nevertheless important factors in continuance of the condition.

Hypertrophic gingivitis is curable, but its treatment requires considerable time and patience on the part of both patient and operator. Patients suffering from this type of gingivitis should be referred by the dentist to the physician for a complete physical examination. The adolescent soon becomes keenly interested in observing improvement in the gingivae, probably indicative of internal stimulation.

Hypertrophic gingivitis developing during pregnancy usually disappears soon after parturition if the gingivae have received local treatment by the dentist. The treatment often calls for surgical removal of some of the excess gum tissue.

## PYORRHEA ALVEOLARIS

## (SUPPURATIVE PERIODONTITIS)

The term "pyorrhea" means flow of pus and "alveolaris" indicates the alveolar bone, which surrounds and supports

the teeth. "Suppurative," a term that refers to the formation of pus, is technically more correct. When it is followed by the term "periodontitis" (per-i-o-don-ti′-tis), the formation of pus in the inflamed periodontium (per-i-o-don′-ti-um) is indicated. The term "periodontium" includes a tooth and its alveolar and supporting bone, together with the connecting soft tissue fibers that are attached to the tooth at one end and to the alveolar bone at the other end. The periodontal tissue consists of short, but strong fiber bundles arranged in six different groups, continuous with one another and extending from the bottom of the gingival crevice around each tooth to the apex of the root deep in the jaw bone. These fibers suspend the tooth in its socket like a basket hung in a well by many ropes, so when one bites upon anything, the pressure or blow is cushioned by these fibers, which prevent the tooth from pressing against the bone.

When dental calculus, or tartar, is allowed to gather upon the teeth, inflammation of the soft tissue about the necks of the teeth results. This condition is called gingivitis. If the calculus is allowed to remain and accumulate, the inflammatory condition increases and the deeper tissue becomes inflamed. Then the soft tissue begins to loosen around the neck of the tooth because of the irritating effects of tartar deposits. This loss of attachment of the tissue to the tooth



root causes deepening of the gingival crevice, which now cannot be kept clean with the toothbrush and so becomes a pus pocket, or, as it is properly called, a pyorrhea pocket. (Fig. 5.)

Inflammation of the gingivae is a treacherous condition if neglected. The earliest symptom is bleeding. After a

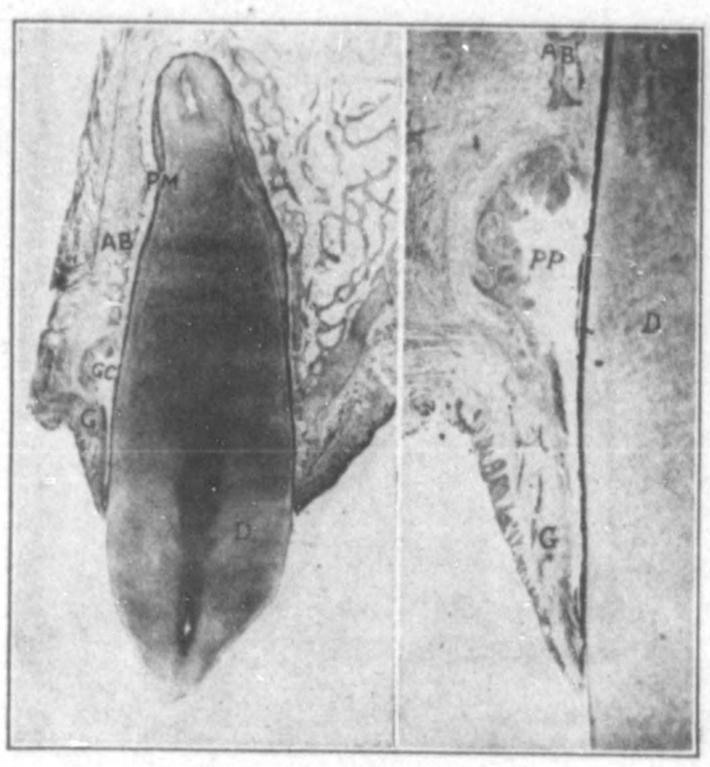


Fig. 5.—A: Pyorrhea pocket on labial surface of upper cuspid. D, dentin. G, gingival tissue of labial surface. GC, gingival crevice or pyorrhea pocket. AB, alveolar bone. PM, periodontal membrane. (After Kronfeld.) B: Higher magnification of pyorrhea pocket. D, dentin. G, gingival tissue. PP, pyorrhea pocket. AB, alveolar bone. (After Kronfeld.)

time, the bleeding ceases, and if the cause is not eliminated, the deeper tissue becomes involved. The blood stream spreads the toxins and poisons arising from the presence of bacteria in the pyorrhea pocket into the bone that sup-

ports the teeth. Pyorrhea does not often spread directly from one tooth socket to another, but progresses into the bone around a tooth and causes the bone to be resorbed. This process gradually weakens the support of the tooth and eventually causes the loss of the tooth. Pyorrhea is sometimes confined to a single tooth socket, but in pyorrhea of the inflammatory type, usually several sockets or all are more or less involved. The inflammatory type of pyorrhea responds favorably to treatment in most cases and, with regular care by the dentist and interdental toothbrushing daily by the patient, it can be cured.

Generally speaking, there are two types of pyorrhea. The first type is caused primarily by the presence of dental calculus or other irritants of the gums and by infection. This is the type described above. Probably 90 per cent of all pyorrhea cases are included in this class, as stated by the eminent pathologist Bernhard Gottlieb.[4] This type of pyorrhea can be cured by elimination of the cause, dental operative treatment and prophylactic care. This treatment must be supplemented with thorough home care by the patient.

The second type of pyorrhea differs considerably from the first type. There is no bleeding of the gums, no accumulation of tartar on the teeth and no evidence of infection at first, but the teeth, which have appeared to be firm and



healthy, suddenly begin to separate and drift apart. The anterior teeth are frequently affected. An unsightly space appears between two teeth, and often one or more teeth begin to protrude. Each month, the teeth move farther out of line and farther apart. Even x-ray films do not always reveal any disturbance that might cause the trouble or show the loss of bone characteristic of the first type of pyorrhea. From nine to twelve months after the onset of the disease, the bone begins to resorb rapidly and, at this time, x-ray pictures will reveal the effect and extent of the trouble, but not the cause.

The second type of pyorrhea, more uncommon than the first, is found at almost any age, but it is found most frequently in young and middle adult life. It is occasionally found during the adolescent years; more often during the period from 20 to 30, and still more often between 30 and 40 years in women, but later in men. It seems to be caused by a disturbance of or a deficiency in nutrition and may be related to the unbalancing of an internal secretory function which affects the bone-forming cells. Some dentists call it periodontoclasia (per-i-o-don′-to-cla-sia). Others call it periodontosis (per-i-o-don-to′-sis), or diffuse atrophy of the alveolar bone.

It seems that people who drink little or no milk and thus have a low intake of calcium and phosphorus are particularly

susceptible to this type of pyorrhea. Those whose intake of fruit and vegetables is extremely low also seem to be susceptible. This particular type of pyorrhea may appear during adolescence and during or after the child-bearing period. As a rule, men are not affected by it until late in life. It frequently develops when the system is undergoing some severe physical or nervous stress and strain.[5]

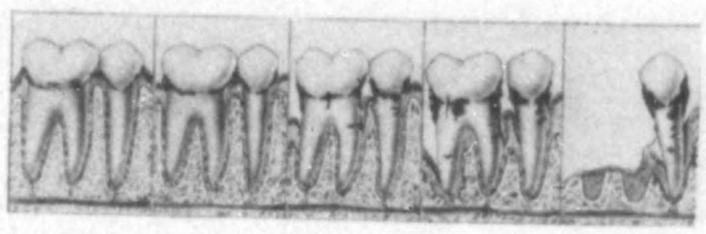

Fig. 6.—Periodontitis. Caused by irritants such as calcareous or food deposits at the necks of the teeth.

There are certain inherited characteristics that have a bearing on physical functions. It does not necessarily follow that children will inherit pyorrhea because one or both parents have it, but some of the children are liable to be susceptible. It should be remembered that this type of pyorrhea represents only a very small percentage of the total number of cases, and even these can be controlled, so that very few teeth need be lost because of the inherited tendency. Regular treatment and the cooperation of the patient in persistent care are required to control the disease. The patient's responsibility is greater in these cases because he must not only carry out



vigorous home care, but also maintain a diet that will tend to correct any nutritional deficiency and promote bone building.

It is sometimes difficult to differentiate between the two types of pyorrhea. There are usually some symptoms of each type in every case of pyorrhea. There are varying degrees of nutritional deficiency as well as varying degrees of an inherited tendency in each family. In a family of five children, one may be susceptible and may inherit characteristics similar to those of the parent who has pyorrhea. This child may develop the eating habits of the parent who has pyorrhea. The sooner such tendencies to neglect one's normal nutritional demands are recognized and corrected, the less trouble will there be with the teeth in late years. Parents should not permit the child to develop dislikes for necessary foods that may have been disliked by them. Rather, parents should seek information from good dietitians and assistance from the dentist so that children will be well fortified for the years of stress that come to all at some period of life.

Other systemic conditions that are frequently characterized by the loss of teeth should be mentioned, but one must not get a wrong perspective as to the cause of this common disease of the supporting tissue of the teeth. The gums usually become diseased in diabetes and often

the teeth loosen and have to be removed. In blood disturbances such as anemia, leukemia and agranulocytosis, the gums invariably are greatly affected; and in infectious diseases, very often the teeth loosen, apparently because the supporting bone is resorbed. The physical aging process is another factor in the loss of teeth. Parts of the body may age faster than others, and it is found that many persons suffer from an atrophy of the bone around the teeth which can be attributed only to the premature aging of the alveolar bone and bone-forming cells. Any of these hereditary tendencies or systemic disturbances may hasten and intensify the common causes of pyorrhea and make control of the disease more difficult. Any disturbance in the periodontal tissues (tissues surrounding the teeth) that causes a loss of bone support reduces tooth function. As the bony structure is resorbed, the stress of mastication often becomes too great for the tooth to withstand, not because the stress is increased, but because the support is weakened.

### TRAUMATIC INJURY FROM OCCLUSION

The occlusion of the teeth should bring every tooth in one jaw into harmonious relationship with its antagonist in the opposite jaw. As the teeth erupt and come into occlusion with the teeth opposing them, the cusps of one fit into the grooves of the opposing tooth and



the two teeth tend to stabilize each other in the best position to meet the forces of mastication. The greatest occlusal force is exerted vertically and the greatest resistance is developed to withstand vertical stress. While each tooth is supported by tissue and bone, holding it in its proper position, when stress is applied more horizontally than vertically a tipping force is exerted that is more difficult to withstand. It is seldom that each individual tooth in the arch receives an equal lateral or horizontal pressure as the lower jaw is protruded (moved forward) or when the masticating movements are carried out. When there is no food in the mouth, this uneven lateral pressure often exerts too much force on one tooth and it is pushed out of line when the teeth are closed tightly. Constant repetition of biting and pushing to get such a tooth out of the way causes damage to the periodontal membrane and bone around the root of the tooth. The root is held in its bony socket by the periodontal membrane, and when a single tooth receives more force than the membrane can sustain, the root is pressed against the bony socket, and the pressure crushes the periodontal membrane. A sudden soreness of the tissue on the side of the root develops where the pressure is exerted and the tooth becomes tender to the touch. This is called pressure pericementitis[6] (per-i-se-men-ti′-tis) or traumagenic[7] (trau-ma-gen′-ic) or trau-

matic occlusion.[8] The injury would soon heal and the tenderness disappear were the injury not repeated frequently. Unless one of the opposing teeth is worn down or fractured to relieve the constant injury from this heavy lateral stress, the tooth gradually loosens, and eventually it is lost because of the injury to the periodontal membrane.

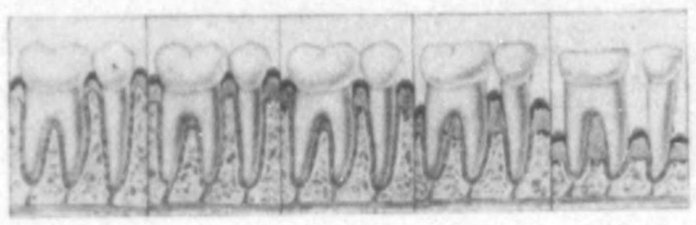

Fig. 7.—Periodontitis. Caused by systemic conditions that lower tissue resistance.

The dentist should always be on the alert to detect excessive stress upon individual teeth. The patient also should be conscious that a tooth seems to interfere with free movement of the teeth across each other in the usual masticatory movements of the jaw and should call the dentist's attention to such interference. The movements of the lower jaw should be free from interference from a malposed tooth or the high cusps of a tooth in proper position which tend to lock the teeth and obstruct masticatory movements. As adult life progresses, the continuous wear of the surfaces of the teeth in occlusion tends to level them off and make them slide over each other more freely. This is normal and advantageous, but if one tooth does not wear down so fast as its neighbors, it stands



above them and is subjected to excessive occlusal stress, mostly horizontally or laterally. The supporting tissue around this tooth is damaged by pressure and the tooth may be loosened. Occlusal wear that is evenly distributed is usually a preventive of excessive stress. Uneven occlusal wear or excessive occlusal wear lead to discomfort and pain in occlusion and eventually to loosening of the teeth.

The correction of traumatic (traumat'-ic) injuries from occlusal stress can be brought about in various ways. Orthodontic treatment may be indicated to realine the teeth in a better relationship to each other.

Orthodontic treatment is generally limited to children and young adults. In the mouths of most persons beyond 25, it is possible to establish a new relationship of the occlusal surfaces only by means of properly placed fillings, inlays, crowns and bridges. Injuries from occlusal stress are more common among those who have suffered the loss of one or more teeth, which greatly interferes with masticatory efficiency. As a result of inability to masticate properly or to masticate upon the teeth supposed to bear the heavy stress of mastication, the teeth that are not designed for such use are subjected to an overload which in time causes them to loosen. Replacement of missing teeth is a very important service in the prevention of injury. Simple adjustments on the grinding sur-

faces of the teeth can be made by the use of a carborundum stone on high spots and interfering cusps. This procedure, when properly carried out, wears away only the high interfering point and allows free movement of the teeth over each other during the masticatory movements of the jaw. Injury of the periodontal tissues is seldom observed in mouths in which the occlusal relationship is satisfactory and the teeth wear down evenly to permit the free movements of the jaw as the teeth glide over each other. When the supporting bone has been reduced by resorption, cusp interference becomes increasingly injurious in its effect upon the periodontal membrane, and greater care must be taken to relieve those teeth that obstruct masticatory movement of the jaw, to conserve their functional capacity, which is now reduced in proportion to the amount of support that has been lost.

Pyorrhea can usually be completely cured and its progress can be prevented by treatment and by regular prophylactic care by the dentist. Like most other diseases, it can be cured more easily and with better results when the earliest symptoms of gingival inflammation are observed. Preventive treatment is extremely important when tendencies to injury or to periodontal disease are discovered. The faithful cooperation of dentist and patient is essential to the control of pyorrhea.



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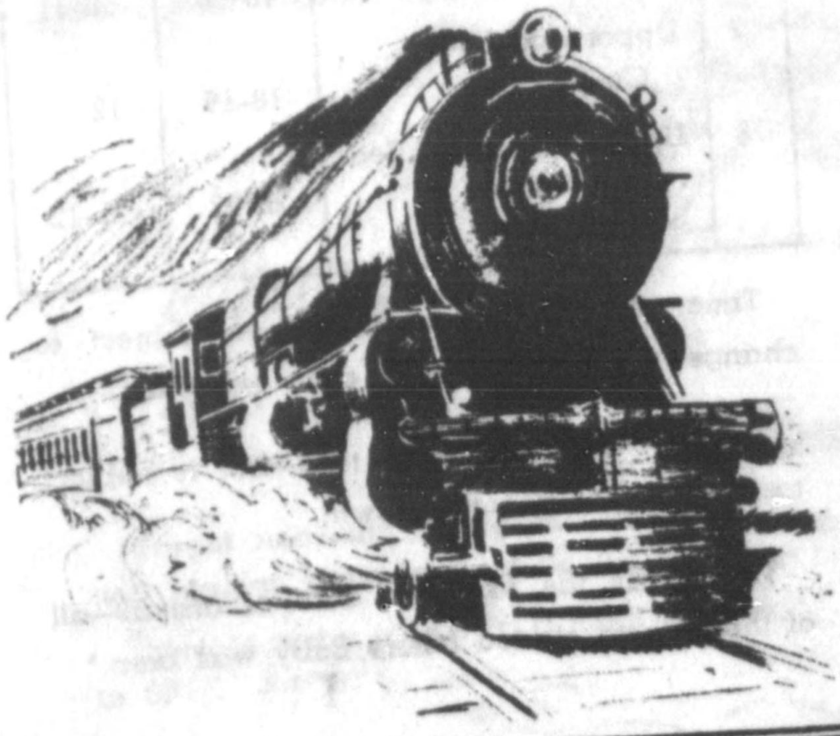
B 8

# The Time Table of Teeth



Serving THE MOTHERS of NEW HAMPSHIRE

NOT EFFECTIVE AFTER 21 YEARS

## BABY TEETH

| NO. | TOOTH | ARRIVE ‡ | DEPART † |
|---|---|---|---|
| | | *Months* | *Years* |
| 1 | Lower Central Incisor | 7–8 | 6–7 |
| 2 | Upper Central Incisor | 9–10 | 7–8 |
| 3 | Upper Lateral Incisor | 11–12 | 8 |
| 4 | Lower Lateral Incisor | 12–13 | 7–8 |
| 5 | Upper First Molars | 14–15 | 10–11 |
| 6 | Lower First Molars | 15–16 | 10–11 |
| 7 | Upper and Lower Cuspids | 18–19 | 12 |
| 8 | Upper and Lower Second Molars | 26–27 | 11–12 |

Time of Arrival and Departure subject to change without notice in each individual.

The above is the usual time, but is subject to influence of general growth.

This gives the expected date of arrival—all of these teeth **started before** Baby was born.*

## PERMANENT TEETH

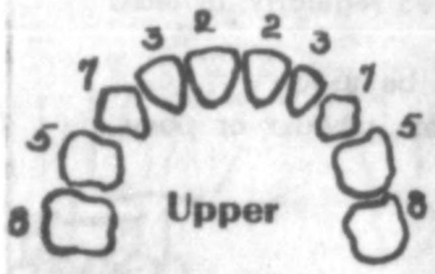
| NO. | TOOTH | ARRIVE ‡ | DEPART |
|---|---|---|---|
| | | *Years* | THESE TEETH SHOULD NOT DEPART* |
| 1 | First Permanent Molar | 5½–6 | |
| 2 | Lower Central Incisor | 6–7 | |
| 3 | Upper Central Incisor<br>Lower Lateral Incisor | 7–8 | |
| 4 | Upper Lateral Incisor | 8–9 | |
| 5 | First Bicuspids | 10–11 | |
| 6 | Second Bicuspids<br>Lower Cuspids | 11–12 | |
| 7 | Upper Cuspids<br>Lower Second Molars | 12 | |
| 8 | Upper Second Molars | 12–13 | |
| 9 | Wisdom Teeth | 17–30 | |

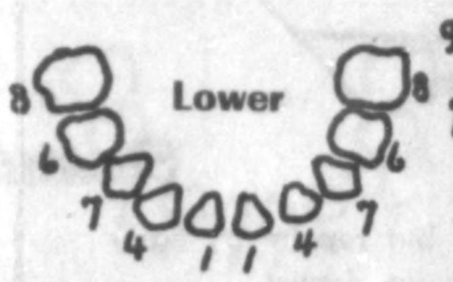
Arrival may be delayed by unforeseen circumstances. If delayed too long — see your dentist.

* See other side for Care of the Teeth.
‡ No excess baggage—Food on teeth is excess baggage.
† Make connections with Permanent Teeth.

## Map of A

### Baby




### Teeth

Numbers correspond
and indicate the ORDER

STATE DEPARTME
*DIVISION OF DEN*
CONCORD

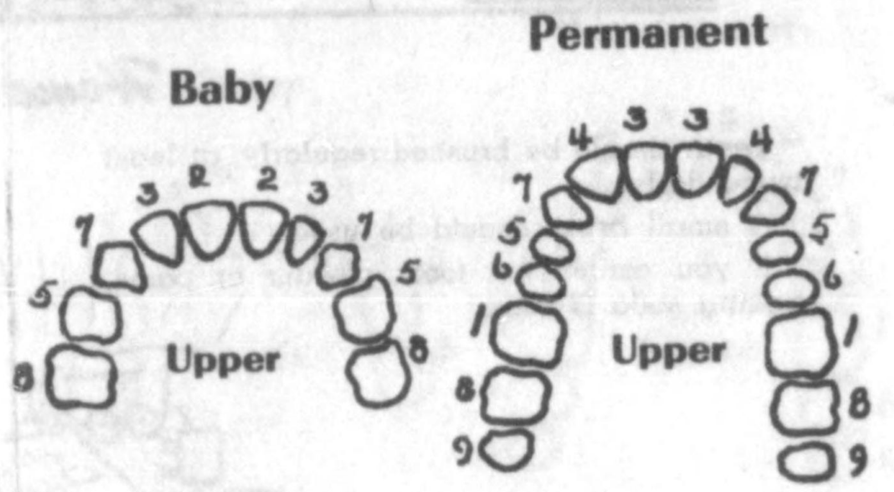
20M11-46

## PERMANENT TEETH

| NO. | TOOTH | ARRIVE ‡ | DEPART |
|---|---|---|---|
| | | *Years* | THESE TEETH SHOULD NOT DEPART* |
| 1 | First Permanent Molar | 5½–6 | |
| 2 | Lower Central Incisor | 6–7 | |
| 3 | Upper Central Incisor<br>Lower Lateral Incisor | 7–8 | |
| 4 | Upper Lateral Incisor | 8–9 | |
| 5 | First Bicuspids | 10–11 | |
| 6 | Second Bicuspids<br>Lower Cuspids | 11–12 | |
| 7 | Upper Cuspids<br>Lower Second Molars | 12 | |
| 8 | Upper Second Molars | 12–13 | |
| 9 | Wisdom Teeth | 17–30 | |

Arrival may be delayed by unforeseen circumstances. If delayed too long — see your dentist.

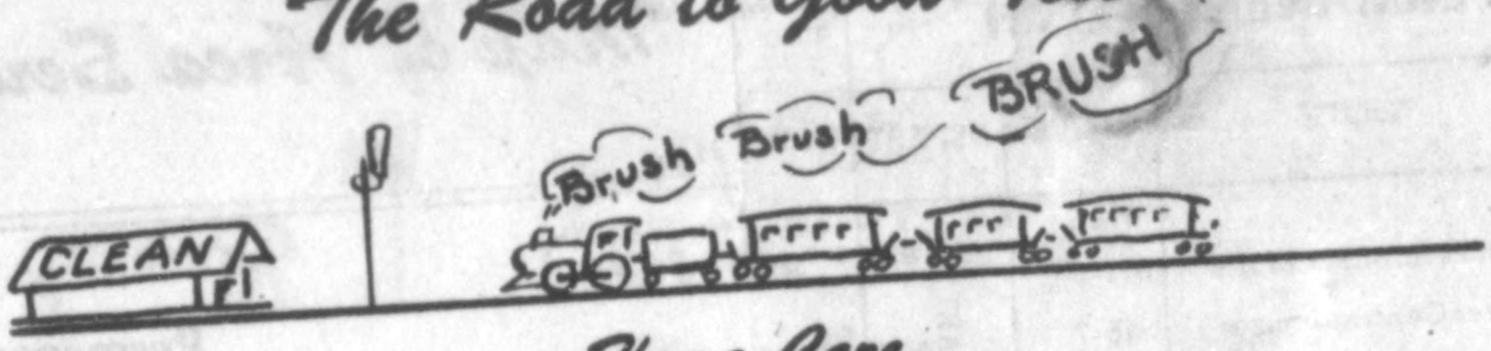
## *Map of Area Served*




Numbers correspond to numbers in table and indicate the ORDER OF ERUPTION.

**STATE DEPARTMENT OF HEALTH**
*DIVISION OF DENTAL SERVICES*
**CONCORD NEW HAMPSHIRE**
20M11-46

# The Road to Good Teeth




## Home Care

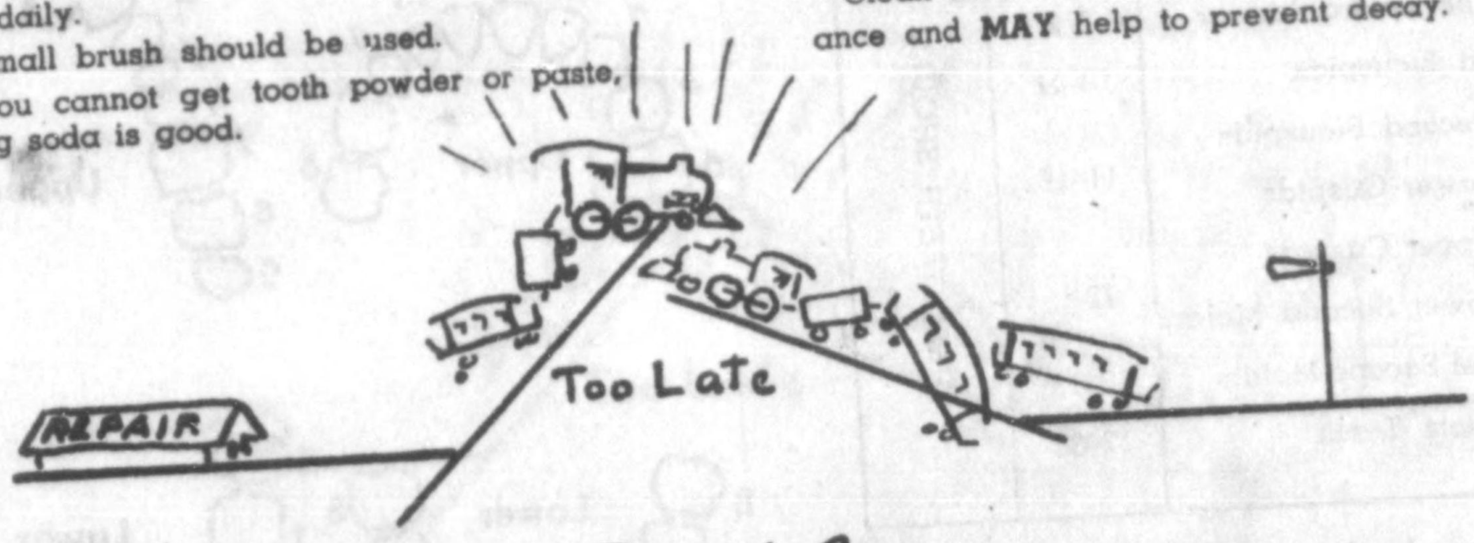
Teeth should be brushed regularly, at least twice daily.

A small brush should be used.

If you cannot get tooth powder or paste, baking soda is good.

Brush your teeth the way they grow.

Clean teeth are necessary to good appearance and **MAY** help to prevent decay.




## Dental Care

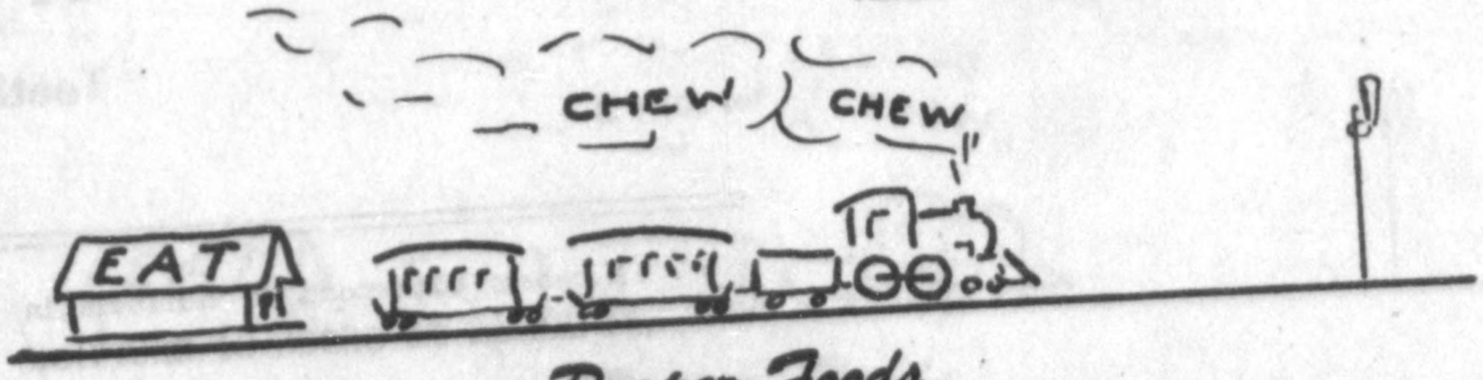
Prevent necessity of big repairs by early and regular visits to your dentist.

There is never a hole in a tooth too small to fill.

Two years of age is not too young to start dental care.

Small defects are cheaper, easier, and less painful to correct.

**MAKE THE LITTLE HOLE—NO HOLE!**




## Proper Foods

**GOOD NUTRITION IS NECESSARY TO GOOD HEALTH**

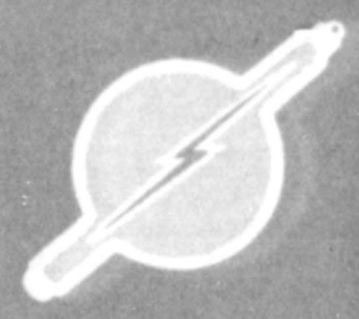
Watch your daily needs and consult your physician for dietary information relating to your specific problems.

B7

# Good Teeth

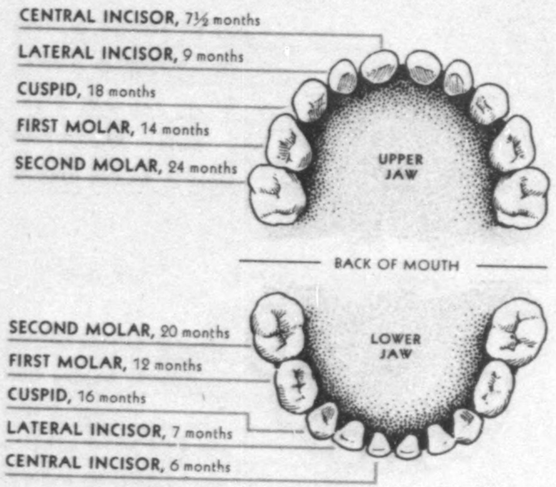
SEE YOUR DENTIST

BRUSH YOUR TEETH



EAT THE RIGHT FOOD EVERY DAY

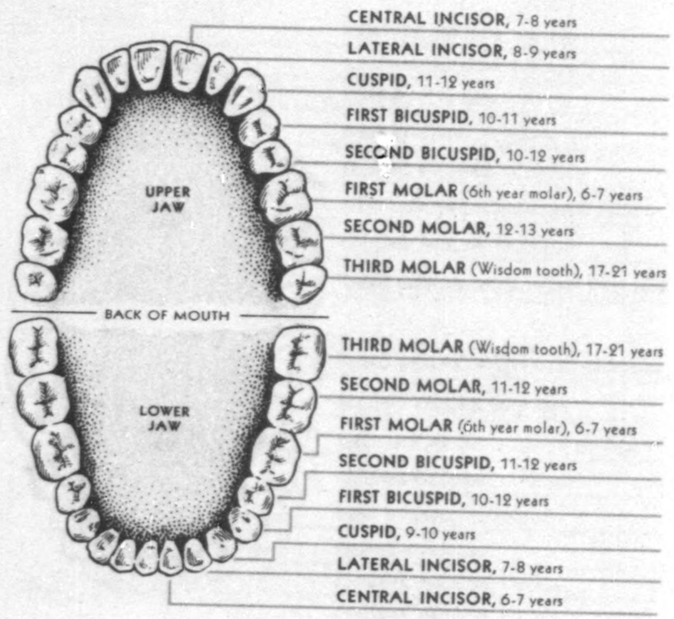
METROPOLITAN LIFE INSURANCE COMPANY
HOME OFFICE: NEW YORK
Pacific Coast Head Office: San Francisco - Canadian Head Office: Ottawa




## A FULL SET OF DECIDUOUS TEETH

With approximate ages at which eruption occurs.

Normally eruption may occur a little earlier or a little later than at the ages given.




## A FULL SET OF PERMANENT TEETH

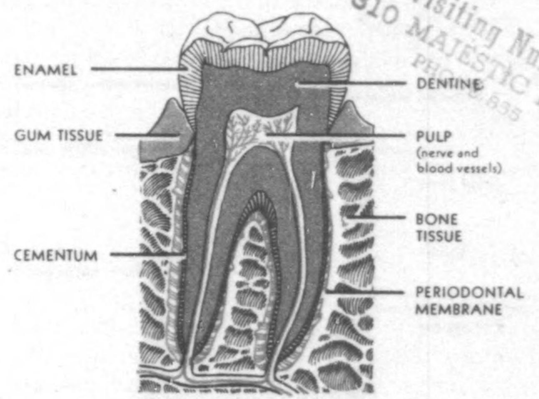
With approximate ages at which eruption occurs.

# *Good Teeth*

make a big contribution to health and good looks. The body takes care of the building of teeth, but we must provide the materials required and arrange for proper upkeep.

The work of the teeth is to chew solid food and mix it with saliva so that it can be swallowed easily and digested properly. Unless this job is well performed the health of the whole body may suffer.






## TOOTH BUILDING

Each tooth is perfectly designed for the work it has to do (see above). The crown is covered with *enamel*, the hardest material in the body, and the roots are covered with a thin layer of bonelike material called *cementum*. A softer substance called *dentine* lies underneath these outer coverings. Enclosed within the dentine is a hollow space called the *pulp chamber*, which contains blood vessels, nerves, and the spongy substance which surrounds them. The blood vessels and nerves enter the tooth through a narrow canal which runs from the pulp chamber to an opening at the tip of each root. The blood brings food for the tooth, and the nerves carry messages of pain in case of infection or injury.

The small jaw of a child is not big enough to hold the teeth which he will need when he is older. Therefore he is provided with a set of 20 deciduous, or baby, teeth to chew with and to encourage his jaws to grow until they are large enough to hold the 32 larger and stronger teeth of the permanent set (see inside front cover).

### ✦ The Sixth-Year Permanent Molars

A child begins to lose his first teeth when he is about 6 years old, and four permanent teeth appear at about the same time. These are the first permanent molars, or grinders, usually known as the sixth-year molars. They do not replace baby teeth, but come in just back of the last baby molars. The sixth-year molars are the largest and most important teeth in the lifetime set. They do the heavy work of chewing while the baby molars are falling out and the permanent ones are coming in. They act also as corner posts to hold the permanent teeth in line as, one by one, they take their places in the dental arch. It is particularly important for children to be under a dentist's supervision when the sixth-year molars are coming in, so that weak spots or surface cracks in the enamel can be discovered and repaired at the earliest possible moment.

## THE SPECIFICATIONS FOR GOOD TEETH

Strong, even teeth in a healthy mouth depend largely upon good general health, upon foods which give the teeth the building materials they need, upon skilled dental care, and upon cleanliness. Heredity and other influences, the extent of which are unknown, may also affect the teeth.

### ✦ Food

Teeth, like any other part of the body, depend for their nourishment upon food. Teeth especially require adequate amounts of the substances used in their construction—calcium, phosphorus, and vitamins A, C, and D. A diet which includes adequate amounts of milk, eggs, meat, fruits, vegetables, cereal products, butter, and fish-liver oils will supply the materials needed for good teeth as well as for general good health and growth.

As the crowns of the baby teeth are practically completed before birth, the mother's diet must provide the necessary materials during this period. After the child is born, protection of the baby teeth and the final structure of the permanent teeth make it equally important that the foods eaten during childhood continue to supply all the



building materials in generous amounts. The quantity and kind of food which will provide all the food materials needed by children and adults for the good health, growth, and repair of the whole body —of which the teeth are a part—are briefly outlined below.

An excess of sweet foods should be avoided, since they seem to encourage the growth of acid-forming bacteria which attack the enamel. Sweet foods also tend to satisfy the appetite too quickly and

DAILY FOOD NEEDS

| Food | Child (preschool through adolescence) | Adult | Woman (pregnant and nursing) |
|---|---|---|---|
| Milk | ¾–1 quart | 1 pint | 1 quart (pregnant)<br>1½ quarts (nursing) |
| Eggs | 1 (at least 3–4 during week) | 1 (at least 3 during week) | 1 |
| Citrus fruit (oranges, grapefruit), or tomatoes, fresh or canned | 1 serving | 1 serving | 2 servings |
| Other fruit, fresh, dried, or canned | 1 serving | 1 serving | 1 or 2 servings |
| Potato (white or sweet) | 1 serving | 1 serving | 1 or 2 servings |
| Green-leaf vegetable (cooked) | 3–4 times during week | 3–4 times during week | 3–4 times during week. |
| Other vegetables (sometimes raw) | 1 serving | 1 serving | 1 serving |
| Meat, poultry, or fish | 1 serving | 1 serving | At least 1 serving |
| Cheese, dried beans or peas (used for main dish) | 1–2 times during week | 1–2 times during week | 1–2 times during week |
| Cereal, whole-grain or enriched | At least 1 serving | 1 serving | 1–2 servings |
| Bread, whole-grain or enriched | At least 1 slice at each meal | 1–6 slices | 3–6 slices |
| Butter, vitamin-A margarine, and other fats | On bread, vegetables, and moderate amounts in cooking | On bread, vegetables, and moderate amounts in cooking | On bread, vegetables, and moderate amounts in cooking |
| Water | 3–4 glasses | 4–6 glasses | 4–8 glasses |
| Fish-liver oils | 1–2 teaspoons through 2 years—desirable through adolescence | | 1–2 teaspoons |

interfere with eating enough of more essential foods. Sweets should be used only in small amounts to give flavor to other foods, and preferably not between meals, but as desserts after meals.

### ✦ Dental Care

Teeth must be taken care of properly and repaired when necessary if they are to do good work and escape early loss. No one is capable of caring for the teeth properly without the help of a dentist.

Costly and painful repair work, the loss of permanent teeth, and serious root abscesses may be avoided by going to the dentist every six months or at such intervals as he may find necessary. The dentist will remove decayed areas before they have a chance to spread widely, and will close the cavities with permanent fillings. It is most desirable to introduce a child to the family dentist before little, if any, work needs to be done, so that the dentist can win the child's confidence and cooperation.

### ✦ Cleanliness

Millions of bacteria are present even in a clean, healthy mouth. Most of these bacteria are harmless. But some kinds act upon bits of food caught between and around the teeth, and upon gummy patches at their necks, to form acids which eat through the protective enamel covering. It is only through breaks in the enamel that the bacteria which cause tooth decay can get into the tooth. The object

## EVERYONE SHOULD

**Begin going to the dentist at about the age of 2½ or 3 years.**

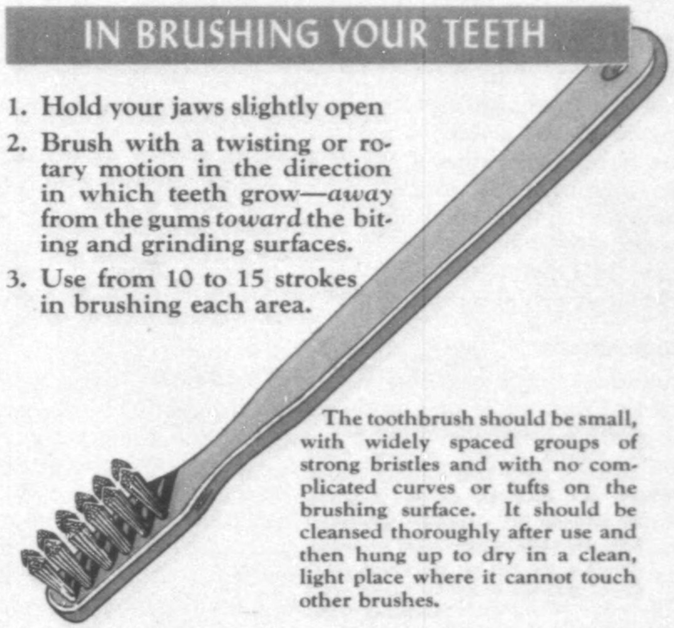
**Have a dental examination and a prophylactic cleansing twice a year, or as often as the dentist thinks necessary.**

**Have all needed repairs made promptly by one's own dentist or in a dental clinic.**



## IN BRUSHING YOUR TEETH

1. Hold your jaws slightly open
2. Brush with a twisting or rotary motion in the direction in which teeth grow—*away* from the gums *toward* the biting and grinding surfaces.
3. Use from 10 to 15 strokes in brushing each area.



The toothbrush should be small, with widely spaced groups of strong bristles and with no complicated curves or tufts on the brushing surface. It should be cleansed thoroughly after use and then hung up to dry in a clean, light place where it cannot touch other brushes.

of brushing the teeth is to dislodge bits of food from between the teeth and to break up the gummy patches which furnish feeding grounds for acid-forming bacteria. The teeth should be brushed after each meal, if possible, and always before going to bed.

A number of toothpastes and powders have been carefully examined by the Council on Dental Therapeutics of the American Dental Association, and bear its seal of acceptance. A strong water solution of table salt (one spoonful) and baking soda (three spoonfuls) can be used if commercial dentifrices are not available.

The baby's teeth may be kept clean by wiping them with a clean cloth moistened with a solution of bicarbonate of soda and boiled water. As soon as the child is old enough, he should be taught to use a toothbrush.

## WHEN A TOOTH IS IN TROUBLE— SEE YOUR DENTIST

### ✦ Dental Caries

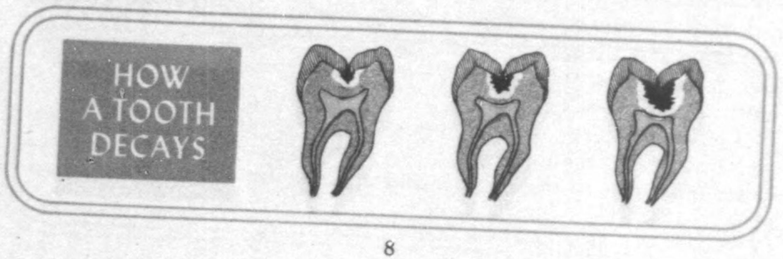
The agents of tooth decay (dental caries) are bacteria which get inside the tooth through breaks in the enamel caused by faulty structure or the action of acid-forming bacteria. Even when the break is no bigger than a pinprick, large numbers of bacteria can easily go through it. Once inside the tooth, the bacteria multiply rapidly and spread decay inward toward the pulp chamber where the nerves and blood vessels are located. If the decay is not checked in time by a dentist the tooth usually begins to ache. Further delay in obtaining dental treatment may result in the loss of the tooth.

### ✦ Root Abscess

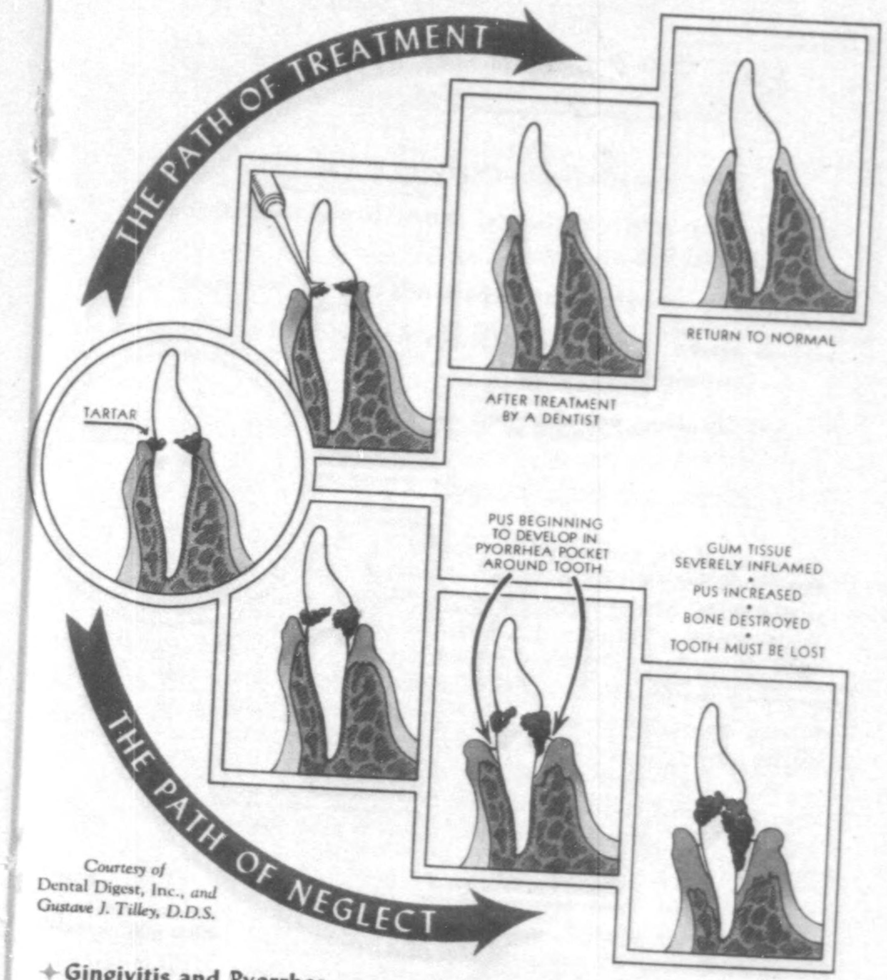
Infection in the pulp chamber may travel down through the root canal and form an abscess at the end of the root. The abscess may push through the jawbone and gum to form a gumboil, or it may cause a large and painful swelling of the face. Sometimes an abscess develops at the roots of a tooth without causing pain or swelling. From this hidden focus of infection, bacteria or their poisons may be carried by the blood stream to other parts of the body. In any condition, such as arthritis or neuritis, which may be due to abscessed teeth, the physician usually wishes to have the teeth X-rayed and examined by a competent dentist.

### ✦ Impacted Teeth

Impacted teeth are usually third molars (wisdom teeth) which remain imbedded in the jaws or come only part way through. They may cause a number of disturbances—neuralgic pains, chiefly—if the teeth are entirely below the gums; or painful swellings of the back of the mouth, if they are partly erupted. X-ray pictures are invaluable in locating impacted teeth and in determining what treatment is necessary for them.






*Courtesy of Dental Digest, Inc., and Gustave J. Tilley, D.D.S.*

### ✦ Gingivitis and Pyorrhea

Pyorrhea is caused by germs which attack the periodontal membrane—that is, the elastic tissue connecting the roots of the teeth with their bony sockets. If not checked it spreads to the tooth sockets, and the teeth become loosened and finally lost.

The development of pyorrhea is favored by an inflammation of the gums called gingivitis. The first indication of gingivitis is a

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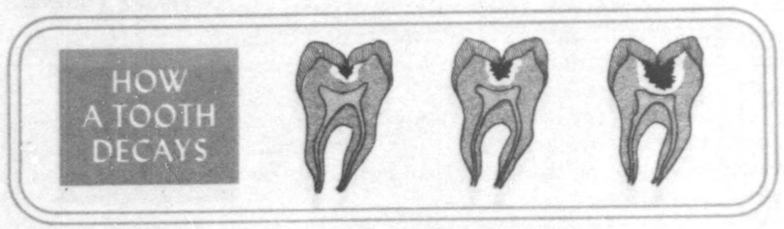




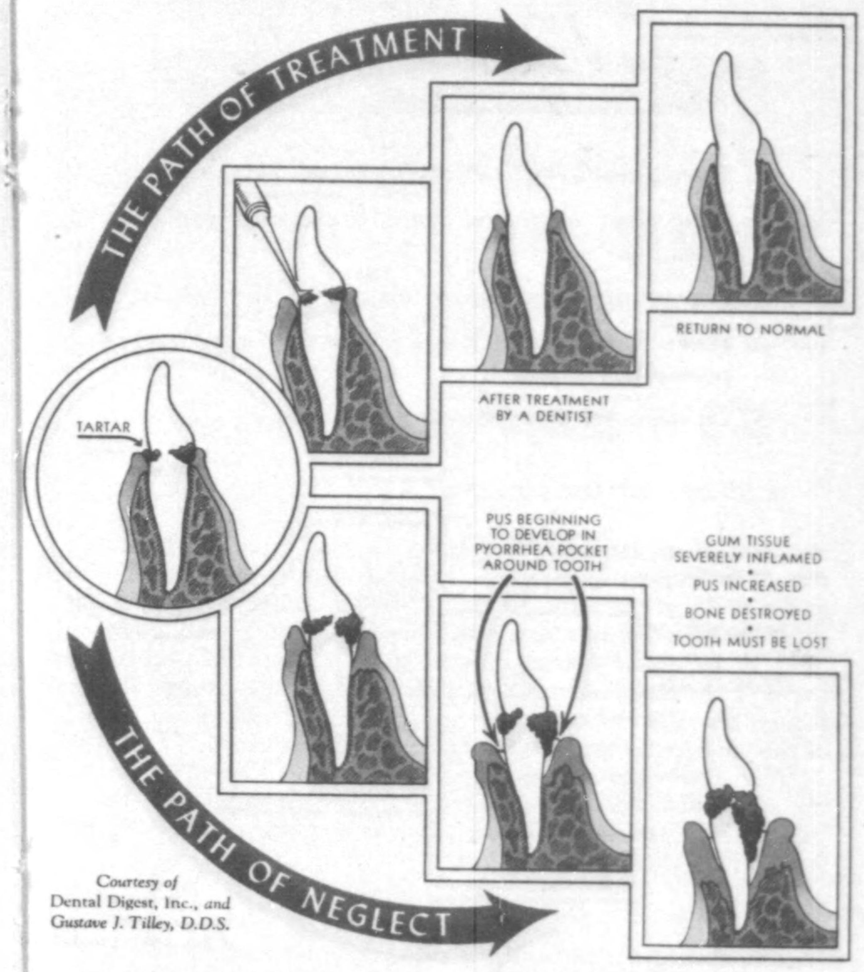


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## TO PREVENT GINGIVITIS

1. **Have a prophylactic cleansing at least twice a year.**
2. **Keep your teeth and gums healthy by proper brushing.**
3. **Eat enough of the right kinds of food (see page 5).**
4. **Have defective fillings or bridges repaired promptly.**
5. **Do whatever else your dentist advises.**

tendency of the gums to bleed easily. It may be caused by a poor diet, by collections of the rough yellowish incrustations called tartar at the necks of the teeth, by the persistent wedging of food in particular crevices between the teeth (especially those which are out of line), or by dental fillings, crowns, and bridges which irritate the gums. If the inflammation is neglected, it penetrates deeper into the tissues, becomes chronic, and provides a fertile field for the growth of the pus-producing germs responsible for pyorrhea.

Active pyorrhea can be checked successfully by a dentist if it has not progressed too far, but some permanent damage to the tissues will result in almost every case. That is why prevention is doubly important.

## IRREGULAR TEETH

***An unshapely jaw and irregular teeth may affect health and social and business success in a number of ways:***

A narrow upper jaw with protruding teeth or a receding lower one may spoil a person's looks and thus interfere with his normal, happy adjustment to life.

Upper and lower teeth which do not occlude, or come together, properly (malocclusion) interfere with digestion by making adequate chewing impossible.



Teeth which are out of line favor tooth decay and gingivitis by interfering with proper function and proper cleansing.

Heredity plays an important part in determining the size and shape of the jaw, which in turn may influence the size, shape, and position of the teeth and the relation of one jaw to the other. One often hears of a certain type of jaw as "running in the family." But the conditions under which the jaws develop and the teeth erupt play an even more important part. Bad influences on young, growing jaws and teeth include:

1. A lack of the foods needed for building bones and teeth and exercising the jaw muscles.
2. Prolonged thumb sucking; biting the tongue, lips, or cheeks; and mouth breathing which is frequently due to blocking of the nose by enlarged tonsils and adenoids.
3. Habitually lying face downward or always on one side while sleeping, or leaning one side of the lower jaw on the hand while sitting.
4. Improper care of baby teeth.
5. Losing baby teeth too soon or keeping them too long, which often results in irregular line-up of the permanent teeth.

Watchful care on the part of parents and physician and early supervision by a dentist will help to prevent or remedy conditions which may be responsible for uneven bite (malocclusion) and irregular teeth. Besides checking faulty habits and giving needed dental care, the dentist may suggest exercises or other things the child himself may do to encourage normal jaw development. If necessary, the dentist may advise taking the child to an orthodontist —that is, a specialist in preventing and correcting malocclusion and irregularities of the teeth. The corrections may take some time and cause some inconvenience, but they are well worth while, because they will eventually give the child a normal chewing surface and at the same time greatly improve his appearance.

*Statements in this booklet have been accepted by the Committee on Public Health and Education of the American Dental Association.*

## OTHER PAMPHLETS OF INTEREST

*Blueprint for Health*

*Your Food*

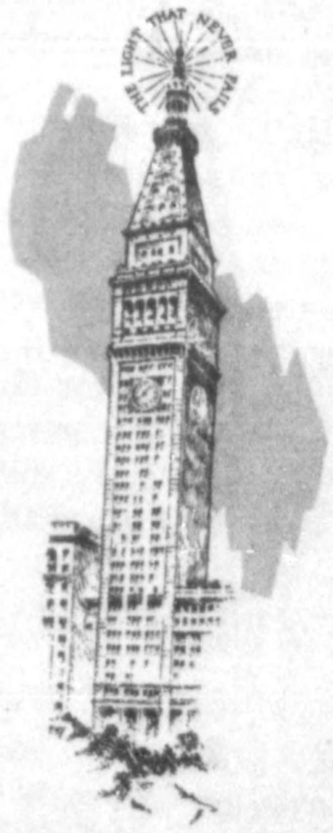
*Family Food Supply*

*Information for Expectant Mothers*

*Your Baby*

*Out of Babyhood into Childhood*

Ask your Agent for these, or write to the Health and Welfare Division, Metropolitan Life Insurance Company, 1 Madison Avenue, New York 10, N. Y.

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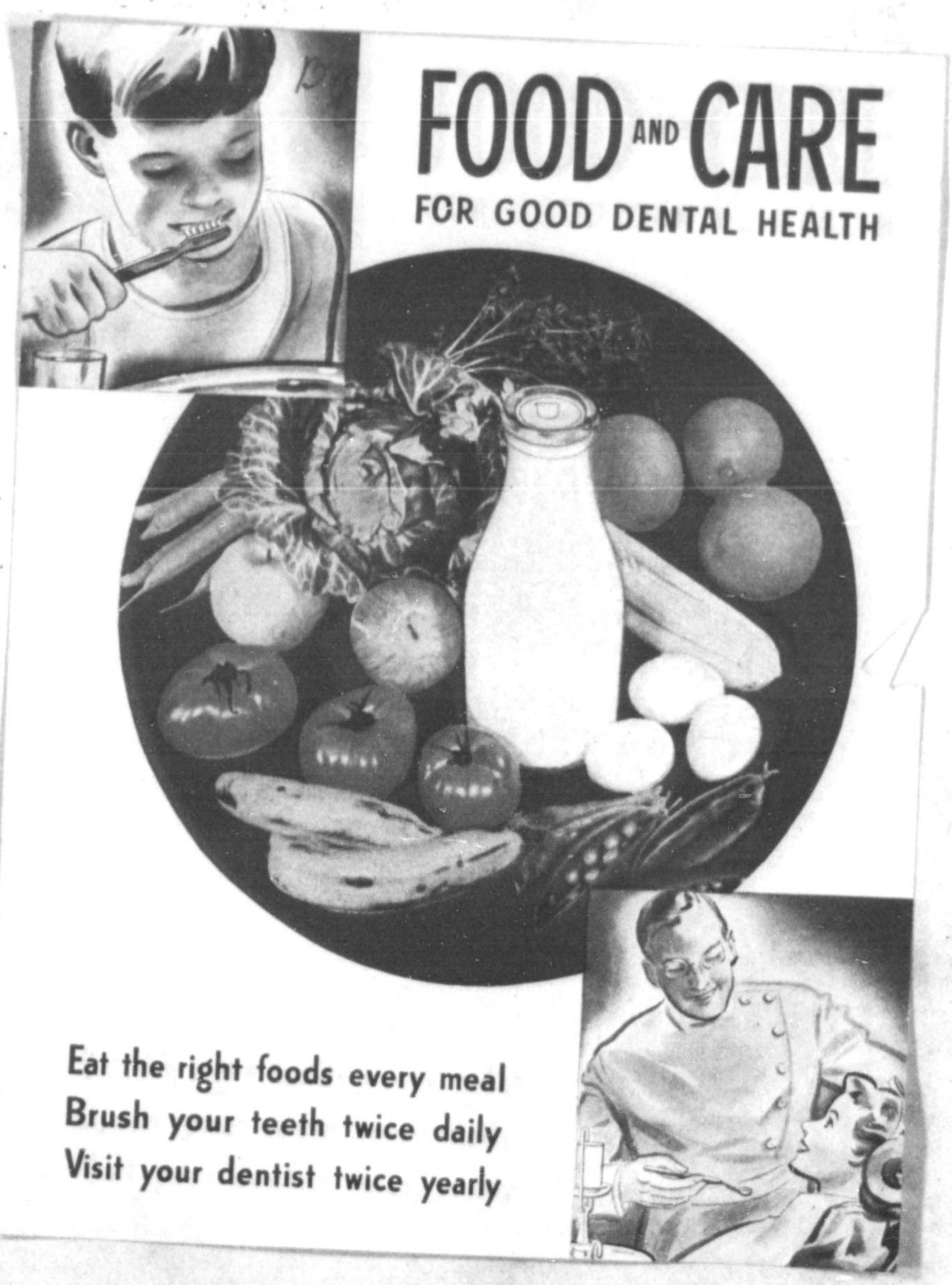

# *Food and Care*

## FOR GOOD DENTAL HEALTH

Good dental health is dependent upon professional dental care, personal dental care, and good nutrition. These three "musts" are featured on the chart.

Proper nutrition is essential for normal development and maintenance of the tissues of the mouth. The following foods, in the amounts stated, are recommended not only because they promote body growth and tooth and jaw development in children, but also because they aid in maintaining sound teeth and gums in all age groups.

**MILK** 2 or more glasses daily . . . For Adults
3 to 4 or more glasses daily . . . For Children
To drink, combined with other foods, in ice cream and in cheese.

**VEGETABLES** 2 or more servings daily besides potato. . . .
1 green or yellow; "greens" often

**FRUITS** 2 or more servings daily
At least 1 raw; citrus fruit or tomato often

**EGGS** 3 to 5 a week; 1 daily preferred

**MEAT, CHEESE, FISH, FOWL** 1 or more servings daily
Dried beans, peas, peanuts occasionally

**CEREAL AND BREAD** 2 or more servings daily
Whole-grain value or enriched

**BUTTER** 2 or more tablespoons daily

**OTHER FOODS** To satisfy appetite and to complete growth and activity needs.

***The statements in this leaflet have been accepted by the Council on Dental Health of the American Dental Association.***

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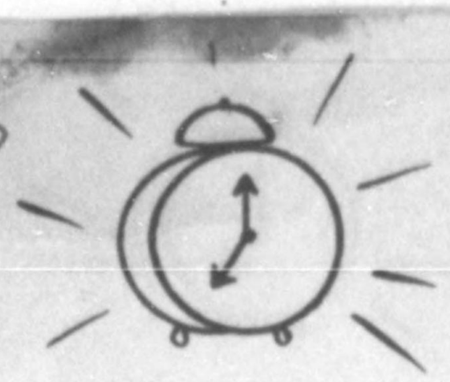
# Get in Step---

## ---take Your Teacher a DENTAL CERTIFICATE


•MISSISSIPPI STATE BOARD of HEALTH



# TAKE TIME for TEETH

SEE A DENTIST - TWICE EACH YEAR

BRUSH AFTER

MEALS and AT BED TIME!

SEND YOUR CHILD TO SCHOOL *with* A DENTAL CERTIFICATE

MISSISSIPPI STATE BOARD OF HEALTH

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# Prevent Tooth Loss

Hole in
Enamel Only
The Time To Start

Dentine Involved
Hole in Enamel
Small;
Can Be Saved

Abscess

Too Late!
Pulp Infected
Abscess Formed
Tooth Is Lost.

## EARLY FILLING IS THE FIRST STEP

The early treatment of dental defects before the damage to the tooth is extensive takes less time, hurts less, and costs less.

The responsibility for providing dental care is the parents'. A program whereby every child shall receive continuous dental care should be planned jointly by the adults concerned. The parents and the dentist are best able to work out this plan for the individual child. When it is necessary, available social and public health resources can be utilized. These resources differ in each community. The teacher, parents, and dentist should know the resources of their particular communities.

A child should start going to the dentist as soon as twenty baby teeth are through the gums and should make regular, frequent visits to the dentist every year, especially through adolescence.

**To insure against further trouble of all kinds the teeth should be examined every six months by a dentist.**

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

**Pupil's Name** .....

**Town** ..... **School** .....

**Date** ..... **Teacher** .....

**Has your child had a dental examination by your family dentist within the last six months? If not, will you arrange for such an examination as soon as possible? In either case, please have the dentist fill in and sign below, then return this sheet to the teacher.**

**This is to certify that I have examined and found the condition checked below:**

- ☐ **No dental defects.**
- ☐ **Dental defects which were present have been completely cared for.**
- ☐ **Treatment has been started.**
- ☐ **Treatment is needed but no provision is made for it.**

**Date** ..... .....
**Signature of Dentist**

**It is not possible to take my child to the family dentist for an examination.**

.....
**Parent or Guardian**

**THIS CARD IS TO BE FILED IN SCHOOL WITH PHYSICAL RECORD CARD.**

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

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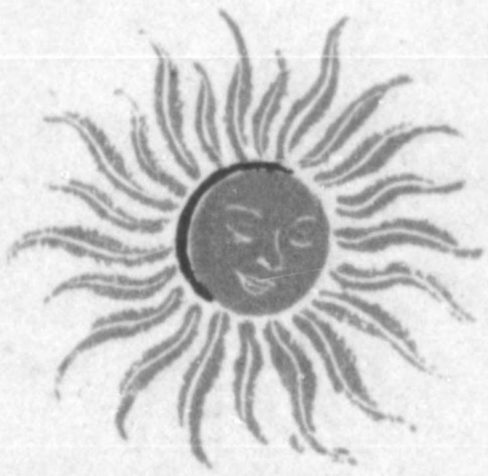
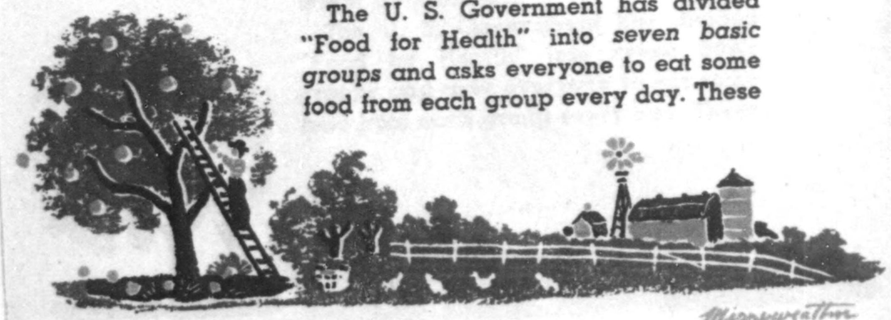


# YOUR TEETH
## and their care

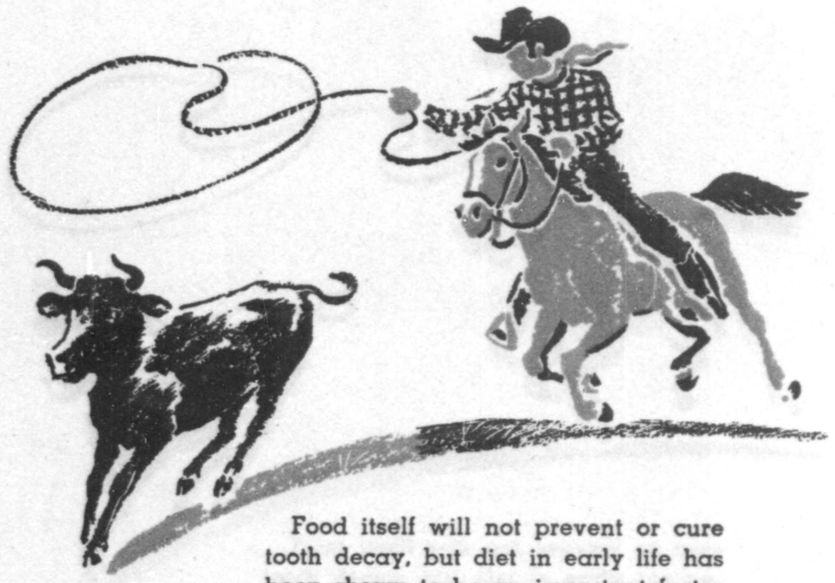
# RIGHT FOODS

All children and adults should eat first what the body needs, and then what they want. If good habits of eating the right foods are established early in life, one grows to prefer the healthful ones rather than those which might be harmful.

The U. S. Government has divided "Food for Health" into *seven basic groups* and asks everyone to eat some food from each group every day. These



groups are: (1) green and yellow vegetables, some raw and some cooked, frozen or canned; (2) oranges, tomatoes, grapefruit, or raw cabbage or salad greens; (3) potatoes and other vegetables and fruits, raw, dried, cooked, frozen or canned; (4) milk and milk products, fluid, evaporated, dried milk or cheese; (5) meat, poultry, fish, or eggs, or dried beans, peas, nuts or peanut butter; (6) bread, flour and cereals (natural whole grain, or enriched or restored); (7) butter and fortified margarine with added vitamin A.



Food itself will not prevent or cure tooth decay, but diet in early life has been shown to be an important factor in the building of teeth, and no doubt the structure of the tooth has much to do with its ability to resist decay.

Many scientists are of the opinion that decay results from the action of acid produced by acid-forming bacteria growing in the mouth on certain

foods, particularly sweets, that cling to the teeth. While carbohydrates are necessary to restore energy, the amounts should be limited to the body requirement, and candy or sweet desserts should be eaten sparingly, if at all. The sticky, sweet masses that adhere to the teeth must be removed promptly by proper brushing.

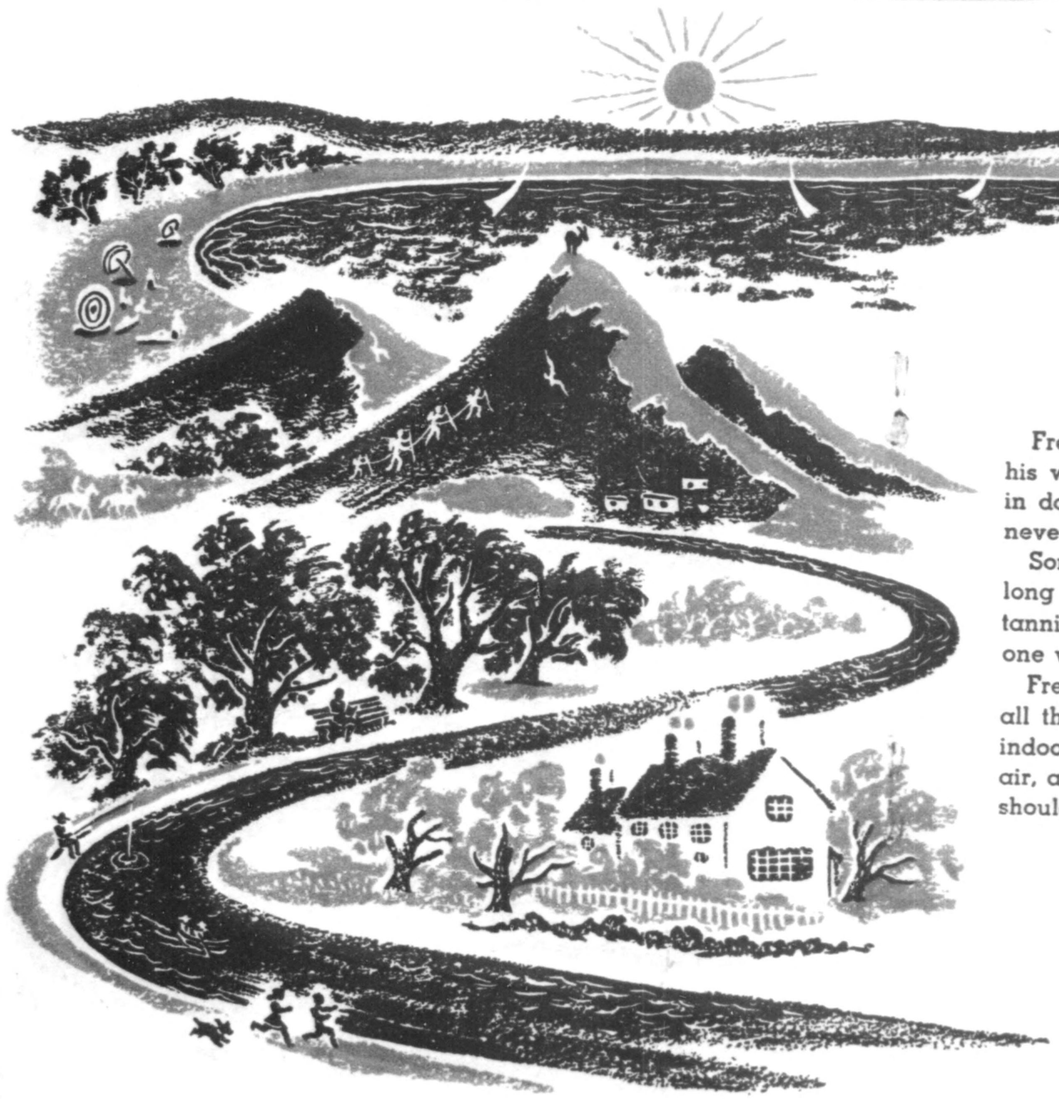
# VITAMINS

Vitamins are essential chemical compounds that help in the digestion and assimilation of nutritious substances. They are found in food but are not food themselves.

The sun, when it shines on you directly, helps to manufacture at least one vitamin your body needs. Green and yellow vegetables are rich in some vitamins, while acid fruits, such as oranges and tomatoes, contain others. Milk and milk products are sources of important vitamins, and enriched flour and whole grain cereals and breads store other

essentials. Synthetic, or manufactured, vitamins can be purchased in liquid, pill or capsule form, but it is better to obtain the required vitamins by eating the proper sort of food. If one average helping is eaten every day from each of the seven basic food groups, no additional vitamins will be needed.

When teeth are in the process of growth, vitamins are necessary to build healthy structure, but when the teeth have been formed, no amount of vitamins will prevent or cure tooth decay. That is a particular job for your family dentist, who should be visited regularly.

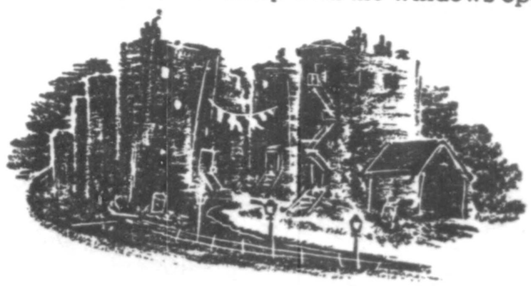


# FRESH AIR and SUNSHINE

Fresh air was made for man to live in, and sunshine to light his way and keep him warm. Disease germs live and thrive in dark, damp places where the air is foul and the sunshine never reaches.

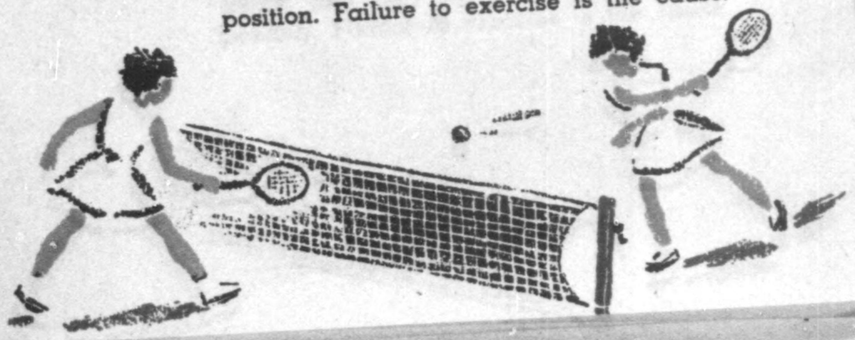
Some hours each day should be spent in the sunshine. Too long an exposure at one time will produce a burn, but gradual tanning is beneficial, for that helps to manufacture at least one vitamin within the body.

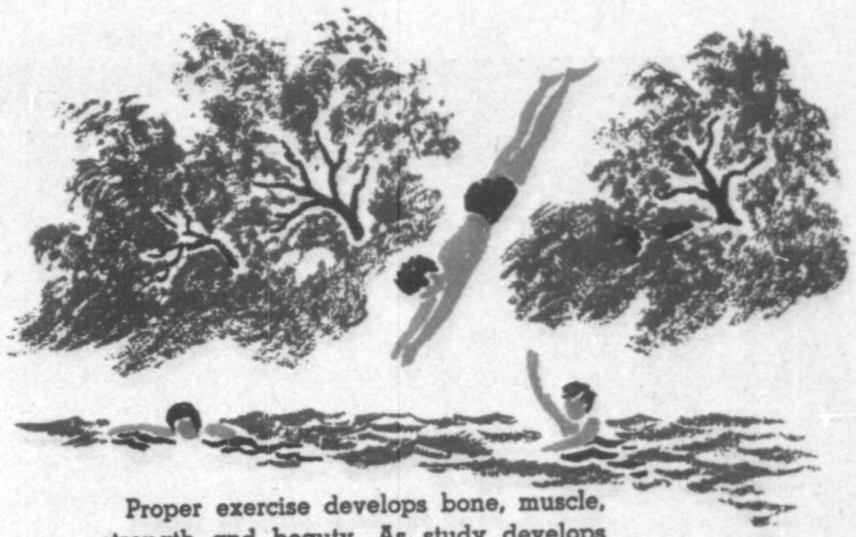
Fresh air is essential at all times. We cannot be out of doors all the time, but we can have clean fresh air brought to our indoor life by proper ventilation. Night air is as pure as day air, and since fresh air is conducive to sound sleep, bedrooms should be well ventilated. Sleep with the windows open.



# Healthful EXERCISES

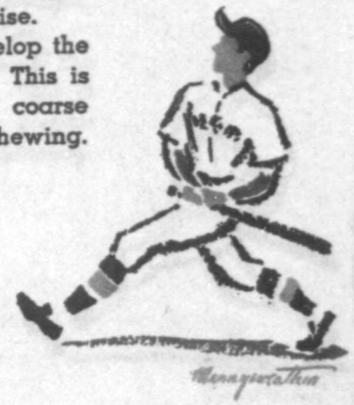
A person who has been sick in bed for a long time often has to learn to walk again, because, from lack of exercise, the muscles have become too weak to function. If you should bind your arm to your side and keep it there long enough, eventually the arm would wither and become useless, from lack of exercise. Religious fakirs in India sometimes hold their bodies, arms or legs in one position for so long that the joints become fixed, the muscles shrivel away, and they cannot move from one position. Failure to exercise is the cause.

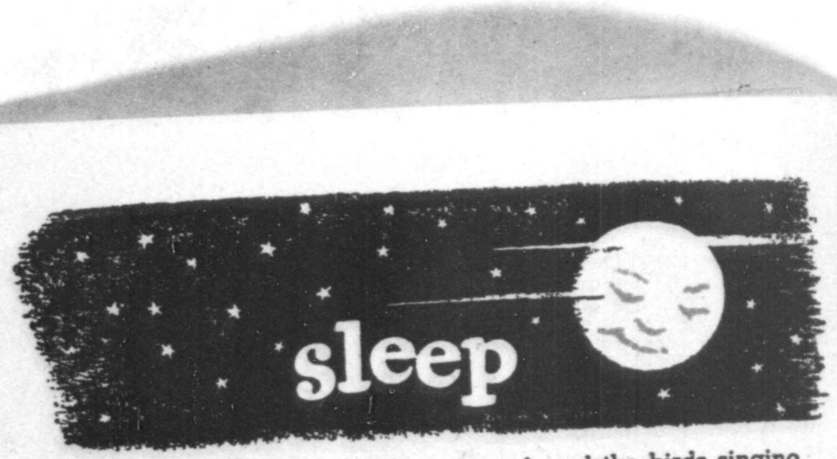




Proper exercise develops bone, muscle, strength and beauty. As study develops the mind, so does exercise develop the body. Once the body has been built into satisfaction, it must be kept in strength, health and beauty by daily exercise.

Teeth need exercise also to develop the jaws and maintain healthy gums. This is best done by daily eating some coarse foods that require considerable chewing.






In the morning sunshine, you have heard the birds singing happily in the trees. In the fields, you have seen young colts scampering and running around the pasture, kicking up their heels; lambs on the green hillside playing hop, skip and jump, and little pigs nosing about in the alfalfa, grunting and squeaking to each other as they pick their breakfast from the fresh green plants.

Much of this activity and happiness of early morning life is the result of a *good night's sleep*. All day long these young animals run and jump, eat and play, but when night falls, they retire to their sheds and barns and nests to sleep. During these hours of refreshment, nature restores energy and converts the food eaten that day into new growth, strength and beauty.

So it is with the human family. If one is to expect good health, good looks and a good clear mind, he must devote nine or ten hours each night to sound sleep. It is during this period of rest that new energy and charms are added to the body.

Teeth are parts of the body, not detached units. Since regular, refreshing sleep helps keep the body strong, it follows that adequate rest helps to build and maintain healthy teeth.

# CLEANLINESS


Why should people wash their hands before they eat? Clean their finger nails? Bathe several times a week? Brush their teeth after each meal? Because washing the hands before each meal removes dirt and with it many germs which otherwise might be carried into the mouth to cause disease. Cleaning the nails also removes dirt and germs and definitely improves the appearance of the hands.

Bathing with soap and water removes fetid accumulations and opens the pores so that they may breathe and perspire freely, as they should. It stimulates the skin and makes it more beautiful.

Brushing the teeth after each meal, followed by rinsing, will help dislodge and wash away the food and débris on which disease germs live.

It is only your dentist who can correct tooth ills, but proper brushing will aid in keeping the teeth clean and attractive. Furthermore, food tastes better when the mouth is clean and accumulations are removed from the teeth.

Any dentifrice acceptable to the Council on Dental Therapeutics of the American Dental Association may be used. A good dentifrice can be made at home by mixing three parts of Baking Soda* with one part finely ground table salt. Many teachers make this mixture for the use of children in the school room.

So, with *right foods and vitamins, sound refreshing sleep, fresh air and sunshine, healthful exercise, cleanliness and regular dental attention,* all children can do much toward building and maintaining good health and sound teeth, and at the same time greatly improve their appearance.

*Arm & Hammer Baking Soda and Cow Brand Baking Soda are classified as accepted dentifrices by the Council on Dental Therapeutics of the American Dental Association.

Church & Dwight Co., Inc.
70 Pine Street
New York (5), N. Y.



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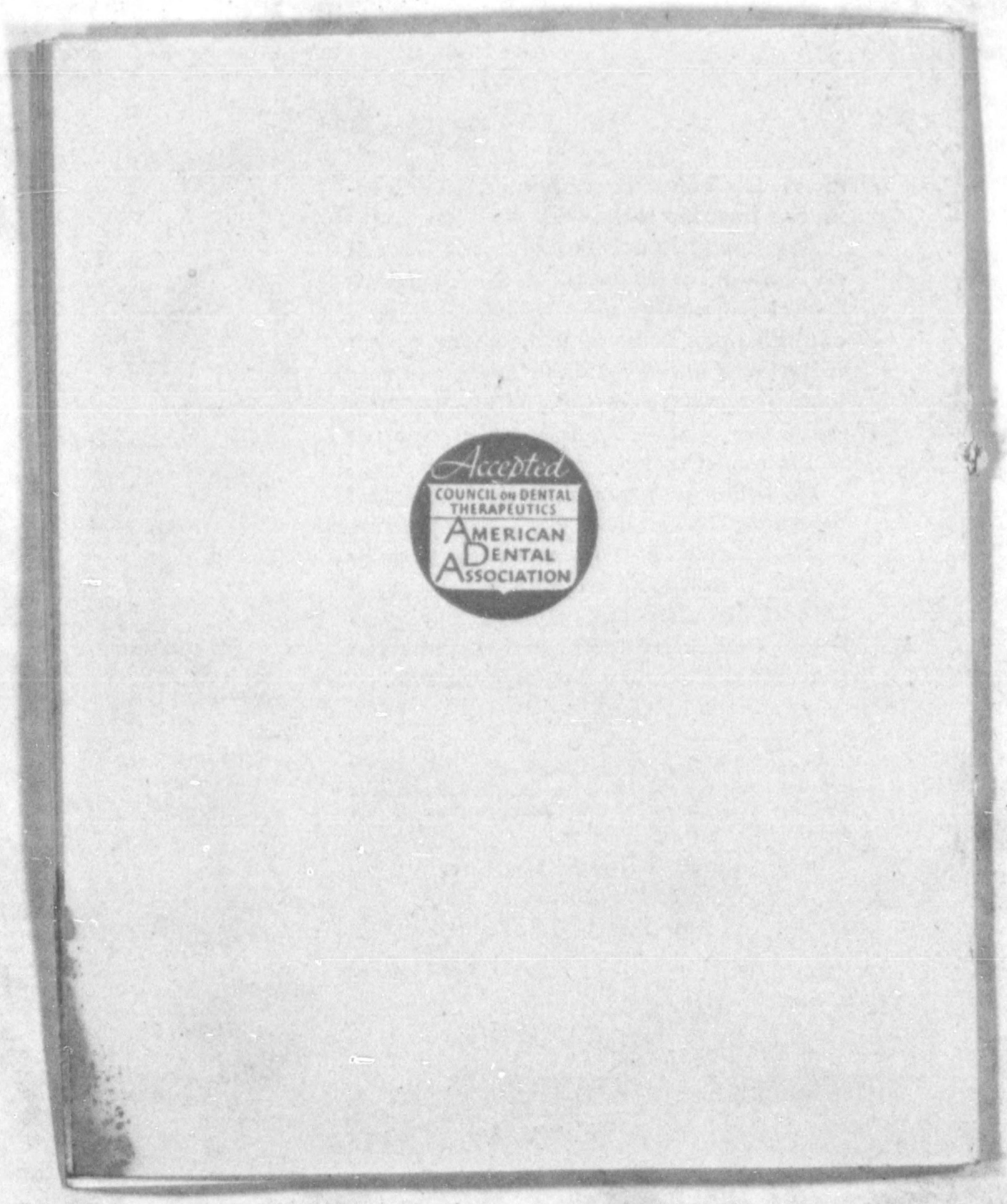

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# A SIX POINT DENTAL HEALTH PROGRAM

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
BUREAU OF MATERNAL AND CHILD HEALTH
DENTAL DIVISION

1. **Acquire, Very Early in Life, the Habit of Regular Dental Inspection, Treatment, and Filling of Cavities.**

Regular inspection and mouth care by a dentist has been placed first on the list since it is the most effective control measure we have to offer at the present time; these regular visits to a dentist should start at preschool age since many three year olds have tooth decay.

2. **Eat a Fortified, Well Balanced Diet and One That Is Very Low in Sugar.**

A well balanced diet, that is one containing a sufficient amount of proteins, carbohydrates and fats is necessary for growth and health. The foods eaten must also contain the necessary vitamins and be well fortified with minerals. Get the sugar needed by eating fresh fruit and not candy.

3. **Tooth Brushing, Properly Done, Can Accomplish a Few Worthwhile Objects.**

Tooth brushing is not a complete mouth care program. Tooth brushing will clean certain surfaces of the teeth and make them more attractive. Performed properly, it may assist to prevent diseased gums and the formation of cavities in some areas. It will not prevent decay on the proximal surfaces or in pits and fissures. A clean tooth may not decay, but no one can keep a tooth entirely clean with a toothbrush. See the Dentist or Dental Hygienist at regular and frequent intervals to have tartar and stain removed and all surfaces of the teeth polished.

4. **Mouth Habits Affect the Arrangement of Teeth.**

Mal-arrangement of the teeth is not necessarily inherited. Many children deform the arrangement of their teeth by biting the lip, tongue, cheek or pencil

and by thumb or finger sucking. Mouth breathing caused by diseases of the nose and throat may also cause mal-arrangement of the teeth. Children and parents need to realize further that adequate care of the deciduous and young permanent teeth will do more than any other single thing to prevent irregular teeth.

5. **Drugs, and Proprietary Preparations, Should be Used Only on the Advice of a Dentist or Physician.**

Today, dental nostrums that are not only useless, but sometimes dangerous are sold directly over the drug store counter. If a toothpaste, toothpowder, or mouth wash bears the Seal of Acceptance of the Council on Dental Therapeutics of the American Dental Association, you may be sure it is a safe preparation to use.

6. **Develop in the Child the Concept That a Dentist is a Friend and Not an Ogre to be Feared.**

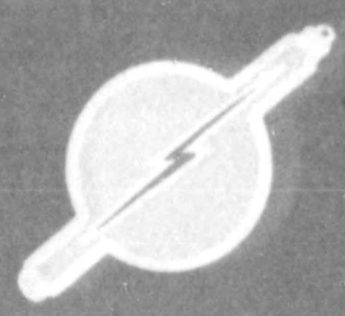
One of the first friendships that every child should make outside of his family circle is with the dentist. It should be made while the child is very young—at two and one-half or three years of age. It should be renewed often—so often that the child will look forward with pleasure to visiting his dentist and will go to see him willingly without any urging. Some children fear dental operations because their first visit was delayed until their teeth ached or became abscessed. Naturally, then, they associate dentistry with pain. They have no desire to renew the acquaintance because of fear. This fear, however, can be prevented. Begin taking the child to the dentist when he is still young. And return often so that no cavity can become large enough to be painful. Once the dentist makes a friend of the child and the child makes a friend of the dentist, fear and misgivings vanish.

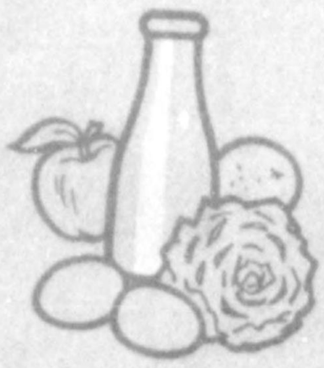
B8

# Good Teeth

SEE YOUR DENTIST

BRUSH YOUR TEETH





EAT THE RIGHT FOOD EVERY DAY

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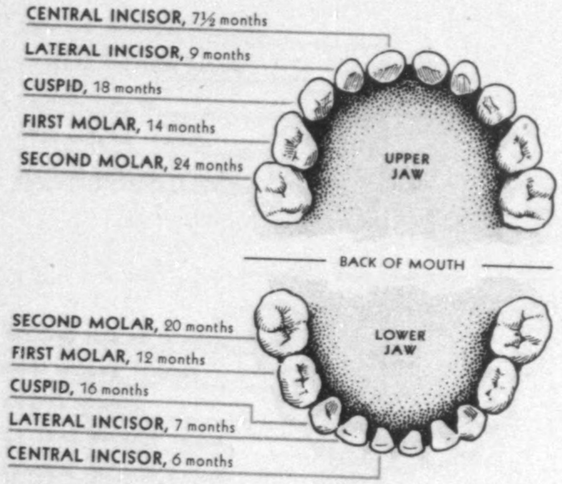
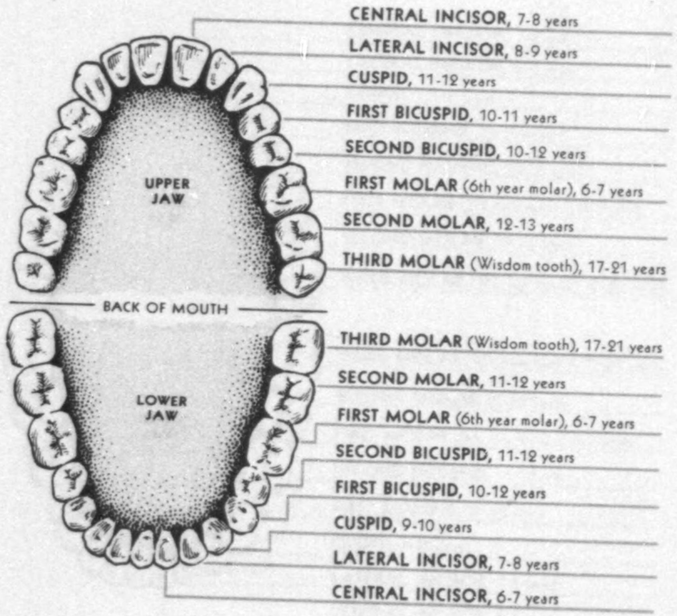



## A FULL SET OF DECIDUOUS TEETH

**With approximate ages at which eruption occurs.**

**Normally eruption may occur a little earlier or a little later than at the ages given.**



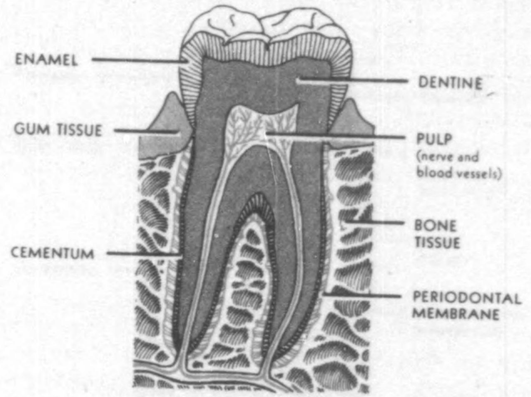

## A FULL SET OF PERMANENT TEETH

**With approximate ages at which eruption occurs.**

# *Good Teeth*

make a big contribution to health and good looks. The body takes care of the building of teeth, but we must provide the materials required and arrange for proper upkeep.

The work of the teeth is to chew solid food and mix it with saliva so that it can be swallowed easily and digested properly. Unless this job is well performed the health of the whole body may suffer.




## TOOTH BUILDING

Each tooth is perfectly designed for the work it has to do (see above). The crown is covered with *enamel*, the hardest material in the body, and the roots are covered with a thin layer of bonelike material called *cementum*. A softer substance called *dentine* lies underneath these outer coverings. Enclosed within the dentine is a hollow space called the *pulp chamber*, which contains blood vessels, nerves, and the spongy substance which surrounds them. The blood vessels and nerves enter the tooth through a narrow canal which runs from the pulp chamber to an opening at the tip of each root. The blood brings food for the tooth, and the nerves carry messages of pain in case of infection or injury.

The small jaw of a child is not big enough to hold the teeth which he will need when he is older. Therefore he is provided with a set of 20 deciduous, or baby, teeth to chew with and to encourage his jaws to grow until they are large enough to hold the 32 larger and stronger teeth of the permanent set (see inside front cover).

### ✦ The Sixth-Year Permanent Molars

A child begins to lose his first teeth when he is about 6 years old, and four permanent teeth appear at about the same time. These are the first permanent molars, or grinders, usually known as the sixth-year molars. They do not replace baby teeth, but come in just back of the last baby molars. The sixth-year molars are the largest and most important teeth in the lifetime set. They do the heavy work of chewing while the baby molars are falling out and the permanent ones are coming in. They act also as corner posts to hold the permanent teeth in line as, one by one, they take their places in the dental arch. It is particularly important for children to be under a dentist's supervision when the sixth-year molars are coming in, so that weak spots or surface cracks in the enamel can be discovered and repaired at the earliest possible moment.

## THE SPECIFICATIONS FOR GOOD TEETH

Strong, even teeth in a healthy mouth depend largely upon good general health, upon foods which give the teeth the building materials they need, upon skilled dental care, and upon cleanliness. Heredity and other influences, the extent of which are unknown, may also affect the teeth.

### ✦ Food

Teeth, like any other part of the body, depend for their nourishment upon food. Teeth especially require adequate amounts of the substances used in their construction—calcium, phosphorus, and vitamins A, C, and D. A diet which includes adequate amounts of milk, eggs, meat, fruits, vegetables, cereal products, butter, and fish-liver oils will supply the materials needed for good teeth as well as for general good health and growth.

As the crowns of the baby teeth are practically completed before birth, the mother's diet must provide the necessary materials during this period. After the child is born, protection of the baby teeth and the final structure of the permanent teeth make it equally important that the foods eaten during childhood continue to supply all the



building materials in generous amounts. The quantity and kind of food which will provide all the food materials needed by children and adults for the good health, growth, and repair of the whole body —of which the teeth are a part—are briefly outlined below.

An excess of sweet foods should be avoided, since they seem to encourage the growth of acid-forming bacteria which attack the enamel. Sweet foods also tend to satisfy the appetite too quickly and

**DAILY FOOD NEEDS**

| Food | Child (preschool through adolescence) | Adult | Woman (pregnant and nursing) |
|---|---|---|---|
| Milk | ¾–1 quart | 1 pint | 1 quart (pregnant)<br>1½ quarts (nursing) |
| Eggs | 1 (at least 3–4 during week) | 1 (at least 3 during week) | 1 |
| Citrus fruit (oranges, grapefruit), or tomatoes, fresh or canned | 1 serving | 1 serving | 2 servings |
| Other fruit, fresh, dried, or canned | 1 serving | 1 serving | 1 or 2 servings |
| Potato (white or sweet) | 1 serving | 1 serving | 1 or 2 servings |
| Green-leaf vegetable (cooked) | 3–4 times during week | 3–4 times during week | 3–4 times during week |
| Other vegetables (sometimes raw) | 1 serving | 1 serving | 1 serving |
| Meat, poultry, or fish | 1 serving | 1 serving | At least 1 serving |
| Cheese, dried beans or peas (used for main dish) | 1–2 times during week | 1–2 times during week | 1–2 times during week |
| Cereal, whole-grain or enriched | At least 1 serving | 1 serving | 1–2 servings |
| Bread, whole-grain or enriched | At least 1 slice at each meal | 1–6 slices | 3–6 slices |
| Butter, vitamin-A margarine, and other fats | On bread, vegetables, and moderate amounts in cooking | On bread, vegetables, and moderate amounts in cooking | On bread, vegetables, and moderate amounts in cooking |
| Water | 3–4 glasses | 4–6 glasses | 4–8 glasses |
| Fish-liver oils | 1–2 teaspoons through 2 years—desirable through adolescence | | 1–2 teaspoons |

interfere with eating enough of more essential foods. Sweets should be used only in small amounts to give flavor to other foods, and preferably not between meals, but as desserts after meals.

### ✦ Dental Care

Teeth must be taken care of properly and repaired when necessary if they are to do good work and escape early loss. No one is capable of caring for the teeth properly without the help of a dentist.

Costly and painful repair work, the loss of permanent teeth, and serious root abscesses may be avoided by going to the dentist every six months or at such intervals as he may find necessary. The dentist will remove decayed areas before they have a chance to spread widely, and will close the cavities with permanent fillings. It is most desirable to introduce a child to the family dentist before little, if any, work needs to be done, so that the dentist can win the child's confidence and cooperation.

### ✦ Cleanliness

Millions of bacteria are present even in a clean, healthy mouth. Most of these bacteria are harmless. But some kinds act upon bits of food caught between and around the teeth, and upon gummy patches at their necks, to form acids which eat through the protective enamel covering. It is only through breaks in the enamel that the bacteria which cause tooth decay can get into the tooth. The object

## EVERYONE SHOULD

**Begin going to the dentist at about the age of 2½ or 3 years.**

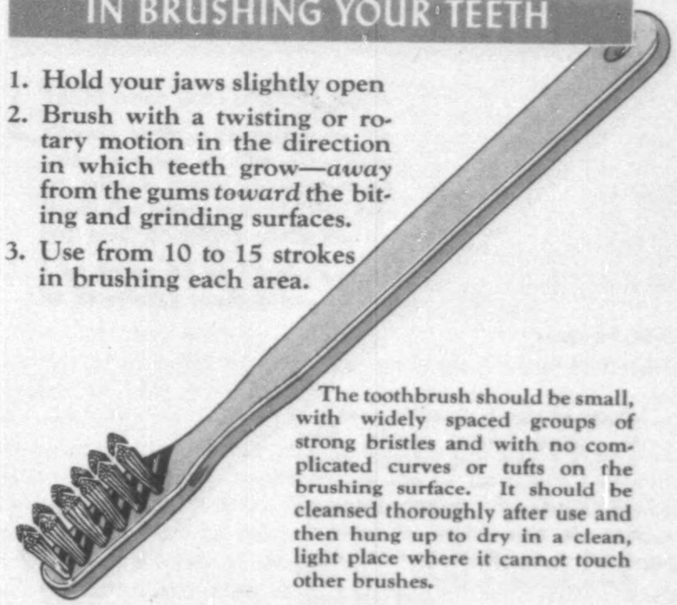
**Have a dental examination and a prophylactic cleansing twice a year, or as often as the dentist thinks necessary.**

**Have all needed repairs made promptly by one's own dentist or in a dental clinic.**



## IN BRUSHING YOUR TEETH

1. **Hold your jaws slightly open**
2. **Brush with a twisting or rotary motion in the direction in which teeth grow—*away* from the gums *toward* the biting and grinding surfaces.**
3. **Use from 10 to 15 strokes in brushing each area.**



**The toothbrush should be small, with widely spaced groups of strong bristles and with no complicated curves or tufts on the brushing surface. It should be cleansed thoroughly after use and then hung up to dry in a clean, light place where it cannot touch other brushes.**

of brushing the teeth is to dislodge bits of food from between the teeth and to break up the gummy patches which furnish feeding grounds for acid-forming bacteria. The teeth should be brushed after each meal, if possible, and always before going to bed.

A number of toothpastes and powders have been carefully examined by the Council on Dental Therapeutics of the American Dental Association, and bear its seal of acceptance. A strong water solution of table salt (one spoonful) and baking soda (three spoonfuls) can be used if commercial dentifrices are not available.

The baby's teeth may be kept clean by wiping them with a clean cloth moistened with a solution of bicarbonate of soda and boiled water. As soon as the child is old enough, he should be taught to use a toothbrush.

# WHEN A TOOTH IS IN TROUBLE— SEE YOUR DENTIST

### ✦ Dental Caries

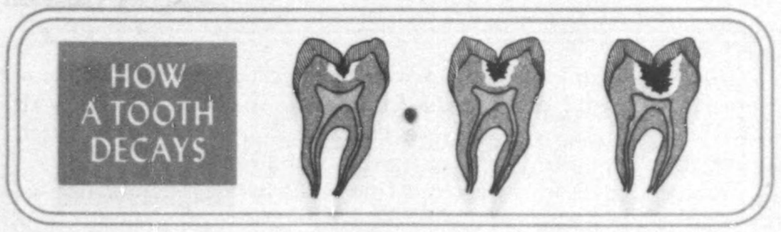
The agents of tooth decay (dental caries) are bacteria which get inside the tooth through breaks in the enamel caused by faulty structure or the action of acid-forming bacteria. Even when the break is no bigger than a pinprick, large numbers of bacteria can easily go through it. Once inside the tooth, the bacteria multiply rapidly and spread decay inward toward the pulp chamber where the nerves and blood vessels are located. If the decay is not checked in time by a dentist the tooth usually begins to ache. Further delay in obtaining dental treatment may result in the loss of the tooth.

### ✦ Root Abscess

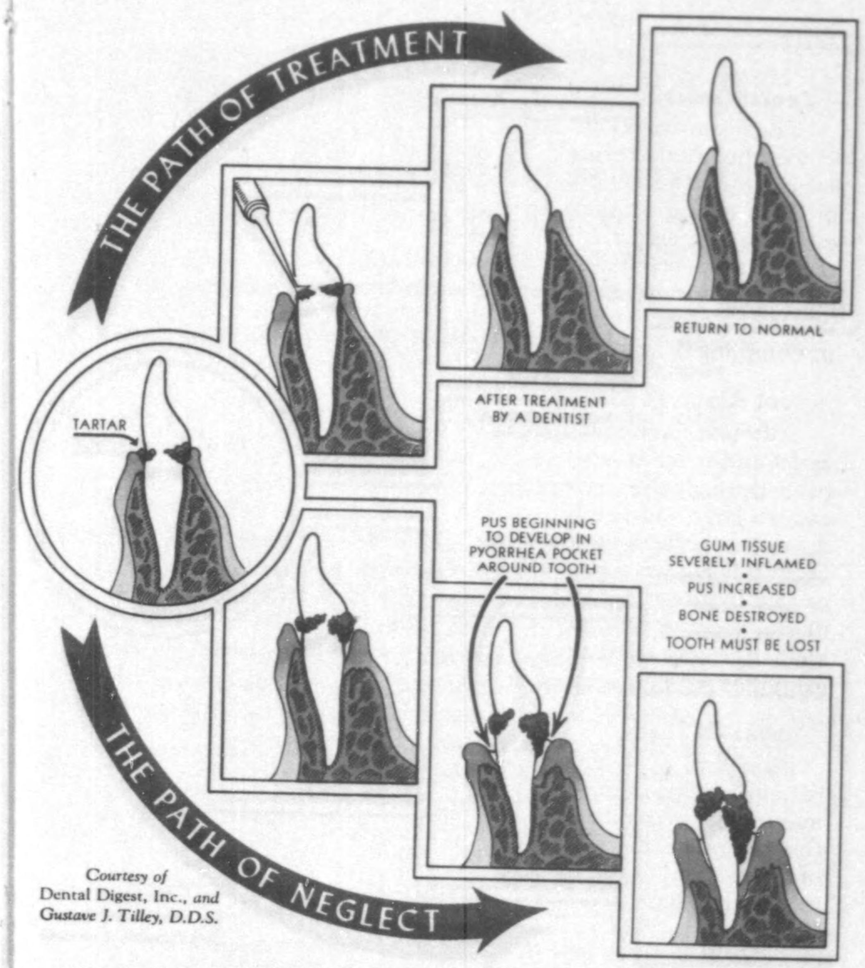
Infection in the pulp chamber may travel down through the root canal and form an abscess at the end of the root. The abscess may push through the jawbone and gum to form a gumboil, or it may cause a large and painful swelling of the face. Sometimes an abscess develops at the roots of a tooth without causing pain or swelling. From this hidden focus of infection, bacteria or their poisons may be carried by the blood stream to other parts of the body. In any condition, such as arthritis or neuritis, which may be due to abscessed teeth, the physician usually wishes to have the teeth X-rayed and examined by a competent dentist.

### ✦ Impacted Teeth

Impacted teeth are usually third molars (wisdom teeth) which remain imbedded in the jaws or come only part way through. They may cause a number of disturbances—neuralgic pains, chiefly—if the teeth are entirely below the gums; or painful swellings of the back of the mouth, if they are partly erupted. X-ray pictures are invaluable in locating impacted teeth and in determining what treatment is necessary for them.






*Courtesy of Dental Digest, Inc., and Gustave J. Tilley, D.D.S.*

### ✦ Gingivitis and Pyorrhea

Pyorrhea is caused by germs which attack the periodontal membrane—that is, the elastic tissue connecting the roots of the teeth with their bony sockets. If not checked it spreads to the tooth sockets, and the teeth become loosened and finally lost.

The development of pyorrhea is favored by an inflammation of the gums called gingivitis. The first indication of gingivitis is a

## TO PREVENT GINGIVITIS

1. **Have a prophylactic cleansing at least twice a year.**
2. **Keep your teeth and gums healthy by proper brushing.**
3. **Eat enough of the right kinds of food (see page 5).**
4. **Have defective fillings or bridges repaired promptly.**
5. **Do whatever else your dentist advises.**

tendency of the gums to bleed easily. It may be caused by a poor diet, by collections of the rough yellowish incrustations called tartar at the necks of the teeth, by the persistent wedging of food in particular crevices between the teeth (especially those which are out of line), or by dental fillings, crowns, and bridges which irritate the gums. If the inflammation is neglected, it penetrates deeper into the tissues, becomes chronic, and provides a fertile field for the growth of the pus-producing germs responsible for pyorrhea.

Active pyorrhea can be checked successfully by a dentist if it has not progressed too far, but some permanent damage to the tissues will result in almost every case. That is why prevention is doubly important.

## IRREGULAR TEETH

***An unshapely jaw and irregular teeth may affect health and social and business success in a number of ways:***

A narrow upper jaw with protruding teeth or a receding lower one may spoil a person's looks and thus interfere with his normal, happy adjustment to life.

Upper and lower teeth which do not occlude, or come together, properly (malocclusion) interfere with digestion by making adequate chewing impossible.



Teeth which are out of line favor tooth decay and gingivitis by interfering with proper function and proper cleansing.

Heredity plays an important part in determining the size and shape of the jaw, which in turn may influence the size, shape, and position of the teeth and the relation of one jaw to the other. One often hears of a certain type of jaw as "running in the family." But the conditions under which the jaws develop and the teeth erupt play an even more important part. Bad influences on young, growing jaws and teeth include:

1. A lack of the foods needed for building bones and teeth and exercising the jaw muscles.
2. Prolonged thumb sucking; biting the tongue, lips, or cheeks; and mouth breathing which is frequently due to blocking of the nose by enlarged tonsils and adenoids.
3. Habitually lying face downward or always on one side while sleeping, or leaning one side of the lower jaw on the hand while sitting.
4. Improper care of baby teeth.
5. Losing baby teeth too soon or keeping them too long, which often results in irregular line-up of the permanent teeth.

Watchful care on the part of parents and physician and early supervision by a dentist will help to prevent or remedy conditions which may be responsible for uneven bite (malocclusion) and irregular teeth. Besides checking faulty habits and giving needed dental care, the dentist may suggest exercises or other things the child himself may do to encourage normal jaw development. If necessary, the dentist may advise taking the child to an orthodontist —that is, a specialist in preventing and correcting malocclusion and irregularities of the teeth. The corrections may take some time and cause some inconvenience, but they are well worth while, because they will eventually give the child a normal chewing surface and at the same time greatly improve his appearance.

*Statements in this booklet have been accepted by the Committee on Public Health and Education of the American Dental Association.*


METROPOLITAN LIFE INSURANCE COMPANY PRESS
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# Mouth Health Catechism



# Mouth Health Catechism

**Good teeth and a clean, healthy mouth are essential for good health and a pleasing personal appearance. To have good teeth and a clean, healthy mouth it is necessary to know something about teeth, their structure and the ways of taking care of them.**

**DIVISION OF ORAL HYGIENE**
**NORTH CAROLINA**
**STATE BOARD OF HEALTH**

1. Q. GIVE THREE NAMES FOR THE FIRST TEETH.

   A. The first teeth are called baby, temporary or foundation teeth.

2. Q. HOW MANY FOUNDATION TEETH ARE THERE?

   A. There are twenty foundation teeth.

3. Q. WHEN DOES THE FIRST TOOTH APPEAR IN A CHILD'S MOUTH?

   A. When a child is about six months old his first tooth usually appears. By the time he is two or two and a half years old he should have all of his foundation teeth.

4. Q. WHY IS IT IMPORTANT TO TAKE CARE OF THE TEMPORARY TEETH?

   A. Good temporary teeth are needed for chewing and digesting food during a period in the child's life when nutrition is of vital importance. They are also needed as space retainers and guides for the permanent teeth.

5. Q. WHEN SHOULD THE CHILD FIRST VISIT THE DENTIST?

   A. When a child is about two years of age, or when he has all of his foundation teeth, he should be taken to a dentist.

6. Q. WHAT IMPORTANT DENTAL DEVELOPMENT TAKES PLACE WHEN A CHILD IS ABOUT SIX YEARS OLD?

   A. The first permanent tooth, the six-year molar, erupts when a child is about six years old.

7. Q. WHERE IS THE SIX YEAR MOLAR LOCATED?

   A. The six-year molar is the sixth tooth from the space between the two central teeth, or it is the first tooth back of the last baby tooth.

8. Q. WHY DO CHILDREN OFTEN LOSE THEIR SIX YEAR MOLARS?

   A. The six-year molars are frequently mistaken for baby teeth and are not given the proper care. Three out of four children lose one or more of their six-year molars by the time they are sixteen years of age.

9. Q. WHY IS THE LOSS OF A SIX YEAR MOLAR A DENTAL TRAGEDY?

   A. The six-year molars are called the keystones of the dental arch. Each of them is a determining factor in the positions of the other permanent teeth and, therefore, in the symmetry of the jaws and face.

10. Q. HOW MANY PERMANENT TEETH ARE THERE?

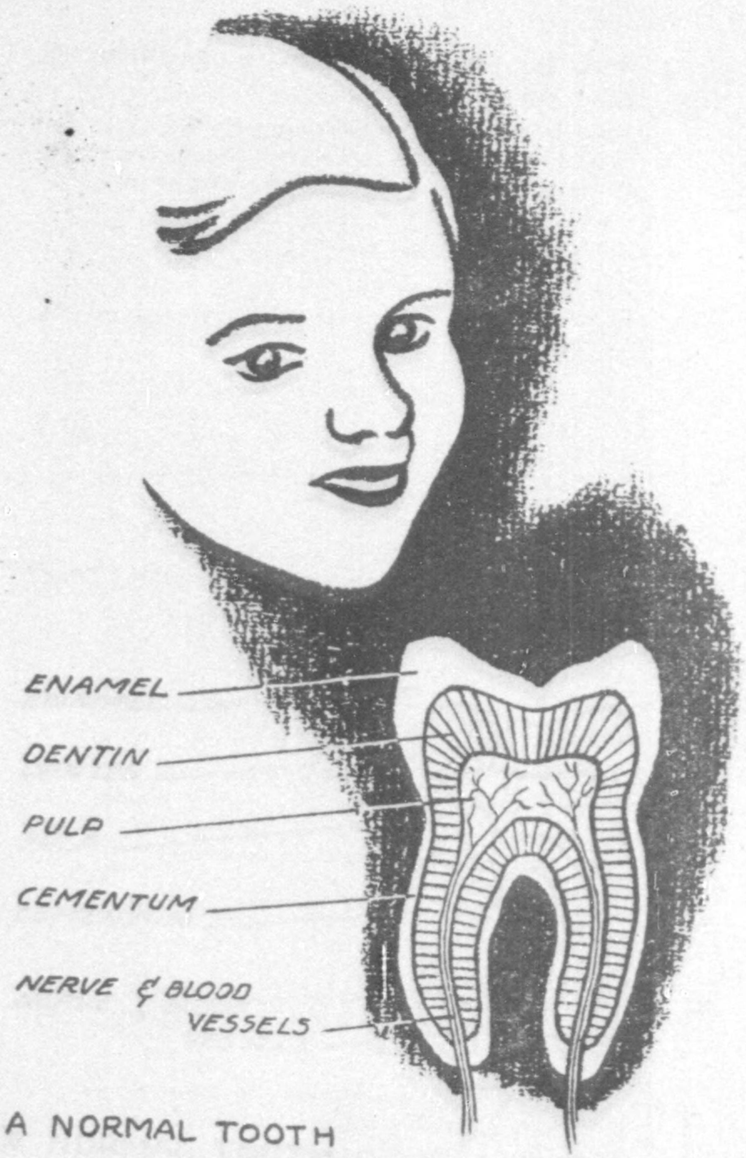
    A. There are thirty-two permanent teeth.

11. Q. WHEN DO THE PERMANENT TEETH BEGIN TO FORM AND WHEN DO THEY ERUPT?

    A. The permanent teeth begin to form at birth. They grow and develop under the baby teeth they are to replace. Usually all of the twenty baby teeth have been replaced by permanent teeth by the time a child is twelve years old. In addition there are twelve molars in the permanent set.

12. Q. IF A CHILD'S PERMANENT TEETH SHOULD COME IN CROOKED, CAN ANYTHING BE DONE ABOUT IT?

    A. They can, in all probability, be straightened. There are dentists, known as orthodontists, who specialize in straightening teeth.




A NORMAL TOOTH

13. Q. NAME THE THREE PARTS OF A TOOTH.
A. The three parts of a tooth are:
1. The crown, the part above the gums
2. The neck, the part at the gum line
3. The roots, the part beneath the gums

14. Q. OF WHAT SUBSTANCES ARE TEETH COMPOSED?
A. Teeth are composed of:
1. Enamel, the hard, protective covering of the crown
2. Dentin, the substance, not quite so hard as enamel, beneath the enamel and cementum
3. Cementum, a layer of bonelike material covering the roots
4. Pulp, a soft, spongy material containing the nerves and blood vessels

15. Q. WHAT IS THE RELATIONSHIP OF DIET TO MOUTH HEALTH?
A. The elements necessary for building and maintaining good strong teeth and healthy supporting tissues are supplied by the diet.

16. Q. WHAT ELEMENTS SHOULD THE DIET CONTAIN TO MAKE GOOD TEETH?
A. The diet should be made up of foods containing calcium, phosphorus and vitamins A, C and D.

17. Q. WHAT FOODS ARE THE BEST SOURCES OF CALCIUM?
A. Milk is the best source of calcium. Many of the green, leafy vegetables also contain calcium.

18. Q. WHAT FOODS FURNISH PHOSPHORUS?
A. Milk, sea foods, lean meats, beef liver, eggs and whole grain cereals are rich in phosphorus.


**19. Q. What Foods Supply Vitamin A?**

A. Whole milk, other dairy products and cod liver oil are good sources of vitamin A.

**20. Q. What Are the Best Sources of Vitamin C?**

A. Citrus fruits and tomatoes are the best sources of vitamin C.

**21. Q. How Is Vitamin D Supplied?**

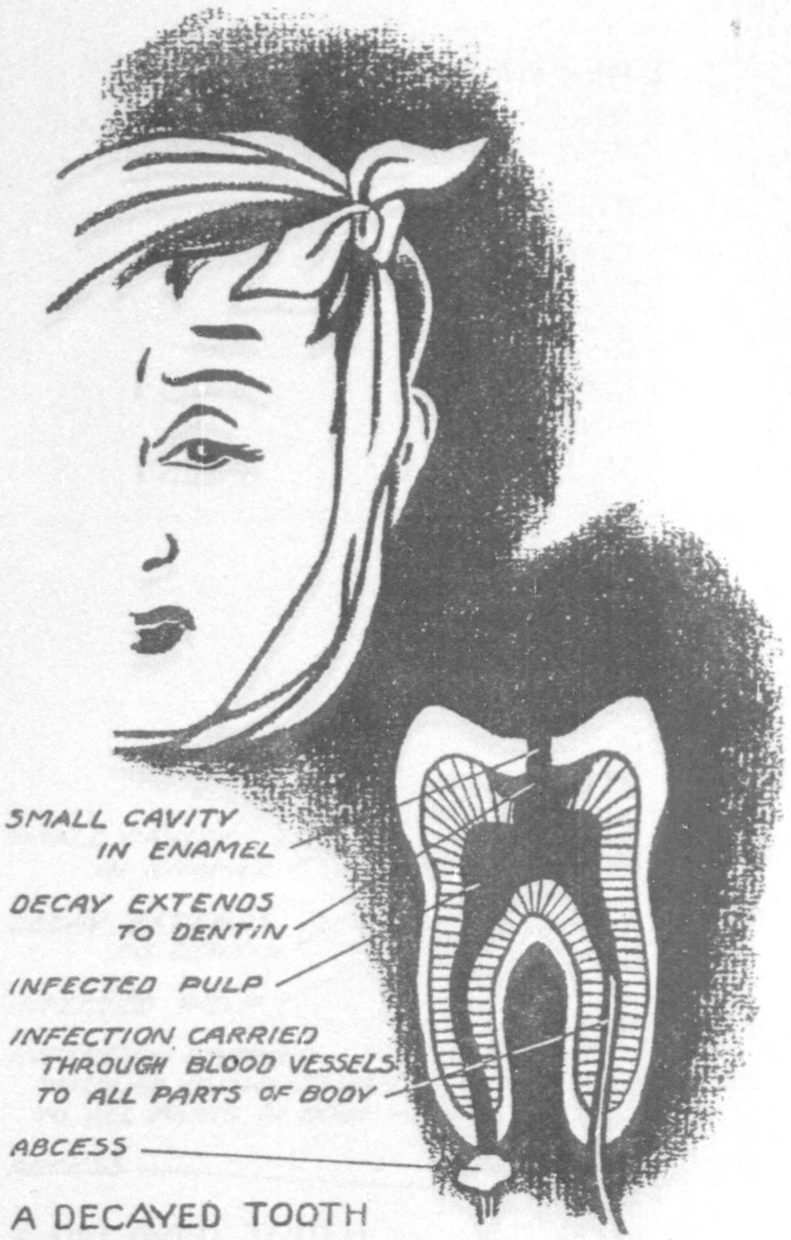
A. Exposure to the sunshine is a source of vitamin D. Cod and other fish liver oils contain vitamin D and should be included in the diet during the winter months.

**22. Q. What Foods Should Be Included In the Daily Diet of a Child?**

A. A child's daily diet should include as many of the following foods as possible:
One quart of milk
One egg
One orange or tomato (canned tomatoes and tomato juice are acceptable)
Other fruits
Two or three vegetables, one leafy
One serving of meat, fish or cheese
Whole grain cereals and breads
Cod liver oil in winter

**23. Q. Why Should Some Rough, Coarse Foods Be Eaten?**

A. The chewing of rough, coarse foods serves to massage and stimulate the gums. In the case of children, it furnishes exercise which helps to develop the jaws. Because so little chewing is required in the mastication of the highly refined foods of today, chewing gum for a short while after meals will, in ? measure, supplement this needed chewing exercise.




A DECAYED TOOTH

24. Q. Are Dental Defects Prevalent?

A. Yes. Statistics show that from 90 to 95 per cent of the population have dental defects.

25. Q. What Is the Most Common Dental Defect?

A. Tooth decay, or dental caries, is the most common dental defect.

26. Q. What Causes Tooth Decay?

A. The exact cause of tooth decay has not been determined. However, it is generally agreed that decay is produced by an acid that is formed by the action of certain bacteria on the food particles, especially sugars and starches, that adhere to the teeth.

27. Q. Can Anything Be Done To Prevent the Presence In the Mouth of These Bacteria?

A. Many dentists believe that the presence of these acid-forming bacteria can be controlled by reducing to a minimum the sugar in the diet.

28. Q. What Part of the Tooth Does Decay First Attack?

A. Decay first attacks the enamel of the tooth. It usually starts on a surface that is in contact with another tooth or in a groove in the chewing surface.

29. Q. Describe the Course of Tooth Decay.

A. Unless checked, decay will penetrate the enamel and the dentin until it reaches the pulp of the tooth. When the pulp becomes involved the tooth usually dies and often an abscess forms at the end of the roots.

30. Q. How Do Abscessed Teeth Affect the Health of the Individual?

A. Infection enters the blood stream from an abscess and is carried to other parts of the body. Diseases of the heart, lungs and kidneys may be caused by this infection.

31. Q. How Can Dental Caries Be Prevented or Corrected?

A. The best way to prevent or correct dental caries is for the individual to visit a good dentist regularly.

32. Q. How Often Should a Person Visit His Dentist?

A. A person should visit his dentist at least twice a year.

33. Q. Can the Dentist Always Fill a Decayed Tooth?

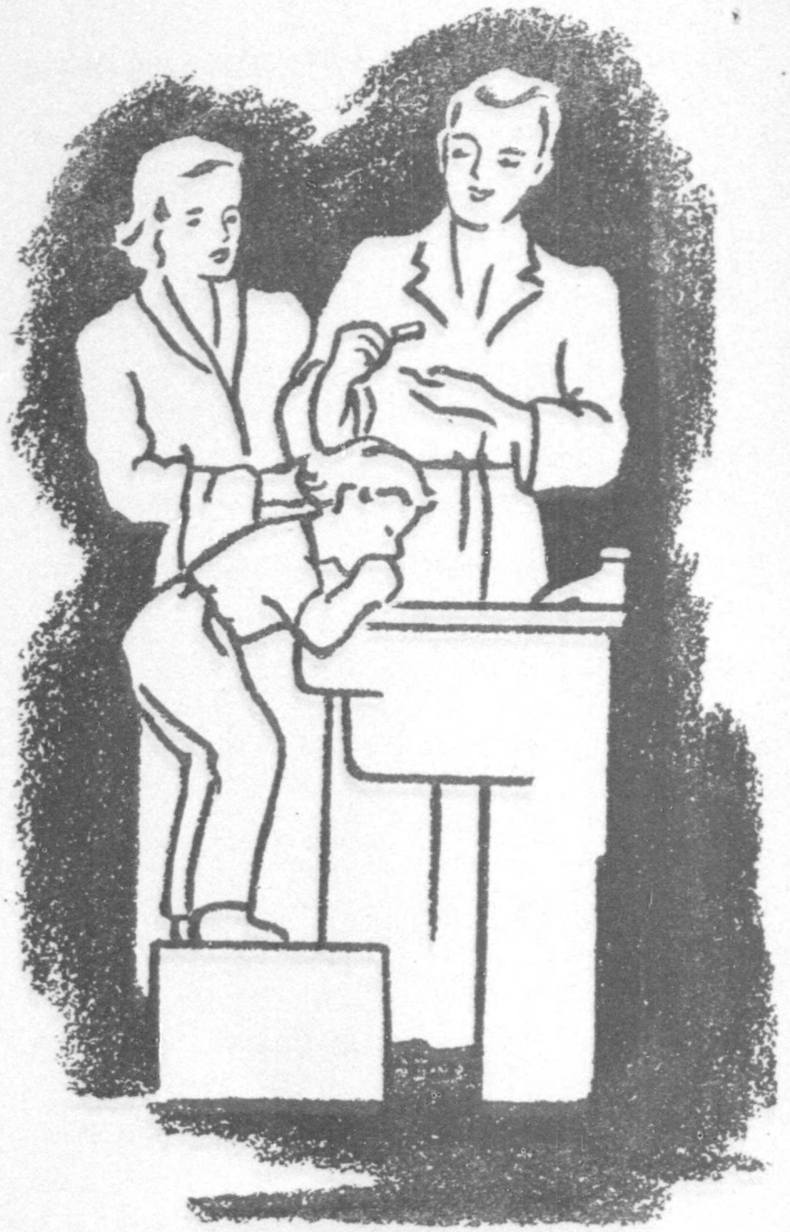
A. No. If the decay has reached the pulp, the tooth may have to be extracted.

34. Q. Are There Any Serious Effects From Having a Tooth Extracted?

A. Yes. There is a gradual shifting of the other teeth in the arch to compensate for the space left.

35. Q. What Does the Shifting of the Other Teeth Do?

A. The shifting of the teeth weakens their foundations and invites pyorrhea pockets to form about their roots.



**36. Q. Is There Any Home Remedy For Pyorrhea?**

A. Pyorrhea should be diagnosed and treated by a dentist, and his advice should be followed.

**37. Q. Can the Claim That a Clean Tooth Never Decays Be Substantiated?**

A. No, but cleanliness is a factor in preventing decay.

**38. Q. How Often Should the Teeth Be Brushed?**

A. The teeth should be brushed at least twice a day, after breakfast and before going to bed.

**39. Q. What Is the Function of a Dentifrice?**

A. A good tooth paste or powder acts only as a cleansing agent, just as soap does. One that claims to do more than that should be avoided for it might injure the teeth or gums. A good, inexpensive dentifrice may be made by mixing baking soda and salt in the proportion of one teaspoonful of salt to ten of soda.

**40. Q. State Briefly the Four Most Important Aids To Mouth Health.**

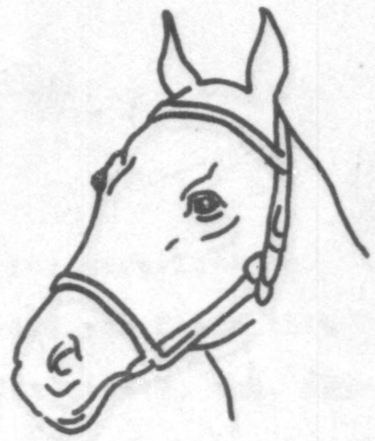
A. The four most important aids to mouth health are:

1. Regular visits to a dentist
2. A diet containing tooth building foods
3. Cleanliness
4. Chewing exercise

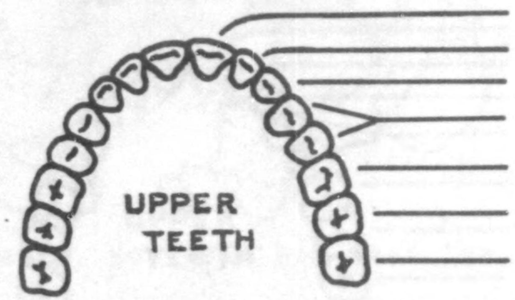
B8

You have often heard that a horse's age can be told by looking at his teeth.

Did you know that a good dentist can probably tell your age by looking at your teeth? This is no magic trick of his. He can do it because he knows the ages at which the permanent teeth usually appear in a child's mouth. By studying the following chart, you, too, can know this.



*THE SECOND TEETH AND THE AGES AT WHICH THEY USUALLY APPEAR*




| | |
|---|---|
| *Central Incisor* | *6...8 years* |
| *Lateral Incisor* | *7...9 years* |
| *Cuspid* | *9..13 years* |
| *Bicuspids* | *8..12 years* |
| *Six Year Molar* | *5...7 years* |
| *Twelve Year Molar* | *12..14 years* |
| *"Wisdom Tooth"* | *17..25 years* |

*The lower teeth have the same names and appear at the same ages.*

Your dentist can tell something that is of much more importance than your age by looking at your teeth. He can tell whether or not you have been eating the right foods.

The materials for building and maintaining your teeth come from the foods that you eat. The materials essential for building and maintaining good teeth are calcium, phosphorus, and vitamins A, C, and D. Calcium and phosphorus might be called the building materials, as the teeth are composed largely of these two minerals. The vitamins might be called the builders, as each vitamin has certain work to do. Vitamin A is especially concerned with growth. Vitamin D helps the body to assimilate the calcium and phosphorus. Vitamin C helps the teeth to retain the calcium. All three vitamins are needed for the health of the teeth and gums. To have good teeth you must eat foods that contain these materials. The following table shows the best sources of these food elements.

*Legend: Ca (calcium), P (phosphorus), *(fair), **(good), ***(very good)*

| Food | Ca | P | Vitamins A | C | D | Food | Ca | P | Vitamins A | C | D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Oranges | * | | * | *** | |

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*Legend: Ca (calcium), P (phosphorus), *(fair), **(good), ***(very good)*

| Food | Ca | P | Vitamins A | C | D |
|---|---|---|---|---|---|
| Milk | *** | ** | *** | | |
| Lettuce | * | | ** | *** | |
| Cabbage | * | * | ** | *** | |
| Carrots | ** | * | *** | *** | |
| Spinach | *** | ** | *** | *** | |
| Tomatoes | | | ** | *** | |

| Food | Ca | P | Vitamins A | C | D |
|---|---|---|---|---|---|
| Oranges | * | | * | *** | |
| Eggs | * | * | *** | | ** |
| Fish | | *** | | | |
| Beef | | *** | | | |
| Cod Liver Oil | | | *** | | *** |

You will notice that cod liver oil is a food and that it is the best source of vitamin D. The sunshine is another source of this vitamin.

People who have studied foods and the relation of foods to teeth recommend that your daily diet include the following foods.

*One quart of milk*
*One serving of meat or fish*
*One egg*
*One orange or tomato*
*(canned tomatoes and tomato juice)*



*One additional fruit*
*Two or three vegetables, one leafy*
*Whole grain breads and cereals*
*Cod liver oil in winter*

*Make a list of:*

*A. the permanent teeth usually found in the mouth of a*
*1. nine year old child. 2. twelve year old child.*
*B. the foods that are the best sources of*
*1. Ca., 2. P., 3. Vitamin A., 4. Vitamin C., 5. Vitamin D.*

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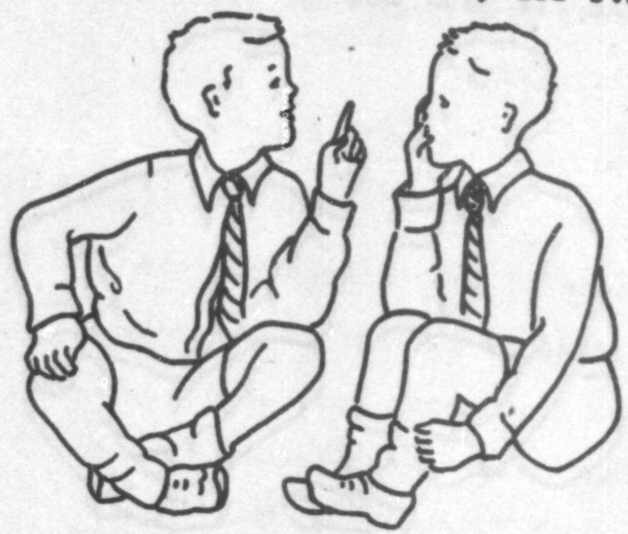
*North Carolina State Board of Health*
*Division of Oral Hygiene*

B 8

# TWENTY WHITE HORSES

"Twenty white horses on a red hill;
Now they tramp,
Now they champ,
Now they all stand still."



When you were five or six years old you heard this Mother Goose riddle, and, maybe, you could not guess what the twenty white horses were. After you knew the answer you said the rhyme to one of your playmates and, to help him guess it, you told him that the twenty white horses were in his own mouth. You were right then but, if you were to tell one of your classmates, to-day, that he had twenty white horses in his mouth, you would be wrong. Do you know why?

Yes, the twenty white horses in this old, old rhyme were your teeth but they were your **BABY TEETH**. How do we know? Because you had twenty baby teeth. You may have some of your baby teeth yet and, if you have, you must take good care of them. You wonder why you need to take care of teeth that will get loose and come out. The main reason is that you want to have a clean, healthy mouth. Another reason is that the first teeth are guides for the second teeth. When one of your second teeth is ready to

own mouth. You were right then but, if you were to tell one of your classmates, to-day, that he had twenty white horses in his mouth, you would be wrong. Do you know why?

Yes, the twenty white horses in this old, old rhyme were your teeth but they were your **BABY TEETH**. How do we know? Because you had twenty baby teeth. You may have some of your baby teeth yet and, if you have, you must take good care of them. You wonder why you need to take care of teeth that will get loose and come out. The main reason is that you want to have a clean, healthy mouth. Another reason is that the first teeth are guides for the second teeth. When one of your second teeth is ready to come through, the baby tooth under which it is growing gets loose and comes out. If you lose your baby teeth too soon, your second teeth may not come through in straight rows. However, if you have neglected your baby teeth and they have decayed, the dentist may have to extract them.

The second teeth are called **PERMANENT TEETH**. The dictionary says that permanent means "to stay to the end." That is exactly what you want your second set of teeth to do, for, if you lose them, no other teeth will grow in their places. You will have thirty-two permanent teeth. Take care of them so that they will be really and truly permanent.

Over

B8

Your first permanent teeth came through when you were about six years old. That is why they are called "six year molars." The six year molars are very important teeth. Take good care of yours because they will help to keep your permanent teeth in line after they have come through your gums.

*********

The following sentences tell some of the things that the story tells you about your teeth. Some of the sentences tell about your first set of teeth. Some tell about your second set of teeth. If the sentence tells about your first teeth, make a check ( ) at the end of the line under "First Teeth." If it tells about your permanent teeth, make a check under "Permanent Teeth."

| | First Teeth | Permanent Teeth |
|---|---|---|
| 1. No other teeth will grow in their places. | ..... | ..... |
| 2. They get loose and come out. | ..... | ..... |
| 3. They are the guides for the second teeth. | ..... | ..... |
| 4. The six year molars come through when a child is about six years old. | ..... | ..... |
| 5. There are twenty of them. | ..... | ..... |