

American Dental Association

ADACommons

Patient Dental Health Education Brochures

Special Collections

1967

Diet and Dental Health (1967)

American Dental Association

Follow this and additional works at: <https://commons.ada.org/patientbrochures>



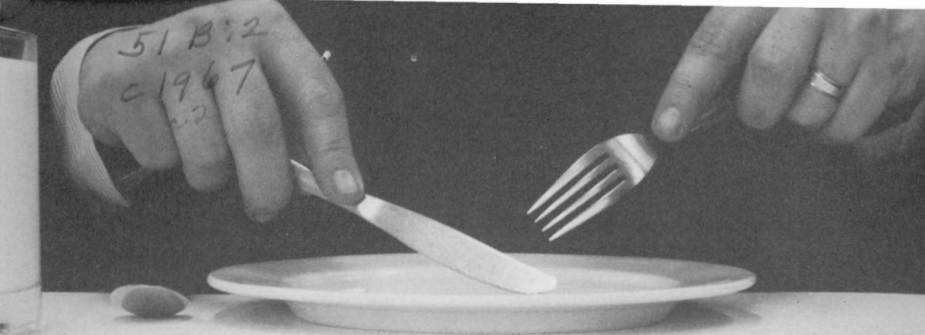
Part of the [Dental Public Health and Education Commons](#), [Dietetics and Clinical Nutrition Commons](#), [History of Science, Technology, and Medicine Commons](#), and the [Periodontics and Periodontology Commons](#)

Recommended Citation

American Dental Association, "Diet and Dental Health (1967)" (1967). *Patient Dental Health Education Brochures*. 127.

<https://commons.ada.org/patientbrochures/127>

This Book is brought to you for free and open access by the Special Collections at ADACommons. It has been accepted for inclusion in Patient Dental Health Education Brochures by an authorized administrator of ADACommons. For more information, please contact commons@ada.org.



**DIET
&
DENTAL HEALTH**

One essential for good health is eating the right foods.



The kind of diet recommended by nutritionists for general health (see page 9) will provide all the nutritional factors required for development of the oral structures. However, there are a few things about diet that should be considered particularly from the aspect of dental health.

Three major types of dental disorders are DENTAL CARIES (*tooth decay*), PERIODONTAL DISEASE (*disease of the tissues surrounding and supporting the teeth*) and MALOCCLUSION (*irregularities in tooth position and jaw relationship*).

COPYRIGHT 1967 AMERICAN DENTAL ASSOCIATION

There is no evidence of a direct connection between diet and the development of malocclusion. But there is a relationship between diet and tooth decay, and some evidence of a limited relationship between diet and periodontal disease.

Good nutrition in early childhood plays a part in the development of the teeth. Only fluoride has been proved to help build decay resistance into teeth. Millions of American children are now receiving adequate dietary fluoride by drinking water containing the essential one part per million of fluoride ion.

Where there is no central water supply to be fluoridated, dentists and physicians may prescribe dietary supplements of fluorides in selected cases. Or a dentist may apply fluoride solutions to the surfaces of the erupted teeth of children who have not received adequate dietary fluoride.

Eating excessive amounts of fermentable carbohydrates, especially sugar, is a direct invitation to tooth decay. These carbohydrates are especially harmful if they are eaten in sticky forms that adhere to the tooth surfaces.

Bacteria in your mouth quickly turn sugar into acids that attack tooth enamel. Each time you eat a sugar-rich confection, your teeth are attacked by acids. Therefore, the less frequently you eat sweet foods the less tooth decay you will have. Several studies have indicated that the amount of tooth decay is related to the frequency of between-meal eating, especially of sticky, sugary foods.

If you wish to reduce decay, cut down on sugar-containing foods in your diet. If you do eat a sweet occasionally, brush your teeth immediately afterward to remove as much sugar as possible before the oral bacteria turn it into acids. If brushing is not possible, rinse your mouth thoroughly with clear water.

The “Hidden Sugar” table (*see page 10*) shows the number of teaspoons of sugar in some candies, soft drinks and desserts.

If an individual has rampant dental caries, his dentist may suggest a special diet low in sugars and starches for a limited time.

Diet and Periodontal Disease

Tooth decay is primarily a disease of childhood, adolescence and early adulthood. Most of the damage it causes occurs before the age of 35. After that, the chief cause of tooth loss is periodontal disease, a disease of the gums and other supporting tissues. Teeth must have the support of healthy gums and healthy bone. These tissues require daily personal care, which includes toothbrushing and a good diet.

There is some evidence which suggests that inadequate nutrition may be a factor in the development of periodontal disease or in a poor response to treatment. An inadequate or unbalanced diet or the inability of the body to make use of food properly may contribute to decreased resistance to periodontal disease. The texture of foods is

also important—soft foods tend to impact between the teeth and around the gums.

A further problem is created because patients with periodontal disease often make a poor selection of foods. They find that many coarse but nutritious foods cause pain when chewed and therefore deliberately omit such foods from their diet.

It should be emphasized that good toothbrushing habits at home and regular professional care by a dentist are the two most important factors in preventing periodontal disease.

Severe, sustained deficiencies of such nutrients as iron, protein and some of the vitamins may produce changes in the oral tissues which weaken their resistance to disease. However, such deficiencies occur so seldom in the United States that they are probably minor factors in periodontal disease. In the rare instances in which they do occur, the diagnostic and treatment services of a physician or a dentist are required.

Physical Character of Foods

The physical character of food plays an important role in keeping the mouth clean and in providing the muscles used for chewing with the exercise they need. Ordinarily, your mouth is cleansed to some extent by the chewing of fibrous foods. Foods that require thorough

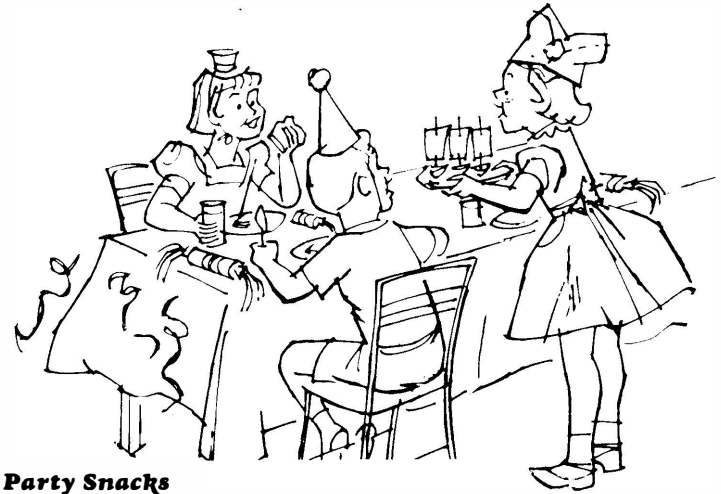
chewing, during which they are forced over the teeth and soft tissues, cleaning them, are called *detergent* foods. Examples are firm fresh fruits and raw vegetables. Everyone should make a special effort to ensure that his daily diet contains ample amounts of these foods.

Foods that require little chewing and that tend to cling to the teeth and pack into the fissures and grooves are called *impacting* foods. Examples are cookies, crackers and many candies.

Unfortunately, modern man tends to eat too many impacting and too few detergent foods. For this reason it is important to use a toothbrush regularly and carefully, immediately after eating, to remove sticky food residues from the teeth. If you cannot brush your teeth immediately after eating, you should rinse your mouth thoroughly with plain water.

Vitamins

Taking vitamin preparations is never a substitute for good eating habits. They cannot make up for a poorly chosen diet. If you eat a balanced diet, you do not need additional vitamins, except under extraordinary circumstances. Like any other form of medication, vitamin preparations should be taken only after consultation with a physician.



Party Snacks

When you are planning a party for children, at home or in school, you do not need to serve sweet foods. There are many healthful foods that children enjoy which you can serve instead of sweets.

Nutritious beverages—such as milk, tomato juice and unsweetened fruit juices—served in colorful paper cups, are appealing to children. Popular finger foods are raw vegetables, such as carrot and celery sticks, radishes, tomato, cabbage and lettuce wedges and cucumber rings.

Fruits look more “glamorous” to children if they are wrapped in cellophane. Apples, bananas, peaches, plums, grapes, bing cherries, tangerines, pears or strawberries may be served in season. You can

make "boats" of orange wedges, with toothpicks as masts and small pieces of paper as sails.

Cheese and meat cubes and shrimp speared with colored toothpicks are easy to handle. Serve them with crackers. Other suggestions: celery stuffed with cheese; hard cooked or deviled eggs; cheese dips with vegetable sticks.

Cut bread for sandwiches into unusual shapes with cookie cutters. Make faces or other designs with carrot curls, sliced olives or nuts.

Substitute a decorated sandwich loaf for a birthday cake. Cut an unsliced loaf of day-old bread the long way into three or four slices. Use two or three different kinds of egg, meat or cheese spreads between layers and frost the outside with cream cheese (*tinted if you like*). Place candles on top. Slice the loaf into ribbons when the children are ready to eat.

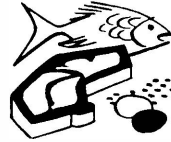
Favorite sandwich spreads are egg or meat or fish combinations and cheese. Give peanuts, popcorn or potato chips in individual cellophane packages to the children.

There are now available some foods, beverages, candies and chewing gum sweetened not with sugar but with such sweetening agents as saccharin, cyclamate and the sugar-like substance sorbitol. These are often incorporated in "low-calorie" foods. These sugar substitutes present no hazard of tooth decay.

Important daily foods for adequate nutrition



MILK GROUP Three to four 8-ounce glasses for children; two or more glasses for adults.



MEAT GROUP Two or more servings—beef, veal, pork, lamb, poultry, fish, eggs, with dry beans and peas and nuts as alternates.



VEGETABLE-FRUIT GROUP Four or more servings including—A dark green or deep yellow vegetable, important for vitamin A, at least every other day. A citrus fruit or other fruit or vegetable, important for vitamin C, daily. Other fruits and vegetables, including potatoes.



BREAD-CEREALS GROUP Four or more servings—whole grain or enriched.

Information for the above chart was obtained from "Essentials of an Adequate Diet—Facts for Nutrition Programs," Agriculture Information Bulletin No. 160, Agricultural Research Service, U.S. Department of Agriculture.

It is pointed out in the bulletin that the number of servings listed is the minimum—the foundation for a good diet. Many people will want more than the minimum amounts of these foods, and everyone will eat foods not specified, such as butter, margarine and fats and oils used in cooking.

Hidden Sugar

The approximate sugar content of popular foods
expressed in teaspoons:

100 grams sugar = 20 teaspoons = $\frac{1}{2}$ cup = $3\frac{1}{2}$ oz. = 400 calories.

tsp. sugar

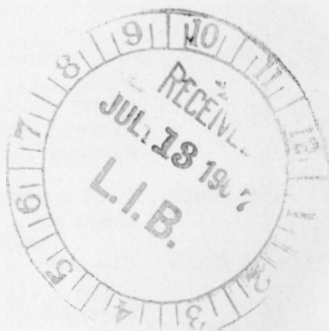
candy*	Chocolate bar.....	1 average size.....	7
	Chocolate cream.....	1 average size.....	2
	Chocolate fudge.....	$1\frac{1}{2}$ " sq. (15 to 1 lb.).....	4
	Chocolate mints.....	1 medium (20 to 1 lb.).....	3
	Marshmallow.....	1 average (60 to 1 lb.).....	$1\frac{1}{2}$
	Chewing gum.....	1 stick.....	$\frac{1}{2}$
cakes and cookies	Chocolate cake.....	1 /12 cake (2 layer icing)...	15
	Angel food cake.....	1 /12 of large cake.....	6
	Sponge cake.....	1 /10 of average cake.....	6
	Cream puff (iced).....	1 average custard filled....	5
	Doughnut, plain.....	.3" diameter.....	4
	Macaroons.....	1 large or 2 small.....	3
	Gingersnaps.....	1 medium.....	1
	Molasses cookies.....	$3\frac{1}{2}$ " diameter.....	2
	Brownies.....	2" x 2" x $\frac{3}{4}$ ".....	3
ice cream	Ice cream.....	$\frac{1}{8}$ quart ($\frac{1}{2}$ cup).....	5-6
	Sherbet.....	$\frac{1}{8}$ quart ($\frac{1}{2}$ cup).....	6-8

*Candy is from 75 to 85% sugar. Popular candy bars are likely to weigh from 1 to 5 oz. and may contain 5 to 20 teaspoons of sugar. Adapted from current publications on food values. Courtesy of Dr. Herman Becks, University of California.

tsp. sugar

pie	Apple.....	1 /6 med. pie.....	12
	Cherry.....	1 /6 med. pie.....	14
	Raisin.....	1 /6 med. pie.....	13
	Pumpkin.....	1 /6 med. pie.....	10
soft drinks	Sweet carbonated beverage.....	1 bottle, 6 oz.....	$4\frac{1}{3}$
	Ginger ale.....	6 oz. glass.....	$3\frac{1}{3}$
milk drinks	Chocolate.....	1 cup, 5 oz. milk.....	6
	Cocoa.....	1 cup, 5 oz. milk.....	4
	Eggnog.....	1 glass, 8 oz. milk.....	$4\frac{1}{2}$
spreads and sauces	Jam.....	1 tbs. level.....	3
	Jelly.....	1 tbs. level.....	$2\frac{1}{2}$
	Marmalade.....	1 tbs. level.....	3
	Syrup, maple.....	1 tbs. level.....	$2\frac{1}{2}$
	Honey.....	1 tbs. level.....	3
	Chocolate sauce.....	1 tbs. thick.....	$4\frac{1}{2}$
cooked fruits	Peaches, canned in syrup.....	2 halves, 1 tbs. syrup.....	$3\frac{1}{2}$
	Rhubarb, stewed, sweetened....	$\frac{1}{2}$ cup.....	8
	Apple sauce (unsweetened).....	$\frac{1}{2}$ cup scant.....	2
	Prunes, stewed, sweetened.....	4 to 5 med., 2 tbs. juice....	8
dried fruits	Apricots, dried.....	4 to 6 halves.....	4
	Prunes, dried.....	3 to 4 medium.....	4
	Dates, dried.....	3 to 4 stoned.....	$4\frac{1}{2}$
	Figs, dried.....	$1\frac{1}{2}$ to 2 small.....	4
	Raisins.....	$\frac{1}{4}$ cup.....	4
fruits and fruit juices	Fruit cocktail.....	$\frac{1}{2}$ cup, scant.....	5
	Orange juice.....	$\frac{1}{2}$ cup, scant.....	2
	Pineapple juice, unsweetened....	$\frac{1}{2}$ cup, scant.....	$2\frac{3}{5}$
	Grapefruit juice, unsweetened....	$\frac{1}{2}$ cup, scant.....	$2\frac{1}{5}$
	Grapefruit, commercial.....	$\frac{1}{2}$ cup, scant.....	$3\frac{1}{2}$

AMERICAN DENTAL ASSOCIATION
ARCHIVES
DO NOT CIRCULATE



AMERICAN DENTAL ASSOCIATION
211 E. Chicago Avenue, Chicago 60611