



For some time I have been promising a lecture upon the subject of sugar eating or candies. Speaking of sugars in a technical way they are called crystallizable carbohydrates, in which oxygen and hydrogen exist in proportion to form water. There are many varieties or kinds of sugars. Among the more common kinds are those which are used in foods, as such, although many of our common foods themselves contain large quantities of sugar. Those with which all are familiar are known as cane and beet sugar, glucose, and sugar or milk or lactose. It would no doubt be interesting to many of you if I was to tell you all about the various kinds of sugars and how they are made, their various effects upon the human body and how to use them; but while the Home Health Club is an educational work, I seek to confine myself to instructions that will be of practical benefit to my readers. The great majority of whom desire information regarding the effect upon the health of over-indulgence in sugar, or candy.

While different kinds of sugars differ in sweetness and taste as well as digestibility, they are essentially the same uses, as food, as do the starches, because all starchy food must be converted into dextrin or sugar before it can be utilized or assimilated by the body. For this reason, sugars, although they form an excellent class of foods, producing both force and heat, and fattening the body, are not absolutely necessary for the maintenance of health if starchy food in sufficient quantity is made a part of the diet. It is true that sugars possess more agreeable flavors than do the starches and are more satisfying to the palate. They also possess antiseptic and preservative powers which the starches do not. For these reasons sugars and syrups are used extensively to preserve fruits, either in solution or dried form.

There is probably no food partaken of that takes the digestive organs so little as sugar. This is largely on account of the fact that it is so readily soluble. Cane sugar must be converted into grape sugar before it is assimilated, but grape sugar does not need to be changed and is therefore assimilated without effort. It is frequently spoken of as a pre-digested carbohydrate.

Experiments have proven that the muscle energy producing effect of sugar is so great that when about seven ounces were added to a small meal, the total amount of work done increased from six to 30 per cent., and when added to a large meal the power to do was increased from eight to 16 per cent. Sugar adds both meat and fat, as before stated, and for that reason and because it might be considered the most rounded of nutritives, many mountain guides carry it instead of meats and fats when making their perilous journeys.

During muscular activity the consumption of the sugar of the body is increased four fold. In the West India the negroes always grow fat during the sugar season when they chew the cane in the fields. In Volume I of the Home Health Club books is given the following about candy: "Candy, absolutely pure, eaten in small quantities, is not harmful. It is, in such small quantities, quickly absorbed by the stomach, and supplies a healthful proportion of carbonaceous material. In excessive quantities, candy, as sugar, is sure to do damage. Children who are indulged to the fullest in their desire for sweets will at some time suffer from the indulgence of their kind by unwise parents.

"The cheap candies on the market are almost without exception, largely composed of glucose. As a natural constituent of fruits glucose is beneficial, but as a manufactured product it cannot be too highly condemned, and its consumption is always harmful.

"A natural product can be imitated, but never duplicated, by the chemist. We may form a product identical in composition; but if nature's impress is not upon it there will be a subtle difference. This is one reason why glucose is harmful. Another reason is the fact that in the manufacture of glucose, acids are used which contain traces of arsenic. The cheaper forms of glucose candies, when used in excess, not infrequently produce symptoms identical with those of slight arsenical poisoning.

Many persons acquire an inordinate fondness for sugars, continued over-indulgence in this food, especially by people who are not very active or live in a warm climate or heated rooms will surely suffer. The most prominent disturbance is fatigues, dyspepsia, then follows constipation and disorders of assimilation and nutrition and sometimes functional glycosuria or diabetes.

There are some diseases in which sugar in all forms should be strictly avoided, such as fatigues, dyspepsia, acute and chronic gastritis, gastric catarrh, gout, rheumatism, obesity and diabetes, and it should be absolutely forbidden in diabetes. Temporary disturbances of the blood from eating too much sweet food are very common and are usually relieved by simple remedies and by withholding or diminishing the customary allowance of sugar. Sugar eaten too copiously in excess spoils the teeth and destroys the appetite for other foods.

Club Notes. I have had a number of letters recently, asking for a powerful diuretic; a number of cases of dropsy in an aggravated form which refuse to yield to all

ordinary treatment seems to demand heroic methods. I know that under the usual methods of treatment, severe cases of dropsy do not find the relief which is hoped for and desired. In many cases recourse to the old-fashioned herb remedies will not only relieve the system of the accumulated water, but by a simple external treatment, the relief that has been secured can be retained. The common milk-weed or silk weed, otherwise known as Pleurisy root, Asclepias Syriaca, will quickly relieve cases of renal dropsy by acting upon the kidneys and bowels, removing the accumulated fluid. Either the infusion or uncture may be used. If the latter is preferred it would perhaps be best to have it prepared by a pharmacist. The infusion is made by placing two ounces of the root bark in three pints of water and boil down to one-half. Strain and take two ounces of this, four or five times daily. The external application is made by adding one pint of water to one pint of commercial acetic acid which is 32 percent pure, thus making a 16 percent solution, which is just four times as strong as the so-called pure vinegar. Sponge the entire body with this nightly for several months, and after complete relief is secured, continue it about twice per week until there are no signs of the disease. I have relieved desperate cases by this method.

Rose Hill.—Dr. David H. Reeder, La Porte, Ind.—Dear Sir: I have read many of your lectures and am very much interested in them. Therefore, I take the liberty of asking you for the following information: (1) What is a good remedy for colic? (2) What means should be taken to prevent flatulency after meals? (3) What should be done for catarrh of the head which is accompanied by copious discharge from the nostrils? (4) How can one keep from taking cold easily? (5) I am just about 16 years old and am five feet seven inches tall, and weigh about 125 pounds. Is there any means by which one can broaden out a little without getting any taller? If so, what are they? (6) Please send me a list of all your works and price list of the same. Very respectfully yours.—C. C.

Colic is usually due to fermentation or gas in the stomach, and in order to cure it the digestion must be made perfect and then there will be no fermentation, no gas and no colic. Use the vegetable or herb remedy of which I have written you in a private letter and which has so often been described in Club Notes. As a temporary relief, there are several methods which may be successfully used. One very good one is the use of charcoal tablets. Another is five drops of lavender oil in a little sugar, while still another is essence of peppermint, a few drops in water.

The catarrh of ordinary kind is usually cured by the method of home treatment described in the cloth-bound book of Home Health Club Lectures. The book is sold by the club for two dollars (\$2.00). The condition you have described is more on the order of coryza or what is commonly called Hay Fever, and you should have the Schuessler tissue remedy known as Nat. Mur. and Kali. Mur. They are harmless tissue salts which effect the mucous lining and by applying the element which is lacking, cure the disease. To prevent colds, keep the skin active and vigorous. A cold hand bath on arising in the morning is excellent for some people. You will broaden out in due time, let Nature attend to that. There is no danger that one will become too tall; the tall men have the advantage in the world. In a private letter I have sent you information regarding Home Health Club Books, etc.

All communications for this department should contain the full name and address of the sender, and not less than four cents in stamps and should be addressed to Dr. David H. Reeder, La Porte, Indiana.

FIRE IN A LOCOMOTIVE.
The Building of It Is a Task Calling for No Little Understanding and Exertion.

The average citizen manages to set the house in an uproar every time he has to make a fire in the heater, but his job is a trifle in comparison with what a railroad fireman faces when a new fire has to be built in a locomotive, says the Philadelphia Record. As a starter about 200 pounds of wood are necessary to fire up the ordinary engine. The wood used is old railroad fire cut into convenient blocks. When the fire box has been lined with wood it is drenched with oil and the match applied.

As soon as the fire gains headway forced draught is applied the operation necessarily being performed in the round house, where all apparatus for quickly producing high temperature is at hand. When a good bed of blazing wood has been produced the fireman gets busy with his shovel, placing coal in even layers over the flames. This part of the work is hard on the back, and the aggravated individual, whose axes are evident to the whole block when he labors with the heater, would go down and out in the first minute at it. Under the forced draught it is only a few minutes before the coal has been reduced to a sheet of embers at white heat, and by this time there is enough steam pressure generated to permit of the locomotive being moved under its own power.

Continuous resort to the shovel on the part of the fireman does the rest. It is only about once a month that a new fire is built in a locomotive while in service. The balance of the time the fire is kept alight by being banked when the iron horse is not on the road.

A Successful Candidate.
The Lover—You see, ma and pa are opposed to me, but the girl isn't.
Friends—You're all right. You're going to be elected by an overwhelming minority.—Smart Set.

COLLEGIAN AS NURSE GIRL.
Many Fair Students "Tend Baby" During University Course—No Task Too Humble.

From Virgil to dishwashing, from higher mathematics to tending baby, is the daily routine of scores of ambitious girl students at Barnard and the Teachers' college just now. No task is too humble for the young women who are working their way through college, as the announcement boards in the college buildings amply testify, says the New York Sun.

There are applications for socks, to darn, doors to scrub, babies to tend, clothes to mend, dress skirts to bind, shirt waists to make, invalids to read to, divan pillows to make, besides typewriting and tutoring to do. Housekeepers on the heights have now come to depend upon student help, not only because the labor is considerably cheaper than the usual supply, but also because students are more trustworthy. So any fine day you may see scores of pretty, shirt-waisted, pompadour headed students taking their small charges out to air, wheeling invalids or totting small children to and from the kindergarten, while within doors you would see energetic girls scouring pans, cleaning silver, wiping dishes, dusting rooms, sewing, cooking and what not.

FALLS MAY MAKE EMPIRE.
Zambesi, "Smoke Which Is Noisy," Will Probably Be Foundation of a Great Nation.

"Smoke which makes a noise" is the meaning of Zambesi, the South African falls which have five times the power of Niagara or 25,000,000 horsepower, and whose flow of water is double that of Niagara, according to the Chicago Tribune. It is thought eventually these falls will supply power to all of Industrial South Africa, thus transforming its immense solitude into a prosperous empire. The most promising field for exploitation is believed to lie in the operation of gold mines, driving the stamps, pumps, and other machinery. As is the case in all South Africa, Rhodesia is not irrigated naturally, and it will be necessary to introduce artificial irrigation, using the Zambesi for the force and water. Difficulty in constructing high tension lines in the neighborhood of the falls is anticipated on account of the enormous volumes of spray sent up there. This spray attains a height of 600 feet, falling in a fine rain over the surrounding territory. In periods of high water these columns of spray and the noise of the falls can be heard over nine miles. British engineers have already made pioneer developments.

SUSPICIOUS OF NEW WOMAN.
Vivale Njiah, in Periodical Talk, Denies Himself Distrustful of Late Movement.

"It's the unexpected that happens with men. I ain't so with women; they're sorter got to expectin' the time for washin' an' wipin' dishes to come 'round regularly, an' it does. I look on this New Woman movement with suspicion. The Old Woman was so blame much better'n I be that if they're goin' to improve her I'm 'fraid she'll git out o' my spear; an' if they ain't, what's the use o' monkeyin'?" Podger says that he don't take no stock in religion; but when I says to him, says I, "Podger, did your old mother's prayers ever seem to lead you astray any?" you oughter heard how still he kept. Women are better than men, but when they forget it they forget so dum hard that it's discouragin'. Needin' one hand to hold her satchel, an' another to feel an' see if she's hangin' 'bout her behind, it's always seemed a burthen shame to me that Nacher didn't give lovely woman another hand fer gen'ral an' miscilanyous purposes. A man an' a woman started to travel together. He went by reason, an' she by instinct. What about it? Nothin'; only she was the one that got there."

MIGHT HAVE BEEN HIS HAT.
Senator Tillman Relates Story Which Shows How Mildness May Turn Away Wrath.

Senator Tillman was talking to some reporters about the efficacy of mildness in debate. "One can't be too mild," he said, "and one gets on especially well if along with one's mildness there goes some rare and unexpected quality. To be mild and at the same time unexpected is, usually, to succeed. Here is an instance of what I mean. At the end of a theatrical performance one man turned to another and cried in a harsh, grating voice: "Look here, you have sat on my silk hat. It is ruined." "The other looked at the silk hat. It was indeed a wreck. He said: "I am sorry. This is too bad. But," he added, "it might have been worse." "How might it have been worse?" exclaimed the first man with an oath. "The answer then given was an excellent example of mildness coupled with unexpectedness. It was: "I might have sat on my own hat."

Glass Bath Tube Latest.
Women who go in deeply for sanitation and hygiene in the home are adding annealed glass bath tubs to the equipment of their bathrooms. Of German make, the tubs are rather more expensive than the porcelain tubs, until recently looked upon as the height of luxury. It is said for them that the glass tubs are microbe proof, a fact which will find favor in the eyes of ultra-particular housekeepers.

TOO LATE FOR PUDDING.
Ambassador Choate Tells of Amusing Incident at an Aristocratic English Dinner.

Ambassador Choate tells of a woman in London society well known by reason of her penchant for dining distinguished persons in literary and artistic circles. This woman long ago made it an ironclad rule that no guest of hers, whether at table or not, should for any reason whatever be interrupted in any discourse he chose to deliver. Upon one such occasion, says Mr. Choate, toward the end of one of the lady's dinners, and while a certain litterateur was holding forth at some length with respect to the latest novel, a guest to the right of the hostess was about to violate the known rule of the head of the mansion in that he began to address her while another guest was speaking. The guilty man was promptly admonished by a swift glance from the hostess, whereupon the guest so reproved relapsed into silence. After the dinner the hostess said to him: "Now, Mr. Blank, I'm quite ready to hear what you had to say. I'm sure it was something of much importance." "Quite true," responded the recipient of the lady's rebuke, "but I fear that it is now too late." "Too late!" echoed the hostess. "Why, what do you mean?" "Oh, I was going to ask that I might have a little more of the food pudding."

MEANING IN KOREAN FLAG.
Writer of Three Thousand Years Ago Explains It, But His Work Is Unintelligible.

The Korean ensign and merchant flag is a white flag bearing the great monad in blue and red. This is a symbol of great antiquity. It is to the Mongolians what the cross is to the Christian. To them it is the sign of deity and eternity, while the two parts into which the circle is divided are called the Yin and the Yang—the male and female forces of nature. Some 3,000 years ago one of the writers, speaking in reference to it, said: "The illimitable produces the extreme. The great extreme produces the two principles. The two principles produce the four quarters, and from the four quarters we develop the quadrature of the eight diagrams of Feuh-ki." This means little to us, though the writer may have explained the matter to his entire satisfaction. But so much we know—that the symbol had a mathematical as well as an occult meaning. There is a little puzzle connected with the Korean flag which may or may not be perplexing to the novice. Divide the great monad by a straight cut into two pieces so that each half of the circle shall contain an exactly equal share of the Yin and the Yang.

DECEIT WAS HER THEME.
New York Woman "Says Things" About Fiances of Popular Young Man.

"It literally takes my breath away," exclaimed a woman known for her blunt directness of speech, according to the New York Tribune, "to hear the way certain people change suddenly around, and say the sweetest things to some one whom only the moment before they had been sharply criticizing, while their poor victim smiles all unsuspectingly, quite believing every kind word that is said to him or her. The other day," she continued, "Sufoe Soft was telling me about the girl the popular Jack Z. is engaged to be married to. 'So common, my dear,' she said, 'and so unattractive! I cannot understand his infatuation. There is really nothing to praise about her.' 'Oh, dear Mr. Z.," she exclaimed suddenly, for who should come up just at that minute but Jack himself. 'I want to congratulate you. I have known Mincie all my life, and I want you to give her my love and best wishes. Of course there is no need to tell you what an awfully nice girl she is.' 'Hardly,' said Jack, beamingly taking it all in, then, raising his hat he passed on. 'I do not think I lied much,' Sophie added complacently. 'I really feel quite virtuous!'"

CLEAN CLOTHES IN BATTLE.
Science Suggests Cleanliness of Wearing Apparel Before Beginning a Conflict.

Socrates took a bath before drinking the hemlock, and many brave men have insisted on dressing carefully on the eve of execution. Science now suggests that in the case of man-o-war crews it is distinctly "advisable that clean clothes should be put on just before going into action." The reason is, of course, that pieces of soiled clothing carried into wounds make them more dangerous. The Japanese surgeon-in-chief of Togo's fleet, whom we are quoting, goes on to say that "there are many examples to show that a pocket notebook, knife, etc., have saved men's lives from shell fragments. We have had a few examples in the present war. I dare say that in time every combatant on board warships in action will wear some kind of protecting mask and jacket." Another hint given by Dr. Suzuki is that the wounded should be laid on the deck, not the non-deck, side of the vessel, for it is not the side exposed to the enemy which is the most dangerous, but the other. "The fragments of bursting shells dispersing in a radiating manner."

Car Turns Complete Somersault.
A motor car speeding on a road near Huntingdon, England, turned a complete somersault, landing upon its wheels, which were smashed. The driver received fatal injuries.

MYSTERIOUS STATUE.
CONNECTED WITH A STORY UNPARALLELED IN HISTORY.

How Peace Was Established in Guana-juto Between the President of Mexico and His People.

Connected with the recent visit of President Diaz, of Mexico, to the city of Guanajuato is a story which has no parallel in civic history, says the Chicago Record-Herald. In again entering the home of the patriot Hidalgo and the former hotbed of Mexican insurrection the president broke a vow which he had kept for more than a decade. The last time he set foot in Guanajuato angry mobs of patriots thronged the streets and sought to do the president harm. As he rode through the streets his carriage was stoned and he narrowly escaped serious injury, if not assassination.

Once safely back in his palace in Mexico City, President Diaz swore that he would never again enter the city of Guanajuato. Times change rapidly in Mexico, however, and revolutions and insurrections which were wont to erupt in a day have now become rare occurrences. Guanajuato became as safe for patriots and as law-abiding as any other city of the republic. Many invitations came from the governor of the state and from the patriotic citizens of the city, but the president was obdurate and could not forget the indignities he had suffered there.

Several public enterprises were started, among them being the construction of the Juarez theater, which is the most gorgeous home of the muses in all Mexico. The plan was to have the president open the theater for it was expected that he could be induced to come to the city by the time it should be completed.

The city also planned to erect a handsome statue on the public plaza which should be typical and representative of the progress not only of the city but of the nation. The selection of the statue was left to a committee, and its exact character was to be kept a secret until the president came and was satisfied with the work.

The story is told that during a heavy windstorm at night the shroud was torn from the statue and the policemen traveling that beat did not stop to look at it, but hastened to the house of the committee chairman. The latter aroused the other members of the committee, and before morning light had broken a wound shroud covered the statue. The strange fact about it all was that no one in Guanajuato seemed to have the least bit of curiosity regarding the veiled statue which was a somewhat gruesome thing to look upon, perched as it was high above the street upon an artificial mound.

Neither was there any impatience expressed regarding the theater, the people resting content in the belief that in his own good time the president would recognize the loyalty of Guanajuato and come to them. When the president did come, and pulled aside the curtain there was disclosed a statue not of Liberty but of Peace, typifying the condition which had come to the city and the country so recently. The theater was opened with an elaborate ball and everyone was made happy. President Diaz's visit to Guanajuato was attended with immense enthusiasm, and Guanajuato succeeded in wiping out the stain of disloyalty which for years had rested upon the city.

Live Rail Not Essential.
The live rail, it appears, is a dead rail after all. Dr. Sylvanus P. Thompson, of England, says: "Neither the public nor the not electrically trained railway engineer appears to realize that the live rail is itself already an obsolete device, discarded in the latest types of electric railway. In ten years' time there will probably be no live rail left. Already the live rail has been discarded in at least two places in the United Kingdom. It is an engineering blunder I would therefore ask whether the time is not ripe for public opinion in some effective form, such as a departmental inquiry, to step in and prevent the railway engineers of England from committing our railway systems any further to this dangerous and unnecessary device."

Butterflies in Topics.
Though butterflies and moths are found widely distributed all over the globe they are by far the most abundant in the tropics. For instance, Brazil can show to the collector not less than 700 different species within an hour's walk of Para. There are not half as many in all Europe. In Britain there are 67 species, and in all Europe there are 390 different kinds. They are found as far north as Spitzbergen, on the Alps to a height of 5,000 feet, and on the Andes up to 18,000 feet. As there are some 200,000 species, it is easy to see why butterfly hunters are great travelers.

Easily Pleased Them.
Nell—So their engagement is off?
Belle—Yes. She says he was too hard to please.
"That's funny. He must have changed since he proposed to her."—Philadelphia Ledger.

DOING INITIATION STUNTS.
College Boys Perform Their Antics for Amusement of Street Car Passengers.

In a Mount Auburn car which left Bowdoin square about 11:45 the other evening a young man, evidently a college freshman, tried to kiss the conductor, who resented the familiarity.

But that was only the beginning, says the Boston Globe, for there were three other freshmen of equally strange rig with this first one, and there were four other rather sedate freshmen in the company of this quartette, seated quietly near the center of the car. The first four freshmen were being initiated into some college secret society, and the last four were attending to the duties of initiation.

When the boys entered the car at Bowdoin square it was noticed that they were munching "hot dogs." They wore red ribbons and just below the knees of their trousers, which was turned up "training in London" style, so as to show some rather loud hoarse and ancient footwear. There was a negligible air about the rest of their costumes, and when they entered the car they looked as if the "exercises" had been going on for some time, either in a theater or in the hotel district.

The passengers in the Mount Auburn car were forcibly reminded that something was "up" when the four young men walked around offering to each a bite from his "Frankfurt" sandwich, or "hot dog," as they called them. Most of the passengers smilingly refused the unexpected hospitality, but there were a few Mount Auburnites who did not let the opportunity pass. They bit.

Then one young man went around the car trying to sell a one-cent paper for a nickel. Nobody wanted the bargain. Then all four walked around the car and read aloud the advertisements.

One of the students was then ordered to kneel on the seat and look out of the window, which he did in a very quiet manner. Another one of the quartette was told to put tape on the shoes of the kneeling student. With a little piece of wood he imitated the work of a shoemaker on the sole of the young man's shoes driving imaginary nails with great seriousness. At Bowdoin street the eight students left the car and got transfer checks. At Harvard square the students left the second car and headed for the rooms of the society.

NOT A BLEACHED BLONDE.
But Straw-Colored Hair Made It Hard for Typewriter to Get a Job.

A great majority of the girl stenographers as well as the men, were employed through some typewriter establishment. A number of fancy incidents develop, says the Philadelphia Press. A young woman of a perfect blonde type called at an office on Ninth street to secure a position. Her hair was straw colored. She was sent out to an address, but returned with the following complaint: "Though I am an expert stenographer as you know, I find it difficult on account of my straw-colored hair to get work. Men think that my hair is bleached and they hesitate to employ a bleached blonde, for they know well that she would bleach her hair to so conspicuous a hue as mine would have a snuff-colored tinge for so long a time as it would last."

"When I was out of work last year I had to apply to six offices before I could get a place. Three of the men to whom I applied didn't test my ability in any way. They said lamely that they were sorry, but they preferred an older, a more sedate person. Two men, after a brief talk, admitted that my work suited them, but had to admit also that their wives had peculiar views and would object to my presence in their husbands' offices."

"The man who engaged me was a bachelor. He, too, was about to re-pledge me, but I broke out desperately with: "Look here, I am not a bleached blonde. My hair is straw colored naturally. If you object to it, I'll wear a brown wig during office hours."

"The man laughed and took me on. He has told me since, though, that he would not have taken me but for my frank outburst. Now he tells me he has been compelled to dispense with my services because of the many jokes that his friends are poking at him."

Japanese Advertising.
The Japanese advance in advertising as in all else. Here is an illustration: "Our wrapping paper is as strong as the hide of an elephant. Goods forwarded with the speed of a roundball. Our silks and satins are as soft as the cheeks of a pretty woman, as beautiful as the rainbow. Our panels are packed with as much care as a young married woman takes of her husband."—Kansas City Journal.

Not Disposed to Criticize.
"Don't you think," asked Mrs. Oldcastle, "that our minister is becoming somewhat recalcitrant?"
"Oh, I don't know," replied her hostess. "Josiah thinks so, but it don't seem to me that he weighs a pound more than he ought to for a man as tall as him."—Chicago Record-Herald.