DAILY MAGAZINE PAGE FOR EVERYBODY

Secrets of Health and Happiness

How to Make Your Diet Fit Your Age and Your Needs

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DR. HIRSHBERG

YOU eat to live efficiently in good health and spirits. To eat only to live, or to live only to eat, are the two besetting sins of human nature.

The grandmother or the mother "who has reared half a dozen and more children" in the old-fashioned way is content, They are alive and that is all she considers. That a diet, a mode of procedure, a method that brings a child to adult life 90 per cent. better off than was done in the old way is ready to hand seems to have little influence upon most people.

Man's food is composed of lean meats, fat meats, milk, cream, green vegetables, non-green vegetables, fruits, minerals, water, starches and sugars in cereals and bread.

Such a combined diet is best, but coffee and meat or bread for breakfast, sandwiches and soups for lunch, and a riot of vegetables, tea and milk for supper, will, to be sure, keep you alive—but incapable of any superiority over your fellow-man.

The physiology of the human creature demands a better mixture than the average person carelessly shovels into his guiltless oesophagus.

To gulp down soups, fluids, custards, creams and other soft foods mechanically is to deprive the mouth, teeth, skin and flesh of the cleanliness which tough, hard food bestows.

When solid foods are chewed and ground by the teeth, they act much the same as tooth powders and tooth brushes. They cleanse all the parts touched.

Study of Foods Needed.

How often do you or the custodian of your table consider that a meal must be fitted as snugly to your age, occupation, physical strength, social conditions, habits, the climate and the season of the year as a key to a lock?

Seldom is a cook a student of books on dietetics and physiology. She either does "as mothers used to do" or, when she tries a new dish, she chooses it without regard to your age or your work.

Digestion occurs in the mouth as well as in the stomach and intestines. The latter have no teeth and are very sensitive to emotional shocks. Good cheer and laughter during a meal are as beneficient to digestion as rest and sleep after it.

Digestion depends upon too many circumstances to say offhand "what is good for the digestion." Some foods are more easily absorbed in the morning, others are at night.

Human food must be made up of from 10 to 98 per cent. of water and the rest proteins, fats, sugars, starches and minerals. Any ration without proteins—these contain nitrogen—may keep you alive, but you will be a paltry weakling.

Meat contains from 17 to 25 per cent. of water, cheese 25 to 35 per cent., beans, peas and other leguminous vegetables about 25 per cent.

Starches and sugars are found for the most part in plants. White bread contains about 5 per5 cent. of these; potatoes, 20 per cent., and cane sugar, 9 5per cent.

Fats may be either from animals or from plants, but mostly the former. Butter, meat, fat, lard, olive oil, corn oil and cream are the available fats.

What a "Calory" Is.

Nutrition minerals—besides table salt—are lime, iron, phosphorus, soda and potash. From 1 to 3 per cent. are take nwith each meal.

Once the alimentary caverns have taken and absorbed the pabulum and transferred it into tissues, the latter converts them into new growth, into heat and into work. The heat units, therefore, are taken as a fair guide to the digestive value of a food It is called a calory.

A calory of protein is about one-fourth of a gram or four grains. A calory of fat is one-tenth of a gram or 1 1-2 grains. Or, to put it the other way, 9.3 calories of fat equals one grain of fat; 4.1 calories of protein equals on grain of protein; 4.1 calories of sugars or starch equals one grain of sugars or starches; 7.9 calories of alcohol equals one grain of alcohol.

Right here you see an explanation of why ignorant housekeepers, cooks and parents may keep those in their care alive, in spite of a faulty diet and want of food knowledge. The different foodstuffs can replace each other to a slight extent in calories at least.

Height, weight, age, work, climate, neighborhoods, ventilation, period of life and other matters determine the kind and quantity of food needed by you and yours to maintain maximum health and service.

Milk must have other rations taken with it because alone it is too rich in water. Cream, eggs and chocolate added to milk help very much. Lime water, coffee and tea make milk aromatic and tasteful.

Fermented cow's milk, such as kefir or lozak, is easily digested by the sick and convalescent; so are rare oysters, clabber or buttermilk. Raw and soft-boiled eggs are more easily digested than poached, fried or hard boiled. The latter if powdered or devilled are superior to fried eggs.

Foods that are fried are difficult to absorb, because a casing or encysted cake of waxy fat surrounds the particles of food and thus defers the action of the stomach juices. Cheese, similarly, should be grated and ground into powder or creamy paste before it is taken. Then it should be thoroly chewed and ground up with saliva.

Finally, it may be said that the potato at best is not of much nutritive value. Even as a puree mashed with butter and milk, potatoes are hard to digest.

A PERSONAL QUESTION.

A party of strangers were visiting at the college. It was in the late fall and the air was crisp and cold. One of the members of the party, a charming young woman, was escorted thru the grounds by a learned but very much preoccupied professor. Suddenly two members of the track team, accoutred for their sport, passed them.

"It's dreadfully cold," remarked the young woman, with a dainty shiver, as she gazed after the runners, "to be without stockings."

The professor's mind, deep in contemplation of the fourth dimension, was attracted by the sound of the girl's voice.

"Then why," he asked, absently, "did you leave them off?"

FEMININE FOIBLES — By Annette Bradshaw

DECORATION AND RELIGION

How Well You Can See the Preacher, and How Religious You Feel Depends a Good Deal on Where You Happen to Sit.

What an Explosion Really Is

The following definitions of explosions and explosives were prepared by A. Marshall, author of an imporant book on explosives. As they were too primary to be included in so technical a work, he sent them to the editor of Nature.

Explosion.—When gas or vapor is released so suddenly as to cause a loud noise an explosion is said to occur, as, for instance, the explosion of a steam boiler or a cylinder of compressed gas. Great and increasing use is made of explosive processes in gas, petrol and oil engines for driving machinery of all kinds. In these engines the material that explodes is a mixture of air with combustible gas, vapor or finely-comminuted liquid and in the explosion these are suddenly converted into water vapor and the oxides of carbon, which latter are gases. Altho all these things are liable to explode, none of them are called explosives; this term is confined to liquid and solid substances, which produce much more violent effects than exploding gaseous mixtures, because they occupy much smaller volumes originally.

Explosive.—An explosive is a solid or liquid substance or mixture of substances which is liable on the application of heat or a blow to a small portion of the mass, to be converted in a very short interval of time into other more stable substances largely or entirely gaseous. A considerable amount of heat is also invariably evolved and consequently there is a flame.

Gas Evolution.—That evolution of gas (or vapor) is essential in an explosion is rendered evident by considering thermit. This consists of a mixture of a metallic oxide, generally oxide of iron, with aluminium powder When suitably ignited the aluminium is converted into oxide and the iron or other metal is set free in a very short interval of time with the evolution of an enormous quantity of heat, but there is no explosion. It is indeed because no gas is evolved that thermit can be used, as it is, for local heating and welding.

Heat Liberation.—It is also an essential condition that heat should be evolved in an explosive reaction, otherwise the absorption of energy due to the work done by the explosion would cool the explosive and consequently slow down the reaction until it ceased, unless heat were supplied from without. Ammonium carbonate, for instance, readily decomposes into carbon dioxide, ammonia and water, but in so doing it absorbs heat; consequently the reaction is much too slow to be explosive. Ammonium nitrate, on the other hand, is decomposed into oxygen, nitrogen and water with the evolution of heat and is consequently liable to explode. A violent impulse is required to start the explosion, but once it is started the energy (or heat) liberated suffices to propagate the explosion, unless the conditions be such that the energy is dissipated more rapidly than it is liberated.

Sensitiveness.—Another essential for an explosive is that the reaction shall not set in until an impulse is applied. If the reaction set in spontaneously, it is obvious that its energy cannot be utilized in the form of an explosion.

VELOCITY OF EXPLOSION.—The heat and gas evolved are the two principal factors which govern the power of an explosive, i. e., the amount of work it can do in the way of displacing objects. But the time taken by the explosion is also a matter of great importance. The rate of explosion is measured by making a column of the explosive, confining it, if necessary, in a metal tube, and measuring the time that the explosive wave takes to travel a known distance. In black powder and similar nitrate mixtures the velocity of explosion is only a few hundred metres a second, but with modern high explosives the velocity of detonation is from two to seven thousand metres a second. This naturally makes them much more violent and destructive. Explosives of the gunpowder type are used when earth or soft rock is to be blasted or when the material must not be broken up too much. Propellants for use in firearms are required to burn slowly; for rifled arms they must be slower even than gunpowder. They are not exploded by means of another high explosive, but merely lit by a powerful flame and should then burn by concentric layers. The rate of burning increases with the pressure in the gun, but for completely gelantinized powders it is less than a metre a second.

THOUGHTLESS.

"Your honor," said the arrested chauffeur, "I tried to warn the man, but the horn wouldn't work."

"Then why didn't you slacken speed rather than run over him?"

A light seemed to dawn on the prisoner, says Case and Comment. "That's one on me," he answered. "I never thought of that."

The Amateur Gardener

While looking at a neighbor's vegetable garden the other day I was tempted to say, as Polly did in Charles Dudley Warner's famous classic, that 'the poles have come up beautifully." What restrained me was the remembrance that the beans in my own garden had not then come up at all, while by looking carefully at the foot of every bean pole in my neighbor's yard I could see that there really were beans there, even if they were not so clearly visible as the array of poles.

If all the beans that were planted in my own garden should come up, the whole place would have to be converted into a bean patch. Never having planted a vegetable garden before, I was altogether ignorant as to the number of beans I should sow in a row; and, not wishing to be miserly, I scattered them as freely as petunia seeds. When the time for transplanting comes I shall either thave to edge all my flower borders with dwarf stringless beans or start a vegetable mission and distribute bean plants among the needy.

Heretofore I have had neither the room nor the desire for a real vegetable garden, and my interest has been solely given to floriculture; but this year I am cultivating beans and lettuce in place of dahlias and nasturtiums. The former took up a great deal of room and ran almost entirely to leaves, while the latter, for the last two or three years, have produced nothing but horrid little black bugs. The spot where the dahlias usually stood, with the nasturtiums in front of them, looked remarkably big after Nicodemus had spaded it up for me, and as a kitchen garden it appeared to have great possibilities, besides being in full view from the kitchen windows.

Tomatoes: Picking and Marketing

As soon as the tomato plants become established cultivation should be begun, and should be continued as often as necessary thruout the growing season. Where the plants are on stakes cultivation can be carried on later in the season. It is also a good plan after the second cultivation to go between the rows with a celery banker and throw the soil toward the plants. This enables the plants to take a firm hold on the soil.

The time to pick tomatoes depends upon how far they are to be transported to market. The riper the fruit the finer the flavor and also the softer it gets. Tomatoes that are to be shipped are picked when they show the first red tint of ripening. They should be picked at a stage that permits them to be put on the market in a firm, solid condition.

It does not pay to put on the market soft and overripe tomatoes, for they cannot be sold and they only go on the dump. In addition they lead to dissatisfaction between the producer and the commission merchant. Many producers find fault with the commission merchant and charge him with being dishonest when instead of getting a check for such tomatoes they get a freight bill; in reality the fault is their own.

Too much care cannot be exercised in culling the fruits, in order to put on the market only those of the proper degree of ripeness. This is especially important during seasons when there is a large crop. The good ones will usually sell at a good price, but it is hard to get rid of soft or otherwise poor tomatoes at any price. Two or three rotten tomatoes in a basket will ruin the entire lot. A customer that once gets a basket of rotten tomatoes seldom comes back.

In order to pick them at the proper stage the vines should be gone over at frequent intervals. In warm weather especially the fruits soften rapidly and great care must be exercised in culling out the soft ones. In case the tomatoes are grown on plants that lie on the ground all mud and dirt should be carefully wiped off with a dry cloth. The market does not want dirty fruit. Just after a rainy season there will be a lot of work required to clean the fruit, which would be eliminated by growing the crop on stakes. At the same time all stems should be carefully removed and the fruit carefully graded. The better fruits can be sold at a much higher price if they are picked out.

The variety of tomato grown is a great factor in determining the profits. For market you want a tomato of good size, early, smooth, rather globular in shape, ripening evenly all over and up to the stem, firm tissues and holding its size until the end of the season. The plant itself should be resistant to disease and should crop heavily.

There are many good varieties of tomatoes on the market and the variety showing the most merit under each grower's particular conditions is the one to plant. In fact, it will be found profitable to start with a good variety and then select and save your own seed, in order to improve on it. Since earliness is such an important factor the plants that produce the largest amount of early fruits should be marked with a stake and be left unpicked, for seed purposes. After these plants have thoroly ripened several specimens of fruit, they should be carefully compared as to the characteristics that a good market tomato ought to have.

For the main crop of tomatoes earliness is not important; in fact it is not desirable to have it come until after the glut which comes in the fore part of August. For this reason the plants before they are set in the field, do not require so much handling. The seed should be sown under a glass-covered frame as soon as the ground can be worked outdoors in the spring.

In order to lengthen the season of the late crop as much as possible all tomatoes that are full grown should be picked at the first sign of frost and put in piles and covered, where they will continue to ripen. Thus they can be sold rather late in the season.

TO JOHN WALKER AND OTHERS.

Your inquiry regarding peonies has been asked by several other gardeners and, I think, has been answered before. Your peonies sometimes will bloom the second or third year, but often they will not bloom until the fourth or fifth year. Each spring there will be several small buds on the plants, and you will be counting the number of flowers you are expecting only to be disappointed when they fail to open out. All you can do is to take good care of the plants, and when the buds do open out, you will be well rewarded for your wait of two, three or four years for bloom.

Bush fruits such as raspberries, blackberries, gooseberries, etc., in small gardens where it is possible to use the hose, will be benefitted by frequent waterings, also liquid manure

MOVIES—PROGRAMS FOR TODAY—SCREEN GOSSIP

CHILDREN'S THEATRE AIDS DELINQUENTS

Educational Motion Pictures in Special Playhouse Suggested for Toronto.

BY HARRY H. JOHNSON.

Will Toronto shortly have a Children's Moving Picture Theatre? At the present time a number of children's welfare workers are busily engaged in this city in investigating the contibutory causes of juvenile delinquency and one committee is at present engaged in making a report on the moving picture theatre in its relationship to this important subject.

In not a few cases an investigation has resulted in a special theatre being organized in which the films are of a nature, to eliminate questionable scenes and are chosen with a view of educating and amusing the child mind with suitable pictures.

The organization of such a theatre is a comparatively simple matter and requires only the co-operation of the manager of one of the up-to-date moving picture theatres with a small group of interested workers who would make it a "hobby."

Special Programs.

This Children's Theatre, while putting on the regular shows at the regular hours or at other times, such as Saturday mornings, and in many cases where an up-town theatre is used special programs are given during the slack hours between four and six o'clock in the afternoon. Special arrangements are made in the way of ushers and a matron to look after the small charges, and the program of films suitable to the child is given.

There are numbers of these theatres in New York, Boston, Brooklyn and elsewhere. In Amherst, N.S., for over three years a very successful Children's Theatre was operated. Under the leadership of John Bradford, the community work secretary, the exclusive use of a theatre seating six hundred was obtained for Saturday mornings. A corps of ushers from among the school teachers and young women college students of the town was organized and a matron secured.

The program consisted of one children's story, such as one of the well known fairy tales, one scenic or travel film, an acceptable comedy film, when the same was procurable, and one educational film, on nature study or similar subject. Special music was provided and a story teller told the story of the film before it was shown. From time to time mass songs, folk games and folk dances in costume by the children, were held and proved very successful. The ordinary program of the theatre lasted about an hour and a half.

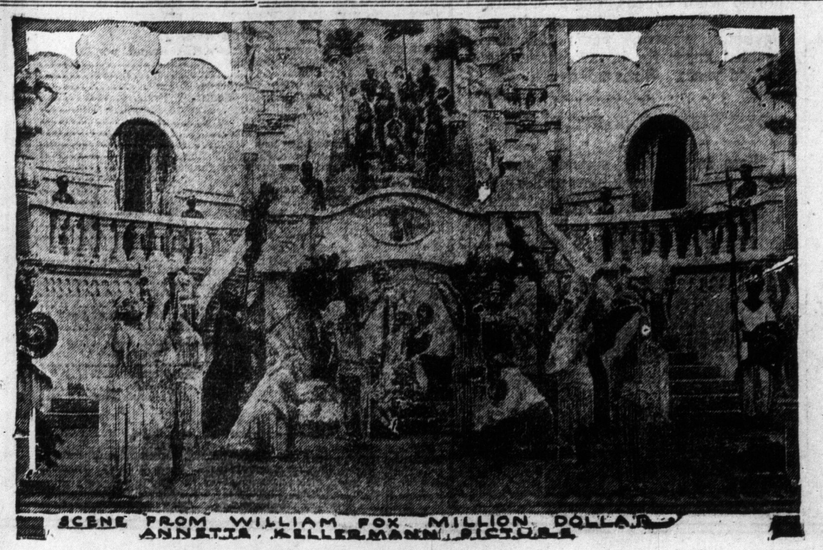
Perhaps the greatest difficulty up to the present time in the conduct of these theatres is the lack of understanding of the psychology of the child mind by the film manufacturers and producers. The fairy tale films, like the tales themselves, will never grow old and repeated showing will only endear them to the minds of the people and children. At the present time, however, after the films have been once around the circut they are destroyed and seldom reproduced. This difficulty will doubtless be overcome as the number of these theatres increase and the film producer is warranted, by the demand, in taking a greater interest in this particular branch of the business.

Lists Are Published.

At the present time there are a number of organizations, such as the Bureau of Economics, at Washington, and several periodicals that regularly publish a list of films that would be very suitable for such a theatre.

Toronto, thru the playgrounds, has done some work along the line of children's programs in one or two of the recreation centres, by showing on various occasions films that have been especially chosen for their young members. In Montreal, for several years the community department of the Y.M.C.A., conducted moving picture exhibitions in the parks, in which health, city betterment and educational films were featured, together with good drama and comedy. The machine was mounted on a wagon and a regular series was run in five parks a week.

From the view point of the moving picture theatre manager the Children's Theatre is a business getter and not only has he the special performances, looked after by a committee, but the children prefer to save their money for their own matinees, and in that way he does not have a large percentage of his seats at the evening performances filled with children who usually come early and stay late, and at half the price occupy seats that he might sell several times during the evening at full price.


SCENE FROM WILLIAM FOX MILLION DOLLAR ANNETTE KELLERMANN PICTURE

EXPECT TO BE IN NEW STUDIOS BY NEXT FALL

Work Well Under Way on Fox Million-Dollar Building at Corona, Long Island.

Tho nothing has been heard of the big William Fox studios at Corona, Long Island, in recent weeks, this does not mean a cessation of activity there. This work is well under way, and the entire Fox producing organization in the east expects to be installed in its Long Island film city by the end of the present summer.

This plant, as previously described, is to be the largest single film company installation for manufacturing purposes in the entire world. It will cover an enormous acreage and shelter the several thousand employes of the corporation.

PROMINENT PEOPLE IN NEW PHOTOPLAY LEAGUE

One of the outgrowths of the recent meeting of the delegates of the Federated Women's Clubs, which was held in New York City, was the formation of the Photoplay League and the appointing of the advisory committee.

At their first official meeting held at the Seventh Regiment armory recently, after the organization was instituted, the forthcoming Pallas release, "Davy Crockett," was shown as an example of the modern high grade picture.

In commenting on Mr. Farnum's work in "Davy Crockett" as well as in "David Garrick," Frank Lascelles, the lecturer of the evening, said: "Were all motion pictures of the tone and quality of these two pictures which have been shown to the delegates there would be no need of further activities on the part of censors or of our delegates. On the contrary, there seems to be some manufacturers who have not the thought of the best element of the community in mind in the selection of their stories and the execution of their productions, hence the formation of this Photoplay League, which has no connection with any producing or exhibiting organization.

ONLY ON THE SURFACE.

Chairman Burnett of the committee on immigration was talking indignantly about Japanese picture brides, 1800 of whom entered America last year.

"These proxy or picture weddings," said Chairman Burnett, "look very romantic on their face, but at the bottom they are sordid enough.

"They remind me a little of the young fellow on the pier who stood on an ash barrel waving his handkerchief frantically at a departing ship.

"'Come on! Let's go to lunch,' a friend said, looking up at the chap on the barrel. 'You've waved enough; come on!'

"'No, I can't' panted the waver, and he flapped his handkerchief harder than before.

"'Can't. Why not?'

"'She's got a field glass.'"

Anna Little, who hesitates being an expert horsewoman and fearless 'stunt' girl at the American studios, proved her right to aquatic honors this week in the plunge at Santa Barba. Held aloft on the shoulders of a man, Miss Little defeated all comers in the "submarine battle jousting match" they staged. "We upset the crowd until they had swallowed half the water in the plunge," write Miss Little to a friend in Los Angeles. "Helen Rosson was so much a fish she thinks she is beginning to grow scales," says Miss Little.

BLUNT.

Jones' opinion of himself as a golfer was very much greater than his skill warranted.

Recently he was invited to play on a certain famous Scottish ground, as a visitor. Armed to the teeth with clubs of all sorts and sizes, he set off, and, followed by a caddy, proceeded to play.

He buried his ball in every bunker, gully and bit or rough grass on the landscape, and muttered naughtily. After half an hour of it he turned to his silent caddy.

"Really," he murmured, ingratiatingly, "this is the most difficult course I have ever played on."

"Hoo did ye ken?" replied the lad, in quiet scorn. "Ye hevna pleyed on it yet!"

SURE THING.

Charles M. Schwab said at a dinner in New York:

"It's old-fashioned nowadays to believe that crookedness pays. We have no more crooked advertisements. We have no more crooked millionaires. We have no more crooked jokes. They're old-fashioned.

"'What sort of a chap is your fiancé?' a girl was asked last week.

"'Oh,' she answered, 'he's the most honorable, upright, generous, godly fellow in the world.'

"'Goodness, you'll starve to death,' is what this girl would have been cynically told in the past; but the answer she got last week was:

"'Then one of these fine days you'll be living in a white Fifth avenue house with seventeen baths overlooking Central Park.'"

Little Stories Told in Homely Rhyme

THE WAY TO WIN

Copyright, 1916, by the author, Otis F. Wood.

JIM Griggs, a youth of Pinkleville, was kicking t'other night. Said he: "I ain't no braggart, but I think I'm passin' bright, and yet it seems I'm in a rut. I just can't get ahead, while Henry Johnson's makin' coin. He's lucky on the deal." Old Peleg Lee just gave a grunt and took a fair-sized chew. Said he: "Well, Jim, I'll tell you why that feller's beatin' you. He's got no plan to make you mad—no plan like that at all; but Henry's always pitchin', Jim, with somethin' on the ball." Friend Reader, Peleg Lee was wise. A mouthful Peleg said. It isn't luck that boosts your game and makes you forge ahead. Dame Fortune's just a myth, I think, so far as luck's concerned. Each dollar that I ever got by real hard work was earned. A lazy fellow's bound to find he's in a rut some day. He'll kick about his luck a lot; he'll have a heap to say about the breaks the game will give to others. That's a stall. To win, just keep on pitching, friend, with something on the ball.

RECIPES FOR THE CARD INDEX COOK BOOK

Smoked Salmon Sandwiches

INGREDIENTS

1 slice salmon.
A few slices of cucumber.
½ oz. butter.
Hard boiled yoke of 1 egg.
Salt, mustard, pepper.

METHOD

Mix the yolk of egg and butter together and rub thru a fine sieve. Shred the salmon finely and mix with the butter and egg, season with mustard, pepper and salt. Cut the bread and butter very thin and lay shavings of very thinly sliced cucumber on one piece; spread the salmon mixture on the other and put together; press close and cut into fancy shapes with a sharp cutter.