

MILK FOR BABES-BUT-TERMILK FOR ADULTS

All authorities on dict say that milk is a perfect food. This is true in a sense; and in another it is altogether untrue and misleading.

The natural food of the infant is mother's milk. But the appalling mortality of infants is due chiefly to the use of cow's milk, carrying the seeds of disease from the cow, the air and made favorable by improper feeding, lack of fresh air, bathing and exercise. Not even cereal starch kills antidote. more infants between the ages of one and six than does milk in the first two years.

Cow's milk differs materially from twice as much proteid and only about half as much sugar but the danger lies more in the contamination of the milk sold in the cities. Fortunately good work is being done in many places to remedy this evil.

Milk is called the perfect food be cause it contains all the elements necessary for the growth of the infant, and in the proper proportion. But the physical constitution and development of the infant differ much from those of the adult, and the food should differ accordingly.

first six years is rapid, and a large sixteenth century, was due to a uniproportion of lime is necessary to form diet, consisting chiefly of unferbuild the bony framework. Milk is mented wine with an egg daily. The in this respect an appropriate food for egg supplied the fat, sulphur and althe infant and inappropriate for the burnen deficient in the "light wine," adult. The lime of milk being little or grape juice. Broken down at 40 by needed for maintaining the bony framework of the adult, is largely de- naro lived to be more than 100 by simposited in the arteries, contributing to ple living. the distinctive disease of old age-

hardening of the arteries. The prime cause of hardening of the arteries, which is also a cause of "heart failure" and of certain forms troubles, or as a substitute in infant of insanity, is auto-intoxication, or self- feeding, in certain cases. poisoning, resulting from the absorption of waste matter from the lets containing the lactic acid baclower part of the alimentary canal, of | terium culture that will convert sweet which I shall have more to say in deal- milk into full cream buttermilk by ing with "Bread," in a subsequent article

Deficiency of iron in the blood of the proper temperature, according to the adult is serious; the percentage of instructions. Not only because this iren in cow's milk is small, corre- full cream buttermilk contains the fat sponding to the nervous inactivity of in emulsified form is it better than the the infant. In this particular milk is buttermilk you buy of the butter-

The Jewish instructions on diet prohibit eating meat and milk together, though this may be for an ethical reason.

The writer has recently made several days' tests of an exclusive milk diet on himself and others, carefully recording results. A change from the ordinary mixed diet to any monodiet is beneficial, and milk is not an exception. But the benefits derived from the milk diet which have recently been much advertised should be credited to the monodiet, avoiding the injurious effects of mixing several incompatible foods at the same meal. Equally satisfactory results can be shown from many other monodietseven the peanut, which is the most concentrated of all foods, containing an excess of albumen. Great gains have been recorded from exclusive diets of beans, oatmeal, wheat, etc., as well as milk, pursued for 60 days or

. . . .

nore

Prof. Metchnikoff, head of the Pasteur institute, who has made most praiseworthy investigations into the causes of our early decay, has concluded that the failure of the average man to live his natural term of life. 100 years, is due to the development of pathogenic germs in the lower part water, and planting them in a soil of the food tube from improperly digested, superfluous food, and recommends the use of buttermilk as an

The chief causes of the offending conditions in the colon, the large intestine, leading to a constant poisoning of the stream of life, are: Too much the infant's natural food, containing food, eaten hurriedly; too much starch and not enough fruit, and bad combinations of foods, good in themselves. Buttermilk is not a natural corrective of these abnormal conditions, although it no doubt serves as an antidote, nor is the "internal bath," good in a way, the true remedy; the cause should be removed.

It has been said that "wine is the milk of age," and of unfermented wine this is true. The grape contains much sugar, acid and iron, which are deficient in milk. The most noted case of prolonged life in history, that of The growth of the infant in the Cornaro, the Venetian nobleman in the indulgence in eating and drinking, Cor-

> You can make the best buttermilk any day in your own kitchen. And there is nothing better for digestive disorders, and especially for intestinal

You can get at the drug store tabsimply dropping a tablet into a quart bottle of milk and maintaining the



 \mathbf{T} HE Easter bonnet is a bagatelle in comparison with the Leadgear fashion evolves for winter time. No airy arrangement of straw and flowers at this season ekes out the price charged for the milliner's ingenuity; but sub-stantial velvets, furs and costly ostrich feathers sum up a total that makes even the milliner's skill but an item. This year, for the poor husband's further undoing, have been added gorgeous gold and silver blooms that cost a pretty penny, a perishable rose cloth of gold often outdistancing a durable ostrich tip in price.

Such a craze is there for these huge gold and silver roses that, fast as the makers can turn them out, the shops cannot supply the demand. Fresh relays are eked out to pacify the clamoring of store buyers, and everywhere one meets the baffling information: "We are just out of gold roses, madam," "We are expecting more silver roses to-morrow morning." or.

Flower hat trimmings always make their appearance at the very height of cold weather, just as wings seem to suit Dame Fashion's fancy in the last sultry days of August. The very contrast of the biting wintry winds with the fragile blossoms, however, seems to lend spice to the choice of flowers for midwinter wear. In fact, the frost seems to have an amazing effect on these winter flowers, for they grow to mammoth proportions, some of the huge chiffon roses measuring not an inch less than a foot across.

The illustration shows the latest dressy Gage model, just now so popular

EXPERIMENT IN LAMB FEEDING IN THE WEST

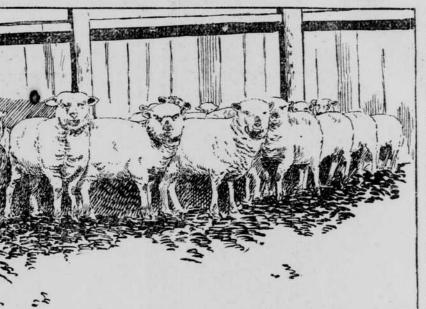
Results Obtained from Various Feed Combinations-By G E. Morton, Wyoming.

ascertaining the best ration.

this ration and another lot was fed al- cle and little fat. Pea hay that was falfa hay and corn. Shropshire-Meri- well cured before the stalks became

The Wyoming experiment station | The pea hay seemed very unsatisfachave just concluded a year's investi- tory, and while nothing is definitely gation in lamb feeding with a view to established by this experiment with regard to the amount of pea hay need-Three experiments were carried on ed for the production of 100 pounds at the same time. Previous experi- gain, yet it can be definitely stated

ments with small numbers of lambs that it gives unsatisfactory results for had shown that oats and oil meal fattening lambs. The lambs do not seemed to balance the native hay radiget enough roughage, and have the tion about as well as any grains tried. scours almost constantly. What gain Therefore, one lot of 40 lambs was fed is made is chiefly framework and mus-



Showing Type of Lambs Used in Experiment.

no cross-bred lambs were used. ambs in each lot.

ards protected by a high board fence, practically equal in value when fed ment to the living by open grieving with the exception of the lambs, upon with native hay and oil meal. A study for the dead. There are few families peas in the field. These were run in of Lot 9 shows that spelt is not near- whose ranks remain unbroken year small areas fenced with woven wire, ly equal to either bald or Scotch bar- after year. Absence permanent and he fences being moved as necessary, ley when fed with native hay and oil temporary leaves vacant chairs at the and the lambs driven to a corral at meal, giving a gain of only 13.8 pounds family table, and the only wise thing

utting: the sweet clover was coarse iderable quantity of wire-grass.

ka; the spelt was raised on the Lara-The pea hay fed in a corral pro-



TOOK EDGE OFF THE EFFECT

His Mistake When He Boasted of Mad. est Act of Charity.

Taylor got on the subject of modesty one night at the Press club. "Practically all acts of charity," said he, "are performed out of vanity. Modest charity is very rare, yet it is the only sort that counts, you know, with th-er-Recording Angel, eh? I remember once, motoring in the east, I came to a small town that had suffered from a flood. In the empty post office there was a contribution box for the flood sufferers.

"Not a soul was present. Nobody saw me or knew me. I pushed a \$20 bill into the box and slipped away unseen. And that act, I claim, that modest act of charity, was worth more than these acts involving many thousands, which are made on public subscription lists, to the loud fanfare of trumpets."

Taylor paused and relighted his cigar. His companion said:

"Quite right. Yours was genuine modest charity, Taylor. No wonder you brag about it."-Detroit News-Tribune.

JUST A TEST.



"Goodness, sonny, what's trouble?" "Nawthin'. I just wanted, to see if I had forgotten how to cry-boo-hoo!

The Selfishness of Grief.

Holidays are sad seasons for families from which loved ones have been taken away by death, but when we do our duty we give thanks for those still left us, and redouble our care for their happiness.

With the best intentions in the All the lambs were fed in uncovered that Scotch barley and bald barley are world we are meting out sorry treatin 14 weeks, or less than a pound a to do is to forget them as far as possible by devotion to those whom we are privileged to keep. Perpetual mourning is unnatural and selfish, inasmuch as it makes discomfort for those about us, and we need all the acre of the peas supported six lambs cheer and brightness we can gather to ease the burden of living.

> Sheer white goods, in fact, any fine wash goods when new, owe much of their attractiveness to the way they are laundered, this being done in a manner to enhance their textile beauty. Home laundering would be equally satisfactory if proper attention was given to starching, the first essential being good Starch, which has sufficient strength to stiffen, without thickening the goods. Try Defiance Starch and

you will be pleasantly surprised at the

Off for the Woodshed.

"Great Scott!" snorted the irritated

"Playing you are a ship, eh? Well,

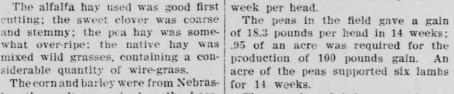
And the next moment grandpa was

The Land of England.

improved appearance of your work.

| stringy, undoubtedly would show bet-A comparison of peas in the field ter results than those given above, and pea hay was made with two lots but when compared with alfalfa and of Cotswold grade lambs, having 40 corn the pea hay is a poor ration. By comparing Lots 7 and 8 we find

night.



a very unsatisfactory adult diet, milk man, but because the lactic acid though it sustains life indefinitely. bacterium prevents the development

adult is more evident on comparing the infant with the adult anatomy and physiology: In the infant, for instance, the upper part of the alimen- avoided in this way. Here is the most tary canal is almost a straight tube, allowing the milk to pass quickly to the intestine, which is adapted to its digestion. The adult stomach is a deeply curved pouch, which in certain abnormal conditions retains the food for several hours longer than the

proper time for digestion. The fermentation of milk alone is not always serious, but the fermentation of meat. cereals and fruits in the stomach. through the agency of milk, leads to serious results.

The proportion of iron in the blood is very small, but very important. When it is found to be deficient, it is very difficult to supply it. Probably its best source is the brown part of wheat which is excluded from our fine patent white flours, of which we shall speak later, Grapes, the brown part of wheat, cabbage (raw) and lettuce readily supply iron. It has been found that persons living exclusively on milk lack "sand," a quality which the infant never needs | buttermilk causes no such difficulties. to display, since it is absolutely dependent.

in flesh-eating animals the stomach casein in cow's milk being finely and liver are much larger in propor- broken up. tion than in the vegetable-eaters. An apparent exception is found in the ruminating animals, like the cow, which gathers a large quantity of food and stores it in the first of a series of stomachs for future chewing. The development of the food tube indicates the food adapted to the animal. Although the infant digestive organs are better adapted to milk than the adult's, and of the fats, butter is the most they are not perfectly adapted to cow's milk. To feed a dog or a child of two years on "what we leat ourselves" indicates a sympathetic but thoughtless disposition.

Sterilized or boiled milk is open to the same objection as roasted peanuts. Its vitality, its real life-giving qualities are largely destroyed.

It is most unfortunate that out people are ignorant of the value of goat's milk, especially for infant feeding. The goat is the healthiest of all animals and the slowest to degenerate when domesticated. Rarely, if ever, is the goat known to contract tuberculosis or any other disease. The milk is superior in every way to cow's, quired by the infant in which intesand the poorest can own a "poor man's cow," which can be fed on the potato use of buttermilk tablets obviates this peelings, cabbage leaves or anything | difficulty, besides overcoming other eise that is clean.

Hardly any other food is compatible with milk, except uncooked, that soured milk is not natural. The whipped eggs, rice or toasted bread. reply is that cow's milk is not natural. Flesh meat, being a stomach food, is Certainly tests of buttermilk have particularly inharmonious with milk. proved it very satisfactory.

"To Learn the Transport by the Pain." To learn the transport by the pain. As blind men learn the sun; To die of thirst, suspecting That brooks in meadows run;

To stay the homesick, homesick feet Upon a foreign shore Haunted by native lands, the while And blue, beloved air-

This is the sovereign anguish, This, the signal woe! These are the patient laureates Whose voices, trained below,

But the unsuitability of milk to the of injurious bacteria in the milk. This is important in the case of infants Cholera infantum, some forms of diarrhoea and perhaps typhoid can be important practical application of the germ theory yet made, a boon for infant humanity, a recovery in some degree of the loss due to departing from nature in infant feeding as a result of departing from nature in other platinum. Wavs.

> It has long been known that buttermilk is a valuable food medicineeven when soured by lightning. We can not always command the thunder. but science has discovered how to make buttermilk without a churn and without lightning, and without separating the butter. Butterless buttermilk is good, full-cream buttermilk is better in most cases.

Cow's milk is digested by the infant with difficulty, often resulting in complete breakdown of the digestive and nervous system; but the adult digestive system is not so well adapted to the digestion of milk and hence flatulence and absolute revulsion often result from its continued use. But skirt of center front. because it is in a sense largely predigested, the coarser curds of the

This removes the greatest objection to cow's milk as a diet for infants and as an ideal monodiet for adults in severe stomach and bowel troubles. A certain amount of fat is necessary to the best conditions for normal nutrition, and fat is about 21/2 times more valuable as a heat and energy producer than other forms of carbon; easily assimilated, except peanut and olive oil. But emulsified as the fat is in milk, it is much more easily assimilated than as butter. For this reason, and for others, the new way of making buttermilk gives a much more nutritious product and more digestible, es-

pecially for the infant.

Cow's milk cannot be made identical with the infant's natural food, but it can be approximated to it. The chief difficulty to be overcome is to adapt the large curds that tend to remain in the stomach longer than they should. as the development of the calf's stomach requires that its food shall have a much heavier curd than that retinal digestion is more important. The

objections to the use of cow's milk. But the objection naturally, arises

To us, the duller scholars Of the mysterious bard! -Emily Dickinson Rather Lonely. "You don't find social life interest ing?" "Not very." "Then you can occupy your mind with business." "Not much. My employes have crowded into all the places of active responsibility and left me very little to do except to sign my name with a Ascend in ceaseless carol, Inaudible, indeed, rubber stamp."

VOGUE IN SEASON'S COATS. REVIVAL OF GOLD SLIPPERS. Are Slightly Narrower Than Those of Fascinating Footgear Just Now Im-

Last Winter. mensely Popular. The coat is slightly narrower than In with all the other brilliant fasthose of last winter across the shoulcinating footgear the gold slipper is

ders at back. The fronts are doublerevived. This is made of gold satin, breasted fastened with huge buttons cloth of gold, but especially of gilt. This is the name that it has always of brilliants set in a composition like gone by and there are bottles of the

To Wax Furniture.

rubbing with a piece of fine cork.

The Pony Skin Coat.

Quickly Adjusted Shields.

liquid sold to touch up the slipper The revers, which are quite broad, are made of old blue satin, that very whenever it becomes faded. According to the new fashion it is good looking tone that comes in so many fabrics. These are slightly emforming bees. The long sleeves are match the costume. These gold slip-

without fullness, each fastened tightly at wrist with a button of - brilliants, except a black gown, a white one, and and finished with a frill of old lace. The blouse that rises above this them the stockings are of the same high-waisted skirt is built of gray filet color as the skirts tulle in the coarse round mesh that is fashionable. It is draped over thin silver gauze, and shows a round

sleeves are long and tight, made of tulle wrapped around the arm. Here and there ar e embroidered sil ver bands, and there is one large one where the bodice tucks under the

LATEST IN COLLARS.



The new Paris "Bull Dog" collar, showing the bow to be worn at the back or the side.

The Separate Coat.

The separate coat is three-quarter length and it is understood that this season will usher in a great many separate coats which do not right- cut long, with a waistcoat of gaudy fully belong to a jacket suit. The finishing of seams in a tuck effect is seen on the newest models and, in many instances, gives a plain but attractive trimming. An exceedingly smart coat them last year. of this description was developed of a blurred striped effect in one plain style like a plain directoire coat. The nanel effect is a new note. The panel extends from the upper portion of the large buttons are of ornamental V-shaped opening at the top of the coat to the hem, and has button trim-

ming on each side. To bring the panel into prominence, the stripes are across the material and not lengthwise as upon other portions of the coat. The sleeves are plain, not even finished with cuffs, but a black velvet shawl collar is used.

The variation of the usual pierrot ruff is one composed of white and gray maline from the collar of which

changed. hats as well as fancy coats.

Sweet Clever Hay Native Hay, and Barley 20009 20 Contraction of the Contraction

process.

lambs fed pea hay ate only 200 pounds | were wholly unsatisfactory. of hay per head, which was less than the amount of hay and grain eaten by

any other lot Lots 1 and 3 constituted a second

not necessary to wear stockings to trial of native hay, oats, and oil meal, broidered with a heavy silver thread match these slippers. Instead, they in comparison with alfalfa hay and ley in 1907 at the Ontario expericorn. In experiments conducted the previous winter with small lots of pers do not look well with anything lambs upon various grain rations and native hay, the ration made up of nathese in pastel shades. With all of tive hay, oats and oil meal proved to be the best of those tried, the lambs

As bronze slippers are back in fashmaking a gain of 17.4 pounds per head in 14 weeks, against 28.6 pounds made ion, the old-fashioned bronze liquid is by the lot on alfalfa hay and corn. The sold to keep them in luster. These are guimpe and stock of Mechlin lace. Its very pretty and they are worn with present experiment with 40 lambs in stockings to match. One should be each lot shows an average gain of 20.3 pounds in 14 weeks by the lambs careful that these stockings do match, on native hay, oats, and oil meal, and for when they are of another shade of brown they are quite ugly. Shops now 34.3 pounds by the lambs on alfalfa have a genuine bronze silk stocking, hay and corn.

which they sell for the slipper. of oats, and 25 pounds of oil meal for In waxing it is of great importance to make the coating as thin as possible in order that the veins of the wood may be distinctly seen. The fol-

lowing preparation is the best for pergain. forming the operation: Put two ounces The results of these two experi- erage yield of 56.5 bushels of grain each of white and yellow wax over a ments indicate that the native hay, and 1.3 tons of straw per acre. In moderate fire in a clean vessel, and oats, and oil meal ration will produce 1907, of three winter varieties. Tenwhen it is melted add four ounces of somewhat less than two-thirds the gain nessee was the most productive, best spirits of turpentine. Stir the produced by alfalfa hay and corn in whole until entirely cool and you have the same length of time, and also re- ing the past 14 years winter barley a pomade fit for waxing furniture. quires considerably more feed to pro- has been completely killed out on which must be rubbed over with a duce 100 pounds gain. fine brush. The oil soon penetrates

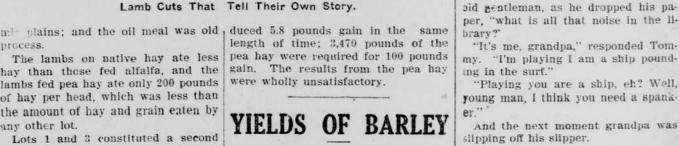
Wild sweet clover is common along the pores of the wood, brings out the rrigation ditches and in waste spots. color of it, causes the wax to adhere and since it withstands alkali well better, and produces a luster equal to and gives a heavy tonnage of hay, it that of varnish without being subject should prove a desirable hay crop in ao any of its inconveniences. The polmany sections. Stockmen commonly ish may be renewed at any time by believe that sweet clover is useless

as a forage plant, but cattle and sheep will eat the growing plant if it is not too large and coarse, and the ex-It looks as though the pony coat of periment here reported shows that last winter would be in first style lambs eat the hay readily and make this year. It is in black and brown,

good gains from it. Comparing Lots 4 and 5, we find satin or left quite plain and mannish. that the sweet clover lambs made an The short ones will not be in first average gain of 30.7 pounds in 14 style, but they will be worn by those weeks, while the alfalfa lambs made who put a good deal of money in 34.4 pounds gain. The former ate The new ones are cut on straight one-sixth more hay, somewhat more corn, and a small amount of oil meal. and rather narrow lines, with small The larger consumption of sweet closleeves and gauntlet cuffs. The rever hay was due to the fact that it vers are of satin or skin and the was cut late and was very coarse and stemmy. The lambs liked it, however,

and showed a steady appetite for it. There was not the slightest difficulty

A girl who has theories on the evils in getting them to eat it at the start. of pinned shields will not use the tiny The lambs eating pea hay made the safety ones sold for that purpose. She compromises by not sewing in her shields after each washing, but hooks the hay to produce 100 pounds gain pea hay is borne out by the results sewing takes only a few minutes, and is much easier than fastening a shield gain of only 5.8 pounds per head in easily be taught to eat from a pail with needle and thread each time i' is 14 weeks.



The highest yield of six-rowed barment station was produced from a special strain originated from a selection from the Manshury barley, originated at the college in 1906. The college has produced a considerable number of hybrid barleys by using the Manshury as one of the parents. Of six varieties of two-rowed barleys grown for 14 years in succession two-rowed Canadian, Jarman, selected beardless and New Zealand Chevalier ranked first in yield, with 64.6, 63.8 and 62.2 bushels per acre,

respectively. Of the hulless variety grown for The amount of feed required was 14 years in succession, Guy Mayle 607 pounds of native hay, 460 pounds ranked first with 48.3 bushels. Purple second with 45.4 bushels, and 100 pounds of gain. In the previous Black Hulless third with 44.9 bushels. experiment 574 pounds of hay, 591 The last mentioned variety is the pounds of oats, and 86 pounds of oil most extensively grown throughout meal were required for 100 pounds Ontario. Winter barley at the college for 11 years has given an av-

yielding 53.4 bushels per acre. Durthree occasions.

Improving the Farm .- One of the quickest, best and cheapest ways to improve the farm is to put it down to clover, field by field, and pasture hogs upon it. Cowpeas can be used in the

same way. Fall Plowing Best for Barley .- In a co-operative test the Wisconsin experiment station found an average yield of 41.8 bushels of Oderdruck barley per acre was secured on fal plowing and 35.9 on spring plowing. Drilling gave an average vield of 41.1 as compared with 39.6 bushels where sown with a seeder. Drilling on fall plowing gave an average yield of 43.3 bushels, and on spring plowing 37.3 bushels, as compared with 41.2 and

35 bushels respectively, where a seeder was used. In four cases where the barley was sown on land not plowed but worked up carefully with a disk plow, an average yield of 22.2 bushels was secured.

after this time.

by hand it is very important to allow them to get the mother's whole milk low gain of 16.9 pounds per head in for three or four days. The first milk 14 weeks. It required 1,472 pounds of after the cow freshens contains much more protein and ash than afterin live weight. This poor showing for wards. Nature provides these to loosen and clean out the digestive system gotten with Lot 10, which contained and to give the calf a good start in a very different class of lambs and life. It is the safest plan to allow was not carried on in comparison with the calf to run with its mother for Lot 6, but which shows a still poorer the first two or three days. It can

Twelve thousand seven hundred and ninety-one persons own four-fifths of the soil of England, their aggregate property, exclusive of that within the metropolitan boundaries being 49,180. 775 acres. In point of fact, the number of owners of four-fifths of the English land is nearer 5,000 than 12,000. Of these 500 are noblemen, and four or five of these swallow up the rest. -New York American. The extraordinary popularity of fine

white goods this summer makes the choice of Starch a matter of great importance. Defiance Starch, being free from all injurious chemicals, is the only one which is safe to use on fine fabrics. Its great strength as a stiffener makes half the usual quantity of Starch necessary, with the result of perfect finish, equal to that when the goods were new.

Rain or Shine.

Small Wallace accepted an invitation to a party, as follows:

"Dear Louise-I will come to your party if it don't rain" (then thinking that he might have to stay home in that case)-"and if it does."-The De lineator.

We would willingly have others perfect, and yet we amend not our own faults .- Thomas a Kempis.







them in. A small, non-rustable hook is sewed on the corners of each shield, and an eye to correspond on the proper place on the armhole. The preliminary

metal.

spring minute tails of brown fur. Ottoman silk is used for making