



DAIRY FACTS

VARIATIONS IN CREAM TESTS

One of Most Common Causes Is Difference in Amount of Water Used for Flushing.

There are many causes for the variations sometimes found in cream tests. Frequently would be a better word to use than sometimes in connection with this subject, for variations in the tests may always be looked for. A few of the causes are here given.

If the milk of a herd of cows whose average test is 4 per cent is separated so that the cream tests 40 per cent and the milk suddenly drops to 3.5 per cent of fat, as will often occur, the cream will then test only 35 per cent. The amount of fat lost in the skim milk is not affected to any appreciable extent by the richness of the milk separated.

One of the most common causes of variation in the test of cream from the farm separator is a variation in the amount of water or skim milk used for flushing out the cream at the end of the run. It is apparent that especially where a small quantity of cream is separated, a marked difference in the richness of the cream may be made by a change in the amount of water or skim milk added. It is an easy matter to vary a pint or more in the water or skim milk used and this alone may easily change the per cent of fat in the cream from 2 to 5 per cent. The per cent of fat in the cream may be readily changed, as is well known, by adjusting the cream screw.

The cream screw, however, is not changed very frequently and it is not the common cause of the variations in the test which constantly occur and which causes so much friction between the buyer and seller of cream.

Waterproof

As sure as you find rain and leaky boats, so sure you need shells that you know won't soak nor swell.

You need the shells that after being doused in water will chamber and eject easily, the shells that will fire as though they had never been wet.

US BLACK SHELLS

By one of three easy tests with free sample shells you can prove that The Black Shells are waterproof.

For the three free shells and a booklet describing how to make the waterproofing and other tests, just do as follows:

On the margin of this advertisement write your name and address, also that of your ammunition dealer, tear it out and send it to us. We will send you an order on your dealer for shells from his stock and for booklet of directions.

UNITED STATES CARTRIDGE CO.
2657 Trinity Building, New York City

WHY STRIVE TO KILL TIME?

If Annihilation Were Possible, the World Would Remain Just Exactly as It Is Today.

There are so many gentle proverbs devoted to the praise of Time, that it is wonderful to think how, in our day, that comely Titan has come to be regarded by the most of us as our worst enemy.

We are forever scheming how to forebreathe him, to get the better of him, even—in the extravagant phrase of the speed-at-any-price maniacs—to annihilate him.

Those, to be sure, fail to see how the consumption of their ideal would leave them exactly at the point from which they started.

Even the forty minutes girdle round about the earth, if achieved, would soon exhaust the excessive potentialities of existence; and, unless science is prepared to deal triumphantly with the problem of penetrating and breathing atmosphereless space, one fails to see what the world would gain through a perfected system of aeroplanes but the tedium vitae in its final and quite incurable form.

Tables Turned.

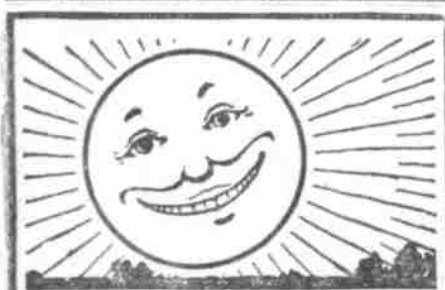
"You say the poor thing is unhappy?" asked the woman who listens eagerly.

"Yes," replied the woman who talks. "She has one of those ambitious husbands who wants her to go into politics, so that he can become socially prominent."

His Choice.

"If your dog were a singer, I wonder what style of songs he would select?"

"I am sure he would choose bark-rolles."



Sunny Dispositions

and good digestion go hand in hand, and one of the biggest aids to good digestion is a regular dish of

Grape-Nuts

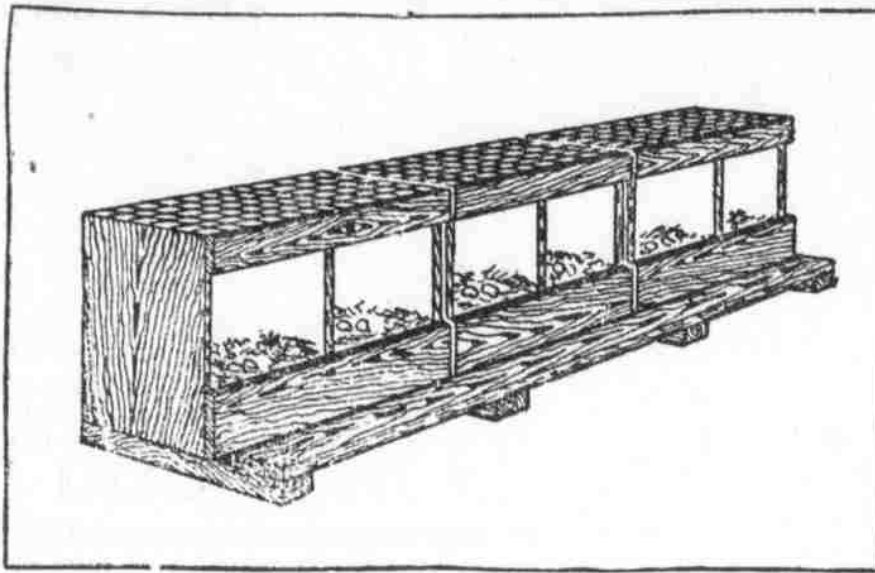
This wonderfully delicious wheat and barley food is so processed that it yields its nourishing goodness to the system in about one hour—a record for ease of digestion.

Take it all 'round, Grape-Nuts contributes beautifully to sturdiness of body and a radiant, happy personality.

Every table should have its daily ration of Grape-Nuts.

"There's a Reason"

PROFITABLE LAYING FLOCK FOR WINTER



GOOD OPEN NESTS, BUILT IN PAIRS.

The poultryman who wishes to have a profitable, laying flock for the season just ahead, says N. E. Chapman of the extension division at University Farm, must do three things now.

First, he must make his poultry house ready for the laying stock. This means that he must make it perfectly weather tight, repairing roof and windows if need be; that he must clean it thoroughly and either whitewash it or spray it with some good disinfectant; that he must thoroughly renovate roosts and nests; that he must refill the loft with clean straw; provide new sand and litter, hoppers for dry mash, for grit, shells and charcoal, a table or shelf for pans or crocks for water and milk, and a cheese box of road dust or hard coal ashes.

He must determine the capacity of his house in order that the laying flock may not be crowded. Each laying hen

needs at least four square feet of floor space. If an inclosed scratching shed is included, this may be considered in making calculations of the amount of floor space. If a considerable number of fowls is to be kept over, it will be worth while to divide the poultry house proportionately between old and young.

He must gather in all the young chickens from brooder houses, coops, boxes, trees and bushes, for a thorough culling of the flock. He must give pullets hatched in April and May a chance to make good. They will lay in November and December if properly housed and fed. He must dispose of all old stock, except birds desired as breeders; also old roosters and cockerels, except those needed as breeders or for family consumption. Colony houses may be utilized for cockerels and surplus stock until they can be profitably marketed.

START FOR WINTER LAYERS

Early Pullets Should Be in Cold-Weather Quarters Some Weeks Before They Begin to Lay.

The cold weather will soon be here again, so now is the time to get everything ready for wintering the laying stock. April and May pullets will start to lay about the first of November, or even sooner, and they should be in their winter quarters several weeks before they start to lay.

The most important thing, and the one most frequently neglected by the average farmer, is to have the winter quarters properly cleaned and disinfected. After being thoroughly cleaned out they should be whitewashed. The whitewash is best made from fresh lime and applied while hot with a spray motor or force pump. About 6 or 8 per cent of crude carbolic acid is added to the wash, also a small pail of buttermilk added to each barrelful makes it stick better. Everything movable in the house should be taken out and disinfected. When fresh straw or shavings is put into the nests and fresh litter on the floor, the house is perfectly clean and healthful for the reception of winter layers.

It has been believed by many poultrymen, and investigations seem to bear out the belief, that hens which molt late are better winter layers than those which molt early. Those hens which molted in August and are now starting or have started to lay, are likely to stop again when the cold weather sets in. So now is the time to pick out the hens to keep over winter.

All males should be kept separate from the females until breeding season opens, as it gives them a better chance to produce vigorous stock when it is wanted.

LICE POWDER EASILY MADE

Few Cents Will Pay for Mixture That Will Effectually Keep Vermin From the Fowls.

"Don't let the mites and lice eat up the profits of your poultry flock when a few cents' worth of homemade lice powder will free all fowls," says M. C. Kilpatrick, poultry expert of the agricultural college extension service, Ohio State university.

An effective homemade lice powder is made as follows: Place two and one-half pounds of plaster of paris in a pan. Then stir in three-fourths pint of gasoline and one-fourth pint of cresol or 95 per cent crude carbolic acid until a crumbly powder is formed.

Dust the fowls by sifting the powder in the feathers, between the legs, under the wing and along the back.

BLUE OINTMENT FOR VERMIN

One Application Will Keep Fowl Free From Lice for Entire Season—Must Dust Often.

With many poultrymen the use of blue ointment as a remedy for lice is replacing the use of lice powder and liquid lice killers. When lice powder is used, the dusting must be very thorough, as the desiccants of any louse that escapes will soon reinfest the hen. With lice powders at least two dustings must be made ten days apart.

On the other hand, when blue ointment is used, but one application will keep the fowl free of lice for an entire season. The ointment is applied by rubbing a small pellet into the feathers around the vent, as all lice on the fowl must make frequent visits to this portion of the hen in order to obtain moisture.

EARMARKS OF GOOD LAYERS

Chalky White Ear Lobe Indicates Hen Is Laying Heavily—Rules Laid Down by Cornell Expert.

When you go out into the hen yard to get a chicken or two for the Sunday dinner, you naturally want to select the ones that are poor layers. There probably isn't any way of telling in every case by a hen's looks whether or not she is a good layer, but the following rules laid down by Professor Kent of Cornell are the result of a good deal of study and observation. They will hold good in most cases:

Yellow-legged birds quickly lay of the color in their shanks when they are laying. A hen which is laying heavily almost loses the yellow color out of her shanks. After molting the yellow color returns quickly.

Examination of the ear lobe is considered to be almost infallible. A chalky white ear lobe indicates that a bird is laying heavily, whereas a cream-colored one shows that the bird is laying moderately, has just started, or has just stopped. A milk-colored ear lobe shows that the hen has laid slightly or has stopped laying. A very yellow or dark ear lobe indicates that the hen has not laid at all.

It is to be remembered that an extremely white ear lobe also may mean very low vitality.

The more velvety the texture of the comb of a hen is the better is her health, and it is almost a certain sign that she is laying heavily.

Out of 40 hens under observation at Cornell, six with chalky-white ear lobes showed that they had laid 22 eggs that week, 16 eggs the previous week and nine the week before that.

Of six other hens with creamy ear lobes, four laid 15 eggs that week and three laid 12 the week before and three more laid nine eggs the prior week.

Seven hens with yellow ear lobes were examined and only one of them had laid an egg that week and four the week before.

Nine hens with very dark ear lobes showed that they had not laid an egg for weeks.

BOARD TO CATCH DROPPINGS

Convenient Platform, Liked by Many Breeders, Is Lowered and Raised by Aid of Pulleys.

Many breeders like a board platform under the roosts, to catch the droppings. This keeps the floor clean, and enables them to preserve the droppings in good shape. A convenient board for droppings that is much liked by one breeder, is hinged at the north wall, lowered and raised by pulleys, and held by narrow chains hooked over nails.

Every morning, the board is towed into a low box, the width of the board, which is wheeled from place to place on casters. The boards are quickly cleaned with a hose. Roosts are screwed onto iron brackets fastened to the boards. The roosts are frequently taken out and painted. Boards for droppings should be of good lumber, smooth, and free from knotholes where mites might hide.

MARKET ALL SURPLUS MALES

Get Young Roosters Out of the Way and Reduce Feed Bill—Save Those Wanted for Breeders.

Any young roosters which are large enough to crow should be marketed as soon as a market can be found, to get them out of the way and reduce the feed bill. This, of course, refers to those which are not kept for sale as breeders, etc.

LIVE STOCK

RUSTED STRAW FOR FEEDING

Value Demonstrated by Experiments Made by Canadian and Other Experiment Stations.

There has evidently not been much investigation on the effect of rust on straw as to its feeding value. Most of the analyses made show that rust increases the feeding value of the straw. The Dominion experiment station in Canada and the experiment stations in North Dakota and Minnesota, have found that the rusted straw has a larger feeding value than rust-free straw. The analysis made at the North Dakota experiment station one year, however, showed that the straw had a decreased feeding value. The reason for an increase feeding value is explained by the fact that the plant first produces the nourishment in the stem and leaves and later passes it up into the head to fill out the kernels. The rust interferes with this food passing up into the head. It has a little the same effect as cutting the grain for hay.

The value of the rusted straw depends on a good many factors, among which are the time at which rust strikes the crop, how the straw is cured, and whether it has any shriveled grain in it. Cases have been reported in which animals have been harmed by being fed rusted straw.

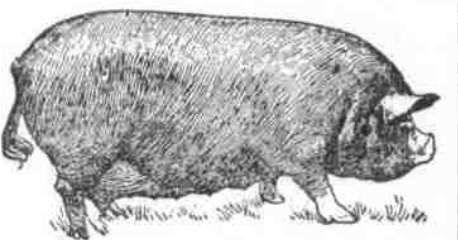
One way to determine if it is harmful is to feed it to a few of the less valuable animals for a week or two and observe the effect that it has on them. Some other roughage should be fed with the rusted straw and do not make a sudden change from other feed to rusted straw. Shaking the straw to remove the dust as far as possible is also advisable. Observe the animals that are being fed rusted straw to see what effect it has on them.—North Dakota Experiment Station.

VALUE OF WHEAT FOR SWINE

Tests Made at Missouri Agricultural College to Find Suitable Substitute for Corn.

(By L. A. WEAVER.)

Information of value to all pork-producers, especially in seasons when the corn crop is short, has been obtained by carrying on experimental work with other crops grown on the farm by the Missouri agricultural experiment station. By conducting feeding trials with wheat it has been shown that under some conditions wheat may well be used for hog feeding instead of corn. Results obtained show that when corn is worth 70 cents or more



Prize Winning Sow Owned by Missouri Agricultural College.

a bushel, wheat may be profitably substituted for corn if the wheat is worth 90 cents or less. Likewise if corn is worth 80 cents per bushel, wheat is worth \$1.03 a bushel as hog feed.

It has been further shown that pork may be produced more cheaply by adding a small amount of tankage to a mixture of corn and wheat than by feeding these feeds without such a supplement.

For example, the cost of producing 100 pounds of pork with corn and tankage was 60 cents less than when corn alone was used. This would mean an additional profit to the producer of \$100 or more on each carload of hogs fed.

GIVING MEDICINES TO SWINE

By Using Old Shoe With Hole Cut in Toe, There Is Little Danger of Strangulation.

If it should be necessary to administer medicines to a hog, simply cut a small opening in the toe of an old shoe, have an attendant hold hog in as natural a position as possible, insert toe of shoe in mouth, pour drench in shoe carefully, and the hog will do the rest (of course powders should be liquefied with water). By this method there is practically no danger of strangulation, no danger of breaking drenching horn or bottle or any other vessel that may be used, the hog in trying to eject shoe from mouth will simply swallow.

RIGHT CARE OF BROOD MARE

Careful Plowman Can Use Her Up to Within Few Days of Time She Is to Drop Her Colt.

A careful plowman can use the mare up till within a few days of the time she is to drop her colt without danger, and likewise he can begin work with the mare ten days or two weeks after the colt is born, provided the work is reasonably light and the mare is cared for properly.

It is not necessary that the colt follow its dam while she is in harness, but it is better to leave the colt in the pasture or the barn while the mare is driven.

WIFE TOO ILL TO WORK

IN BED MOST OF TIME

Her Health Restored by Lydia E. Pinkham's Vegetable Compound.

Indianapolis, Indiana. — "My health was so poor and my constitution so



down that I could not work. I was thin, pale and weak, weighed but 109 pounds and was in bed most of the time. I began taking Lydia E. Pinkham's Vegetable Compound and five months later I weighed 133 pounds. I do all the house-

work and washing for eleven and I can truthfully say Lydia E. Pinkham's Vegetable Compound has been a godsend to me for I would have been in my grave today but for it. I would tell all women suffering as I was to try your valuable remedy."—Mrs. WM. GREEN, 332 S. Addison Street, Indianapolis, Indiana.

There is hardly a neighborhood in this country, wherein some woman has not found health by using this good old-fashioned root and herb remedy.

If there is anything about which you would like special advice, write to the Lydia E. Pinkham Medicine Co., Lynn, Mass.

English Learning Other Languages.

The English have never been distinguished in the past as linguists, their own mother tongue answering their requirements, commercially, intellectually and otherwise. Their insularity in this respect is disappearing, however, and two anonymous donors have each given \$5,000 to Leeds university, one gift being for the development of the Russian language and literature, and the other as an initial endowment to found a chair of Spanish.

Whenever You Need a General Tonic Take Grove's

The Old Standard Grove's Tasteless Chilli Tonic is equally valuable as a General Tonic because it contains the well known tonic properties of QUININE and IRON. It acts on the Liver, Drives out Malaria, Enriches the Blood and Builds up the Whole System. 50 cents.

Contradictory Methods.

"How is it you are always so ready with everything needed?"

"Because I make it my standing rule to have everything in running order."

Sties, Granulated Eyelids, Sore and Inflamed Eyes healed promptly by the use of ROMAN EYE BALSAM.—Adv.

After man came woman—and she is still in the race.

Is Work Too Hard?

Many kinds of work wear out the kidneys, and kidney trouble makes any kind of work hard. It brings morning lameness, backache, headache, nervousness, rheumatism and urinary troubles. If your work is confining, strains the back, or exposes you to extreme heat or cold or damp, it's well to keep the kidneys active. Doan's Kidney Pills are reliable and safe. Thousands recommend them.

A North Carolina Case

N. A. Spence, Sr., 423 S. Wilmington St., Raleigh, N. C., says: "I suffered for years from kidney trouble. I had backaches and pains through my loins and the kidney secretions were unnatural and filled with sediment. After using Doan's Kidney Pills, I passed several gravel stones and improved at once. The aches and pains soon left and the action of my kidneys was regulated."

Get Doan's at Any Store, 50c a Box
DOAN'S KIDNEY PILLS
FOSTER-MILBURN CO., BUFFALO, N. Y.

COLD IN HEAD CATARRH

INSTANTLY RELIEVED BY THE OLD DR. MARSHALL'S CATARRH SNUFF
25¢ at all drug stores or sent prepaid by WILLIAMS MFG. CO., CLEVELAND, O.

RHEUMATISM

is completely washed out of the system by ten gals. (three weeks) of the celebrated Shivar Mineral Water, costing only two dollars. Tastes like positively guaranteed by money back, on return of the two loaned carbons, should report "no benefit." Mention your press office. Address: Shivar Spring, Box 42, Shelton, S.C.

To cure constiveness the medicine must be more than a purgative; it must contain tonic, alterative and cathartic properties.

Tutt's Pills

possess these qualities, and speedily restore to the bowels their natural peristaltic motion, so essential to regularity.

Safety Razor Blades Resharpened

Write for Free Booklet. Safety Razor Blades Resharpened and priced. SHARPE'S RAZOR WORKS, Dept. C, Durham, N.C.

AVOID GALL STONES OPERATIONS

(No Oil) Stone Pains or Aches in Stomach, Back, Side or Shoulders; Liver Troubles, Stomach Misery, Dyspepsia, Colic, Gas, Bloating, Headache, Constipation, Piles, Catarrh, Nervousness, Bile, Jaundice, Excess of Bile. These are common gallstone symptoms—CAN BE CURED. Send for home treatment. Medical Book on Gall Stones, Bile, Troubles and Appendicitis. FREE. Gallstone Remedy Co., Dept. W-8, 219 S. Dearborn St., Chicago