Store Eggs for Lean Months!

George F. Stewart  
*Iowa State College*

A. D. Oderkirk  
*Iowa State College*

Belle Lowe  
*Iowa State College*

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Store Eggs for Lean Months!

By GEORGE F. STEWART
A. D. ODERKIRK
BELLE LOWE

Many Iowa farm people who have plenty of eggs in the spring find themselves with none to sell in the fall when the price goes hiking up because of the scanty supply, and not even enough to eat.

In March, 1940, we made a study of egg consumption in Iowa and found that 6 of the 99 counties have a deficit of eggs the year around—they produce less than they use. These counties are Black Hawk, Dubuque, Scott, Wapello, Polk and Woodbury. Other counties which have a deficit in some 3-month periods of the year are: Appanoose, Cerro Gordo, Clinton, Des Moines, Fremont, Lee, Linn, Mills, Muscatine, Webster and Page.

Two years ago Farm Science Reporter suggested that those who have cold storage lockers might wish to try freezing some of their cheap spring eggs and storing them as “whites” and “yolks” or as mixed whole eggs to be used months later. A good many farm folks have tried this; some are enthusiastic about it, and others have not been satisfied.

Since that time we have done additional work here at the Iowa Station in an endeavor to improve the process of preparing eggs for freezing and also with storing eggs in the shells in water glass and with shells coated with oil.

The nutrition of our people must be good so that they can drive with our “Food for Freedom” campaign and other war efforts. It is essential that folks have ample supplies of eggs because they are a protective food—excellent sources of protein, fats and minerals, and spring eggs are especially apt to have considerable amounts of the essential vitamins (except vitamin C). An egg for each person per day the year around is essential.

Tests show that you can store eggs for as long as 6 months, either frozen or in the shell, without hurting their nutritive value, even though they may not retain all of their fine fresh flavor. Most of us eat a good share of our eggs in cakes, cookies, custards, salad dressings and the like. These stored eggs are perfectly satisfactory for cooking.

And so even folks who have sufficient supplies of fresh eggs the year around may find it profitable to store some eggs during the spring when prices are lowest of the year. The cost of storing eggs is very small.

One of the things our tests in the last 2 years have shown is that eggs which are going to be frozen and stored in lockers should not be too fresh! We have found that if you let eggs remain in the shells at a temperature of 70 to 80°F. for 3 to 5 days before they are broken out and frozen, you will have less trouble with the thick, gummy yolk. It’s when we have frozen the real fresh eggs that we have had trouble.

Using Water Glass

But only real fresh eggs—not over 8 hours old—can be satisfactorily stored in the shell. To store eggs in the shell, either dipping them in oil or storing them in water glass is satisfactory. Water glass, which can be bought at the drug store, is the cheaper and probably will prove better than oil for storing eggs.

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more satisfactory for most people. Here are the general rules for storing in water glass:

1. Use clean fresh eggs that are not over 8 hours old. We have found that starting with real fresh eggs is highly important if the eggs are to retain their firm yolk, white characteristics and good flavor for several months.

2. Place the eggs small end down in a crock or stone jar. You can build up several layers, but avoid too many because of the danger of the weight breaking those at the bottom. Now cover the eggs with a water glass solution made by diluting 1 part of commercial water glass with 9 parts of boiled water. Ten quarts of the solution will cover 15 dozen eggs.

3. Cover the water glass solution with a thin layer of white mineral oil to avoid evaporation of the water.

**Use of Mineral Oil**

We have tested and found white mineral oil satisfactory for coating the shells. Though other oils may be used, we have tested the following with satisfactory results:

- Premier—Standard Oil Co. (Indiana)
- Eureka—Standard Oil Co. (Indiana)
- White Rose—Standard Oil Co. (Indiana)
- Carnation—Sonneborn and Son (New York)
- Klearol—Sonneborn and Son (New York)

These oils usually can be obtained from retail or wholesale druggists, or the local tankcar oil dealer.

The rules for treating eggs with oil are:

1. Use clean sound eggs that are not over 8 hours old.
2. Dip them in oil at 70 to 90°F. (using wire baskets) for a few seconds.
3. Drain to remove the excess oil, then place the eggs, small end down, in regular egg cases or better yet, in clean crocks.
4. After they are treated, the eggs should be kept in the coolest place available — not cooler than 32°F nor over 65°F.
5. Avoid storing the eggs where there are strong odors, because the eggs may pick them up.

We have found in using oil that eggs properly treated and handled will keep in excellent condition for 3 months and in edible condition for 5 months. Those stored in water glass will be somewhat superior in keeping quality, but are so tightly sealed that the shells must be punctured before boiling or they will crack.

**Freeze Them**

Two years ago Farm Science Reporter told how to freeze cheap spring eggs for use in the high priced and scanty supply months of fall and early winter. Some of the folks who put eggs in their lockers at our suggestion did not like the frozen and thawed yolks because they were inevitably somewhat gummy. Those who praise the method like the convenience of having yolks or whites readily available without the necessity of having to “think up something to do with the whites or the yolks.”

Because of the interest in freezing and storing eggs in cold storage lockers, we are repeating here the procedure, with the improvements which we have
of yolk.

Whether you use salt, sirup or honey depends on how you plan to use the eggs. Most all recipes will work well with salted yolk. A few foods, such as scrambled eggs, cannot be made with sweetened yolk, but sweetened yolk works fine with baked goods or mayonnaise.

6. The yolks are now ready to package for the freezer. We have found the waxed cartons work best, but you can use glass jars or tin cans.

The glass, wax and tin offer good protection against drying out in the locker. If covers are not available for the tin cans, cover the eggs after they are frozen with a small amount of water which will protect the surface from drying. All containers should be filled not fuller than an inch of the top to allow for expansion.

Once the eggs are prepared and in the container they should be frozen promptly. The yolk is likely to sour rapidly when held above freezing. The whites do not spoil so easily. The eggs are first placed in the freezer and later transferred to the locker after they are frozen.

Egg yolks and whites may be taken home as you need them, thawing and keeping them in the refrigerator. If you are in a hurry, they may be thawed in warm water (120-125° F.). We find that it is not safe to keep thawed yolks more than 48 hours even though they are in the refrigerator because of the danger of souring. Thawed whites may be kept as long as a week in the refrigerator, before they are used without undergoing any serious change.

These thawed yolks and whites may be used just as you now use fresh egg whites and yolks. For convenience, you may use the following figures for estimating the amount of yolk and white corresponding to one egg:

2 tablespoons of white equals the white of one egg.
1 tablespoon of yolk equals the yolk of one egg.

Some folks may want to mix the whole egg before freezing, and this works very well. Mix whole eggs the same as yolks—with salt, sirup or honey.

We have found that egg yolks and whites prepared in the manner suggested may be stored in lockers a full year without loss of quality if the locker temperature is not higher than 5° above zero.

Only clean eggs, not over 8 hours old, should be preserved in water glass. Pack them with the small ends down in stone crocks or jars.