#### What is Salmonella?

Salmonella refers to a type of bacteria that may lead to food poisoning in humans and animals. Eggs, as well as other foods, are susceptible to bacterial growth. However, eggs have several natural barriers that help prevent contamination, such as the shell, enzymes found in the egg white and membranes surrounding the shell and yolk.

The following precautions will help prevent Salmonella food poisoning:

- ✓ Use only fresh, clean, unbroken and properly refrigerated eggs.
- Avoid mixing yolks and whites with the shell. Use an inexpensive little gadget called an egg separator to help insure that any bacteria possibly present on the shell will not reach the yolk and white.

  n an average year, 3500 lots of shell eggs will be inspected at over 670 establishments.

  All people who distribute eggs in WV must have an egg distributor permit.

# What do officials check during an inspection?

WVDA regulatory officers contact grocery stores and other retail outlets to insure shell eggs are kept in a sanitary environment, are properly refrigerated, are intact and undamaged, meet carton labeling rules and meet the grade and weight specified on the carton.

### **Storage Tips**

✓ Leave eggs in their original carton to help prevent them from drying out and picking up odors and flavor from other foods in the refrigerator.

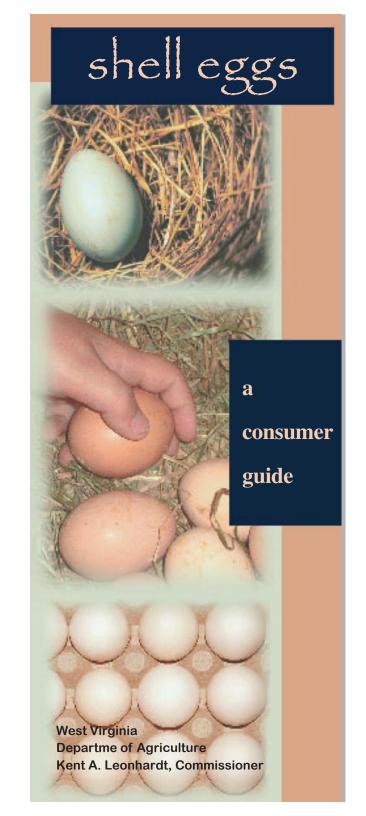
- ✓ Store eggs at 45°F with the small end of the egg pointed down in the carton.

  This will help keep the air cell in place and the yolk centered in the egg.
- ✓ Place egg cartons in the coldest part of the refrigerator – an inside shelf, not in the door.

#### **Cooking Tips**

- ✓ Most recipes are based on large eggs.
- ✓ Hard cooked eggs peel easily if they are old. Use eggs at least one week old.
- Cold eggs separate the easiest. Egg whites reach their greatest volume if they set at room temperature for 30 minutes before beating.
- ✓ Cook eggs until the whites are completely set and the yolks begin to thicken. Cook scrambled eggs and omelets until thickened and no visible liquid egg remains.
- The thick, ropey pieces of egg white called chalazae help anchor the yolk in the thick white. The more prominent the chalazae, the fresher the egg. This natural part of the egg does not interfere with the cooking or beating of the white.

Regulatory & Environmental Affairs Division 1900 Kanawha Boulevard, East Charleston, West Virginia 25305 304-558-2208 agriculture.wv.gov



## What should I look for when buying eggs?

Purchase only clean, unbroken, odor-free eggs. Quality is indicated by egg grade, not size. A process called candling, in which eggs are held in front of a light source, allows egg graders and regulatory officers to observe the size of the air cell, the condition of the yolk and the white, and any hidden defects. These factors, along with shell soundness, cleanliness and shape, are used to classify eggs as Grade AA, Grade A or Grade B.

AA and A are the grades most commonly marketed at retail. Grade AA eggs are the highest quality, but there is no difference in nutritive value among the different grades.

#### How many sizes of eggs are sold?

The official size or weight classes are:

Size	Minimum net weight per dozen (without carton)
Jumbo	30 ounces
Extra Large	27 ounces
Large	24 ounces
Medium	21 ounces
Small	18 ounces

## What information is included on the egg carton?

All eggs sold at retail in cartons must be packaged in cartons that are clean, intact and free of odor. Labels must include:

- ✓ Grade and Size
- ✓ The term "Eggs"
- ✓ Identity of the packer by USDA plant number, state permit number or name and address
- ✓ Quantity of eggs

- ✓ Use By, Sell By or Expiration Date
- ✓ The words "Keep Refrigerated"
- ✓ Safe Handling Statement

The carton may show the candling, or Julian, date. This three-digit number indicates the specific day of the year on which the eggs were graded, sized and packed. For example, number 001 would represent January 1, while 365 would be December 31.

This number provides an indication of the eggs' freshness.

### Is it safe to use eggs after the sell by or expiration date has passed?

Yes. Sell by or expiration codes indicate freshness. Since egg quality deteriorates over time, code dates are used to ensure the grade specified on the label is accurate. If stored properly, eggs may be safely consumed several weeks beyond the expiration date with no significant quality loss.

#### Are eggs nutritious?

Yes. Eggs contain 13 vitamins and numerous minerals. One egg provides 10 to 13% of the daily reference value for protein – as much as one ounce of lean meat, fish or poultry. Egg protein is the highest quality food protein – second only to mother's milk for human nutrition.

Eggs are nutrient-dense; they provide many nutrients compared to the number of calories they contain. Calories per egg are:

Size	Calories
Jumbo	94
Extra Large	84
Large	75
Medium	66

One large egg contains about 4.5 grams of fat, but only 1.5 grams of saturated fat, the kind linked to increased blood cholesterol levels. More than half the egg's total protein content is found in the egg white, which is both fat- and cholesterol-free.

#### Are white eggs better than brown eggs?

No. Shell color depends on the breed of hen that produced the egg. It does not affect the egg's nutritive value, cooking properties, flavor or quality. Brown eggs usually cost more than white eggs because brown egg layers are slightly larger birds and require more food.

### Are Grade AA eggs more nutritious than Grade A eggs?

No. There is no difference in nutrients between egg grades. When broken out, the yolk and thick white of a Grade AA egg stands taller than that of a Grade A egg.

### Why do eggs sometimes turn green when cooked?

When eggs are cooked for too long or at too high a temperature, they will sometimes turn green. Color change may also occur if the cooking water contains a high level of iron.

Although the green tint does not affect flavor or wholesomeness, it may be avoided by cooking at low temperatures and using stainless steel cookware.

### Is it safe to consume eggs with a blood spot on the yolk?

Yes. The presence of a blood spot on the yolk does not mean the egg is fertilized or unfit to eat. Blood spots occur occasionally when a blood vessel on the yolk sac surface ruptures during egg formation. Easily removed with the tip of a knife, the spots do not affect the egg's nutritive or chemical properties.