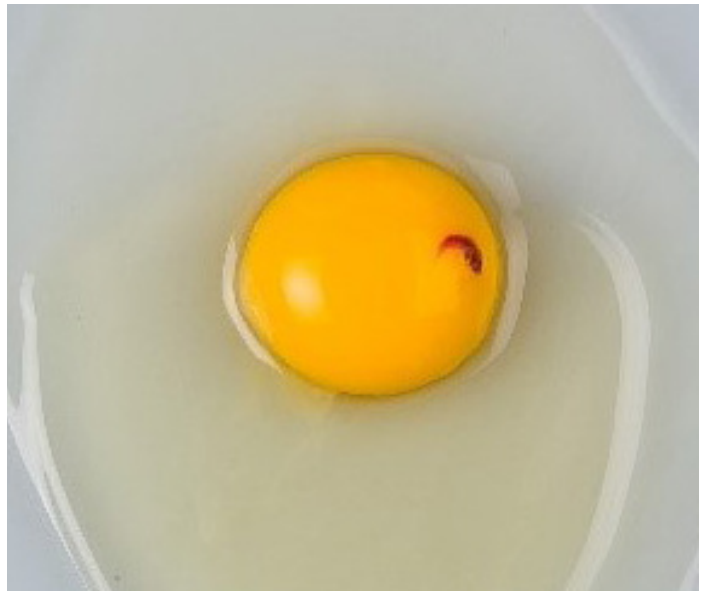


NATIONAL 4-H POULTRY JUDGING MANUAL  
Revised February 21, 2021

**MARKET EGGS - INTERIOR QUALITY BY BROKEN OUTS**

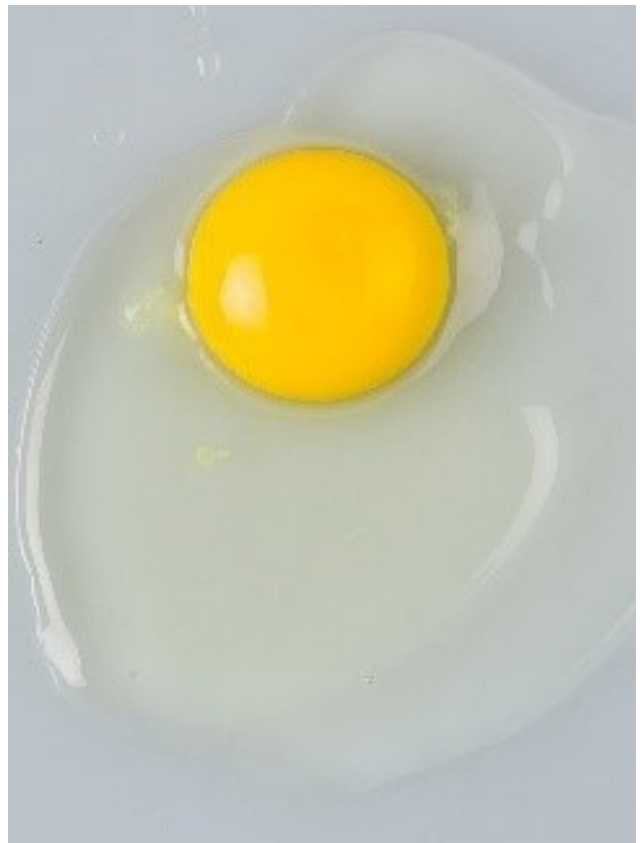
In the broken-out egg class, the eggs to be graded are broken out on glass dishes. The grades will be Grades AA, A, B, or Loss. Eggs with meat or blood spots less than  $\frac{1}{8}$  inch in diameter total will be classified as Grade B. Any eggs with blood or meat spots totaling more than  $\frac{1}{8}$  inch in diameter are classified as Loss (see Figures 1 and 2). It is important to not confuse bits of the chalaza as meat spots. Pieces of the chalazae may break off and be visible in the albumen (see Figure 3).



*Figure 2. Broken-out egg with a blood spot on the yolk.*



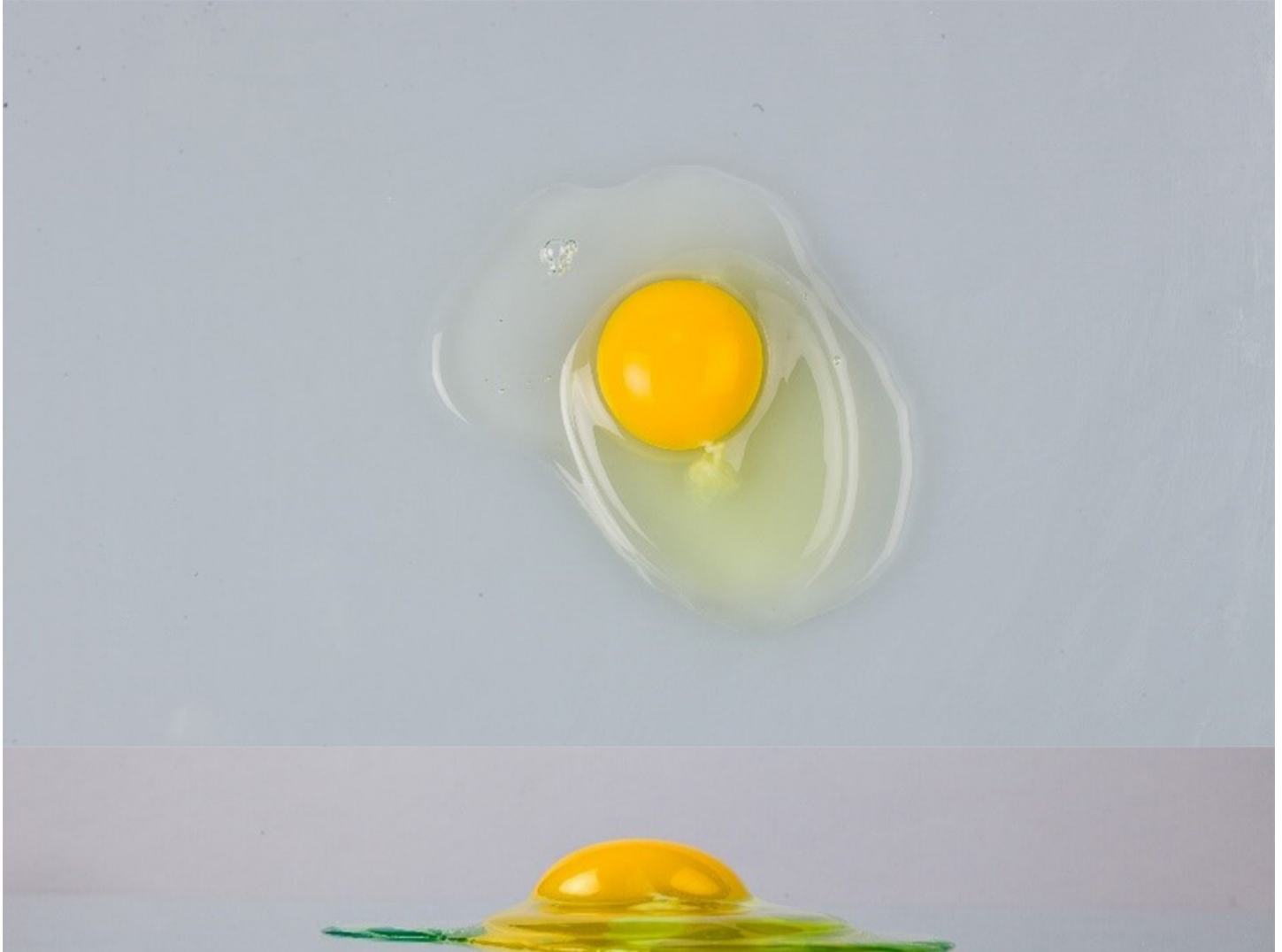
*Figure 2. Broken-out egg with a meat spot in the albumen.*



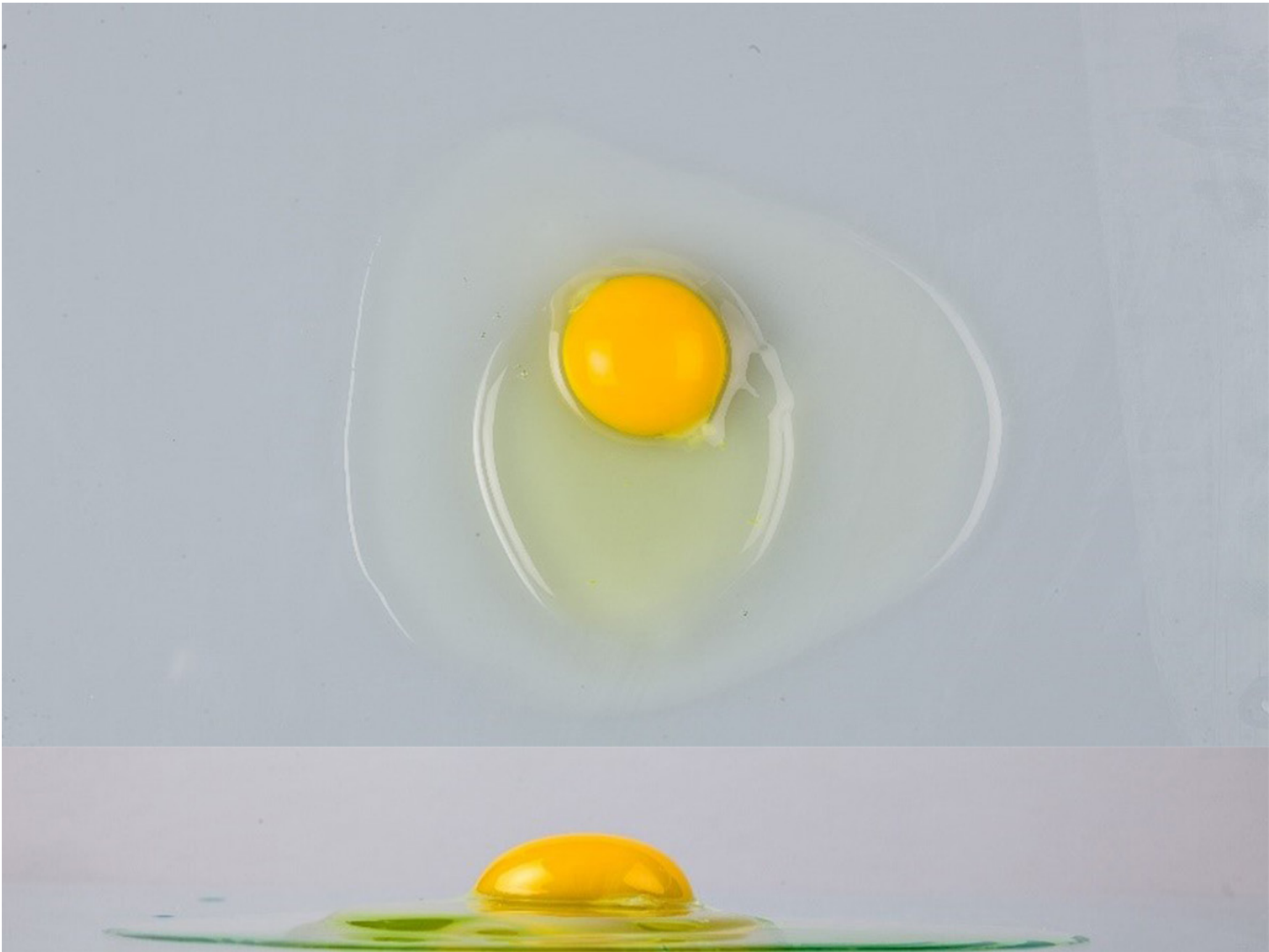
*Figure 3. Broken out egg with a piece of chalaza, and not a meat spot, in the albumen.*

The criteria used to grade broken-out eggs include the height of the thick albumen as well as the yolk's size and flatness. For a Grade AA egg, the thick albumen is in the shape of an egg and the yolk sits off the plate, as shown in Figure 4. For a Grade A egg, the albumen is losing its egg shape and sits lower on the plate. The edges of the thick albumen having a rounding of the edges. You cannot see under the yolk (see Figure 5). For a Grade B egg, the yolk is flattened, and the thick albumen is almost all gone (see Figure 6).

Contestants should evaluate each egg on its own merit and not compare it with other eggs in the class. If you set an incorrect standard, your grade scale could be off, causing you to incorrectly grade several eggs. The diameter of the outline of the thick albumen (top view) may give an indication of grade; however, the height of the thick albumen (side view) is the most important factor in determining grade.



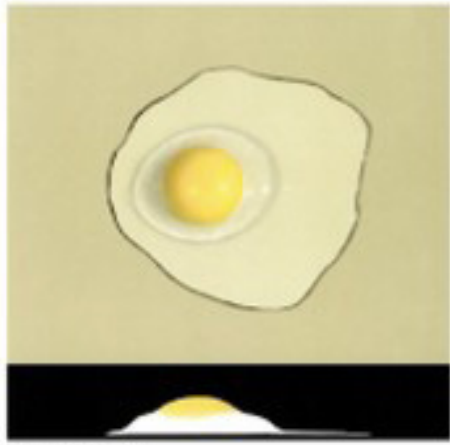
*Figure 4. Grade AA broken-out egg.*



*Figure 5. Grade A broken-out egg.*



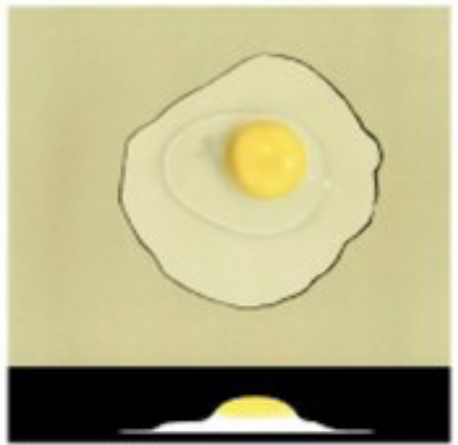
*Figure 6. Grade B broken-out egg.*



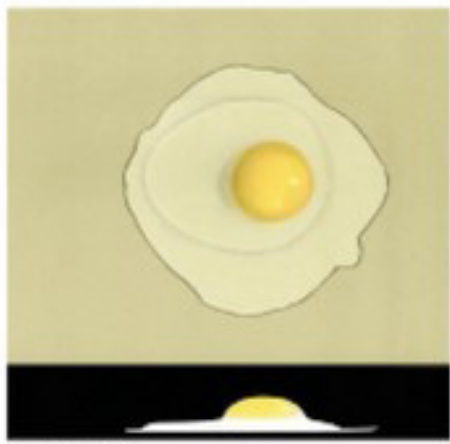
1. High "AA"



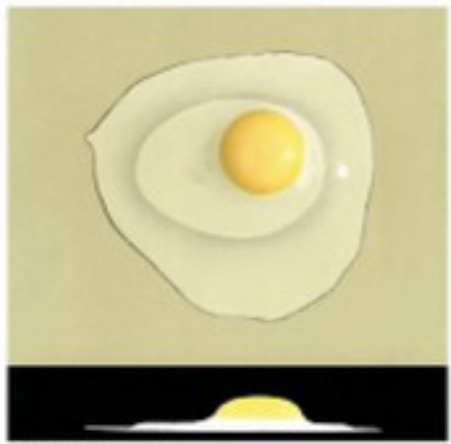
2. Average "AA"



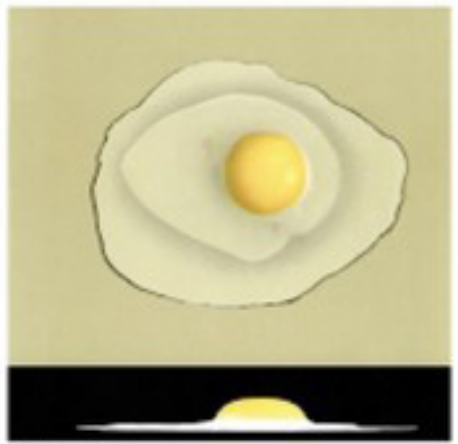
3. Low "AA"



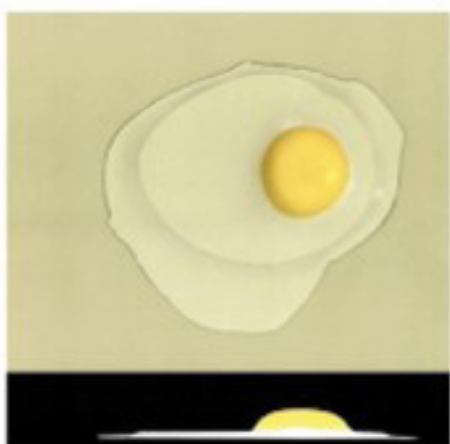
4. High "A"



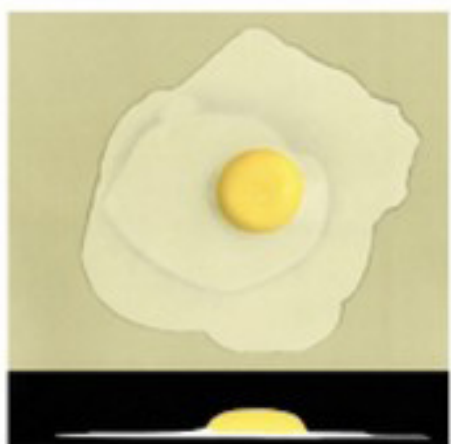
5. Average "A"



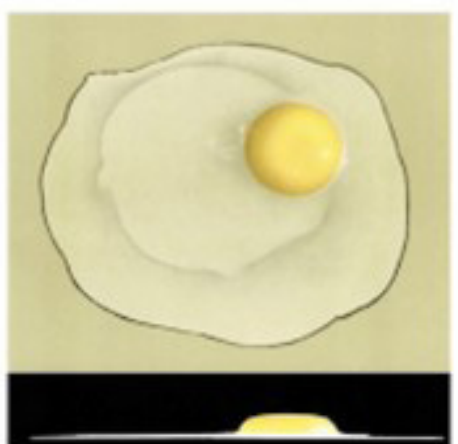
6. Low "A"



7. High "B"



8. Average "B"



9. Low "B"

*USDA standards for broken out eggs.*