

Remove an Eggshell Without Cracking the Egg

ELECT Social 1.1 exchanging ideas and points of view with others

Materials:

- Fresh, **uncooked** egg use a **fresh** egg, an older egg will float in the liquid.
- Drinking glass, large enough for the egg to touch the bottom, but not touch the sides of the glass. You can use a plastic cup or container to hold the egg, clear containers allow you to observe the experiment well
- White vinegar
- 4-5 days of patience



Method:

- Before you begin, examine your uncooked egg for cracks.
- Gently place the egg in the bottom of the glass taking care not to crack it.
- Pour enough vinegar over the egg until it is completely submerged in the liquid.
- Cover the top of the container with foil or plastic wrap and place it on a shelf of the refrigerator where it will remain undisturbed. Keep it out of the way so it doesn't get knocked around.

After the first day, you should see the frothy residue of the shell on the surface of the liquid. You will also see that parts of the shell still remain on the egg. The shell takes at least 2-3 days to fully dissolve.

- Gently pour out the vinegar taking care to keep the egg from falling out of the container.
- Carefully roll the egg back down to the bottom of the container and refill it with vinegar.
- Place the egg back in the refrigerator and leave it alone.
- After at least another 24 hours, remove the egg to check its progress. If there are no white spots or areas that look like shell left on the egg, the dissolving process is complete.
- Gently pour out the vinegar and catch the naked egg in your hand.

See how it feels:

- You may notice that it feels quite rubbery. To test the strength of the membrane, try dropping the egg on the table and see if it bounces. Start with just one inch above the table and then increase the height by an inch at a time. (At a certain height, the egg will break. Do this activity outside or lay down newspaper before experimenting.)