1014-U1-191 Jean Uhl (juhl@georgiasouthern.edu), School of Teahnology, PO Box 8047, Statesboro, GA 30460-8047, Patricia B Humphrey* (phumphre@georgiasouthern.edu), Department of Mathematical Sciences, PO Box 8093, Statesboro, GA 30460-8093, and James Braselton (jbraselton@georgiasouthern.edu), Department of Mathematical Sciences, PO Box 8093, Statesboro, GA 30460-8093. Visualizing the Method of Finding Volumes by Cross Section: An Eggsperiment.
In Calculus, finding the volume of a solid of rotation by cross section is a typical application of integration. Students, however, often have trouble visualizing these cross sections. While teaching the course recently, we developed a real-life analogy using hard boiled eggs.

Our multi-disciplinary approach entailed modeling the egg as al ellipsoid, using Calculus to derive a formula to compute the volume, and then measuring the volume directly by water displacement. We then employed statistics to decide whether the two methods agreed. (Received August 16, 2005)

