

# Team Third Spring 2018

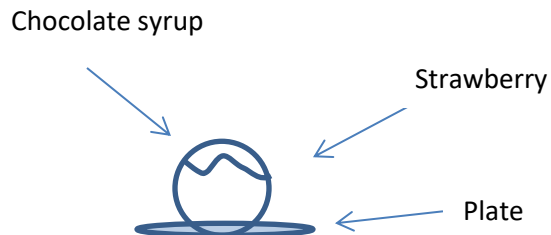
MCEN 4151

Steve Rothbart

5/7/18

The idea behind this image was to play around with what I had lying around in the kitchen. Strawberries stood out to me as a possible subject due to their bright color and interesting texture. I wanted to enhance this texture by creating ice crystals on the surface of the strawberry. However, when freezing the strawberry, the ice crystals looked like mold instead of something visually appealing. I looked again in the refrigerator and found some chocolate syrup. The swirls in the chocolate syrup provided a fun counterpoint to the sharpness of the strawberry seeds.

The basic flow apparatus is shown below:



The strawberry was placed on the plate with the flattest side facing the camera. It was oriented in this direction due to the extremely shallow depth of field provided by the macro lens I was using. Then chocolate syrup was poured onto the strawberry. The syrup was slowly but constantly poured to achieve swirls in the liquid.

The materials used in this photo were one strawberry, a 6" diameter plate, a black shirt used a backdrop, and Hershey's Chocolate Syrup. This photo was taken in the kitchen of my apartment. The light came from the above room light.

The idea behind this photo was to make sure the chocolate syrup was crisp and in focus. Because of this, I wanted little motion blur and a medium depth of field. The camera used is a digital Nikon D80 approximately 9" from the subject. The original image was shot in a NEF format and was 3872 x 2592 pixels, the final image was converted to PNG at the same size. The exposure was 1/5s at f/9 with an ISO of 400. The focal length was 105 mm. This lead to a field of view of 2.03" x 1.34". The image was manipulated in Adobe Photoshop. The contrast was increased to make a better distinction between the different shades of chocolate syrup. The original image is shown below:



I enjoy the image aesthetically, however, I'm not sure it reveals much about fluid physics. If I were to make the image again, I would procure external lighting and get rid of the bright white spot on the chocolate syrup.