

Spherical Yogurt Recipe (Reverse Spherification)

Background

The technique of Reverse Spherification is very versatile - much more so than Basic Spherification as it can make spheres with almost any product. It is best for liquids with high calcium content or alcohol content. These spheres have a thicker membrane and are long-lasting as the process of jellification can be stopped by removing the sphere from the sodium alginate bath and rinsing it with water.

Ingredients

Yoghurt spheres

- 200 g of plain yogurt (do not use no fat or low fat yogurt because the calcium content is lower. Alternatively you can use no fat but you will have to add calcium gluconate)
- 90 g heavy cream
- 30 g sugar

Alginate Bath

- 1500 g of distilled water (tap water contains ions which could interfere)
- 7.5 g sodium alginate

Preparation

1. [Already performed for Science Makers] Start by preparing the alginate bath. Mix the sodium alginate in the water using an immersion blender until the sodium alginate is completely dissolved. If this is your first time doing this, be aware that this may take longer than expected. Let it rest for 2-24 hours in the fridge so that the air that has entered the mixture disappears and the sodium alginate is completely rehydrated.

You can speed the process of removing bubbles by straining through a sieve or use a magnetic stirer rather than a blender to avoid air bubbles in the first place.

- 2. To create the yogurt mixture just mix all the ingredients together.
- 3. You are now ready to start the spherification process! Remove the alginate bath from the fridge. Scoop the yogurt mixture with a half sphere 5ml measure spoon and carefully pour it into the alginate bath. Stir the bath gently with the slotted spoon without touching the spheres. If you let them sit in the bottom of the bath, they will flatten and if you let them float, the top won't be covered with the calcium solution and won't gel. However, it is important that the yogurt spheres don't touch since they would stick together.
- 4. Leave the yogurt spheres "cooking" for about 2 minutes in the alginate bath and then carefully remove them using a slotted spoon.
- 5. Then rinse them very gently with water and strain them carefully. If desired they could be stored in a sealed container with water in the fridge.

Further Reading

- <u>Original recipe</u> at molecularecipes.com
- Reverse spherification technique details at molecularecipes.com
- <u>10 Tips to Create a Perfect Sphere</u> at molecularecipes.com