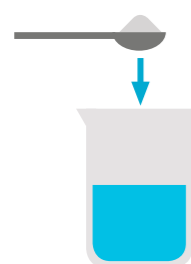


MOLECULAR COCKTAILS: SPHERIFICATION

Spherification is a technique that can be used to make small caviar-like spheres of flavour which then float in a cocktail and burst in the mouth when they are drunk. Two different techniques can be used: spherification, and reverse spherification.

THE METHOD



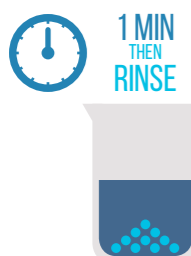
1

First, sodium alginate is dissolved in the liquid to be spherified. If the liquid is too acidic (pH < 3.6), the sodium alginate will convert into insoluble alginic acid, so this must be avoided.



2

The liquid from step one is dropped into a 'bath' containing calcium chloride, calcium lactate, or calcium lactate gluconate. This forms a membrane around the spheres.



3

The spheres are removed from the bath after around a minute and then rinsed in distilled water. They are then ready to be served and can be placed into the cocktail!

SPHERIFICATION

Sodium alginate in liquid

Calcium salt bath used

Doesn't work for acidic liquids

Eventually gels whole sphere

REVERSE SPHERIFICATION

Calcium salt in liquid

Sodium alginate bath used

Works for acidic liquids

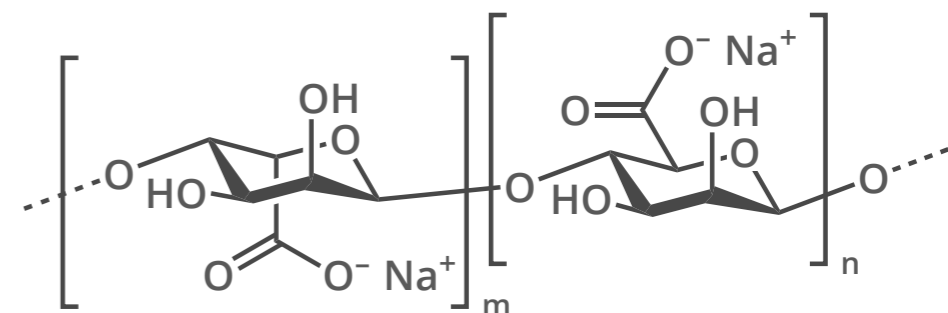
Gel only forms at membrane

BUBBLED UP BELLINI



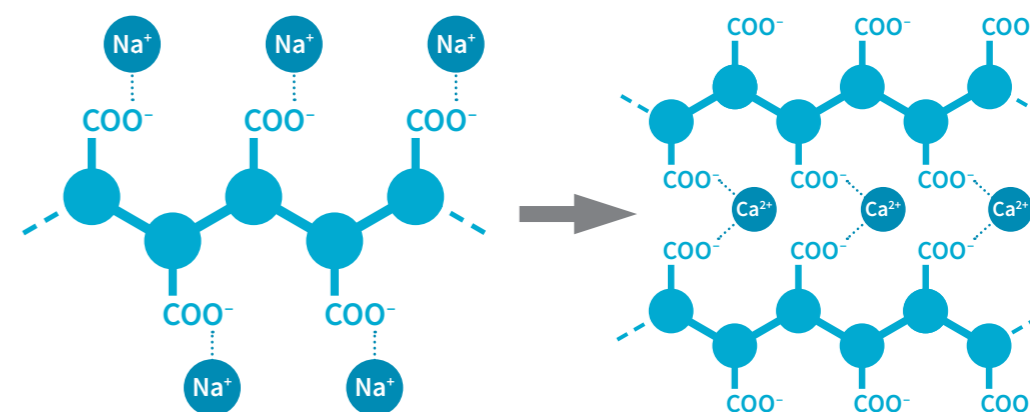
Sparkling wine with spheres of fruity seaweed extract. This is no salty dog – think strawberries from the sea.

THE SCIENCE



SODIUM ALGINATE

Sodium alginate is a salt of alginic acid, a substance used by brown algae to strengthen their cell walls, and which can be collected from seaweed. When it is placed in a calcium salt solution, calcium ions displace the sodium ions, and their increased pull on the negative ions in neighbouring chains increases the attraction between them, leading to the formation of a gel-like substance.



Creative REACTIONS



La Raza SINCE '03
RESTAURANT, CAFE, COCKTAIL BAR & LIVE MUSIC VENUE

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