

CONCENTRACIONES DE CALCIO Y ALGINATO PARA LA ESFERIFICACIÓN INVERSA

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Abstract

Reverse spherification is a process of molecular gastronomy in which science to culinary practice is applied. In many of the high level gastronomy restaurants that count with Michelin stars is a current challenge to improve this process. Reverse spherification consists in the use of two liquid substances with specific concentrations and temperatures so that solid exterior layer and liquid interior food spheres can be made. One of these substances must be abundant in calcium while the other substance must be a gelling agent as sodium alginate. Having these two substances what has to be done next is to pour the gelling agent in the abundant in calcium substance so that spheres can be formed. After a few minutes, these have to be immersed in water for the excess gelling agent to be removed. One of the mayor problems with this method is to achieve an specific consistency in the outer layer and interior of the spheres. The outer layer has to have a certain hardness able to store food and certain softness able to break when consumed. The food must remain liquid so that it can't be mixed with the gelling material which is not pretended to be consumed. Nowadays, the reverse spherification process is patented, however there is no patent that indicates the exact quantities neither of calcium chloride or sodium alginate. All of them mention quantity ranges that makes this method a process of prove and error. In our work we look further to stablish precise and optimum quantities and temperatures to make of reverse spherification a standardized process.

Keywords:

Spherification, Molecular Gastronomy, Sodium Alginate, Gelling Agent.