
3D printing of hydrocolloid gels for food applications.

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3D printing has been a growing field for about 15 years. It consists of manufacturing a structure by additive deposition of materials. The most are those developed for printing plastics but other systems are being finalized, such as home printing. In the world of the food industry, relatively few studies have been conducted and target markets remain still to be expanded. Currently, potential clients are of two types: the hospital environment and ultra-advanced technical areas (aerospatial/army). The advantage of 3D printing in both cases, is the possibility of a personalized and concentrated nutritional source, while being able to structure the matrix. It is within this framework that our study, where we seek to develop high printability inks, presenting a high added nutritional value obtained through the inclusion of by-products. Thus, the development of advanced technology with a sustainable development objective reuse 'waste' from side streams.