

عنوان مقاله:

?Is the Tayyeb brand awarded to Single Cell Protein

محل انتشار:

همایش بین المللی غذای طیب (سال: 1401)

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خلاصه مقاله:

Introduction-Single-cell protein (SCP) is the protein extracted from cultivated microbial biomass that can be used as a protein supplement for both humans or animals and offers an alternative proteinaceous food sources to solve protein deficiency problem being faced by the entire humanity. However, there have been concerns about possible risks such as alimentary allergies, toxins, nucleic acids and indigestible fibers. So, it can give rise to bioethical issues for consumers, particularly Muslims. For a Muslim food must meet the criteria of Islamic jurisprudence such as Halal and Tayyeb. Halal is an Arabic word that means "Permissible" according to Islamic rites. On the other hand, Tayyeb Means "Purity" in word and the foods must have several characteristics that are classified as Tayyeb food, including nutritious and safety, being halal, originality, attractiveness and blessing. So Tayyeb is considered as a food beyond Halal, which includes all spiritual and nutritional aspects. Considering safety is one of the most important aspects of Tayyeb food, and on the other hand, there are concerns about the possible risks of SCP consumption, the question is whether this protein alternative can be Tayyeb or not? The aim of this paper is to answer this question. Material and Methods (Or Methodology)- related articles from ۲۰۱۰ to ۲۰۲۲ were searched in Google Scholar, PubMed, Web of Science databases. Among the ۱۳ articles found in this regard, ۸ related papers were used. Conclusion - Large amount of SCP can be produced by microorganisms due to their fast growth rate on agricultural and industrial wastes. Beside proteins, SCP contains carbohydrates, nucleic acids, lipids, minerals, vitamins and several important amino acids. So, it can be an effective alternative for more expensive protein sources such as fish, meat products and soymeal. Nowadays, removal of nucleic acids, toxins and other possible risks from SCP as well as its high nutritional value, have turned it into a safe and healthy product. Therefore, the Tayyeb brand can be awarded to Single Cell Protein if it has other characteristics of Tayyeb food.

کلمات کلیدی:

Single Cell Protein, Nutritive value, Protein alternative, Tayyeb

