

【ノート】

スエヒロタケを利用した血合粉だしがらからのヘム鉄素材の開発

梶野美紀¹⁾・田畑麻里子²⁾・松井徳光^{2)*}

¹⁾ 武庫川女子大学大学院生活環境学研究科食物栄養学専攻

〒663-8558 兵庫県西宮市池開町 6-46

²⁾ 武庫川女子大学生生活環境学部食物栄養学科

〒663-8558 兵庫県西宮市池開町 6-46

Development of heme iron materials from ground dark red flesh of dried bonito grounds by *Schizophyllum commune* fermentation

Minori KAJINO¹⁾, Mariko TABATA²⁾ and Tokumitsu MATSUI^{2)*}

¹⁾ Administration Food Sciences and Nutrition Major, Graduate School of Human Environmental Sciences, Mukogawa Women's University, 6-46, Nishinomiya, Hyogo, 663-8137, Japan

²⁾ Department of Food Sciences and Nutrition, School of Human Environmental Sciences, Mukogawa Women's University, 6-46, Nishinomiya, Hyogo, 663-8137, Japan

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[Abstract]

We aimed to produce high concentrations of heme iron by *Schizophyllum commune* NBRC6504 fermentation of powdered dark red flesh of dried bonito, characterized by its high heme iron content. Iron concentrations in products fermented for nine week by *S. commune* were analyzed by atomic absorption spectrophotometry. We found that the concentrations of non-heme and heme iron in the fermented products were significantly higher than those in the materials. High concentrations of iron were recovered from the powdered material by the fermentation ability of *S. commune*. This is the first report detailing that high concentrations of heme iron are able to be obtained from powdered dark red flesh of dried bonito by basidiomycete fermentation.

Key words: Dark red flesh, Fermentation, Heme iron, *Schizophyllum commune*

[摘要]

鰹節の血合粉だしがらをスエヒロタケで発酵させて、高濃度のヘム鉄素材の開発を目指した。スエヒロタケ (NBRC6504) の発酵9週目における発酵産物の鉄濃度について、原子吸光分光光度計を用いて分析した。その結果、発酵させることで、上清液中のヘム鉄や、沈殿物中のヘム鉄および非ヘム鉄の濃度が高くなった。この結果から、担子菌の発酵能によって多くの鉄が検出され、高濃度の鉄が回収できることが示唆された。これは、担子菌を用いることで、血合い粉だしがらから高濃度のヘム鉄を得ることができることを証明した初めての報告である。