Iron deficiency anaemia is a very common disease. It is found in a latent form in every second woman living in the developed world. For the prevention and treatment of anaemia, it is recommended to use complexes of ferric with carbohydrates. They are safer and show higher digestibility in comparison with the preparations that have iron in the form of salts of organic and inorganic acids.

The aim of the work is to develop the technology of iron-containing complex based on glucan from Pleurotus ostreatus. The technology includes two stages: extraction of glucan from mushrooms and formation of iron-containing complex.

Preliminary the mushrooms were dried, ground up, and alcohol-soluble substances were extracted. The task of the first stage was to obtain the extract of glucan with high immunomodulatory properties. This extract had the minimum content of the related substances (protein, melanin). It was shown that for obtaining the extract it was necessary to treat the prepared raw materials with 3% alkali solution for 4 hours. The obtained extract was acidified and after that the related substance was separated by centrifuged.

At the second stage, the task was to obtain the iron-containing complex with a stable high yield in aggressive environment of gastrointestinal tract. Rational conditions for obtaining iron-containing complex were the combination of ferric (III) chloride and polysaccharide solutions; concentrations of solutions were $\text{Fe}^{3+} - 0.075\%$, polysaccharides – 0.150%; mass ratio of iron and polysaccharides – 1.00:2.00, temperature 98...100°C, $\text{pH} = 11.5$. This complex contained $\text{Fe}^{3+}$, glucan, melanin, protein. It was found that the obtained iron-containing complex based on glucan from Pleurotus ostreatus was microbiologically safe and remained usable within 12 months of storage.

Keywords: technology, complex, iron, glucan, Pleurotus ostreatus, iron deficiency.