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of Academician Sabir Yunusovich Yunusov**

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SABIR YUNUSOVICH YUNUSOV  
(1909-1995)**

## **Technology for obtaining biologically active additives from cereal and legume seeds**

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**Relevance.** Since ancient times, every spring in Central Asia, they cook a traditional national dish of wheat germ: "Sumalyak", which improves immunity and gives strength. The demand for such remedies has become in demand due to the spread of Covid-19 around the world. Currently, various therapeutic and prophylactic drugs and dietary supplements have begun to enter the pharmaceutical market, which increase the body's resistance to external factors, give the body strength and energize.

**Objective of research.** Based on the foregoing, we set a goal to develop a technology for obtaining nutraceuticals from natural raw materials that increase immunity and restore the strength and vigor of the body lost due to diseases.

**Materials and research methods.** The object of research are cereal seeds: wheat and barley, as well as legume seeds: beans and mung bean.

**Research results:** The studied objects contain nonessential and essential amino acids, vitamins of group "B", as well as E and A, micro- and macroelements, enzymes and carbohydrates. All of the listed medicinal substances are in the seeds in a "sleeping" form. To increase the content of these substances, as well as to transfer their active substances from a static state to a dynamic one, we had to germinate them under special conditions. An important point in this process is the activity of enzymes. To determine their activity, an indirect method was used, which is based on the breakdown of carbohydrates into glucose under the action of enzymes.

**Conclusion.** Thus, a special technology has been developed for the germination of wheat, barley, beans and mung beans. The activity of the sucrose enzyme during the period of emergence of sprouts was studied, on the basis of which the time of collection of sprouts was ascertained.