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MEDICAL AND DIETARY PROPERTIES OF MALT EXTRACTS

An effective way to solve the problem of nutrition is the enrichment of the daily human diet with products of high biological value. The following products are germinated cereals—malt of various cereals.

It is known that germinated grains (malt) contains the entire set of substances necessary for a balanced diet: low-molecular proteins and carbohydrates, fiber with food fibers, minerals, vitamins, coloring and polyphenolic compounds and plant enzymes and hormones. Therefore foods made with malt, have not only diet but also medical properties.

In the study of their impact on the human body for many years were engaged medical scientists of Kiev Institute of Pediatrics, Obstetrics and Gynecology NAMS of Ukraine. As a result of detailed and extensive research there were established the following biological properties of malts.

Oat malt stimulates the hematopoiesis, improves metabolism in heart, stimulates lactation, improves bile secretion.

Corn malt—improves metabolic processes in the body, has a bracing and tonic effect, improves physical performance, improves digestion processes, has an antioxidant effect.

Barley malt normalizes metabolism, improves processes of hematopoiesis and the function of male glands, increases immune defenses.

Taking into account the valuable chemical composition of malt cereal crops and their biochemical properties were developed therapeutic biological additives from germinated cereals [1] and various plants (Firm “Choice”), and also developed technology of poly-malt extracts and medical-dietetic products based on them [2].

Peculiarity of poly-malt extracts is that they are preparing not one, but at the same time from several types of malt, received from different grains: wheat, oats and barley or wheat, oats and corn.

About the the nutritional value of poly-malt extracts is possible to judge according to the tables and figures 1 and 2, which present their chemical composition.

On the basis of poly-malt extract were developed new dietary and health products that have therapeutic properties. This is achieved by an infusion of the various additives, mainly of plant origin, during technological process [3].

Chemical composition of poly-malt extract

Dry matter, %	Protein substances, %	Gum substances, %	Acidity cm ³ rastvora NaOH conc. 1mol/dm ³ 100 g mash	Ash, %
74 ± 2	4,2 – 4,5	3,6 – 3,8	14	1,14

Figure 1. Carbohydrate composition of poly-malt extract

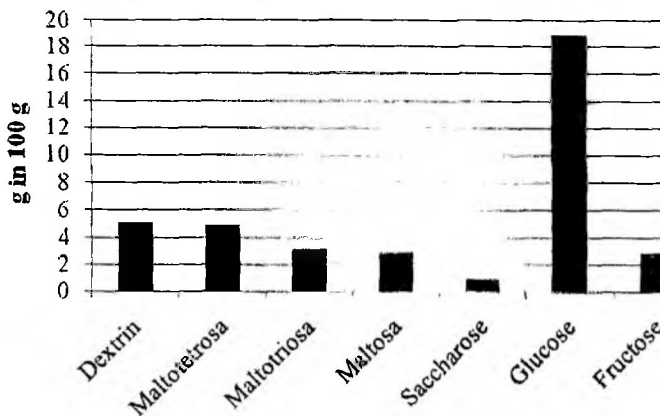
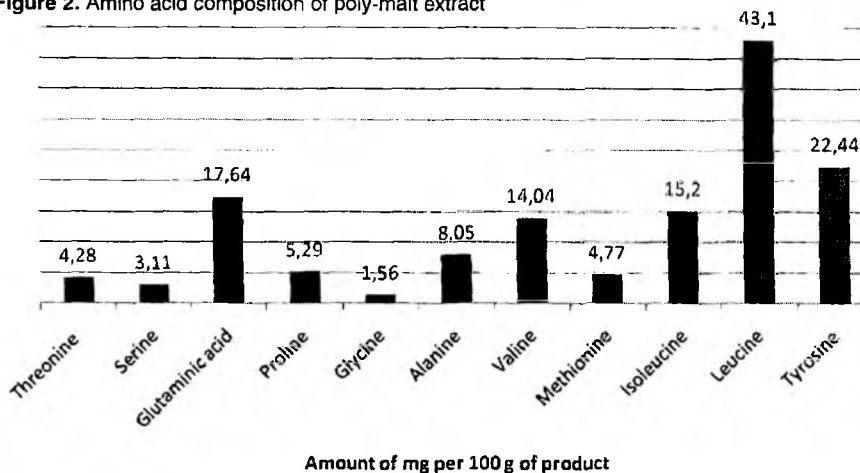


Figure 2. Amino acid composition of poly-malt extract



Polisol—dietary product made from a mixture of malts: wheat, oats and corn or barley. The biological value of the product provided with high-low molecular weight proteins, amino acids, carbohydrate, enzymes, phytohormones, micro and macroelements.

Polisol has tonic effect on the body, increases the hemoglobulin in the blood, normalizes metabolism. It is recommended to take during physical and mental fatigue, and after illness.

Polisol used as dietary products, and as a basis for other medical and health food: Antyhipoksyn, Kholesol, Hemosol, Dzherela and others.

Antyhipoksyn—therapeutic product for people with diseases of the cardiovascular system and the respiratory system, especially recommended for pregnant women. During

its manufacturing at the stage of evaporation of the poly-malt mash aqueous extracts of rose hips tea and tincture of Siberian Ginseng and B vitamins are added.

Kholesol—therapeutic product for children and adults with chronic diseases of the liver and biliary tract. When manufacturing this product during evaporation of the poly-malt mash aqueous extract of immortelle flowers is added .

Hemosol—therapeutic food for adults and especially children with chronic anemia. This product has the ability to increase hemoglobin in the blood. During its manufacturing at the stage of evaporation of the poly-malt mash hemopoietic drug and a set of vitamins is added to it.

Dzherela—therapeutic food for mothers who feed babies. During its manufacturing to a mixture of malts yeast, tincture of walnut and whey concentrate are added. Due to this, the resulting product is enriched with proteins, amino acids and becomes the ability to increase milk production.

Named products are successfully made by Kiev factory of malt extracts. Unfortunately, the plant was dismantled. Today, some of these products produces Ltd “Tsiliushchyi pectyn” under other names. Thus, the poly-malt extract Polisol called Imunodar.

Literature:

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