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# PROBLEMS AND PROSPECTS OF DIGITAL TRANSFORMATION ECONOMIES IN THE CONDITIONS OF DEEPENING INTEGRATION PROCESSES OF DEVELOPING COUNTRIES











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## PATHOPHYSIOLOGICAL AND GENETIC MECHANISMS FOR THE DEVELOPMENT OF LACTASE ENZYME DEFICIENCY

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**Annotation.** For the absorption of lactose–milk sugar by the body, the enzyme lactase occupies a very important place. Lactose deficiency is caused by a hereditary deficiency of the lactase ferment and is inherited in an autosomal recessive manner MCM6 genes adjacent to the LCT gene control the transcription process if we delve into genetic factors.

Relevance of the study. Breast milk is an invaluable boon in adapting to the external environment in the mind and physical development of the organization that came to the new world. But changing the necessary food and vitamins in the body of breast milk comes to the face in the same prenatal and postnatal period of the type problems that can be made peaceful. Let's consider the most important factors that caused this situation.

**Goal.** For the organization of lactose-milk sugar, the enzyme lactase occupies a very important place. Lactase activity will be a payment from the

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12-14 weeks of fetal development and reach its maximum in 39-40 weeks near the time of termination. In a child with normal genotype after birth, enzyme activity decreased at 6-11 months, then between the ages of 2-5 years. Is it basic or age-related lactase deficiency[1.2] this condition is caused by a hereditary deficiency of the lactase ferment and is inherited in an autosomal recessive manner. The functional state of the small intestine mucosa and the amount of lactase enzyme depends on the following factors [3.4]:

1. The fetal period is most often observed between mosquitoes born before the deadline and those that are not enough.

2. The gene (LCT) encoding the genetic factor lactase synthesis is located on the 2nd long proper side of the chromosome (in the field of 2q21).

3. Harmon<mark>ic fa</mark>ct<mark>ors.</mark>

4. Vegeta<mark>tive nervous sy</mark>stem.

5. Protein has the nature of growth factor.

**Results.** Whereas covering genetic factors, the MCM6 genes added to the LCT gene control the process of Transference. Nucleotide localization (c (cytosine) T (thymine)) in case 13910 (c/T - 13910) determines the phenotypic appearance of nucleotide departure in case a (arginine) G (guanine) (G/A – 22018).

**Conclusion:** there are 3 types of C / t nucleotides according to their location at the departure:

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1. C-C genotype < 13910 complete lactase deficiency impractical

2. C / T-13910 undergoes a reduction in the amount of the enzyme laztase, a heterozygous form.

3. T / t < 13910 homozygous polymorphism form lactase deficiency is a form that mainly occurs among adults.

### List of literature used:

1. Pilipenko I.V., Pristyajnok M.C., Özrtxb.F., Voevoda M.I., Pilipenko A.C. Gena LST V nekotorix tyurkozyachnix populyasiyax-Sayanskogo Altne regiona // Vavilovsky journal Genetics I 20, 2016;(6)selektsii:887-893 regulatornoy Oblast polymorphism.

2. Gerbault P., Libert A., Ethan Y., Powell A., CurratM., Burger J., Swallow D., Thomas M. G. the evolution of lactase persistence; an example of human displacement construction .// Phill.Trans .R. Soc B, 2011;366(1566);863-877.

3. Gerbault P., Morret C., Currat M., Sánchez-Mazas A. effect of selection and demography on lactase stagnation diffusion .// Plns One .2009;4(7).

4. Heyer E., Mangal L., Segurrel L., Hegay T., Austrelitz F., Quintana-Murci., George M., Pasquet P., Veuille M. Lactase persistence in Central Asia: phenotype,genotype, and evolution.// Hum Bial 2011; 83 (3); 379-392.

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