# Development Of New Generation "Live" Food Products Based On Rational Use Of Georgia's Raw Resources

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The goal of the research is to develop “live” food products with high biological value, which will be used in the diet therapy of people diagnosed with metabolic syndromes. In order to create such products, we selected the following raw materials out of rich bio resources of Georgia: soybean, amaranth, lentil and topinambour. Amaranth takes the spotlight among them, as it contains a strong antioxidant – squalene, which helps strengthening of the immune system by supplying body tissues with extra oxygen. In order to produce “live” food additive, we sprouted the seeds. We thoroughly studied the effect of different variables on the process of sprouting. Such variables include: the duration of soaking; the frequency of watering; temperature and hydro module. Also we studied how it all affected on the amount of proteins, carbohydrates, lipids and microelements in the seeds. We also incorporated the use of local mineral waters Borjomi, Nabeglavi and Tskaltubo's mild rodonic-chloridic-hydrocarbonate-sulfuric mineral water to further improve the biological value of the finished product. We developed diabetic soybean milk, protein-lipid paste and diabetic bread with rational and complex use of the sprouted seeds. By germinating and sprouting of the seeds, we achieved lower caloric value, low glycemic index whilst achieving a higher biological value. During germination, vitamin C is produced, which is practically nonexistent in raw state of these seeds. Use of mineral waters has decreased the seeds germination and sprouting time by 30-50 percent. The final products can be successfully used in diet of people with metabolic syndromes.

**Awards Won:**