

APPLICATION

Business Partnership Program 2005

PART ONE: I. Executive Summary

Project Objective	
1. State the project's primary objective.	The project's primary objective is the improvement in the technique of baking of the dietary fiber-enriched wheatmeal bread "Margi" and the upgrading of the product quality for increasing the efficiency of production and improving the business results.
Business Opportunity	
2. What business issue will you address?	With due regard for modern requirements, upgrading the product quality, the expansion of the consumer market, offering a competitive product with a longer warranty. Together with the improvement of the food value, gustatory qualities and shelf-life extension, decreasing the product preparation time, the production costs, and increasing a profit margin by making use of the Tax Code-stipulated allowances.
3. Why is this issue important?	The World Health Organization has acknowledged that today one of the most main causes of the most spread diseases, the so-called civilization-related disorders (atherosclerosis, hypertension, diabetes mellitus, obesity, gallstones, etc.) is improper feeding, in particular a deficit of dietary fibers in the diet. The making up of this deficit is known to be one of the primary tasks in preventing said diseases.
4. What is the commercial market or opportunity?	It is desirable that the products rich in dietary fibers occupy a greater portion in the diet of both healthy and unhealthy people for whom the making up of a deficit of dietary fibers means one of the important components for preserving health. The most vulnerable to the deficit of dietary fibers has been found the urban population who generally consumes refined and full food. One of the most realistic and practicable opportunities of making up the deficit of dietary fibers is such popular and daily consumption product as bread.
5. What is the technical challenge?	The dietary fiber-containing wheat coat is rather hard and its digestion is difficult. The wheat grain coat is hydrophilic (water holding) for which reason the bread "Margi" baking time is comparatively long. The handling of this problem by coat dispersing under the available technology, preparing fermented dough from the produced flour and drying in the rarified medium has been achieved only partially. The introduction of the technological innovations proposed by us into production will make it possible to reduce the bread "Margi" baking time by 3,5-4,0 hours together with its quality upgrading.
6. Please list the most relevant companies working in this field.	A number of companies are engaged in the production of several kinds of wheatmeal bread in Tbilisi. The bread baking technology employed thereby does not provide for such processing of the wheat coat as to avoid possible medical contraindications and side effects that could result from its consumption. Existing attitude to the problem settlement affects the gustatory qualities of the baked bread as well (<i>Kolkheti-90, Mesame Ltd., Vagzlis Moedani #2 Ltd., etc.</i>
Proposed Work	
7. What work will you do to address this issue?	The invention proposed by the principal investigator entitled "The Method for Making High Nutrient-Value Bread Dough" will be improved and introduced into production. The optimal shape and baking conditions of the bread "Margi" will be identified and a respective invention application based on it will be prepared.

<p>8. What is different about your approach?</p>	<p>The developed bread baking technology is based on medical science. A technology model resembling a process of digestion of dietary fibers by the human organism has been designed which makes possible for the bread “Margi” to preserve its useful qualities, be devoid of contraindications and show no side effects upon consumption. Such approach will contribute to the creation of a healthy dietary fiber-rich food, which could be unlimitedly consumed by both healthy and unhealthy population.</p>
<p>Expected Results</p>	
<p>9. What is the expected business result of the project for i) the science team and ii) the company?</p>	<p>i) The science research-based invention will be introduced into production. An application for a new invention will be filed which will create prospects for concluding profitable contracts in the future. The model designed by introducing scientific achievements into production will serve as a basis for continuing further research, as well as for exporting and introducing the patented technologies abroad. ii) The introduction into production of the product with a longer warranty and the broadening of a respective market. Increasing a profit margin by reducing the product preparation time, the production costs, and by making use of the available tax allowances.</p>
<p>10. What is the commercial value of the project?</p>	<p>The proposed technological innovation will ensure the market broadening through the product quality upgrading and achieving favorable medical indications. The expected reduction of the production time and costs, as well as the use of the existing tax allowances will contribute to the output expansion and the cutting of production costs. All the above will serve to the widening of the range of market prices and the increasing of the company’s share of profit.</p>
<p>11. What is the anticipated result of the project?</p>	<p>The anticipated technical result of this invention consists in the production quality upgrading, the improvement of food value and gustatory qualities of the product together with an increase in its shelf life and a decrease in production time and costs.</p>
<p>Project Participants</p>	
<p>12. All project participants</p>	<p><i>Tbilisi State Medical University; Mr. GELA SULABERIDZE, MD, Assistant professor of the Chair of Internal Medicine, Candidate of Medical Science; Ms. MAIA BERUCHASHVILI, Senior lab assistant of the Chair of Internal Medicine; The company Equator Ltd.; Mr. NODAR GURGENIDZE, Director of Equator Ltd.; Mr. GIORGI SICHINAVA, Production engineer of Equator Ltd.</i></p>
<p>13. How did the teams meet?</p>	<p>In 2000, the production of the dietary fiber-enriched bread “Margi” based on the technology offered by the Candidate of Medical Science Mr. GELA SULABERIDZE was introduced in the bakery of the company <i>Equator Ltd.</i>, which is still operable, marketable and revenue-generating.</p>
<p>14. What is the work done in the past and how does it relate to the present project?</p>	<p>A Science Team has developed a dietary fiber-rich food product whose medical and preventive properties are scientifically studied and reflected in a number of publications. In 1996 and 2001, the respective patents were obtained. Since 1997 a standard of entrepreneurial subject and technical specifications of the bread “Margi” have been available. Since 2000 production of the bread “Margi” has been introduced at the base of the company <i>Equator Ltd.</i> The information published and television demonstrations based on the research results of the mentioned team of researchers promote the product and contribute to a respective market development. The quality improvement of the product and the production efficiency raising together with the properly run sales and management will further the company’s business widening and increasing its share of profit.</p>