

PROBLEMS AND OBSTACLES OF INSTANT GARLIC PRODUCTS DEVELOPMENT IN UPER NORTHERN 1 AREA.

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ABSTRACT

The research objectives aimed to study problems and obstacles of instant garlic products in the Upper Northern area, the research methodology represented qualitative approach through in-depth interviewing. The population comprised of garlic farmers, community leaders and relevant government officers in the Upper Northern 1 area that comprised of Maehongsorn, Chiangmai, Lampang and Lamphoon Province. The purposive sampling method selected 20 informants from five informants of each provinces. The constructed interviewing form obtained the informants' data, classified only the relevant research's questions and revised for research finding.

The finding found that the instant garlic products were no outstanding of pharmaceutical features and characteristics, no intense marketing competition and availability by some companies with theirs brand as a selling point. Problems and obstacles for exporting represented the products and pricing with limited markets, low variety of products and higher price due to the production and packaging costs even if the raw material like garlic represented the economical price.

INTRODUCTION

Throughout the former period, instant garlic in the Thai market was not as popular as it should be that was different from foreign countries where instant garlic was immensely popular. The reasons of the acceptance on instant garlic in a minor group because the garlic was remained just the item in the kitchen and easily to eat. Therefore, Thai people was unexcited about the instant garlic products respected with other types of supplementary food like royal jelly, pollen, flowers, algae or various types of dairy products. Although research on the value of garlic, garlic products and one thing that garlic consumers should be aware of nutrition loss at 60 degrees Celsius. Therefore, to consume garlic with fully benefit with raw garlic, correct processing and the specified amount for a long time, therefore, it affected in considering diseases or preventing diseases as a health supplement.

The study of the development of healthy food supplements found garlic had been developed to be the first food supplement in Thailand about 5-6 years ago by Thailand Institute of Scientific and Research and Mahidol University who found garlic represented a capable plant in the diseases treatment and initiated a project to produce commercial instant garlic products. At one time, KhaoLaor Company produced a contained capsule of garlic "IMMUNYTOP" and TEO Chemical Company produced "SELECT" in addition with a few minor companies gave up the production in finally.

For the production of garlic in tablet form was considered as a continuous product from the production of garlic powder instead of filling garlic powder in capsules but instead compressed into film-coated tablets. The production process represented to squeeze the juice from garlic and preserve it cool, when the garlic powder was obtained, then hammered into tablets by mixing it with EXCIPIENT and then coated the film. There were many types of

film coatings like Ethyl- Cellulose Hydroxy Propyl Cellulose, etc. The purpose of film coating represented to store in a sealed jar for up to six months validities.

The above mention required the researcher to study problems and obstacles of instant garlic products development in Upper Northern 1 Area.

LITERATURE REVIEW

The origin of instant garlic products

The study of garlic found that medicinal benefits of garlic had been forgotten about 40-50 years, when modern medicine became universal until over 10 years ago, the sickness rate and increasing death from hypercholesterolemia. Scientists earnestly studied the medicinal properties and chemical composition of garlic that was effective in killing some germs and actually reduced cholesterol in the blood vessels. When experimenting, patients consumed ten grams of raw garlic per day for two months. For this reason, many people consumed raw garlic to maintain their health, but there were problems with terrible smell and taste of garlic. In addition, the less nutrition of heat cooking garlic instead of having the raw garlic with broad nutritional benefits. Researchers invented instant garlic to fulfill the consumers' needs who wanted to consume raw garlic, because they were consciously aware of the value of garlic and able to solve garlic's weaknesses in terms of smell and taste very well.

The nature of production and instant garlic products

Currently, the preparation process of instant garlic products on the market could be classified into two types: garlic capsules which would equally be divided into garlic powder and garlic oil and garlic tablets. For garlic powder, production process represented the research of Pharmacy and Natural Products Research Department, Thailand Institute of Scientific and Research that was successful in extracting raw garlic into garlic powder, containing capsules. The product idea began with the opinion of over-supply in garlic of 166,000 tons per year and approximately 3,800 tons of the domestic consuming. Therefore, the remaining garlic should be consumed for food and medicine benefits rather than being exported to foreign countries as fresh garlic. Garlic powder produced is GARLIC NATURA and could be used instead of raw garlic. The garlic powders 1 capsule containing represented equivalent to seven grams of raw garlic. The recommendation size of eating after the breakfast and dinner of two tablets represented the equivalent of consuming the plentiful raw garlic.

The production process of garlic powder started to collect and produce the raw garlic to dry, normally, it took about one month, three kilograms of raw garlic will become one kilogram of dehydrated garlic and then dried garlic and stored not more than eight months. If the time saving on drying, peeled the garlic heads into thin slices or chopped into small pieces with the sun bath or a hot air dryer at a temperature of 45-60 degrees Celsius until dry, with no more than six percent moisture content. If soaked garlic in a solution of 0.5 percent sodium metabisulfite or smoked with sulfur that caused the dehydrated garlic to get better color and longer storage from the dehydrated garlic that had been made into garlic powder by grinding thoroughly sifted through magnesium stearate or one percent of calcium dehydrate and mixed together to prevent coagulation. Garlic was packed in a dry, clean and sealed container. If you enjoy the tangy taste, added salt and got garlic powder mixed with salt, using garlic powder and salt in a ratio of 1:4, and if you enjoyed peppery flavor, mix pepper as well then got garlic powder, mixed pepper and salt using ratio of 1:1:5 respectively.

The garlic oil had been produced for consumption as a healthy supplement more than 50 years and the research found garlic oil was effective in the treatment of certain diseases,

such as reducing cholesterol and fat, treat anemia, arthritis, adjust sugar levels to normal with the blood clotting prevention, etc. The production of garlic oil contained in a capsule which was a delicate jelly or gelatin and easy to consume it. This capsule passed through the stomach into the small intestine, garlic oil would enter the bloodstream in the small intestine. Researchers said this method could eliminate almost all the smell problems of garlic and there were also advantages for the amount of garlic that could be eaten each day. It was the exact way to obtain the broad benefits of garlic, because it might be eaten in appropriated amount and a frequent basis, therefore, it would be effective in considering the disease or creating immunity. The production process of garlic oil was no widespread details and no domestic production.

RESEARCH METHODOLOGY

The research methodology represented qualitative approach through in-depth interviewing. The population comprised of garlic farmers, community leaders and relevant government officers in the Upper Northern 1 area that comprised of Maehongson, Chiangmai, Lampang and Lamphoon Province. The purposive sampling method selected 20 informants from five informants of each province. The constructed interviewing form obtained the informants' data, classified only the relevant research's questions and revised for research finding.

RESULTS

The finding from the study of problems and obstacles in garlic products development represented as following

1. The reasons that instant garlic did not stand out as a healthy food supplement because many medicinal properties of garlic had not been proven to be effective from any chemicals that were components of garlic. In each experiment of the properties of garlic, there were no confirmed reports of what the substance in each capsule significantly affected the experiment and depended on the amount of various substances, the breed of garlic, source of plants, seasonal harvesting, the number of nutrients of soil, fertilization and climate change due to the variation of the nutrient, therefore, garlic products even so had to be sold as healthy supplements together with the intense supervision of the Food and Drug Administration causing manufacturers to be unable to advertise many properties. In addition, sales channel was performed through pharmacies and only available in some supermarkets that caused any changing in sales.

2. Regarding marketing, although there were approximately 12 manufacturers and importers, the competition was not as intense as other healthy supplements. A few outstanding garlic instant products could be sold using the reputation of the long-established company with the various of drugs, especially the traditional and modern medicine. IMMINUTOP products were available in both tablets and capsules. "Natura" and "Alik" brand were quite advantageous because Scientific Research Institute Certified the quality especially Alik was the result of the research of "Project to develop the production of pharmaceuticals and herbs" Faculty of Pharmacy Mahidol University who produced, supervised the production and quality in addition Medici Company Limited was an authorized distributor. The almost imported instant garlic was garlic oil in capsules. Interesting brands, Ranbaxy, was classified as general foods, advertised and promoted, in addition, the reputation of the company made it possible to promote products to be rapidly sold in stores and department stores.

For sales promotion, Ranbaxy devoted advertising budget, such as "free tasting kiosks" displayed in supermarkets including the distribution of books that recommended the various properties of garlic. These marketing activities contributed Ranbaxy rightly known in the form of garlic oil. The expected trend of garlic domestic market would expand and distribute the accurate understanding of consumers for penetrating the provincial market. However, the more sales of instant garlic products depended on Ministry of Public Health, who should accept the garlic as a way to reduce the mortality due to coronary artery disease or arteriosclerosis due to elevated blood pressure, so easing the strict writing of the benefits of garlic on the label could contribute the garlic market, which many countries in Europe had accepted these writings. The government should consider the more consumption of instant garlic products in addition to being beneficial in term of farmers, manufacturers and vigorous people.

3. The garlic exporting, the developed countries were interested in nutritious foods for a long time, therefore there were domestic producers produced products for the market by themselves or importing the standard quality products. The primary obstacles of the oversea market of instant garlic products represented products and pricing but these markets were however small, no variety of products and more excessive price of instant garlic products due to the production and packing processes, although the raw material price of garlic was ordinary. The exporting company started by attending trade shows in West Germany with the Department of Export Promotion to introduce instant garlic products to foreign customers, after that, the importers in West Germany sent a nutrition representative to inspect the factory and ordered many instant garlic products to Germany, after that, the importers in West Germany sent a nutrition representative to inspect the factory and ordered many instant garlic products to Germany. In addition, importers from England and Japan imported instant garlic products to examine the market. The company's selling point represented to be certified by the Department of Medical Sciences for quality, safety and export inspection.

CONCLUSION

The finding found the instant garlic products were no outstanding of pharmaceutical features and characteristics, no intense marketing competition and availability by some companies with theirs brand as a selling point. Problems and obstacles for exporting represented the products and pricing with limited markets, low variety of products and more extraordinary price due to the production and packaging costs even if the raw material like garlic represented the inexpensive price.

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