

Organic Powdered Seasoning Mix-Garlic, Onion, Ginger (GOG) Products

Marmie R. Poquiz

Pangasinan State University

marymae_rosario@yahoo.com

Abstract: This study determined the use of Organic Garlic, Onion & Ginger mix use as substitute for fresh leafy herbs & roots spice. Garlic has been used to treat ear infections, cholera and typhus. It also helps lower cholesterol and blood pressure, improves circulation and lowers blood sugar levels. In onions are rich source of chromium, the trace mineral that helps tissue cells respond appropriately to insulin levels in the blood. It thus helps facilitate insulin action and control sugar levels in diabetes. Organic ginger is a rhizome that is widely used as culinary herb. The light yellow herb has a flery, pungent taste that adds zest to any food. It has a host of minerals and a few vitamins. This increases the body's natural resistance against colds and flu. This study is developmental in nature, hence anchored on development design. The main objective of the study is to develop a nutritious seasoning mix for people who are limited in selenium, germanium, rhizome and minerals or people with cholesterol, blood pressure, and diabetes diseases. Furthermore, the shelf-life of packed/unpacked/bottled organic products is measured, and the cost and return of developing organic products was also determined. The acceptability of the developed product is "Highly Acceptable" in terms of appearance, taste, texture, odor, and mouthfeel. Findings reveal that the product can be a good substitute for commercial seasonings in the market.

Keywords: *Organic, Garlic, Onion, Ginger, Seasoning*

I. Introduction

The word organic foods "refers to foods that are grown organically and are usually processed into value added products and these include agricultural products such as fruits, vegetables, grains, dairy products and meat. Organic foods are safer and more nutritious but they command a higher price in the market [1].

Organic foods found only in health food stores, it is now marketable. There are at least two good benefits for eating organic: fewer pesticides and more nutrients. Pesticides can be absorbed into fruits and vegetables, and leave trace residues. As for nutrients, as for organically grown rice includes its ability to provide fast and instant energy, regulate and improve bowel movements, stabilize blood sugar levels and slow down the aging

process, while also providing and essential source of vitamin B1 to the human body [2].

Another is Garlic, one of the richest of organic selenium and germanium. Garlic has been used for millennia to treat ear infections, cholera and typhus. It also helps lower cholesterol and blood pressure, improves circulation and lowers blood sugar levels. It is one of the most effect antibiotic plants available, acting on bacteria, viruses and parasites and was used during both world wars to disinfect wounds. From curing a cold to easing asthma, garlic is proving to be a drug-free route to health. Reduce the risk of heart disease and lowers blood pressure [3].

For organic ginger is a rhizome that is widely used as culinary herb. The light

yellow herb has a flery, pungent taste that adds zest to any food. It has a host of minerals and a few vitamins. These include calcium, iron, magnesium, manganese, potassium, selenium and sodium. Vitamins C, E and B6 are found in the rhizome. It also contains protein, fiber and essential oils. Ginger has been used as a natural remedy for several centuries. This is because of the potent compounds it contains which assure several benefits. Ginger has potent antioxidant properties. This increases the body's natural resistance against colds and flu [4].

For the onions are rich source of chromium, the trace mineral that helps tissue cells respond appropriately to insulin levels in the blood. It thus helps facilitate insulin action and control sugar levels in diabetes. They are also good source of antioxidant flavonoid quercetin, which is found to have anticarcinogenic, anti-inflammatory, and anti-diabetic functions [5]. They are also good in antioxidant vitamin, vitamin C and mineral manganese. Manganese, is required as a co-factor for anti-oxidant enzyme, superoxide dismutase. In addition, isothiocyanate anti-oxidants in them help provide relief from cold and flu by exerting anti-inflammatory actions. Onions are also good in B-complex group of vitamins like pantothenic acid, pyridoxine, folates and thiamine. Pyridoxine or vitamin B-6 helps keep up GABA levels in the brain, which works against neurotic conditions [6].

“Organic plant-based foods are, on average, more nutritious.” This study will determine the development acceptability of organic food and for the development of powdered seasoning mix out of garlic, onion and ginger.

Objective of the Study

The study aims to develop a nutritious product and affordable seasoning.

Specifically, the study aims to:

1. develop a nutritious seasoning mix for people who are limited in selenium, germanium, rhizome and minerals or people with cholesterol, blood pressure, and diabetes diseases.
2. determine the shelf-life of packed/unpacked/ bottled organic products.
3. compute the cost and return of developing organic products.

Scope and Limitation

The study will focus on the development of organic seasoning mix with long storage shelf life. The study will only include Garlic, Onion, and Ginger which are very common and abundant in agricultural field in the country.

II. Related Literature

In recent years, organic farming has become a trend toward a healthier lifestyle. The government formalized the adoption of this farming system when Congress passed Republic Act No. 10068 or the Organic Act of 2010.

Through the Act, the government has been mandated to “promote, propagate, develop further, and implement the practice of organic agriculture in the Philippines.”

Organic farming has many benefits, the Act said. This farming practice cumulatively conditions and enriches the fertility of the soil, increases farm productivity, reduces pollution and destruction of the environment, prevents depletion of natural resources, saves on imported farm inputs, and protects the health of farmers, consumers, and the general public [7].

The Act paved the way for people to be aware of the benefits of chemical-free

agricultural products, especially among those who are healthy-conscious.

Still, there remains concrete limitations to the successful practice of organic farming in the country. (<https://philippinesgraphic.net/organic-farming-benefits-and-limitations/>)

In 2011, the Department of Agriculture named him as Agri-Achiever on Organic Farming during the Gawad Saka Awards.

“Organic farming means going back to the basics,” said Roy C. Alimoane, director of the Mindanao Baptist Rural Life Center (MBRLC).

The center, a non-government organization based located in Barangay Kinuskusan in Bansalan, Davao del Sur, has been promoting organic farming since the 1970s.

“We want people who come to the center that once they return to their respective places,” Alimoane pointed out, “they have learned something which they could use in their own farms.”

Environment-friendly, natural, not using pesticides and other chemicals, sustainable, regenerative, and healthy—these are the words used to describe this method of farming which has recently captured the attention of many countries around the world.

“Organic agriculture is the answer,” stressed Jessica Reyes-Cantos of the Manila-based Rice Watch and Action Network. “It won’t only retain soil productivity but it can make farming viable. If farmers will have additional income from their land they will continue to plant rice.”

Definitions vary, but according to the International Federation of Organic Agriculture Movements, organic agriculture is a production system that relies on ecological processes, such as waste recycling, rather than the use of synthetic inputs, such as chemical fertilizers and pesticides.

“Although organic agriculture often produces lower yields on land that has recently been farmed conventionally, it can outperform conventional practices—especially in times of drought—when the land has been farmed organically for a longer time,” said Laura Reynolds, co-author of the Worldwatch report, “Organic Agriculture Contributes to Sustainable Food Security.”

Reynolds, a researcher with Worldwatch’s Food and Agriculture Program, said that “conventional agricultural practices often degrade the environment over both the long and short term through soil erosion, excessive water extraction, and biodiversity loss” [8].

Organic farming, she pointed out, has the potential to contribute to sustainable food security by improving nutrition intake and sustaining livelihoods in rural areas, while simultaneously reducing vulnerability to climate change and enhancing biodiversity [9].

Another benefit of organic agriculture is that it uses up to 50% less fossil fuel energy than conventional farming, and common organic practices— including rotating crops, applying mulch to empty fields, and maintaining perennial shrubs and trees on farms—also stabilize soils and improve water retention, thus reducing vulnerability to harsh weather patterns [7].

“On average, organic farms have 30% higher biodiversity, including birds, insects, and plants, than conventional farms do,” said Catherine Ward, co-author of the Worldwatch report.

Conceptual Framework

The study will make use of the Input Process Output model. The input will constitute the requirement to be gathered for the development of this study. The process will include statistical analysis and the procedure for the development of the study. The expected output of the study is the use Organic Garlic,

Onion & Ginger mix use as substitute for fresh leafy herbs & roots spice.

III. Methodology

Research Design

The study will employ developmental research in creating the product. This method is appropriate since the study will focus of product development. Developmental research, is defined as the systematic study of designing, developing, and evaluating products that must meet criteria of internal consistency and effectiveness. Developmental research is particularly important in the field of hospitality management. The most common types of developmental research involve situations in which the product-development process is analyzed and described, and the final product is evaluated.

Data Gathering Tools

The researcher will employ the following tools to gather data: Interview for gathering the necessary requirement of the study. Library research to determine the necessary steps in developing the product. Survey questionnaire to evaluate the product.

Respondents of the Study

The study will include the following respondents: Agriculturist, Farmers, Culinary Experts and Housewife. The Agriculturist and Farmers will help the researcher in determining the quality organic garlic, onion and ginger that is harvest while the culinary experts and housewife which will serve as evaluators of the product.

Product Sensory Evaluation

The product sensory evaluation used a five-point likert scale ranging from 1-Not acceptable to 5 – Highly Acceptable. After the 10 culinary experts and 30 housewives evaluated the product in terms of appearance, taste, texture,

odor, and mouth feel, the following results are presented and analyzed:

Descriptor	Mean	Descriptive Rating
Appearance	4.70	Highly Acceptable
Taste	4.54	Highly Acceptable
Texture	4.71	Highly Acceptable
Odor	4.65	Highly Acceptable
Mouth feel	4.58	Highly Acceptable
Overall	4.64	Highly Acceptable

The data shows that the overall product sensory evaluation has a weighted mean of 4.64 which means that the product is highly acceptable in the taste of the culinary experts and housewives. Specifically, the products' appearance (4.70), taste (4.54), texture (4.71), odor (4.65) and mouth feel (4.58) are highly acceptable as well.

These findings imply that the product is highly acceptable in the taste of the culinary experts and housewives, in terms of appearance, texture, taste, odor and mouth feel. Organic seasoning mix, therefore, is highly acceptable.

IV. References

- [1] Mayo Clinic Staff(2018), Organic foods: Are they safer? More nutritious?:Discover the difference between organic foods and their traditionally grown counterparts when it comes to nutrition, safety and price.
- [2] Brian Halweil(2007), Still No Free Lunch:Nutrient levels in U.S. food supply eroded by pursuit of high yields.
- [3]Reallygarlicky(2018), Garlic Facts & Health Benefits:Garlic – A Wonder Drug.
- [4] K.V. Peter (2004), Handbook of herbs and spice: Volume 2: Woodhead Publishing ISBN 1 85573 835 X.
- [5] Gauri Desai,Michelle Schelske-Santos,et.al(2018), Onion and Garlic Intake and Breast Cancer, a Case-Control Study in Puerto Rico

[6] Ergul Belge Kurutas(2016), The importance of antioxidants which play the role in cellular response against oxidative/nitrosative stress: current state.

[7] Henrylito D. Tacio(2018), Organic Farming: Benefits and limitations

[8] Catherine Ward and Laura Reynolds(2013), Organic Farming Expands, Contributes to Sustainable Food Security.

[9] Thomas Handley (2013), Planet organic: achieving sustainable food security and environmental gains.