

# [Malunggay and spinach powder essay sample](https://assignbuster.com/malunggay-and-spinach-powder-essay-sample/)

[Nutrition](https://assignbuster.com/essay-subjects/nutrition/)

The study aimed to introduce the combination of Malunggay and Spinach powder in order to make a natural, nutritious and practical supplement for all especially to those health-conscious individuals. Nevertheless, this study wouldn’t be possible without the everlasting love, care and assistance from the researchers family, who supported her in the procurement of the much needed logistics and references, cultivated and propagated the Malunggay and Spinach plants for the study.

Introduction:
He gives us that vast goodness of nature and vegetation is among those. As man propagates for abundance; he deserves to harbor tremendous benefits from it. Man inhabited earth with all its richness laid before him. With his gladness, ingenuity and constant search for knowledge he discovered numerous ways to enrich his mind of endless ideas, body for health and longevity and spirit to fulfill his close relation with his maker and humanity. Thus, man discovers infinite ways and makes use of accessible resources to satisfy his longings for health and wellness. The discovery of herbal plants made the possible existence of modern medicine. Modern medicine makes use of these plants in making capsulated herbal medicine or food supplements. It is scientifically proven that numerous of vitamins and minerals are found in herbal plants that can supply the needs of living things, specifically humans. These vitamins and minerals help supply energy within a person body, which is needed foreveryday activities in order for them to perform well. Herbal plants now adays are not just made as medicinal purposes but also as food ingredients so that it may add a unique and healthier flavor to foods. Malunggay or Horse radish (Moringa oelifera)
was once considered a “ poorman’s vegetable” but now it is known as a “ miracle tree” or “ nature’s medicinecabinet” by scientists and health care workers from around the world because it is loaded with vitamins and minerals that can be an effective remedy against many kinds of ailments such as arthritis, anemia, ovarian cancer, heartcomplications, kidney problems, asthma and digestive disorders.

This plant thrives in tropical countries, mainly in Southeast Asia, Central and SouthAmerica and Africa. It is indeed widely cultivated. It grows up to ten (10)meters tall and its leaflets are ovate to elliptic and are two (2) centimeters long. Each ounce of Malunggay contains seven times the Vitamin C found in oranges, four times the Vitamin A of carrots, three times the iron of spinach, four times asmuch calcium as milk and three times the potassium of bananas. It is said that that these plants require little maintenance, which makes it easy for cash-strapped people to gain health without thinking of budget concerns. Spinach (Spinacia oleracea) is an edible flowering plant in the family of Amaranthaceae which originated from Central and Southwestern Asia and is now widely cultivated throughout the world. It grows to a height of up to thirty(30) centimeters and its leaves are simple, alternate, ovate to triangular-basedand varies in size from two (2) to three (3) centimeters long and one to fifteen(15) centimeters broad.

Besides of it being considered as an herb rich in Iron, it is also a rich source of Carbohydrates, Dietary fiber, Fat, Protein, Vitamin A, Beta-carotene, Lutein, Zeaxanthin, Folate, Vitamin C, Vitamin E, Vitamin K andCalcium. It is well-known in stabilizing the blood sugar among diabetics, it serves as an anti-oxidant, an anti-cancer agent, it prevents from atherosclerosisor thickening and hardening of arteries and it aids in the formation of the bloodsubstance required for bloodclotting. The combination of both herbs can surely make a nutritious supplementfor all ages. This study presents the result of the beneficial mix of Malunggay and Spinach known as Malunggay and Spinach powder. A power duo, aproduct of nature, harness within reach and concocted with simplicity.

Methodology:
In acquiring the study of Malunggay and Spinach powder, constant research wasdone. Facts were gained from books and computer resources. The abundance of the said vegetables which most of the time left out wilted aroused a curious mind thus the research drew its concept. The accessibility and availability of both vegetables inspired the research where an actual and continuous propagation was made to ensure freshness of harvest during the several process of experimentation. A series of trial and error process was made wherein an exact time of harvest must be observed and storage in a well-ventilated room must be followed. Three rooms in the house were carefully chosen in which a room at the basement was ample to suit the experiment need. Both vegetables compliment each other interms voluminous vitamins and minerals that supplement the everyday nutrient needs of people in order to fulfill their daily activities.

The preparation of Malunggay and Spinach powder are as follows: Harvest Malunggay and Spinach leaves early morning just when the dew has dried up. Bundle Malunggay and Spinach leaves and hang upside down in a well-ventilated room. Dont expose to sunlight. Use brown paper bag to catch falling leaves. Use clothes pin to secure the brown paper bag to where you hang both leaves. Allow leaves to fall in the paperbag. Grind, pound or blend when the leaves dried up. Seal in a container. Varied usage of this powder as: Tea, combine in vegetable meal, soup, bread, cookies, cakes, desserts, shakes, juices, sandwiches and ice cream.

Procedure:
The review of the study focuses on the health benefits given by the combination ofthe malunggay and spinach powder supplement and its preparation, which can contributein the attainment of health and wellness by making use of our local produce. With thepollution and lifestyle changes, people need to equip themselves with health-consciousmindset by going natural to counteract the radical effect of modern day living. Facts weregathered from books and Internet as references in order to get the needed information forthe study. Potter, Patricia stated that nutrients are the elements necessary for body processesand function. Energy needs are met from six categories of nutrients: carbohydrates, proteins, fats, water, vitamins and minerals. Essential amino acids are the simplest forms of protein; are those that the body cannotsynthesize but must be provided in the diet. Nonessential amino acids are the simplest forms of protein; are those that can besynthesize in the body. Wolff, LuVerne implied that food supplements are preparations containingvitamins, minerals, or proteins, or combination of these, and other nutrients. Their purpose is to add nutrition to the diet. Certain foods, such as cereals andbreads, may be nutritionally enriched or fortified by adding supplements to replacevitamins and minerals removed by food processing.

In Encyclopedia Americana, Volume 20, it is placed that the major classes of nutrients-proteins, carbohydrates, fats, vitamins, minerals and water- differ widely in their functionsin the body. Atherosclerosis is a disease of the arteries in which fatty plaques develop on their innerwalls, with the eventual obstruction of blood flow. It is stated in Encyclopedia Americana, Volume 25, that Spinach; Scientific Name: Spinacia Oleracea; An annual potherb whose leaves are popular vegetable. Known to be a Powerhouse of Nutrient among all green leafy veggies. The leaves are alternate, simple, ovate to triangular-based, very variable in size from about 2-30 cm. Long and 1-15 cm. Broad, with larger leaves at the base and small leaves higher on the flowering stem. Theflowers are inconspicuous, yellow-green, 3-4 mm. diameter, maturing into a small hard drylumpy fruit cluster 5-10 mm. across containing several seeds. Its Nutritional Value per 100grams: Vitamin A, Vitamin B, Vitamin C, Potassium, Vitamin B2 Riboflavin, Niacin, Iron, Calcium, Phosphorus, Carbohydrates, Protein, and Calories.

Results
The research yielded consistent data that the Malunggay and Spinach leaves dry upwell when stored in a well-ventilated room without the direct exposure of sunlight and is easier to pound in order to be made as an all-natural food powder. Before achieving the wanted result of the study, recommended procedures have to be done. The researcher gathered the Malunggay and Spinach leaves and hung it upside down with a clothes pin in a well-ventilated room. A brown paper bag is used in catching the falling leaves. In a week, the leaves of both plant stalks fell down. A mortar and pestle were used in pulverizing the leaves to make it into a healthy food powder. And lastly, the end product was sealed in a clean container ready for consumption

Conclusions
From the research done, the researcher found out that time must be a primary consideration in harvesting and picking of Malunggay and Spinach leaves. The importance of the environment appropriate circulating air as a room for storage perfected the dry ingand falling of leaves, which is possible within a week. The complete falling and natural air -drying the leaves helps in easy pounding of the leaves thus, come up with an assured quality for consumption. However, the current climatic change as evidenced by high temperature affected the growth of Spinach plant. The scarcity of the Spinach leaves deterred the researcher to produce the targeted 200 gram yield an equal proportion of 100 gram from Malunggay and Spinach leaves respectively.

Recommendations:
Based in the researchers observation, it was found out that the harvest made past noontime gathered a crispier and rough quality of leaves and felled off faster exactly 3days from the same storage room. During the pulverizing process it resulted to a brownish colored powder compared from an early morning pick which is dark green. The researcher recommends picking or harvesting the Malunggay and Spinach leaves after the morning dew has dried an assurance of leaves at its freshest state. Hanging them in a well-ventilated room is advisable so that it would not get very dry. Direct exposure to sunlight is not recommended because it results to withered leaves affecting the quality of leaves for future processing. The storage for the finished product is three (3) to five (5) days because if overly stored will attract molds growth as it was meant all natural, no preservative added. An alternative gadget aside from mortar and pestle in pounding the leaves, one can use agrinder to make ones job easier, faster and come up with a uniform and fine consistency.