

Viability of ampalaya in making chips essay sample

[Health & Medicine](#), [Obesity](#)



This chapter presents an overview of this study. This section includes the background of the study, statement of the problem and hypothesis, significance of the study, scope and limitation and definition of terms.

Introduction

Bitter melon or ampalaya is said to be the most bitter of all vegetables of cooking in Asian countries. Different countries formulate their own dishes and improve its cultivation for a higher demand in the market. Ampalaya is also used in the field of medicine and it contributes to aid treatment of different illness. Furthermore, children do not like eating vegetables particularly if it is ampalaya because of its bitter taste. However, ampalaya has a unique nutrient that gives a healthy body and free from disease. It is good for rheumatism and diseases of the liver, aids in lowering blood sugar level and blood pressure, it can relieve headache, disinfects and heal wounds and burns, it can be used as a cough and fever remedy and helps to prevent diabetes and some types of cancer. These are some of different health benefits of eating ampalaya. Instead of eating ampalaya itself, it will become more favorable of eating if it is in a form of chips. This study will help to improve eating ampalaya and to prevent diabetes and different illnesses by using ampalaya as an ingredient of making chips.

Significance of the study

This study is deemed beneficial to the following:

For diabetic patient

It is easier for diabetic patients to eat ampalaya because of having ready to

eat ampalaya chips instead of preparing and cooking ampalaya before eating. For children

Ampalaya chips will have benefits to children because they can gain the different vitamins of an ampalaya without knowing of what they are eating.

For adult

Ampalaya chips can prevent diabetes to those adults that were not eating ampalaya. For the future researchers

For them to have reference if they will conduct a study relating to this research topic.

Scope and limitation

This study covers about the the viability of ampalaya in making chips. This study focuses on all year levels of BSHRM students of Our Lady of Fatima University, Quezon City Campus. The period of this thesis study is in SY 2012.

Definition of Terms

The following terms are operationally defined as:.

Rheumatism - rheumatic disorder is a non-specific term for medical problems affecting the joints and connective tissue. The study of, and therapeutic interventions in, such disorders is called rheumatology.

Bitter melon - The edible fruit of the plant *Momordica Charantia*. The bitter melon grows in tropical and subtropical climates. The name ' bitter' comes

from the bitter taste of this vegetable, considered the most bitter among all edible vegetables.

Viability - (of living things) capable of normal growth and development

Bitter-gourd - is one of the most popular vegetables in China, Taiwan, Vietnam, Thailand, India and the Philippines. Bitter Gourd, also called Bitter Melon, has an acquired taste. The plant is grown mainly for the immature fruits although the young leaves and tips are edible.

Sherbet - A frozen dessert made with fruit juice added to milk or cream, egg white, or gelatin. a frozen fruit juice and sugar mixture served as a dessert or between courses of a meal to cleanse the palate.

Hypoglycemic - Relating to hypoglycemia, an abnormally low level of the sugar glucose in the blood, usually a complication of diabetes, in which the body does not produce enough insulin to Fully metabolize glucose.

Hypoglycemic symptoms include tiredness, dizziness, confusion, Increased heart rate, and a cold, clammy feeling. Diabetologist - is the clinical science of diabetes mellitus, its diagnosis, treatment and follow- up. It can be considered a specialised field of endocrinology.

Gastrointestinal - Of or relating to the stomach and intestines.

Namamarako - a new disease syndrome in ampalaya (*Momordica charantia*) caused by an unknown pathogen

CHAPTER 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter of the study encompasses of reviews of foreign and local literature from book, journal, magazines, and foreign studies such as survey and thesis. It also comprises review of local literature and studies. Which are all having tool to finish the research. Foreign Studies

Ampalaya has insulin-like polypeptides, called p-insulin, in its fruits and seeds. Insulin helps your body use and store blood glucose when you eat food, advises the American Diabetes Association. The plant also contains leptin, a hormone that can play a role in insulin resistance. While bitter melon has a scientifically proven track record for improving insulin resistance in the body, the exact mechanism by which the plant works remains unknown (Qixuan Chen, lead author of a study published in the *Journal of Nutrition*, 2008).

According to Chen (2008), The plant's ability to lower blood-glucose levels might be the result of its ability to create a metabolic environment in the body that reduces body fat, specifically visceral fat,.

Alpha and beta-momorcharin, both proteins, are found in the fruit's seeds. These produce fat-reducing activity in the body. (C. P. Khare's " *Indian Medicinal Plants: An Illustrated Dictionary.*")

Foreign Literature

According to Oshima the staff writer of taking the bitter with the sweet that for along time, however, farmers on the mainland japan grew it only to

southern Kyushu and Okinawa, where the hot summer weather caused a lack of other locally-grown green vegetables. Today, as tourism to Okinawa introduces travelers to famous local dishes such as goya champuru (stir-fry of bitter gourd with tofu, egg and other ingredients), more and more people are becoming accustomed to the vegetable. The gourd's popularity has also been accelerated by the well-publicized facts about its nutritional value. One hundred grams of bitter gourd contains 120 mg of vitamin C -much higher than many vitamin C-rich vegetables and fruits. Scientific data has shown this extremely rich vitamin content is not lost with heating. Okinawa is now the largest bitter-gourd-producing district in Japan. Production has more than doubled from 2, 700 tons in 1990, to 6, 000 tons in1997, most of which is shipped to the mainland. The vegetable's best season is June to August — the bitter flavor increases as its nutritional levels peak.

According to Yae dake, the staff writer of “ Taking the bitter with sweet” in The Japan Times Online, in an attempt to jump on the bandwagon, Okinawan companies have put various bitter-gourd products on supermarket shelves, including goya sherbet, goya juice and dried goya. Goya tea made by drying and roasting sliced bitter gourd picked in its peak season, is also popular. To prepare bitter gourd for cooking, cut the vegetable in half lengthwise, discard the seeds and fibrous core, and then slice into half-moons . Do not remove the skin. A dash of salt tames the bitterness

Local studies

Momordica charantia L. fruits, leaves, seeds and other parts, when used as dry powders, extracts, decoctions, fresh or cooled, have clearly

demonstrated hypoglycemic activity both in vitro and in vivo. (Dr. William D. Torres, PhD, 2004)

According to Raman, PhD and C. Lau, PhD (1996), Oral administration of fruit juice or seed powder of Ampalaya causes a reduction in fasting blood glucose and improves glucose tolerance. “ Ampalaya fruit prepared as a tea is well- tolerated and may be a useful dietary adjunct in the treatment of type-2 diabetes. It has minor gastrointestinal side effects of increased bowel frequency but beneficial to those diabetic patients who are constipated.” (R. Rosales, MD and R. Fernando, 2001) “ So we submitted Charantia to an independent diabetologist for a clinical trial to verify whether it can really help diabetics control their blood sugar when taken as part of their daily diet, exercise and doctor-prescribed medication,” (Jose Abelarde, 2004)

According to Jose Abelarde, 2004, Armed with this traditional medical evidence supporting Charantia’s antidiabetic potency aside from the numerous medical studies done worldwide that also confirm the Ampalaya’s fruits and seeds blood sugar lowering benefits. Herbcare medical consultants then started holding “ scientific meetings” with numerous doctors’ groups to explain Charantia’s supporting role in the management of diabetes. “ These medical evidences and our boldness in presenting them to doctors’ groups are the keys which opened for us the doors of many doctors. Charantia is now regularly invited for exhibition during the conventions of many associations of doctors and allied medical professionals,”

“ Today, an increasing number of doctors already accept the Ampalaya’s benefits as a food supplement in the treatment of diabetes, but they continue to be discriminating in their choice of the brand of Ampalaya product to support. They will support products with credible medical evidence for their product claims and reject those with none.” (J. Abelarde, 2004) Local Literature

According to sabau vlad Adrian, 2007, People giving up sugar is not impart of their free will, it’s because they need to give sugar up for health reasons. Having a diabetes condition makes a person’s sugar level rise due to a a insulin deficiency or a insulin malfunction. On the other hand, some condition of diabetes is the other way around. Diabetes is a disease where the pancreas (a part of digestive organ) is unable to secrete enough insulin. Diabetes is not a simple disease that can be treated immediately.

In recent years, “ namamarako” has become a serious production constraint in ampalaya. Plants affected with “ namamarako” produce mainly male flowers (hence the term namamarako) the leaves become thicker with veins banding and shiny, giving them a plastic appearance. Depending on the severity, plants could become stunted and bear hardly any female flower. The syndrome was first observed sometime in 1996 and now common in many ampalaya-producing areas particularly in La Union, Nueva Ecija, Bulacan, Quezon and Cavite [Philippines].

In an attempt to determine the possible cause and minimize or reduce disease incidence, several studies were conducted to determine whether the

syndrome has a physiological cause, soil-borne or due to a parasitic agent. Infected samples were also sent to local and foreign research institutes to get independent diagnosis of the possible cause. Preliminary results showed some partial recovery of infected plants with improved cultural management practices (e. g. boron supplementation, use of plastic mulch, etc.), however, the physiological cause is not yet fully established and remains only a possibility. The possibility of soil-borne transmission was also eliminated and so far, seed transmission was not observed. Likewise, ELISA tests did not positively detected any commonly known virus infecting cucurbits. Preliminary pathological studies on transmission indicated that the syndrome is difficult to transmit mechanically. To date, no conclusion can be made yet as to the etiology of the pathogen. Further experiments will be undertaken to prove or disprove the hypothesis that the syndrome is caused by a pathogen (Philippine Entomologist, Oct 2003)