



## NUTRI-FLAKES CEREAL

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**Group Name** : **BLOOMWORKS**  
**Group Members** :

1.	<b>Muhammad Azim Naim Bin Azhar</b>	<b>2021196149</b>
2.	<b>Ahmad Ridzuan Nazmi Bin Ahmad Rifai</b>	<b>2021110497</b>
3.	<b>Aideel Hafizi Bin Fisol</b>	<b>2021125959</b>
4.	<b>Nur Nadia Binti Nizam</b>	<b>2021119987</b>
5.	<b>Nur Amylia Binti Zahri</b>	<b>2021113107</b>

**Submitted to :**

**Miss Noor Hasvenda Abdul Rahim**

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## **1.0 EXECUTIVE SUMMARY**

The Nutri-Peel flakes are a new type of cereal that uses potato peel as one of its functional ingredients. The cereal is made with whole wheat flour, rice bran, ground flax, and potato peel as the main ingredients, and water, salt, and vegetable oil as the minor ingredients. The potato peel was chosen as a functional ingredient because the food industry frequently wastes and discards the peel, despite previous scientific studies proving that the peel contains a large number of bioactive compounds that can be beneficial to human health. Nutri-Peel Flakes is a potato peel morning cereal with protein, fibre, no added sugar, and a variety of toasted flavours. The product is available at a price of RM 8.00 per 100 g net weight of cereal. The target market for Nutri-Peel Flakes is anybody searching for a fast, easy, and filling meal. Additionally, the taste may be tweaked to appeal to both adults and children. This product is ideal for any consumer seeking for a healthy complete meal that will keep them satisfied and full for a longer period of time since its main elements are slow-releasing complex carbohydrates. Furthermore, it is suitable for individuals who suffer from constipation since this high-fiber product will help to cleanse the colon and prevent colon cancer. Since Nutri-peels cereal is a one of a kind cereal that implies the usage of food waste, this can cut the cost of any capital, at the same time increasing the profitability of the company. In order to maintain the stability and management of our company, we hired five top managers which including general manager, administration manager, financial manager, operation manager and marketing manager. All this position have their own duties and responsibilities in the company to be able to achieve the business's objectives.

## **2.0 PRODUCT DESCRIPTION**

In Malaysia, there are lots of varieties of potatoes that are used daily in all sorts of categories, such as sweet potato, yam, russet potato, and others. The flesh of the potato is indeed to be a delicacy with high nutritional value. However, what most consumers focus on is the flesh part only, not the peel. Unbeknownst, potato peel has higher nutritional value in terms of protein, ash, mineral, fiber, vitamin C, potassium, iron, riboflavin, and folate (Vaitkevičienė, 2019) than the flesh itself. On top of that, potato peels possess antibacterial properties along with antioxidants due to the existence of phenolic compounds that account for 60 - 80% of caffeic acid, neochlorogenic acid, and chlorogenic acid (Gebrechristos et al., 2020). Nutri-Peel Flakes is a new breakfast cereal made from potato peels. So far, there are few applications for potato peel as a culinary component, particularly in morning cereals and flakes. Instead of simply throwing away the potato peels, they may be used for both commercial and environmental purposes, as food waste is presently a huge concern across the world. Even though numerous cereals and flakes contain ingredients such as granola, maize, and barley malt, no cereal product contains potato peel as a functional ingredient. Potato peels are the least expensive element to utilize in cereal-based goods because they are a waste product. They are a tuber vegetable all over the world due to their low production costs and high nutritious content. In developing nations, potato output has grown by 5% every year on average. The recycling of food processing sector byproducts is a key topic. Furthermore, despite its unappealing look, potato peel has high nutritional elements that are significantly more plentiful than the meat itself, implying that discarding the peel is a waste of food. Potato peel was initially offered as a promising source of dietary fiber.

Nutri-Peel Flakes, a potato peel morning cereal, is a complete meal cereal with protein, fiber, no added sugar, and a variety of toasted flavors. Ground flaxseed, honey, whole wheat flour, bran, and powdered potato peel are among the components in this cereal. The main ingredient in this product is potato peel, which is high in iron and serves to increase the function of red blood cells. Potato peel is also high in vitamin B6, which aids in the conversion of nutrients into useful energy for cells. Honey is used as a sweetener in this product to give it a sweet flavor. Furthermore, honey helps to balance the flavor characteristics of other ingredients in a dish and improves the flavor. Because honey is somewhat sweeter than sugar, less honey may be utilized. To retain the cereal's form, ground flax is used instead of an egg as a binding agent. Whole wheat flour and bran are also utilized because whole wheat flour provides vitamin B, iron, calcium, and protein, and bran is strong in fiber. Despite their great nutritious value,