

## Nutrition Noodles supplemented with Aloe vera.



Mix aloe vera powder with your flour ingredient, dry blended. Noodle products are staple food in many parts of Asia, especially throughout Southeast Asia. Almost 40% of wheat products in Asian countries are consumed in the form of noodles. Traditional noodle is made from simple ingredients. Noodle is described as the most consumed pasta-like product with different varieties, which can be produced using flour, water/milk, salt and/or eggs, whey, or other additives, can be a complete meal since it contains carbohydrates, protein, and trace amount of saturated fatty acids. Besides, noodles are often used as a convenience food due to its simple preparation, low cost, and fast cooking characteristics. However, composition of noodles appears to have limited attention and there is little data available on nutritional value of noodle products. Physicochemical (moisture, ash, pH, acidity, color), sensory properties and the total phenolic compound, antioxidant capacity and their bioaccessibility of traditional noodles supplemented with various levels of aloe vera powder. Moreover, some reports even claimed that noodle lacks other essential nutritional composition such as dietary fibre, vitamins (especially B group vitamins) and minerals which were lost during wheat flour refinement. Quality factors important for instant noodles are colour, flavour, and texture, cooking quality, rehydration rates during final preparation and the presence or absence of rancid taste after extended storage. Sincere efforts of researchers are underway to improve the formulation, extend the shelf life and promote universal fortification of instant noodle. Everybody likes, and due to its instant, make simple, features good taste, culinary art is convenient, and the old and the young like, but our daily edible

flour nutrition composition is unbalanced, cannot meet the life requirement of present people, improve the formulation, extend the shelf life and promote universal fortification of instant noodle , offer to your market, functional and nutritious health noodles containing Aloe Vera, focused as food additive, properties of noodles gain much more attention as these functional ingredients improved overall quality of noodles like texture, antioxidant effect, sensory attributes, enhances shelf life and provides nutrition as well. Antioxidants play an important role in health, especially in protecting cells from the potentially harmful effects of reactive oxygen or free radicals. Several research works had been reported on the use of composite flour in noodle production but, there are less works on incorporation of natural antioxidant in noodles. Synthetic antioxidants have fallen under scrutiny due to Noodles, make your dough or vermicelli preparation, adding aloe vera powder to flour powder with become dough, afterwards or press or roll and make sheet and cut again or press, perhaps use means such as rubbing with the hands, draw, pinch, make strip (narrow or wide, flat, or round) or strip, finally by boiling, stir-fry, braised, the fried a kind of food formed. Adequate dough strength and extensibility is crucial for noodle flour to withstand sheeting, resist tearing, breakage and shrinking of dough sheet. Both protein quality and quantity influence characteristics of instant noodles including fat absorption, colour, and textural quality, as well as dough properties like water absorption and colour.



### **Nutrition and fortified noodles**

To be effective in the formulation of noodles, it is necessary to use Aloe Vera 200X decolorized, as raw materials. With the aloe powder and the wheat flour being the main raw materials, the noodles are produced; Noodle food that utilizes aloe vera in powder form as a functional additive at flour and mixed together (dry bases) , it can be presented as a trend functional supplemented, nutrient laden, convenient healthy and fortified noodles. Production process is all carried out at normal temperatures; adding the ALOE VERA powder which is 0.6 % of the total weight of flour and adding other ingredients as water, salt, etc., uniformly mixing, and carrying out dough kneading, curing, sheeting, and slitting, drying, and cutting into sections to obtain the aloe noodle. Along with total polyphenols and total flavonoids, Aloe Vera Powder, demonstrated good antioxidant activity for instant or fried noodles supplemented with Aloe Vera, provides

nutritional and functional properties. The addition Aloe Vera Powder to the formulation nutrients in the aloe are kept and easier to absorb by the human body, meanwhile, the noodles are better in taste, have the effects of expelling toxin, beautifying, and resisting aging and are smoother and more delicious by adding the various food additives, and the mouth feeling of the product is improved, increased total polyphenols, total flavonoids, and antioxidant activity. Hardness and chewiness increased in noodles, while cohesiveness and springiness decreased in noodles, add to your consumer's diet, microelement-supplementing biological vitamin, polysaccharides, amino acids, organic acid, mineral matter, and trace elements, salicylic acid, salicylate, plant hormone, blood vessel bradykinin enzyme, phytochemicals, and plant-sterols, there are 75 compounds inside aloe vera. Aloe vera is Natural and Food Grade Aloe Vera Powder. Adding Aloe gel to noodles of making, aloe is colorless and odorless, rheology properties, and they are nourishing properties, helps to make smooth anti-the chewing of sensory of dough preparation noodles. So, this health nutrient noodles, its nutritious tonifying is worth very high, has satisfied nutrition heat, nourishing heat, the hot demand of health care that present people highly praise day by day is very effective. China is vermicelli food production state maximum in the world and country of consumption. Vermicelli industry has developed into the industry of a relative maturity. Along with the raising of people's living standard and the enhancing to healthy diet demand, vermicelli also from single filling the stomach, convenient, low-grade product, develop into collection nutrition, function, health care, delicious food, be convenient to medium and high-grade goods all over the body. As traditional health staple food, vermicelli has become an important industry in food manufacturing. Aloe vera added, improves the texture, eating quality and shelf life of instant noodles.



**Aloe as antioxidative compounds prolongs the shelf life of fried instant noodles.**

Aloe vera acts as antioxidant properties for noodles, meat, veggies added, due tannins and phenols of aloe vera. to improve the nutritional, antioxidative, and sensory properties of the

noodles. Microstructure of dough and noodles has been studied to understand the influence of ingredients and processing variables on the noodle quality. New research found Aloe Vera improves the formulation of noodles, extend the shelf life, and promote universal fortification for immune system, because polysaccharides. Accordingly, many researchers are exploring the potential of noodle fortification as an effective public health intervention and improve its nutritional properties on the functionality of ingredients. To prevent food degradation due to oxidation, employment of antioxidants has become a necessity for food products, which are sensitive to this type of chemical change. Though widely used synthetic antioxidants are highly effective (e.g., BHA, BHT, TBHQ), there is growing consumer demand for natural ingredients application in processed foods. That is why new sources of natural compounds with oxidation activity have long been sought for. Aloe Vera contents natural antioxidant source rich in phenolic compounds added to the noodle formulation, affect DPPH radical scavenging, color, and oxidation. Aloe may increase the shelf-life and nutritional value of food without synthetic forbidden chemicals and can claim as eco, bio or natural noodles. Aloe Vera a natural antioxidant improves water hydration properties in the noodles and was seen that it's having better nutritive value and was most acceptable when used up-to 0.6% in powder form in the formulation of chicken noodles and it also does not affect the sensory qualities as well. The TBHQ has a major part in reduction of oxidation thus resulted in increased shelf life in deep fried and steamed instant noodles having fat percentage greater than 15%.



- **Enhancement of Nutritional and Functional Characteristics of Noodles by Fortification with aloe vera gel powder.**

Aloe helps to activate long-term function functional food in the form of general food in daily life. Develop raw noodles with aloe powder added to flour, so that they can be used wanted to optimize the raw noodle manufacturing conditions, The amount and number of aloe powder added that mainly affect quality. These properties increase as the amount of aloe added and the kneading time increase. and showed a tendency to increase gluten formation. The amount of aloe powder added is higher than the kneading time to give the flavor, it had a greater impact on texture properties. The I-optimal design of response surface methodology (RSM) was used for the optimization of added amount of Aloe powder, water content, and kneading time as the independent variables. The quality characteristics (color, texture, water absorption ratio, volume, turbidity) and sensory characteristics (color, flavor, taste, mouth feel, overall acceptance) were analyzed as

dependent variables. The lightness, redness, and yellowness of the Aloe noodle were all lowered with the addition of Aloe powder. All texture characteristics such as hardness, elasticity and chewiness of Aloe noodle showed the tendency to increase with increasing amount of Aloe added and kneading time. The water uptake and the volume expansion tended to increase with aloe addition and water addition. As the kneading time increased, the dissolution of solids decreased, and the turbidity tended to decrease. It was found that the functionality of noodles supplemented with aloe vera is improved by the addition of aloe polysaccharide inside. Noodles made from composite flours showed more smoothness and lightness. Water absorption, cooking loss and lightness of noodle strands reduced, while hardness increased by blending of aloe vera powder with wheat or rice flour at certain levels.

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