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Popular Article

## The Health Benefits of Arrowroot: A Nutrient –Packed Super food

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### Abstract

Arrowroot, a tropical tuber crop has been emerging as a nutrient-dense superfood with numerous health benefits. It serves as a gluten-free, easily digestible alternative to conventional starches, making it ideal for those with celiac disease or gluten sensitivity. Rich in essential nutrients like potassium, iron, and B vitamins, arrowroot supports heart health, oxygen transport, and energy metabolism. Its high fibre content facilitates digestion and supports a balanced microbiota in the stomach. Additionally, arrowroot's antioxidant properties help reduce inflammation and protect against oxidative stress, potentially lowering the risk of chronic diseases. Its hypoallergenic nature and mild flavour make it a versatile ingredient in cooking and baking, suitable for thickening sauces, soups, and enhancing baked goods' texture. Arrowroot's health benefits and culinary

versatility make it a valuable addition to a balanced, health-conscious diet.

**Keywords:** Arrowroot, nutritional value, superfood, *Maranta arundinacea*

### Introduction:

The tropical tuber known as "arrowroot" (*Maranta arundinacea*) is indigenous to Indonesia.

It's usually processed into a powder, also called arrowroot flour. The plant's rhizome, an underground stem with several roots that stores starch and energy, is where the powder is collected from. This vegetable is primarily used in cooking because it complements both savoury and sweet meals well and may even have some therapeutic uses. Arrowroot is rich in protein and many other nutrients, but it's also incredibly

simple to digest, which makes it perfect for kids and senior citizens who might prefer softer foods. Given below is a picture of arrowroot plant and its tuber (Fig 1).



**Fig1. A- Arrowroot plant; B- Arrowroot tuber**

**Health benefits:**

A starchy root vegetable, arrowroot is related to taro, sweet potatoes, cassava, and yam. It has many nutrients but is heavy in carbohydrates, like many starches. A 1-cup (120-gram) serving of sliced, raw arrowroot contains: vitamins, calories, minerals, B5, B9, B1, Mn, Cu, Ca, Fe as shown in fig 2.



**Fig 2: Nutritional benefits of arrowroot**

Compared to other tubers, arrowroot packs more protein—5 grams per cup (120 grams) as opposed to 2.3 grams in the same amount of yam. It also contains more than 100% of the Daily Value (DV) for folate, also known as vitamin B9, which is necessary for DNA creation and development during pregnancy.

According to Pyasi et al., 2024, arrowroot powder can be used to produce flour products. It contains bioactive flavinoids which helps boost immunity. Arrowroot flour has anti-inflammatory properties which helps maintain oral hygiene. Additionally, it provides over 100% of the DV for folate (vitamin B9), which is essential for development during pregnancy and DNA formation.

**Potential benefits:**

Its composition and starch content are mostly responsible for its possible health advantages. 1. Maybe helpful for losing weight: 32% of arrowroot powder contains resistant starch, which is indigestible to humans. In your stomach, it acts like



soluble fiber and when combined with water, it produces a viscous gel. Resistant starches and high-fiber foods slow down the rate of digestion, prolonging the feeling of fullness.

In turn, this may regulate your appetite and lead to weight loss.

2. The high starch content of arrowroot, which promotes larger and more consistent stools, could be the cause. Consequently, you have less evacuations on a regular basis.

It may also help your body rehydrate to make up for the related fluid loss.

#### **Immune system:**

This tuber is a potential source of prebiotics, which are a type of fiber that feeds gut bacteria. Beneficial gut bacteria may boost immunity, as they produce multiple vitamins and absorb key minerals that the immune system needs to function properly. Arrowroot is naturally gluten-free. Its powder can be used as a substitute for wheat flour (Amante *et al.*, 2021). Arrowroot starch is especially applicable for gluten-free products because it helps improve their texture, crispness, and flavour.

#### **Uses of arrowroot:**

Arrowroot is used as a thickening agent for sauces, puddings, and jellies, as well as an

ingredient in baked goods like cookies and cakes. It's also a common substitute for wheat flour in recipes calling for a gluten-free flour. It may have several cosmetic applications due to its alleged oil-absorbing capacity, though they are not necessarily supported by scientific evidence.

1. Dry shampoo: Massage arrowroot powder into your scalp to refresh your hair without water.

2. Deodorant ingredient: Mix equal parts arrowroot powder, coconut oil, and baking soda for a homemade deodorant.

3. Talcum and baby powder: This powder is said to absorb moisture and increase smoothness.

4. Homemade makeup: Mix arrowroot powder with cinnamon and nutmeg to make face powder or foundation, with beetroot powder for blush and with cocoa powder for bronzer.

Arrowroot powder may be used to make tea and food items such as cookies, soup, sauces, gravies, pancakes, pudding, and custards.

#### **Nutritional fact:**

Patients with diabetes and heart disease can benefit most from arrowroot flour's abundant supply of thiamine, niacin,



pyridoxine, and minerals including iron, magnesium, and copper. Nuts' abundant amounts of antioxidants, vitamin E, and omega fatty acids improve memory, brain function, and overall cognitive function. It also serves as a healthy cookie for ones with gluten intolerance and celiac Disease .The rich array of B vitamin aids in energy production, being an abundant source of protein and fiber helps you feel fuller longer, curb cravings, and reduce weight. Milk is a great source of calcium and protein strengthens bones and maintain overall health. Coconut is an amazing source of healthy monounsaturated fatty acids that confers to boosts heart and gut health.

**Side effects:**

Powdered arrowroot is thought to be safe, but too little is known about its use in large amounts. Aside from that, arrowroot allergies might also make someone feel queasy. Although there is insufficient information available, arrowroot powder may have further negative consequences. There are no contraindications when it comes to consuming arrowroot As a naturally occurring starch, it is typically safe to eat in recommended amounts by persons of all ages. But too much of anything can have unfavorable consequences. It should not be used with any diarrhea medication when used as a

natural cure as this could cause constipation.

**Conclusion:**

A remarkable profile of vital nutrients and bioactive chemicals found in abundance in arrowroot are advantageous for growth and development, as well as for promoting digestion, strengthening immunity, and managing diabetes. As an excellent cereal for preventing celiac disease and gluten intolerance, arrowroot is a gluten-free starch that also improves general health. Because of the numerous health advantages and inherent healing qualities of this humble tuber, people have been using it for ages. This healthy gluten-free starch to your regular meal plan to reap the wellness incentives and also variety to your staple diet.

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