

# Potatoes and heart health

By Mashilela Makgato, digital marketing co-ordinator, and  
Nkhensani Sithole, marketing and promotional coordinator, Potatoes SA



With the flowers starting to bloom and the birds chirping a bit earlier in the day, we also get to celebrate Heart Awareness Month in September. September is dedicated to raising awareness in respect of heart disease (cardiovascular disease) in South Africa, as well as emphasising the importance of leading a healthy lifestyle to help promote heart health.

According to statistics, an average of ten adults suffer a stroke every hour and approximately 225 people die from either heart disease or a stroke every day in South Africa. In this article, we look at the humble potato and its nutritional value, the role of potatoes in heart health, and how to incorporate potatoes into a diet. We also aim to debunk some negative myths relating to the potato.

## Nutritional value of potatoes

Potatoes are high in carbohydrates, naturally fat-free and very low in sodium. Additionally, potatoes are high in mineral chromium and have the highest levels of potassium when compared to other vegetables and starchy foods. This is great for a healthy heart.

Potatoes are packed with vitamins, minerals and phytonutrients that can contribute to a person's overall health. Potatoes, cooked with the skin on, are a great way to take care of your heart.

According to South Africa's 11 *Food-based Dietary Guidelines (FBDG)*, we are advised to incorporate starchy foods as the basis of most meals. As a one-stop supply of starch, it is hard to beat the potato. Roughly 100 g of boiled fresh potato, with its skin on, provides 354 kJ of energy.

Research reliably shows that when potatoes are boiled, steamed, or baked with the skin intact, it provides loads of heart health benefits. Potatoes in its natural form and with the skin on are cholesterol free, a

source of fibre and serve as a superior source of specific vital vitamins.

## A little bit of biology

The starch in potatoes is digested into glucose in the gut and then absorbed. From there the glucose travels to the liver and into the body's cells where it is metabolised for use by muscles and the nervous system. This contributes to both physical and mental performance.

## The underground hidden treasure

Potatoes have long been an important, cost-effective source of energy, nutrition, and satiety in the South African diet. As the most important vegetable crop in South Africa and one of the world's most recognised staple foods, the potato

continues to play an important role in diets, health, and well-being.

### Potatoes and heart health

A study conducted over 13 years observing 69 000 people showed that potato intake is not associated with a higher risk of heart attacks, stroke, or heart failure. For South Africans, particularly, heart-related diseases are health risks that are growing rapidly caused by a combination of poor eating habits, lack of physical activity and excessive alcohol intake.

Following a healthy diet is one of the most important preventive measures to reduce heart disease. Particularly, a diet that is high in fibre, low in added salt, high in monounsaturated fats (the good fats like olive oil, nuts and avocado) and high in heart-protecting phytonutrients (that you acquire from eating lots of colourful vegetables).

Potatoes have the potential to contribute to all these elements when eaten as part of a healthy, balanced diet. The potato's skin and flesh offer fibre. When cooked with herbs and rubbed with a little olive or canola oil potatoes are low in salt and a source of monounsaturated fats and the potato skin contains plant compounds that actively improve heart health.

### Why potatoes are heart-friendly

We have been enjoying the humble spud for many years and it is time to consider a few of the reasons why we should continue to eat potatoes as part of a balanced meal.

**A cost-effective staple food:** In most developing countries, potatoes are an easily accessible staple food that is cost-effective. This ensures that enough food and energy are provided at meal times for the whole family. Potatoes can be bought in bulk (to further save costs), last long and don't spoil easily when stored correctly. Potatoes can be cooked in a variety of ways and enjoyed as part of all meals and snacks. You could make egg and potato frittatas for breakfast or a baked jacket potato for lunch.

**High in energy:** In South Africa, starches such as potatoes, pap and

rice are eaten as the foundation of most meals. One of the reasons for this is that potatoes contain energy and result in an increased feeling of fullness after a meal. The high content of carbohydrates found in potatoes is the body's energy fuel. When households are on a strict budget, energy and satisfaction from a meal are a priority. Potatoes tick all these boxes: they are filling, energy dense and a nutrient powerhouse. Natural energy from potatoes baked with skins on is a heart-healthy meal choice.

### Source of quality plant protein:

Did you know one medium potato with skin (180 g) provides 4.5 g of protein? This is reason enough to fall in love with potatoes. Potatoes cooked with their skin on contribute to the much-needed protein your body yearns for.

**Fibre:** Prepare potatoes their skin on. Most of the nutrients are retained in this process. One medium potato (180 g) with skin contains 3.6 g of fibre, whereas a peeled potato only contains 2.7 g of fibre. Fibre is beneficial for gut health and assists with regular bowel movements. It also contributes to satiety and lowered cholesterol in the body.

**Rich in potassium:** Potassium is a nutrient that plays an important role in health. One of its key functions is to help regulate blood pressure. Potassium assists by blunting the effect of sodium on blood pressure. Potatoes contain a large amount of potassium: one 180 g serving of boiled/baked potatoes can contain roughly 20% of the daily requirement of potassium.

**Vitamin C:** Potatoes contain vitamin C too. This vitamin is required for various functions in our body: collagen synthesis (connective tissue, cartilage, bone mineral density and tendons), free radical scavenging (antioxidant properties) and it can also help the body to absorb iron.

**Naturally low in sodium:** In their natural form, potatoes are low in sodium. Potatoes contain large amounts of potassium and low amounts of sodium; therefore, they have a high ratio of potassium to sodium – great for lowering blood

pressure. The recommended daily salt limit is 5 g. When cooking potatoes, limit the amount of salt you add.

### Source of vitamins and minerals:

Vitamin B6 is present in potatoes (varying between 10 to 19% of daily requirements). Potatoes also contain niacin and folate. Some of the other minerals found in potatoes include copper, iodine, iron, phosphorous, manganese, magnesium, zinc, and calcium. Again, the amounts may vary depending on the cultivar and size of the potato. Interestingly, the mineral content of the soil can influence the mineral content within the potato. Potatoes are a micronutrient powerhouse, providing an array of nutrients to contribute to an improved nutritional status.

**Phytonutrients:** Phytonutrients are natural compounds found in plants. Eating fruits or vegetables can boost your phytonutrients and contribute to improved health and decrease disease risk. Not only do potatoes provide energy and nutrients, but they also contain some phytonutrients (phenolics, flavonoids, folates, kukoamines, anthocyanins and carotenoids). Phytonutrients assist by helping the body through antioxidant and anti-inflammatory activities. The number of phytonutrients present in each potato depends on the variety of potato.

### Versatile vegetables

When potatoes are integrated properly into a balanced diet, they can be an important addition to promoting heart health. Best of all, they can taste delicious and be a part of an incredible, creative meal.

Potatoes have long been an important, cost-effective source of energy, nutrition, and satiety in the South African diet. As the most important vegetable crop in South Africa and one of the world's most recognised staple foods, the potato continues to play an important role in our diets, health, and well-being. 🍌

For more information,  
email [sheila@potatoes.co.za](mailto:sheila@potatoes.co.za),  
[nkhensani@potatoes.co.za](mailto:nkhensani@potatoes.co.za)  
or visit [www.potatoes.co.za](http://www.potatoes.co.za).

Mondstuk van die Suid-Afrikaanse aartappelbedryf • Mouthpiece of the South African potato industry

# CHIPS

VOL 37 NO 5 • SEPTEMBER / OCTOBER 2023



**MANAGING THE RISK OF  
BLACKLEG DEVELOPMENT  
AND SOFT ROT**

**RECORD EARLY-SEASON  
PRICES CHARACTERISE  
WORLD POTATO MARKETS**

Feedback on Potatoes SA  
Research Symposium

Plant-parasitic nematodes  
associated with potatoes

Cultivar trials at  
Petrusburg and Greytown