

Beetroot -A Remarkable Vegetable

Patil S. P.¹ and Chavan S.V.²

¹Assistant Professor, Department of Agricultural Engineering, RCSM, College of ABM, Sangli, (M.S.)

²Assistant Professor, Department of Agricultural Engineering. Sharad College of Agriculture, Jainapur, (M.S.)

SUMMARY

Beetroot as locally available vegetable, utilized properly in food processing sector, can thus boost the economic condition of the local farmers and traders. Beetroot has various health beneficial properties. Such as, Betacyanin, the pigment that gives beetroot its color, is also an antioxidant, which helps reduce blood pressure and the risk of heart attacks and strokes, reduces risk of osteoporosis, Lowers cholesterol and helps stabilizing blood sugar.

INTRODUCTION

Beta vulgaris, commonly known as beet root is a seasonal vegetable commonly found in Assam. Due to its high sugar content, beetroot is delicious eaten raw but is more typically cooked or pickled. But it has been found that beetroot has various health beneficial properties. Such as, Betacyanin, the pigment that gives beetroot its color, is also an antioxidant, which helps reduce blood pressure and the risk of heart attacks and strokes, reduces risk of osteoporosis, Lowers cholesterol and helps stabilizing blood sugar. Beetroot also contains folic acid which is essential for normal tissue growth. Beetroots also contain carbohydrates, protein and soluble fiber. The negative aspects about this vegetable is its high sugar content and so, the products made out of beetroot may not be recommended for people with diabetes problem. This area requires further studies that whether they can be made sugar-free or not. Beetroot as locally available vegetable, if utilized properly in food processing sector, can boost the economic condition of the local farmers and traders. In this study, there was an attempt to make, beetroot chips.



Beneficial Effects:

- Reduces blood pressure and the risk of heart attacks and strokes: this is because the high content of nitrates in beetroot produce a gas called nitric oxide in the blood which widens blood vessels and lower blood pressure. A daily dose of 250ml of beetroot juice I to 2 cooked beetroot (approx. 100g) can help dramatically reduce blood pressure and its associated risk.
- **Power antioxidants properties:** Betacyanin, the pigment that gives beetroot its color, is also an antioxidant. Antioxidants are believed to help reduce the oxidation of LDL cholesterol, in turn
- Protecting artery walls and reducing the risk of heart disease and stroke.
- **Folic acid:** Beetroot contains folic acid which is essential for normal tissue growth.
- **Reduces risk of osteoporosis:** Beetroot contains the mineral silica. This helps the body to utilize calcium, which is important for muscular-skeletal health and reducing the risk of osteoporosis.

- **Lowers cholesterol:** Beetroot contain soluble fibre, which has also been shown to have cholesterol lowering capabilities. It also contains caratenoids and flavonoids which help prevent LDL or 'bad' cholesterol from being oxidized and deposited in the arteries.
- **Stabilizes blood sugar:** Beetroot is virtually fat free and low in calories. Although it has a 'medium' GL (Glycaemic Index) of 64, it has an extremely low GL (Glyceamic Load) of 2.9 which means its converted into sugars very slowly and therefore helps to keep Blood sugars levels stable.
- **Treats anemia and fatigue:** Beetroots iron content means it's good for those with anemia and fatigue.

Process Flowchart of Beetroot chips:



Procedure:

- Take raw Beetroot
- Washing of Beetroot
- Peel them with peeler
- Make slice with slicer of 5mm thickness
- Putting the slice beet to dry (in Dryer at 105^oC for 4 hours)
- Frying (with Vegetable oil by adding salt for 30 seconds)
- Beetroot chips are ready
- Packaging
- Storage

Beetroot Chips:

The equipment and processes used to create chips are very complex. But the objective is simple. Chips is easy to make, slicing in a slicer for equal in size(5mm), putting in a tray drier at 180c for 4 hours and frying in a pan with a good vegetable oil for 30 seconds and then keeping in a container. The product is very tasty.

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