

Swede: An Underexploited and Versatile Root Vegetable

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The swede, scientifically classified as *Brassica napus* var. *napobrassica*, stands as a testament to the botanical intrigue that arises when turnip and cabbage come together in a harmonious union. Also known as “rutabaga” in certain regions, the swede boasts a distinctive blend of flavours, marrying the earthy sweetness of turnips with the robustness of cabbage. As a cruciferous vegetable with a bulbous, turnip-shaped root, the swede has not only carved a place in culinary landscapes but also holds a rich history that intertwines with the agricultural practices of bygone eras.

Originating from a natural cross-breeding event, likely in the 17th century Bohemia, now a part of the Czech Republic, the swede emerged as a product of nature’s ingenuity. The turnip (*Brassica rapa* L.) and cabbage (*Brassica oleracea* L. var. *capitata* L.) found themselves in close proximity, allowing the magic of cross-pollination to unfold. What succeeded was the birth of a new hybrid, a vegetable that inherited the best traits of both of its parent plants.

The bulbous root of swede, adorned with a smooth, waxy skin, houses a flesh that ranges from yellowish to purple-tinged. Its flavour profile is a delicate dance between the mild sweetness characteristic of turnips and the slightly peppery, robust notes associated with cabbage. This unique combination not only makes the swede a culinary delight but also a versatile ingredient that adds depth to an array of dishes. Beyond its culinary prowess, the swede has etched its presence in agricultural history. Its journey involves the careful observation and selection by farmers and horticulturists who recognized the potential within this natural hybrid. Through generations of selective breeding, the swede evolved into a stable variety, its characteristics refined to meet the preferences of cultivators and consumers alike.



Fig. 1: Yellow-skinned swede



Fig. 2: Purple-skinned swede

Nutritional profile of swede

Swede is a nutritious root vegetable that offers a range of health benefits:

- i. **Calories:** Swede is relatively low in calories, providing approximately 38 calories per 100 g. This makes them a good option for those looking to manage their calorie intake.
- ii. **Carbohydrates:** It is primarily composed of carbohydrates, with around 9 g per 100 g. The carbohydrates in swedes include dietary fibre, which is essential for digestive health and helps maintain stable blood sugar levels.

- iii. **Protein:** It contains a small amount of protein, approximately 1 g per 100 g.
- iv. **Fat:** It is very low in fat, with less than 0.2 g of fat per 100 g serving. This makes swede a healthy option for those watching their fat intake.
- v. **Vitamins:** Swede is a good source of vitamin C, providing about 25 mg per 100 g. Vitamin C is an antioxidant that supports the immune system and helps the body absorb iron.
- vi. **Minerals:**
 - a) **Potassium:** Swede is a rich source of potassium, offering about 305 mg per 100 g. Potassium is crucial for maintaining proper fluid balance, nerve function and muscle contractions.
 - b) **Calcium:** It provides calcium, an essential mineral that plays a role in bone formation. It offers about 43 mg per 100 g.
- vii. **Dietary fibre:** It is a good source of dietary fibre, contributing approximately 2.3 g per 100 g. Dietary fibre is essential for digestive health, helps regulate blood sugar levels, and contributes to a feeling of fullness.
- viii. **Antioxidants:** Swede contains various antioxidants, including carotenoids and flavonoids, which help protect cells from oxidative stress.

Development of the intergeneric hybrid vegetable

The development of the swede is a result of natural hybridization followed by selective breeding practices by farmers and horticulturists:

Natural hybridization

- The turnip and cabbage, both belonging to the Brassicaceae (Cruciferae) family, were cultivated in proximity to each other.
- Cross-pollination occurred naturally between the turnip and cabbage, resulting in a hybrid plant with characteristics from both parent species.

Human observation and selection

- Farmers and horticulturists observed the characteristics of the naturally occurring hybrid.

- Plants that exhibited desirable traits, such as a bulbous root, improved taste and disease resistance, were selected for cultivation.

Selective breeding

- Over successive generations, individuals with preferred traits were chosen for reproduction, creating a stable variety with consistent characteristics.
- This process involved careful selection and cultivation of plants that displayed the desired features, ensuring the stability of the new vegetable.

Cultivation and dissemination

- Once a stable variety of the swede was established, seeds were cultivated and disseminated.
- The cultivation of swedes spread across Europe and the vegetable became a widely cultivated and consumed crop.

Ongoing improvement

- As cultivation practices advanced, ongoing selective breeding aimed at improving traits like taste, size and disease-resistance likely continued.

While the specific historical details of the development of swede may not be extensively documented, the general process of natural hybridization followed by human selection and cultivation has been a common theme in the development of many crops.

Conclusion

In conclusion, the swede, with its roots deeply intertwined in the annals of agricultural history, emerges not merely as a vegetable but as a culinary marvel bridging the essence of turnip and the resilience of cabbage. The swede, with its rich flavour and storied past, invites us to continue exploring, experimenting and savouring the intricate tapestry of flavours that nature and human cultivation have woven together in this remarkable cruciferous delight.
