Marco Pierre White was England’s first celebrity chef. He was the first Briton to win three Michelin stars. He was the first chef to make British cooking stylish.

In 2008, White filmed a four-part television program about British food. In the first episode he stops at a Yorkshire Rhubarb farm. White grew up in Leeds, so he knows Yorkshire County well. On the drive to the farm, White remarks that he remembered a time when every home in Yorkshire had a rhubarb patch.

White was nostalgic for a particularly British culinary tradition. Yorkshire, England has long been known for its early season rhubarb. White was on his way to see Janet Oldroyd
Hulme, a woman who has become known as the “High Priestess of Rhubarb.” Hulme runs E. Oldroyd and Sons, a fifth generation farm in Carlton, England. E. Oldroyd and Sons specializes in early rhubarb. The farm is near the Rhubarb Triangle, a 9-square-mile area that has been awarded a Protected Designation of Origin status for its role in British culinary and agricultural history. At one time there were over 200 growers in the area and they produced 90 percent of the world’s winter rhubarb.

Rhubarb is a vegetable, although it is considered a fruit in the United States for legal reasons. It is native to Siberia and arrived in Britain in the 13th century. Valued for its medicinal applications, only the rhubarb root was used for centuries. The plant’s red stalks and dark green leaves were bitter and considered inedible. (The leaves contain a high amount of oxalic acid, which can be poisonous.)

These days the rhubarb stalk is used in pies, puddings and sauces. It’s sweet, but not too sweet. To make rhubarb pie filling, you cut the rhubarb into inch-long pieces and simmer it with some water, sugar and jam.

Rhubarb has become an ingredient of traditional British food. For his television program, Chef White visited Hulme to talk about rhubarb’s transformation. He arrived at her farm and surprised her in a packing room where she was boxing up bright red stalks of rhubarb for shipment. After they introduced themselves, Hulme took White into one of her wooden
rhubarb sheds. She opened a low door, and the two of them ducked under the lintel and through a plastic screen. Holding a flashlight and leading the way, Hulme said, "Step into my secret world."

Inside the shed were rows and rows of rhubarb stalks growing out of potting boxes. Everywhere bright red stalks topped with small yellow leaves were reaching for the ceiling. The room was dark except for the light of a few candles. It was also quiet. White likened the space to a church. Of course, Hulme’s shed is hardly a church. But it is full of a vital energy. Perhaps this is why Hulme is described as a priestess.

The word priestess also implies Hulme has a special power. Indeed, Hulme uses the shed to produce rhubarb using a classic English technique called forcing. Forcing means inducing the plant to grow according to the grower’s schedule. Forcing was widely used in England during the 19th century. Gardeners covered plants with large terra cotta pots, called forcing pots, or brought plants into dark cellars. The process was applied to flowering plants and vegetables.

It was a happy accident that extended this process to rhubarb. At the beginning of the 19th century, rhubarb was cultivated at the Chelsea Physic Garden in London. The stalk and leaves were not used at all. Legend has it that in 1817, workmen accidentally covered rhubarb roots with soil. Weeks later, the soil was removed and someone noticed delicate pink shoots
of rhubarb stalks growing from the roots. These stalks were discovered to be much less astringent than the typical rhubarb stalks.

Horticulturalists took note of this development and began experimenting with alternative methods of growing rhubarb plants. *The Royal Horticultural Society of Great Britain’s Quarterly Journal of Art, Science and Literature* records an account of forced rhubarb cultivation in its 23rd Volume, dated 1827. On March 6th it states:

A paper from the Society’s gardener was read, upon the best method of forcing rhubarb for tarts and fine specimen of the leaves, forced in this manner, were placed upon the table. The method was simply this: The seed is sown in a rich border, in the first week of April; the young plants are kept thin and clean during the summer, and before the growing season is fully over, they are taken up, put into common forcing pots, three in each, and placed in a shaded border till they are wanted. In January or February they are put in the forcing-house and submitted to a very gentle heat. This is the most simple, effectual, and certain method of forcing rhubarb yet known.

The English quickly developed an appetite for rhubarb. Thanks to forcing, it became one of the only fresh foods available at the beginning of spring. It soon became one of the most popular vegetables available. Yorkshire was an ideal location for large-scale cultivation. Local coal mines provided an energy source for heating the forcing sheds. Farmers used the local wool industry’s wool waste, an excellent source of nitrogen, to fertilize their fields. By the end of the 19th century Yorkshire rhubarb was big business. There was a special express train run from Yorkshire to London between Christmas and Easter.
Not much has changed at the surviving Yorkshire forcing sheds since the 1820s. In today’s rhubarb farms, like those owned by Hulme, the plants spend two years out in the open, absorbing sunshine and storing energy. The energy is stored as carbohydrates in the plants’ roots. After two years, the plants are moved into the forcing shed.

The rhubarb sheds are kept warm and very dark. This tricks the rhubarb roots into growing to full size within a few weeks. These conditions trick the rhubarb plants into acting like seeds. Seeds start in the same conditions – it’s warm and dark in the earth – and use their stored sugars as energy to grow out of the ground and towards the sun. The rhubarb plants in the forcing sheds “think” they are back in the ground. They grow upwards, trying to get to the sun, and put the energy that would normally be used for growing leaves into growing tall. Visitors to the forcing sheds of Yorkshire say they can hear the sound of popping as the rhubarb stalks emerge from the bud. Weeks later, the rhubarb is harvested by hand. Harvesters work in the candlelight, prying the arm-length rhubarb stalks from their roots. By the end of the harvest, usually in March, the root stock is spent and used as compost.

Forcing a plant deprives it of photosynthesis and weakens the plant. In the case of rhubarb, however, the effects of forcing have positive outcomes for culinary uses. The rhubarb plants grown in the dark, relying on stored energy, put their energy to use growing stalks, not leaves. (The leaves they grow are a pale yellow and atrophied in comparison to rhubarb grown
outdoors.) If there were sunlight present, the plants would grow leaves to absorb sunlight.

Since there is not any light present in the forcing shed, the rhubarb puts its energy to use growing longer stalks. As a result, the stalks are sweeter.

Chef White got his rhubarb from Hulme that day. He seems to have liked it. In 2011 Marco Pierre White was serving rhubarb crumble in his Dublin restaurant. The ingredients for the dessert were rhubarb, flour, butter, sugar, and almonds. It’s served with ice cream.
1. What has Yorkshire, England long been known for?

   A  restaurants with Michelin stars
   B  early season rhubarb
   C  Chef Marco Pierre White
   D  late season rhubarb

2. What does the author describe in the passage?

   A  how Chef White won three Michelin stars
   B  popular recipes for rhubarb pies, puddings, and sauces
   C  medicinal applications of the rhubarb root
   D  “forcing,” a process of growing rhubarb

3. The business of forcing rhubarb helped grow the Yorkshire economy. What evidence from the passage supports this conclusion?

   A  “There was a special express train run from Yorkshire to London between Christmas and Easter.”
   B  “Yorkshire was an ideal location for large-scale cultivation.”
   C  “Not much has changed at the surviving Yorkshire forcing sheds since the 1820s.”
   D  “On the drive to the farm, White remarks that he remembered a time when every home in Yorkshire had a rhubarb patch.”

4. Why might rhubarb harvesters work in candlelight?

   A  to keep the plants “thinking” it is nighttime
   B  to keep the electricity costs low
   C  to keep the plants “thinking” they are underground
   D  because rhubarb plants grow faster in low light

5. What is this passage mostly about?

   A  the reason why rhubarb was only used for medicinal purposes until the 19th century
   B  how Marco Pierre White became England’s first celebrity chef
   C  the pros and cons of growing rhubarb using the forcing technique
   D  the growing technique that popularized rhubarb as a British vegetable
6. Read the following sentences: “The rhubarb plants grown in the dark, relying on stored energy, put their energy to use growing stalks, not leaves. (The leaves they grow are a pale yellow and **atrophied** in comparison to rhubarb grown outdoors.)”

What does “**atrophied**” mean?

A  withered  
B  damp  
C  robust  
D  bloated

7. Choose the answer that best completes the sentence below.

Using the “forcing” method, rhubarb plants are forced to grow in the dark. __________, the plant grows stalks which are sweeter than normal.

A  However  
B  As a result  
C  Initially  
D  For instance

8. What does “forcing” mean as used in the passage?

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9. How do rhubarb farmers trick the plants into acting like seeds?

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10. Explain the effects that “forcing” has on rhubarb plants.

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Teacher Guide & Answers

Passage Reading Level: Lexile 1020

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8. What does “forcing” mean as used in the passage?

**Suggested answer:** Forcing means inducing the plant to grow according to the grower’s schedule.

9. How do rhubarb farmers trick the plants into acting like seeds?

**Suggested answer:** Farmers trick rhubarb plants into acting like seeds by putting the plants in warm, dark conditions, which are the same conditions that seeds experience in the earth.

10. Explain the effects that “forcing” has on rhubarb plants.

**Suggested answer:** Rhubarb plants grown during forcing don’t develop large leaves, because they are not exposed to sunlight and therefore do not grow leaves to absorb sunlight. Instead, they grow upwards, trying to get to the sun, and put the energy that would normally be used for growing leaves into growing tall. Without sunlight, the plant cannot photosynthesize. This causes the plant to weaken.