Rose Hips & Olive Oil Whole Wheat Bread

This is a 100% whole grain spelt* bread made with ingredients inspired by the Galliard loaf. The source of vitamin C is wild rose hip powder; the oil and lecithin are introduced as extra virgin olive oil. The combination softens and lightens the bread.

Wild rose hips from *Rosa canina* are unusually fragrant and soothing as jams and jellies and as a tea. They are also particularly rich in vitamin C, and other valuable micronutrients. During World War II, in Britain, supplies of citrus fruits were cut off and there was concern that children would not have enough vitamin C in their diet to stay healthy. Claire Loewenfeld who was working as a nurse in a children's hospital at the time, knew that wild rose hips would be a good source of the vitamin. She wrote letters to the *Times* newspaper in London suggesting that people go out into the countryside and collect wild rosehips, and organize the preparation of rose hip syrup. As result rose hip syrup became widely available in Britain as a vitamin C concentrate. It was continually produced in England until the early 1960s. Personally I make it now using dried organic rosehips and water, definitely omitting sugar. The dried rosehips are first simmered in water until the rosehips are soft. This mixture is passed through a sieve to remove any seeds, tough skin or seed parts, and finally concentrated to a jam or jelly consistency. In this way the delicate rosehip flavor is available to enjoy without any masking sugar sweetness.

Here in the USA, organic dried rose hips are imported from Chile. They can be obtained in a finely powdered form that is ideal for use as an ingredient in breads. Your own rose hip concentrate could also be used. The Internet quoted concentration of vitamin C in dried rosehips is 10-20 mg per gram. Since 40 mg vitamin C per 500 grams of flour seems to produce a pleasing loft to bread, then 2-4 grams of rose hip powder is the suggested amount to add to bread based on 500 grams of flour. This would be 0.4-0.8% rosehip powder based on the flour weight.

It is tempting to speculate that rose hips were used in Ancient Egyptian bread. Rose water is used as a popular flavoring in modern Egyptian and Middle Eastern cooking. Rosewater was used as perfume in Ancient Egypt, so surely the rose hips would also have been known and used in cooking.

*Rose Hips and Olive Oil bread can also be made using whole Sonora wheat flour.

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Amounts for one loaf made with 500 grams or 16 ounces whole wheat flour

Ingredients	Bakers per Cent	Grams	Ounces	Cups & spoons
Stone ground whole	100	500	16.00	3 cups
spelt wheat flour				-
Enzyme active	1	5	0.16	1 teaspoon
wheat malt				_
Extra virgin Olive	4	20	0.64	2 tablespoons
oil				
Salt*	1.5	7.5	0.24	1½ teaspoons
Rosehip powder	0.8	4	0.13	1 teaspoon
Water	70	350	11.20	1½ cups
Mature sourdough	10	50	1.60	2 tablespoons

^{*}Salt at 1.5% is a personal preference and is lower than the more usual 2%.

- [] Measure whole wheat flour and enzyme active malt into mixing bowl. Mix to evenly distribute the malt.
- [] Measure olive oil, and add to flour in mixing bowl. Rub the olive oil into the flour using the back of a fork until evenly distributed. *Or use a food processor fitted with a metal blade, or a stand mixer fitted with a flat beater.*
- [] Measure salt and rosehips in a jug or bowl and mix well. Measure water into the jug. Stir to dissolve the salt and evenly disperse the rose hip powder.
- [] Measure the sourdough into the jug containing salt, rose hip powder and water. Mix well and add to the flour in mixing bowl.
- [] Mix until flour is completely incorporated. *Extensive mixing is not required at this stage*. Fist dough down in a bowl, cover it, and leave to rise until doubled in volume; for example this may take 6 hours at 77°F (25°C) or 12 hours at 68°F (20°C). Waiting longer than the time for the dough to double will result in a tangy sourdough flavor.
- [] Fist dough down. If dough is too stiff, add more water, perhaps 5-10% more. Knead until smooth and tight by continuously folding the dough from the edge to the center, and fisting it down. *Or knead with a paddle or dough hook in an electric stand mixer*. Form a dough ball and allow it to rest for 15 30 minutes.
- [] Re-shape into dough ball. Gently coat dough ball in whole spelt wheat flour, and set to rise upside down in a basket, lined with a loose cloth. Cover the dough with the ends of the cloth. Allow the loaf to rise until doubled in volume, approximately 2 hours.
- [] At least one hour ahead of bake time, preheat and equilibrate oven at 475°F, with baking tiles or pizza stone in place.
- [] Sprinkle a small amount of flour on the risen loaf and invert it out of the basket onto an oven peel. Make a single lengthwise cut about half an inch deep, along the center of the loaf.
- Reset oven to 400 425°F. Bake the loaf for 40-45 minutes.
- [] Allow loaf to cool to room temperature before slicing. Store in a covered container at ambient temperature.