

## *Fine Bread Crumbs from Whole Wheat Sourdough Bread*

A stock of fine dry breadcrumbs, made from a plain 100% whole grain sourdough loaf, is useful as a quick source of pre-cooked grain for bread making. Replacement of 5-25% of the whole wheat flour in a bread formula with pre-cooked grain such as breadcrumbs provides a source of rapidly fermentable carbohydrate. The effectiveness is increased when a small amount (up to 1%) of enzyme active malted (sprouted) grain flour is also included in the formulation. The advantages in the bread dough of this combination are a boost to the sourdough fermentation, a softening of the final bread and much-reduced rate of staling.

*When you make the replacement remember that the breadcrumbs already contain salt. Therefore you can reduce the salt by 5-25% according to how much breadcrumb is used in your recipe.*

The source of bread for breadcrumbs can be yesterday's whole wheat bread, or even several days old bread provided it has not turned moldy. Crumbs dry faster than slices of bread and are produced rapidly in a food processor. The drying stage makes use of a food dehydrator, which is preferable to an oven because there is a draft to carry the moisture away from the drying breadcrumbs at a relatively low temperature. The plastic sheets fitting the trays on most food dehydrators for making fruit leathers, can be used to hold breadcrumbs during the drying. Provided the breadcrumbs are well dried they can be stored in a closed container at cool room temperatures for several months, although they will be best used within one month.

Hard red wheat and spelt varieties of wheat provide dark colored crumbs. Light colored soft white wheat varieties make lighter colored breadcrumbs. Including the crust in breadcrumbs intensifies both the color and flavor of the breadcrumbs.

Plain whole wheat sourdough breadcrumbs are very useful in other cooking, and can open the way to wonderful savory stuffing and sauces and also to such classic desserts as Queen of Puddings, Scandinavian Apple Cake and Hazelnut Tort.

<i>Ingredients</i>	<i>Amounts</i>
Plain 100% whole wheat bread, at least 24 hours old	One loaf

[] *Optionally cut the crust from the bread, particularly if light colored crumbs are desired.*

[] *Break the bread into pieces and drop them into a food processor fitted with a blade. Process until the breadcrumbs are evenly small. Note that they will be processed again to complete fineness after they have been dried.*

[] *Spread the breadcrumbs thinly, an eighth to a quarter inch thick, on trays that fit your food dehydrator. Dry at 140 – 150 °F for perhaps 3-4 hours.*

[] *Optionally test for complete dryness, by weighing the top tray with breadcrumbs at hourly intervals, during the drying. When the drying is complete, the weight will be the same as that obtained at the end of the previous hour. Note that complete dryness may not be achieved in humid weather.*

[] *Allow the dried breadcrumbs to cool to room temperature in the dehydrator*

[] *Transfer the dry breadcrumbs to a food processor and process until very fine breadcrumbs are produced.*

[] *Store fine breadcrumbs in a closed container at cool room temperature.*