

Bread Leavening Cheat Sheet

By Sweet and Savory Breads

Active Dry Yeast	Instant Yeast <small>(Quick-rise, Fast-acting, Rapid rise, or Bread Machine Yeast)</small>	Baking Soda	Double Acting Baking Powder
<i>Composition</i>			
<p><i>Saccharomyces cerevisiae</i> Live yeast cells that consume sugar in the dough to create carbon dioxide bubbles which causes dough to rise.</p>	<p>Different strain of yeast cells than active dry yeast, and in smaller granules so they rehydrate easier. Also may have enzymes, ascorbic acid and/or dough conditioners.</p>	<p><i>Sodium bicarbonate</i> Fine white alkaline powder</p>	<p>Baking Soda + Acidic Salt + Cornstarch</p>
<i>Proofing</i>			
<p>Must be proofed or rehydrated in warm liquid (100°–110° F MAX) and pinch of sugar. Use a thermometer for best results. If bubbles do not form within 10 minutes, yeast is dead. Throw it out and start over.</p>	<p>None needed. Can be added without proofing in liquid. Add straight to dry ingredients.</p>	<p>None needed. Baking soda is activated immediately upon contact with the acid. Place dough immediately in oven after mixing.</p>	<p>None needed. To Test Freshness: Add 1 tsp. to 1 cup of hot water. Mixture should bubble, otherwise its dead. Throw it out and start over.</p>
<i>Rise</i>			
<p>Dough will need two rises once in a greased, covered bowl and again after dough is formed into final shape. Warmer environments cause yeast to be more active and rise faster. Lower temperatures and longer rising times creates more flavor.</p>	<p>Due to smaller size, different strain of yeast, the added enzymes and/or dough conditioners the dough will rise faster. Only one rise may be necessary. Shape loaf after kneading.</p>	<p>Place dough immediately in the oven, and it will continue rising while baking.</p>	<p>Leavening is activated and begun during mixing, and majority of rise is during baking in the oven.</p>
<i>Common Problems</i>			
<p>Too much salt inhibits yeast growth, but should never be eliminated. Dough needs to be punched down between rises in order to redistribute yeast and release alcohols. Too much alcohol will poison the yeast. Liquid over 140° will kill yeast. Altitude: Above 3000 ft, dough will rise faster, check more often. Flour, dough and bread will dry out faster. Add flour slowly.</p>	<p>Same problems can occur as with Active Dry Yeast. Flavor and structure can be affected in comparison due to quicker rise. Do not use in place of Active Dry Yeast. Too much salt inhibits yeast growth, but should never be eliminated.</p>	<p>Needs an acid to activate such as lemon juice, molasses, buttermilk, vinegar, yogurt. If there is not enough acid there will be a bitter/alkaline flavor present. Altitude: Above 3000 ft, reduce ½ teaspoon per each teaspoon specified.</p>	<p>Sometimes baking powder alone will cause the finished product to taste too acidic. In this case, baking soda should be used to balance the ph and the flavor.</p>
<i>Uses</i>			
<p>This is the most commonly used yeast and has been used for generations. Capable of refrigerating dough overnight. Long slow rise = more fermentation and flavor. ex. Artisanal breads</p>	<p>Used often in bread machine recipes since it can be mixed directly with the dry ingredients. Also can be used when time is at a premium by eliminating one rise. Not recommended for refrigerated methods. ex. Bread Machines</p>	<p>When an alkaline environment is desired for browning. ex. Pancakes</p>	<p>Used in recipes that do not contain an acid. ex. Quick breads</p>
<i>Storage</i>			
<p>Store in a cool dry place in pantry or refrigerator. Use within 3-4 months.</p>	<p>Store in a cool dry place in pantry or refrigerator. Use within 3-4 months. More perishable than active dry yeast.</p>	<p>Cool dry place away from excess moisture in an airtight container. Lasts between 6 months to 1 year after opening. Tip: Write date opened on the side with a permanent ink marker. Do not refrigerate or freeze.</p>	<p>Cool dry place away from excess moisture in an airtight container. Replace every 3 months for optimum performance. Tip: Write date opened on the side with a permanent ink marker. Do not refrigerate or freeze.</p>
<i>Recipes to Try</i>			
<p>Homemade Bread Bowls</p>	<p>English Muffins</p>	<p>Guinness Bread</p>	<p>Coconut Lime Quick Bread</p>
<p>These are general guidelines only. Always read the instructions on your package and/or read the brand's website FAQ's.</p>			
<p>www.SweetandSavoryBreads.com</p>			