



Church of God Ministries
Spanish Fort, Alabama

Leavening Agents

Leaven is any agent that produces fermentation and causes dough to rise, by causing the formation of carbon dioxide gas to bubble into and spread throughout the dough. This is accomplished either chemically (as with baking soda) or biologically (as with yeast).

Baking Soda: a crystalline alkaline salt that gives off gas when an acid is added.

The following are different types of baking soda:

- Sodium bicarbonate, also known as “Saleratus.”
- Potassium bicarbonate, or potash.
- Ammonium carbonate, or “baker’s ammonia.”
- Ammonium bicarbonate, also known as “hartshorn.”
- Baking Powder (baking soda + acid-forming ingredients + starch filler).
- Sourdough starter (a wild yeast colony that is maintained with flour and moisture).
- Yeast (a single-celled fungi, used to leaven).

Not Leavening

* Autolyzed yeast: A yeast that has ‘self-destructed’ and is sterile – incapable of leavening.

* Brewers Yeast: A dead form of yeast that cannot leaven bread; a ‘nutritional’ yeast.

* Torula Yeast: A dead yeast that cannot leaven bread, considered a ‘nutritional’ yeast. Also hickory smoked torula yeast. Used as a savory seasoning that imparts smoky aroma to foods.

* Yeast extract(s): Derivatives of yeast, which are sterile and cannot leaven bread.

* Cream of Tartar: Tartaric acid – potassium bitartrate or potassium hydrogen tartrate. This is an acid used to combine with baking soda. By itself, this is not leavening.

* Tartrate powder: Phosphate powder or sulfate powder – usually added with cream of tartar. By itself this is not leavening.

- * Alum: A metallic double salt, usually added with cream of tartar. Most common is sodium aluminum sulfate (SAS or sulfate powder), and potassium aluminum sulfate (or potash alum). By itself this is not leavening.
- * Sorbitan monosterate: A flavor and texture enhancer. Not leaven of itself.
- * Sodium Caseinate: A milk protein, not a leaven
- * Sodium Silicoaluminate: A fine powder that is used to keep cocoa, salt and other products dry, not a leaven
- * Polysorbate 60: A preservative; not a leaven.
- * Egg whites: Not a leavening agent. While beaten egg white can be stirred into dough, it does not spread through dough as leavening does and is not leavening.
- * Steam or air (such as in popovers or angel food cake). The same principle as egg whites (above) applies; there is no leavening agent mixed through the dough.