

FOOD STORAGE

Spring will soon arrive, and many of us will begin the annual chore of "spring cleaning." This is an excellent time to look at your kitchen arrangement and make sure you are storing your staples in a location that promotes optimal quality. While cleaning out or rearranging the cabinets and pantry, you may wonder which foods are still usable and which should be thrown out.

Storing staples properly helps extend the shelf life, or how long an ingredient can be kept and still achieve the expected results in performance and flavor. This includes dry goods such as flour, sugar, spices, and baking powder as well as liquids like vinegar and oil. You should also consider canned foods, which can suffer from loss of color, flavor, texture, and nutritive value when stored too long or at too warm temperatures.

It's important to store shelf stable items, or non-perishable foods, in cool, clean areas of the kitchen. Cabinets are generally installed around a kitchen, but every cabinet is not automatically a good place to store staples and canned foods. Above the range and refrigerator, and near the dishwasher are generally too warm for keeping food at top quality.

Make a habit of looking for storage information on package labels. Remember, ingredients lose quality over time, even when properly stored. Many manufacturers include helpful dating systems on staple ingredients. Some ingredients have an expiration or "best if used by" date. It may also help you to keep a permanent marker handy to mark the purchase date when you bring items home, especially those without a "use by" date.

With all food products, use the FIFO rule - "first in, first out." If you find you have multiple containers of a particular food, organize them with the most recently purchased in the back so you use the oldest product first. This will help you reduce the loss of items that have passed their prime. Also note the foods you have on hand to resist the temptation to purchase more, especially if they are on sale.

As you organize your cabinets and pantry, notice what you have tossed and try to buy smaller sizes the next time.

The following storage tips provide a range of times generally cited for maintaining best food quality, depending on the age of the product when it was purchased and how long it has been opened. Pantry foods may be safe beyond the recommended storage time, but quality may be affected.

Baking Powder should be stored tightly covered in a dry place for 12 to 18 months or until the expiration date on container. Make sure your measuring utensils are dry before you dip into the container. If you question the quality of baking powder, try this. Mix one teaspoon baking powder with 1/3 cup hot water. If it foams vigorously it still has rising power.

Baking Soda should be stored tightly covered in a dry place for 12 to 18 months or until the expiration date on container. Make sure measuring utensils are dry before dipping them into the container. To test the freshness of baking soda, place 1-1/2 teaspoons in a small bowl. Add one tablespoon vinegar. If it fizzes, it will still help leaven a food.

White Flour should be stored in a cool, dry place. By preserving the flour's moisture content in a clean, airtight container or freezer bag, it can be stored for up to 12 months at room temperature. Exposure to low or high humidity will affect the flour's moisture content and may influence the outcome of a recipe. All-purpose and bread flour will keep up to two years at 40°F in your refrigerator. They can be stored indefinitely in the freezer.

Whole Wheat Flour contains ground wheat germ which has oil that can become rancid at room temperature after only three months. Refrigerate whole wheat flour if you want to keep it longer. It will maintain good quality for about 6 months in the refrigerator and up to 12 months in the freezer.

If you choose to refrigerate or freeze flours, remember to allow your measured portion to come to room temperature before using it in baked goods, so it doesn't affect the action of other ingredients such as baking powder or yeast.

White Granulated Sugar should be stored under normal conditions, tightly closed and in a dry place. The quality of sugar is maintained indefinitely when stored properly. If white granulated sugar absorbs moisture, it becomes hard. Usually lumps can be easily smashed. If the sugar forms a hard lump, put it in a sturdy food-quality bag and pound it with a hammer or the flat side of a meat mallet.

Brown Sugar will maintain maximum flavor for four to six months, but it's very important to store brown sugar in an airtight container to retain its moisture and prevent it from becoming hard. Either store it in the original plastic bag, tightly closed, or transfer it to an airtight container or a heavy moisture-proof plastic bag, such as a freezer bag, and place in a cool spot.

When buying an airtight storage container for flour or sugar, keep in mind that five pounds of flour equals about 20 cups, and five pounds of sugar equals just over 11 cups. Decide where you will store the food and determine the height of a container needed to fit. Select a container that is easy to use when you need to measure out ingredients. Also, check to be sure the lid is easy to open and close tightly.

Spices and Herbs shelf life times will vary depending on storage and quality of the spice or herb. Generally, it is thought that herbs or ground spices retain their flavor for up to one year, and whole spices for two years.

Air, light, moisture, and heat speed flavor and color loss of herbs and spices so store spices and herbs in tightly covered containers in a dark place away from sunlight, such as inside a cupboard or drawer.

To see if a ground spice is potent - smell it. If its aroma is immediate, strong, and spicy, it should still add flavor to your foods. For a whole spice, such as a clove or cinnamon stick-break, crush, or scrape the spice before you smell it. Be careful smelling pepper and chili powder, since they can irritate your nose. For herbs, crush a small amount in your hand and smell it. If the aroma is still fresh and pleasant, it can still flavor foods. If there's no smell or an off smell - toss it. Get in the habit of smelling your spices and herbs periodically. Learn what fresh smells like, so you can begin to detect if the spices and herbs are getting old. Also check the herb containers for insects. Unwanted visitors are sometimes found in opened bottles of dried parsley and dill after a period of time.

Use these simple suggestions to keep unwanted moisture out of spice and herb containers:

- Always use a dry spoon to remove spices or herbs from their container.
- Never sprinkle directly from the container into a steaming pot.
- Avoid storing above or near the stove, dishwasher, microwave, refrigerator, sink or a heating vent.

The next article will focus on canned foods and other pantry staples like chocolate, oils, shortening, and vinegar.

Resource: "Pantry Food Storage" from The Ohio State Extension Service, <http://ohioline.osu.edu/hyg-fact/5000/pdf/5401.pdf>