Baby Powder

Talcum powder (baby powder) is made from talc, a mineral made up mainly of the elements magnesium, silicon, and oxygen. As a powder, it absorbs moisture well and helps cut down on friction, making it useful for keeping skin dry and helping to prevent rashes. It is widely used in cosmetic products such as baby powder and adult body and facial powders, as well as in a number of other consumer products.

Corn Starch

Cornstarch is a fine, powdery starch that is made out of corn. The cornstarch is actually made from the endosperm of the corn, which makes up most of the kernels that we eat when enjoying popcorn or corn on the cob. Cornstarch, also sometimes called cornflour, is produced by grinding, washing and drying the endosperm of the corn until it reaches that fine, powdery state. Cornstarch is gluten free.

Cornstarch has many culinary uses, but it is most often used as a thickener for sauces, gravies and fruit pie fillings. Cornstarch thickens very quickly and easily, and forms a clear sauce after cooking, rather than an opaque one. It has roughly twice the thickening power of flour, and is flavorless after cooking.

Baking Powder

Baking powder is a raising agent that is commonly used in cake-making. It is made from a base, bicarbonate of soda (baking soda), and an acid, cream of tartar (Potassium bitartrate), plus a filler like cornflour or rice flour which absorbs moisture.

The powder is activated when liquid is added, producing carbon dioxide and forming bubbles that cause the mixture to expand. For this reason, it is important to get your cake mixture into the oven quickly once the 'wet' ingredients have been added to the 'dry' ingredients.

Plaster of Paris

Known since ancient times, plaster of paris is so called because of its preparation from the abundant gypsum found near Paris. Gypsum Plaster is a fine white powder which hardens when moistened and allowed to dry. Plaster of paris is prepared by heating calcium sulfate dihydrate, or gypsum, to 120–180 °C (248–356 °F).

Plaster of paris does not generally shrink or crack when dry, making it an excellent medium for casting molds. It is commonly used to precast and hold parts of ornamental plasterwork placed on ceilings and cornices. It is also used in medicine to make plaster casts to immobilize broken bones while they heal. Some sculptors work directly in plaster of paris, as the speed at which the plaster sets gives the work a sense of immediacy and enables the sculptor to achieve the original idea quickly.

Sugar

Sugar is a natural ingredient that has been part of our diet for thousands of years. Sugars are carbohydrates that provide energy for the body. The most common sugar in the body is glucose which your brain, major organs and muscles need to function properly.

Some sugars are found naturally in foods (e.g. fruit, vegetables and milk) while others are used during processing and cooking.

Sucrose is often called table sugar. Made up from glucose and fructose, it is extracted from sugar cane or sugar beet and also naturally present in most fruits and vegetables

In addition to providing a sweet taste and flavor, sugar performs a variety of functions in food products. Sugar is used as a preservative, where sugar inhibits the growth of microorganisms. Sugar is used in baked goods, like cakes, to hold moisture and prevent staleness that is noticed when these foods dry out. In canned fruit and vegetables, sugar enhances texture and colors. Sugar is also used to prevent large ice crystals from forming in frozen sweet mixtures, like ice cream, and to support fermentation in products containing yeast, such as bread. In these roles and others, sugar is an important and versatile food ingredient.

Salt

Salt (NaCl, Sodium Chloride) is a natural mineral made up of white cube-shaped crystals composed of two elements, sodium and chlorine.

It is translucent, colorless, odorless and has a distinctive and characteristic taste.

Salt occurs naturally in many parts of the world in mineral form and has been mined for thousands of years.

Most people probably think of salt as simply a food seasoning. In fact, only 6% of all salt manufactured goes into food. We use salt in more than 14,000 different ways.

Some of the uses of salt:

Water Conditioning

Water is considered hard when it contains calcium & magnesium (hardness ions). Replacing them with 'soft' sodium ions softens the water avoiding scale build-up on hot water appliances

Industrial Chemicals

The greatest single use for salt is as a feedstock for the production of industrial chemicals and in total accounts for 68% of all the salt manufactured

Food Grade Salt

All animals, humans included, require both sodium and chloride for life and health. Since the body cannot manufacture either, it is important these essential nutrients form part of our daily diet

Highway Deicing

Salt is the most effective, readily available, and economical highway deicer in use today and accounts for 8% of all salt production

Paper Manufacturing

In paper making salt is used to manufacture caustic soda and chlorine. Caustic soda is used to process wood fibres and chlorine is used to bleach the pulp

Agriculture

Livestock, poultry and other animals need salt supplements as part of a nutritionally balanced diet to remain healthy and disease free

Baking Soda

Aka **bicarbonate of soda** or **sodium bicarbonate**.

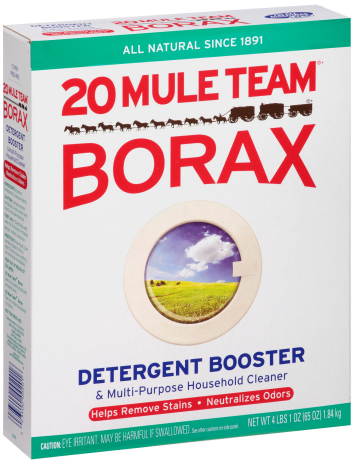
Baking soda is a BASE. When you mix baking soda (BASE) with vinegar (ACID) you get a chemical reaction (an eruption of bubbles!). A product of this reaction is carbon dioxide.

The same exact reaction happens in our cookies, cakes, breads, etc. When a recipe calls for baking soda (BASE), it usually calls for some type of ACID. Like buttermilk, brown sugar, yogurt, lemon juice, vinegar, cream of tartar, molasses, applesauce, natural cocoa powder, or honey. You need this ACID in the recipe to react with the baking soda, which in turn creates carbon dioxide and allows your baked good to rise.

Some everyday uses of Baking Soda (besides baking)
1. Cleaning- it is abrasive and works great for scrubbing grease off of pans, grills, etc.
Add it to the laundry. It will make your clothes cleaner and whiter.
2. Deodorizing- open a box in the fridge to absorb odors, sprinkle it in stinky shoes, sprinkle on the carpet before vacuuming.

***There are many, many more uses for baking soda…. This list is just a few.

Borax



Borax, also known as sodium borate, sodium tetraborate, or disodium tetraborate, is an important boron compound, a mineral, and the salt of boric acid. It is usually a white powder consisting of soft colorless crystals that dissolve easily in water.

Borax has a wide variety of uses. It is a component of many detergents, cosmetics, and enamel glazes. It is also used to make buffer solutions in biochemistry, as a fire retardant, as an anti-fungal compound for fiberglass, as a flux in metallurgy, neutron-capture shields for radioactive sources, texturing agent in cooking, and as a precursor for other boron compounds.

Borax was first discovered in dry lake beds in Tibet and was imported via the Silk Road to Arabia. Borax first came into common use in the late 19th century when Francis Marion Smith's Pacific Coast Borax Company began to market and popularize a large variety of applications under the famous 20 Mule Team Borax trademark, named for the method by which borax was originally hauled out of the California and Nevada deserts.

Borax occurs naturally in evaporate deposits produced by the repeated evaporation of seasonal lakes. Borax can also be produced synthetically from other boron compounds. Naturally occurring borax is refined by the process of re-crystallization.

Flour

Pronounce it: *fl-ow-er*

Flour is a powdery ingredient usually made from grinding wheat, maize, rye, barley or rice. As the main ingredient in bread, it is one of the most common and sought-after ingredients in the world.

Wheat flour is the most popular and versatile flour and there are many different varieties:
White flour, otherwise known as plain flour, contains about 75 per cent of the wheat grain, with most of the bran and wheat germ taken out. It is commonly used for cakes, pastries and biscuits. When used in cakes it is combined with a raising agent such as baking powder or bicarbonate of soda. It is also used in quick breads like soda bread, producing a more densely textured loaf. White flour is usually artificially whitened but you can buy an unbleached variety if you prefer which is an off-white color.