

Tab 1

Hello! Welcome to this Baker's Encyclopedia. This is a collective compilation of ingredients used around the world to help us bake in a new way. By learning from traditional techniques, perhaps we can make new things or shift our reliance from animal-based and resource-intensive ingredients.

Feel free to add ingredients and knowledge, with as much cultural context as possible. This is an open document in order to be as accessible as possible, so don't be weird or mean, okay?

Please add ingredients in alphabetical order, and use H3 formatting for an ingredient name.

Agar-agar

Frequently used as a vegetarian alternative to gelatin for setting jellies, puddings, and custard. It comes from seaweed and has traditionally been used in Japan and Southeast Asia for dessert making — often, the category of jellies are simply called 'agar'. It has a crisper, bouncy, gelled bite as compared to gelatin, and is mostly flavourless — a mild vegetal taste is detected when you use too much.

On the market, agar is available in strips, sheets, jelly premixes, and pure white powder. Recipes call, on the whole, for the pure agar powder.

Agar-agar has to be activated by bringing the solution with agar in it to a boil, thoroughly dissolving the powdered granules. Many traditional recipes heavily lean on coconut milk in agar recipes, which cannot be brought to a roiling boil without the fat splitting— hence a base solution with water/another liquid is heated first with the agar to fully dissolve, with the coconut product stirred in afterwards, slowly brought to a simmer.

Other names:

Kanten 寒天 (Japan)

Buckwheat flour

Buckwheat flour is commercially available in two varieties: dark (using whole buckwheat groats) and light (using hulled groats). These behave differently in recipes: the darker flour is more smoky, earthy and bittersweet, but yields a denser product; the lighter, while behaving closer to wheat in liquid absorbency, has a gentler nutty tone. These yield an almost shortbready, melt-in-the-mouth crumb.

Buckwheat flour has been used in many cultures over time, with roots in East Asia — used for steamed buns, noodles, and griddled cakes (粑粑).

Other names:

蕎麦粉 / そば粉 (sobako), qiao mai fen 荞麦粉

Citric acid

Citric acid is sold as a white powder.

It is most known for its preservative nature in packaged drinks, snacks, and candy as well as an emulsifier in commercially made ice cream. The most famous example is its use in salt and vinegar flavored chips. When swapping citrus, citric acid can be used to “acid-adjust” or increase acidity in beverages without compromising water content. However, it is not a straight replacement for citrus or vinegars; it lacks the body and freshness you would get from a lemon or lime.

Other names:

Sour salt

Coconut oil

Coconut sugar

Flaxseed

Sometimes used as a vegan egg “replacement” because of its binding properties when mixed with liquid. Use it ground, or mix whole seeds with boiling water (and then you can strain out the seeds if you want). It’s also high in fiber and omega-3s.

A typical flax egg = 1 tbs ground flax (7g) to 3 tbs water (45g, preferably warm/hot), left to stand for 5-10 minutes.

A gelled flax egg substitute = 50g whole flaxseeds + 480g water brought to a boil, let simmer for 1-2 minutes until coagulated and thick, and then strained.

Golden Syrup

Glutinous Rice Flour

Glutinous rice flour is ground from sticky rice, ubiquitous across many Asian cultures. It contains up to 98% amylopectin and is low in amylose, hence its free-flowing gelatinous structure. The doughs and batters with GRF are diverse across cooking methods: baked with, boiled, steamed, fermented, even fried as pancakes.

On the whole, products which call for glutinous rice flour are most reliably replicated using Thai brands of GRF: it’s superfine, consistent and silky from the wet-milled process (水磨).

Other names:

Mochiko, 'sweet rice flour', paeng khao niao แป้งข้าวเหนียว, nuo mi fen 糯米粉, chapssalgaru 찹쌀가루

Jaggery

Piloncillo

Psyllium Husk

This is a seed husk that typically comes "whole" or in a powder. It's used in gluten-free baking as a binder, because it forms a gel/mucilage when mixed with liquid. If substituting the powder for whole husk, use 75% by weight (i.e. 3g powder = 4g whole). Very high in fiber, so can be used as a laxative as well.

Sorghum flour

A gluten-free flour made from the cereal grain sorghum. Slight grassy flavor and sandy texture that can be balanced with all-purpose flour or a mix of gluten-free flours (e.g. a heavier one like oat and a starch like tapioca). Popular in Indian roti/dosa, sometimes used instead of teff for injera.

Other names:

Jowar (India), milo (Australia)

Links:

<https://kateray.substack.com/p/baking-with-sorghum>

Example recipes:

Tigernut flour

Technically a tiny tuber, tiger nuts are slightly sweet and a little nutty. Tigernut flour can be added to baked goods as a nut-free alternative to almond flour.

Other names:

Aya (Nigeria), chufa (Spain)

Example recipes:

Toasted Rice flour

Sticky rice grains are toasted and ground for a nutty pantry staple. Toasted rice flour can be used to thicken soups, braises, and warmed sauces. It is mixed at the last second in many

larb/laab dishes to add texture and a roasty quality to an otherwise cold-marinated dish. Similar uses as kinako (toasted soybean powder).

Other names:

Khao Khua (Thailand)

Toasted Soybean Flour

Other names:

Kinako (Japan)

Whole-wheat pastry flour

Cassava flour

Commonly used in GF baking circles, cassava flour is the powdered product of the tuberous root vegetable also called yuca/ubi kayu/singkong. It is much lighter than other alt. grains with a soft powdered consistency, finer than all-purpose flour (and hence often swapped 1-1) — but has a higher water absorbency rate. It is not the same as tapioca flour (tepung ubi kayu)

In Indonesia, a specific kind of cassava flour known as mocaf or tepung mocaf (modified cassava flour) has been gaining popularity for its easy swappage — frequently used in GF/vegan baking by Indonesian bakers, for chiffons, swiss rolls and beyond.

Masa harina

The dried and powdered version of fresh nixtamalized masa. Nixtamalization is a pre-colonization cooking technique in which corn kernels are cooked in an alkaline solution (sometimes in ash, though this requires more skill than with food-grade lime) until the outer hull of the kernel softens. The outer hull is then removed. Once dried—either at room temp over a period of a couple of days, in a low oven for several hours, or in a dehydrator—the kernels are ground through a food mill or high powered blender to make masa harina.

Masa harina is commonly used to make corn tortillas and all manner of Mexican and Latin American dishes. It is a thirsty flour and readily drinks up any liquid in a recipe. It's best to adjust the liquid in a baking recipe to make up for this. Masa harina brings a corn flavor in both savory and sweet applications; is naturally gluten free, and can be used as a thickener for savory sauces and in sweet components like pastry cream. Masa harina is distinct from corn flour and cornmeal.

Mung bean starch

Other names:

Tepung hoonkwe or hunkwe

Chickpea flour/Gram flour/Besan