

KEYSTONE HOUSEHOLD

THE SOVEREIGN HOUSEHOLD

A Working System for Money, Food, Privacy, and Readiness

Free chapter: Part Two, chapter 2, “What actually stores, and for how long.” The book has twenty-four chapters in four parts, sold in three editions. Every figure is checked against a public source, named at the end of the chapter.

FREE CHAPTER

2

WHAT ACTUALLY STORES, AND FOR HOW LONG

Shelf life is not a mystery, and it is not printed on the package. It follows from a handful of facts about the food and about the room it sits in. Once you know those facts you can predict what will keep and what will not, and you can stop either trusting or fearing the date on the can.

WHAT THE DATE MEANS

Federal law does not require a date on most foods. The exception is infant formula, which must carry a use-by date. Every other date you see, whether it reads “best if used by,” “sell by,” or “use by,” is placed by the manufacturer to describe quality, not safety. The U.S. Department of Agriculture’s Food Safety and Inspection Service says so plainly: foods that show no signs of spoilage are wholesome past the labeled date and may be sold, donated, and eaten.

That does not make dates useless. A date tells you when the maker expects flavor, texture, or nutrition to start slipping. For the 30-day and 90-day horizons, where you are eating as you go, treat dates as a rotation cue. For the one-year horizon, where foods are packaged for decades, the printed date is close to meaningless and the storage conditions are everything.

WHAT DECIDES SHELF LIFE

Four things in the food and four things in the room.

In the food: fat, moisture, acid, and whether processing has stopped the food’s own enzymes. Fat goes rancid, and it is the reason brown rice, whole wheat flour, and nuts do not keep. Moisture lets mold grow; dry foods for long storage should be at or under about 10 percent moisture, and grain above 12 percent will mold. Acid shortens the quality life of canned food, which is why tomatoes and fruit carry shorter figures than beans and meat. Processing matters: rolled oats keep because they are heat treated during rolling, which destroys the enzyme that would otherwise turn their oil rancid.

In the room: temperature, oxygen, light, and humidity. Temperature is the master variable, and it is the one you control most easily. Oxygen drives rancidity and keeps insects alive, which is why long-term packaging removes it. Light degrades both food and packaging. Humidity gets into paper and thin plastic and brings mold with it.

THE 30-YEAR FOODS

Under the right conditions, a short list of dry staples keeps for 30 years or more. The Church of Jesus Christ of Latter-day Saints publishes the list, drawn from research at Brigham Young University, and Utah State University Extension’s own studies agree with it.

Food	Shelf life, sealed and cool
Wheat	30 years or more
White rice	30 years or more
Dry corn	30 years or more
Pinto beans	30 years

Rolled oats	30 years
Pasta	30 years
Potato flakes	30 years
Dried apple slices	30 years
Nonfat dry milk	20 years
Dehydrated carrots	10 years
White sugar	Indefinite

“Sealed and cool” carries the whole table. It means moisture under 10 percent, oxygen removed with an absorber, a container that blocks air and light such as a #10 can, a foil pouch, or a food-grade bucket with a gasket lid, and a room at 75°F or lower. Cooler is better. Utah State’s work on white rice shows the spread: rice stored at a steady 70°F with oxygen absorbers keeps well for about 10 years, and the same rice in a cooler room keeps up to 30.

Two foods on the list deserve a note. Dry beans get harder as they age, so old beans need longer soaking and cooking, and very old ones may never soften and are best ground into flour. Even so, pinto beans stored for 30 years were rated acceptable by more than 80 percent of a taste panel for emergency use. And nonfat dry milk is the only milk on the list. Whole milk powder and buttermilk powder carry milk fat and do not store long.

THE FOODS THAT DO NOT KEEP

The same guidance lists foods that should not go into long-term storage however they are packaged: brown rice, whole wheat flour, pearled barley, dried meat, dried eggs, nuts, brown sugar, granola, chocolate, and bottled or canned butter. Nearly every one is on the list because of fat.

Brown rice is the clearest case. The bran layer that makes it a whole grain holds oil, and that oil turns rancid in about six

months on a shelf, according to the USA Rice Federation. Refrigeration or freezing extends it. White rice, with the bran removed, keeps almost indefinitely. Whole wheat flour runs three to six months unopened. Whole wheat berries, the same grain unground, run decades. Grinding exposes the oil.

Cooking oil is the hardest staple to store, and every household needs some. North Dakota State University Extension gives unopened vegetable oil about six months in the pantry and opened oil three to five months. Manufacturer dates often run longer, and cool, dark storage helps. Shortening in an unopened can keeps one to two years. The practical answer is not to try to store years of oil. Store a few months of it, buy it on rotation, and keep it cool.

CANNED GOODS

Commercially canned food sits between the two lists. The seal, not the date, is what protects it. Utah State's guidance is that canned food in metal or glass remains safe to eat as long as the seal is intact, regardless of age, although quality falls off over time. USDA gives the quality figures: high-acid foods such as tomatoes, fruit, and anything pickled keep their best quality for 12 to 18 months, and low-acid foods such as meat, fish, and most vegetables keep for two to five years.

The failures to watch for are physical. Discard any can that is bulging, leaking, badly dented, or rusted through, and any can that spurts liquid when opened or smells wrong. Do not let cans freeze; freezing bulges them and can break seams. Store them cool and dry, not above the stove, under the sink, or in a damp basement or garage.

SUGAR, HONEY, AND SALT

Sugar, honey, and syrup have an indefinite shelf life because nothing can grow in them. Manufacturers print dates of about two years for quality, and honey crystallizes, but crystallized honey is safe and lumpy sugar is still sugar. Store honey in glass or in lined cans; it is acidic enough to rust bare metal. Brown sugar holds moisture, hardens, and does not belong in long storage. Salt, kept dry, keeps indefinitely.

THE THREE SHELVES, IN PRACTICE

Put the figures together and the pantry sorts itself into three groups, and the groups line up with the horizons from chapter one.

Keeps for	Foods	Belongs in
Decades	Wheat, white rice, dry corn, beans, oats, pasta, sugar, salt, nonfat dry milk, sealed and oxygen-free	One-year horizon
Years	Canned goods, white rice and pasta in store packaging, honey, shortening	90-day horizon
Months	Oils, whole wheat flour, brown rice, nuts, crackers, cereal, brown sugar, anything with visible fat	30-day horizon

The rule for buying follows from the table. Match the food to the horizon it can survive. A case of oil belongs in the 30-day layer, where it will be used in weeks. A #10 can of oats belongs in the one-year layer, where it will sit for a decade. A household that buys years of the months-group foods is buying rancid food on a delay.

TEMPERATURE, AGAIN

Every figure above assumes a cool room, and every figure shrinks in a warm one. Utah State’s dry milk study shows how fast. Nonfat

dry milk held at 90°F developed off flavors within six months and was unacceptable by two years. At 70°F it was unacceptable after four years. At 50°F it showed minimal change after four and a half. The rule of thumb that shelf life halves for every rise of about 11°F is rough, but it points the right way. If you can choose between better packaging and a cooler room, choose the room.

DO THIS NOW

- 1** Move any food out of the garage, the attic, or the cabinet beside the stove. Put it where the thermometer from chapter one reads coolest.
- 2** Find every oil, nut, whole grain flour, and bag of brown rice in the house. Write today's date on each with a marker and put the oldest at the front.
- 3** Buy one sealed, long-term container of a 30-year food, a #10 can or a foil pouch of white rice, oats, or beans, and put it in the storage spot. That is the first unit of the one-year horizon.

SOURCES

- USDA Food Safety and Inspection Service, "Food Product Dating." fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/food-product-dating (accessed 2026-09-06)
- USDA Food Safety and Inspection Service, "Shelf-Stable Food Safety." fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/shelf-stable-food (accessed 2026-09-06)
- The Church of Jesus Christ of Latter-day Saints, "Long-Term Food and Water Storage." churchofjesuschrist.org/study/manual/emergency-preparedness/01-food-and-water-storage/03-long-term-food-and-water-storage (accessed 2026-09-06)
- Utah State University Extension, "7 Factors That Prolong Your Food Storage Supply." extension.usu.edu/news_sections/home_family_and_food/foodstorage (accessed 2026-09-06)
- Utah State University Extension, "Storing Wheat." extension.usu.edu/preserve-the-harvest/research/storing-wheat (accessed 2026-09-06)
- Utah State University Extension, "Storing White Rice." extension.usu.edu/preserve-the-harvest/research/storing-white-rice (accessed 2026-09-06)
- Utah State University Extension, "Storing Dry Beans." extension.usu.edu/preserve-the-harvest/dev/storing-dry-beans-1 (accessed 2026-09-06)
- Utah State University Extension, "Storing Dried Milk." extension.usu.edu/preserve-the-harvest/research/storing-dried-milk (accessed 2026-09-06)

- Utah State University Extension, "Storing Canned Goods." extension.usu.edu/preserve-the-harvest/research/storing-canned-goods (accessed 2026-09-06)
- Utah State University Extension, "Storing Sugars." extension.usu.edu/preserve-the-harvest/research/storing-sugars (accessed 2026-09-06)
- Utah State University Extension, "Food Storage Booklet." extension.usu.edu/preserve-the-harvest/files/Food-Storage-Booklet.pdf (accessed 2026-09-06)
- USA Rice Federation, "How to Store Rice." usarice.com/thinkrice/how-to/how-to-store-rice (accessed 2026-09-06)
- North Dakota State University Extension, "Food Storage Guide: Answers the Question, How Long Can I Store...?" ndsu.edu/agriculture/extension/publications/food-storage-guide-answers-question (accessed 2026-09-06)

The Sovereign Household: A Working System for Money, Food, Privacy, and Readiness.
Keystone Household, 2026.

This chapter may be shared as it is, in full, with this page attached.