THE FOOD SAFETY BOOK

What You Don't Know Could Kill You



Joe Kivett and Dr. Mark Tamplin with Dr. Gerald J. Kivett

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The Food Safety Book

First Edition, Paperback – published 2016

Constant Rose Publishing

ISBN 978-0-9791741-0-0

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Book design, Clay Rivers

Dedicated to the thousands of people who strive to keep our food supply safe, and the medical community who helps us recover from foodborne illness.

An ounce of prevention is worth a pound of cure.

-BENJAMIN FRANKLIN

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Disclaimer

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The publisher and author disclaim any personal liability, loss, or risk incurred as a result of the use of any information or advice contained in this book, either directly or indirectly.

Acknowledgments

The authors would like to thank:

Dr. Gerald J. Kivett for his valuable contributions to the foodborne illness section of this book.

Special thanks to Cris Novoa for the hundreds of hours of research she put into this project.

We would also like to thank Angie Ritti, Melinda Wilson, Priscilla Smith, and our friends and family who reviewed the book and provided beneficial feedback.

Jo McAtee for amazing proofing and editing contributions.

Our publisher, Clay Rivers, the final piece of the puzzle, who brought this book to life.

And finally,
Joe would like to thank his mom, Helen Kivett,
for being a great role model in the kitchen
and for always knowing.

Introduction

There are hundreds of websites, articles, books, and brochures that focus on food safety. Some have vast amounts of information, more than the average consumer needs or wants. Other sources are very specialized, with a great deal of information on a specific topic. We feel that *The Food Safety Book* offers consumers a simple, one-stop reference for basic issues regarding food safety.

The primary goal of this publication is to provide consumers with information that will help reduce their chances of falling victim to a foodborne illness (food poisoning). In addition, this guide will provide useful information about food storage and longevity that will save consumers valuable shopping dollars.

The Food Safety Book covers three key themes:

- 1 Food Safety: How to handle, thaw, cook, and store food in ways that reduce the likelihood of acquiring foodborne illness.
- 2 **Food Quality**: How to select, transport, and store food so that it remains fresh and tastes great.
- 3 **Food Longevity:** Easy-to-read charts that outline how long foods last in different environments (shelf, refrigerator, freezer).

Please keep in mind that the information contained in this publication should be used only as a guide. Most importantly, always use common sense before consuming food products—in other words, if you are not certain that your food is safe to eat, throw it away. **When in doubt, throw it out!** It's not

worth taking a chance on consuming bad food that could cause foodborne illness and lead to serious illness or even death.

We hope that the information in *The Food Safety Book* will enable you, your family, and your friends to enjoy safe, fresh, and great-tasting food.

Please note, this book is based on information and regulations found in the United States. Some data may not apply to other countries.

Finally, we ask that you tell your friends about this book so they, too, can enjoy safe eating. Friends and family can order the book on our website at www.thefoodsafetybook.com.

Sincerely, Joe Kivett Dr. Mark Tamplin Dr. Gerald J. Kivett

The Four Basic Concepts of Food Safety

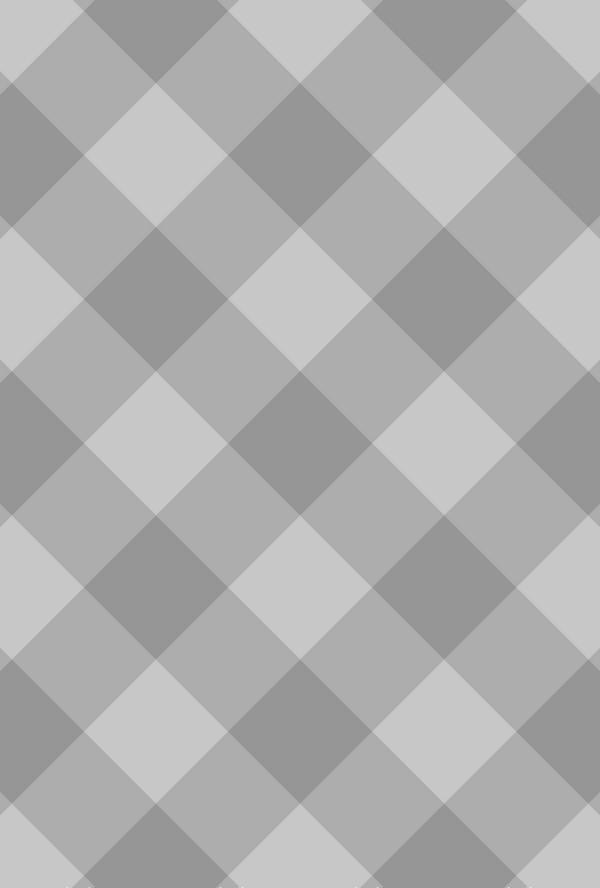
Public health reports indicate that a high percentage of foodborne illness in the U.S. is caused by mistakes made in the home. Consumers can prevent foodborne illness by following these four basic concepts:

- **Separate**: Keep raw meat, poultry, seafood, and their juices away from ready-to-eat food. Most importantly, contain meat juices within their package.
- Clean: Keep anything that contacts food (hands, countertops, cutting boards, etc.) clean and sanitary by regularly washing hands and using clean and sanitized food utensils and hand towels.
- **Cook**: Cook all foods to the proper minimum internal cooking temperature.
- **Chill or Heat**: Never leave perishable foods in the Danger Zone (between 40°–140°F) for more than two hours. If there is any doubt about the safety of food, do **not** eat it. **When in doubt, throw it out!**

Reminders:

- Check storage directions on labels.
- Refrigerate or freeze perishables right away.
- Check expiration dates.
- Use ready-to-eat foods as soon as possible.
- Check canned goods for damage.
- Keep appliances at the proper temperatures.
- Clean the refrigerator regularly, and wipe up spills immediately.
- Avoid cross-contamination (which can occur when bacteria is spread from one food to another).

- Keep foods covered.
- Be alert to spoiled foods (look, smell, taste).
- Place food in the refrigerator when marinating.
- Don't store food under the sink.



PURCHASING YOUR FOOD

Safely Selecting and Transporting Food Products Understanding Product Dating Filling the Shopping Cart

Egg Safety

Egg Classification

Fruits and Vegetables

Meat, Fish, Poultry, or Dairy

Refrigerated, Frozen, and Hot Deli Foods

Shelf-Stable Foods

Organic Foods

Bagging It

Loading the Car and the Ride Home

Safely Selecting and Transporting Food Products

The first step towards ensuring safe food begins at the grocery store. Checking product expiration, "best by," and "sell by" dates is essential for avoiding foodborne illness as well as food waste. Properly bagging your purchases and carefully transporting them home also will help ensure safe and healthy meals.

Understanding Product Dating

Experts estimate that \$165 billion in food in the United States is thrown away each year as a result of fear generated by product expiration dates. This represents approximately 30 percent of the U.S. food supply. Many consumers think that expiration dates are tied to how safe food is to consume; however, these dates are not related to food safety or increasing the risk of foodborne illness. The only exception is infant formula and baby food, which the USDA advises parents not to buy or use if it is past the "use by" date.

Examples of expiration dates include: "Use By," "Best By," "Best Before," and "Best If Used By." These dates are normally found on shelf-stable foods. They are created by manufacturers to provide a guideline for optimal flavor and quality. These dates do not indicate spoilage, nor do they necessarily suggest that the food is no longer safe to eat. Therefore, it is usually okay to consume shelf-stable food beyond the expiration date. For example, dry pasta will most likely taste the same a year after the expiration date. The best way to determine if unopened shelf-stable products that are beyond the expiration date are still of good quality is

to smell them and examine them. Foods can develop an off odor, flavor, or appearance due to spoilage bacteria. If a food has developed such characteristics, you should not use it for quality reasons. Remember, when in doubt, throw it out!

Adhering to these general food-dating guidelines does not guarantee consumers protection from foodborne illness. According to the USDA, bacteria can grow and lead to foodborne illness before and after the expiration date if food is not properly stored and handled.

Perishable and Nonperishable Foods

Foods are either perishable or nonperishable. Close attention should be paid to expiration dates on foods that are perishable, as late-origin consumption is attributed to the most prevalent cases of food poisoning. Foods with a low-acid and high-moisture content are perishable and include dairy, meat, fish, poultry, fruits, and vegetables.

All other foods are nonperishable and are sometimes called shelf-stable. Dates on nonperishable foods are not related to quality but instead are used to indicate peak freshness. This helps store managers know how long to keep these items on shelves and to ensure the product is consumed before losing its flavor, nutrients, and consistency/texture. Therefore, dates on nonperishable foods are more a matter of ensuring optimal taste.

Though food product dating is not federally regulated, more than 20 states require food product dating – especially for perishable foods. However, with the exception of baby food and infant formula, there are areas of the U.S. where food is often not dated.

The Difference Between Open Dating and Closed or Coded Dating

Open Dating "Open dating" refers to the use of a calendar date (11/1/17) as opposed to a code (1017-84BGD) or "closed date." Open dating appears primarily on perishable foods such as meat, poultry, eggs, and dairy products.

Closed or Coded Date This is a date coded by the manufacturers to track products, rotate stock, and determine when and where products were packaged, as well as enable the manufacturer to recall products, if needed. It would typically appear on shelf-stable products, such as canned or boxed foods, and does not indicate freshness or food quality.

Changing Dates It is legal for U.S. retailers to sell fresh or processed poultry and meat products past the package expiration date provided that the product is wholesome (not combined with other types of meat). Retailers also may legally change the date on fresh, wholesome meat that was cut and packaged in the store's meat department. It is not legal, however, to make changes to a label on any product that was packed under federal inspection. A product packaged under federal inspection may still be offered for sale, even with an expired date, as long as the food remains wholesome, but the expired date on the package may not be altered in any way or covered over with a different date.

Florida has specific practices pertaining to milk products. The shelf-removal date on milk products in the state of Florida can be no more than 10 days after the actual plant processing date. The product must be of a quality that permits it to be good for at least four and as many as seven days after the shelf-removal date. For example,

milk processed in Florida on November 1 will have a shelf-removal date of November 11. The milk should then be of good quality for up to five days beyond the shelf-removal date, provided the product has been stored at 40°F or below. Use this information when deciding whether to throw out dairy products that have been in the refrigerator past the shelf-removal date.

Keep in mind that the length of time a product remains good varies from product to product. The temperature of the various storage and transportation environments (delivery truck, grocery store, car, etc.) affects the quality of the product and plays a role in determining how long after the shelf-removal date a product remains suitable for consumption. In short, the colder the temperature, the longer the product will retain freshness. For more information on this, see the "Food Storage and Longevity Charts."

Egg Carton Dating The use of a "Sell By" or "Expiration" date on egg cartons is not federally required but may be necessary depending on the state where the eggs are sold. Cartons displaying the USDA Grade shield must show the "pack date" (when the eggs were washed, graded, and packed in the carton). This date appears as a three-digit code representing the day of the year, beginning with 001 (Jan. 1) and ending with 365 (Dec. 31). If a "Sell By" date is stamped on an egg carton with a USDA Grade shield, that date may not extend beyond 45 days of the pack date.

Eggs should always be purchased before the "Expiration" or "Sell By" date displayed on the carton and refrigerated in their original package in the coldest part of the refrigerator (not in the door) as soon as they arrive home. To ensure the best quality, consume eggs within three to five weeks of the

date of purchase. The "Sell By" date will usually elapse within that period of time.

Baby Food Federal regulation requires that all infant formula and many baby food products carry a "Use By" date. Dating of baby food is for quality as well as for nutrient retention. Infant formula and/or baby food should not be used past the "Use By" date.

Product Dating in General

Take time to check the date on the products you select. This will help ensure that you are purchasing wholesome and good-tasting food. While grocery stores strive to remove products that are outdated, it is up to you to make sure you don't purchase outdated food.

- The date should always be checked before a food product is purchased or consumed.
- Only purchase products that you plan to use before the "Use By" date.
- Questions about the date on a food product should be directed to a grocery store manager.
- Nonperishable foods can be safely consumed beyond the "Use By" date; however, the quality and taste may be somewhat compromised.
- If there is any question about the safety of a product, it should be thrown out!

Filling the Shopping Cart

Using a common sense approach to navigating the grocery store is key. For example, loading refrigerator, freezer, and hot-cooked items into the cart last will help prevent them from entering the temperature Danger Zone (between 40°-140°F). Also, pay close attention to the condition of packaging to avoid potentially contaminated or damaged products.

Egg Safety

Choose only refrigerated eggs, and make sure they are clean and in good shape. Open the carton to see if any of the eggs are cracked. If cracked eggs are found, select another carton that contains all uncracked eggs. Bacteria from a cracked egg can be transferred to the surface of a neighboring uncracked egg and then inside the uncracked egg, where bacteria can grow if the eggs are not properly refrigerated.

Egg Classification

There are a number of options to choose from when purchasing eggs, and egg carton labels can become a bit confusing. The following information, explaining the most common classifications of eggs available to consumers, is largely excerpted from the "egg-cyclopedia" at incredibleegg.org.

Conventional (no special labeling) Eggs laid by hens living in cages with access to feed, water, and shelter. The cages serve as nesting space as well as for production efficiency. In this type of hen house, the birds are more readily protected from the elements, from disease, and from natural and unnatural predators.

Cage-free Eggs laid by hens at indoor floor operations, sometimes also called free-roaming. The hens may roam in a building, room, or open area, usually in a barn or poultry house, and have unlimited access to fresh food and water,

while some may also forage for food if they are allowed outdoors. Cage-free systems vary and include barn-raised and free-range hens, both of which have shelter that helps protect against predators. Both types are produced under common handling and care practices, which provide floor space, nest space, and perches. Depending on the farm, these housing systems may or may not have an automated egg-collection system.

Free-range Eggs produced by hens that have access to outdoors in accordance with weather and environmental or state laws. In addition to consuming a diet of grains, these hens may forage for wild plants and insects. When in cage-free indoor enclosures, they are provided floor space, nesting space, and perches.

Organic Eggs produced according to national USDA organic standards related to methods, practices, and substances used in producing and handling crops, livestock, and processed agricultural products. Organic eggs are produced by hens fed rations having ingredients that were grown without most conventional pesticides, fungicides, herbicides, or commercial fertilizers. All organic eggs are free-range eggs and must meet all of the requirements for those. The USDA inspects the farms before they are allowed to use the "organic label." Due to higher production costs, lower volume per farm, and certification costs, organic eggs are more expensive than eggs from hens fed conventional feed. The nutrient content of eggs is not affected by whether or not the feed ration is organic.

Enriched Colony A production system that contains adequate environmental enrichments to provide perch space, dust bathing, or scratch areas, and nest space to allow the

layers to exhibit inherent behavior. Enriched colony systems are American Humane Certified.

Pasture-raised Eggs laid by hens that spend their days outside on fresh pastures rather than confined to cages or cage-free barns. Each bird is allotted 108 square feet of space where it can forage for grass and insects, living a life as close to natural as possible. Although some farms may claim pasture-raising, without the Certified Humane shield and the measure of space that's required to carry that shield, it's not true pasture-raising.

Vegetarian Eggs produced by hens fed a vegetarian diet with no animal byproducts.

White vs. brown eggs Simply put, the breed of hen determines the color of the egg's shell. Among commercial breeds, hens with white feathers and white ear lobes lay white-shelled eggs; hens with red feathers and red ear lobes lay brown eggs. Since brown-egg layers are slightly larger birds and require more food, brown eggs are usually more expensive than white. However, quality, flavor, and nutrition are not affected.

Omega-3 According to Consumer Reports, this designation indicates that hens were given feed that included flax, marine algae, fish oils, and other ingredients to boost the level of omega-3 fatty acid in their eggs.

Beware of the following label wordings that are basically empty claims:

Natural According to the USDA, this term simply means that nothing was added to the egg. All eggs meet this criterion.

Hormone-free, antibiotic-free No hormones or antibiotics are used in producing eggs for human consumption. Federal regulations prohibit the feeding of hormones to any kind of poultry in the U.S. Antibiotics are only rarely used when chickens are ill, at which time they seldom lay eggs. If antibiotics are used, FDA regulations require a withdrawal period for laying hens to ensure eggs are free of antibiotics.

Fruits and Vegetables

It is important to be selective when choosing fresh produce since many fruits and vegetables are highly perishable with a limited shelf life. Here are a few basic guidelines:

- Select the best-looking and freshest-smelling fruits and vegetables whenever possible.
- Always handle fruits and vegetables carefully. Although some items, such as cauliflower, may seem hardy, they actually are very delicate and may bruise easily.
- Ask your grocery store produce manager if you have a question about the quality of a fruit or vegetable.
- Never purchase fruits or vegetables that are bruised, shriveled, moldy, slimy, or have soft or brown spots. Also avoid fruits and vegetables that show signs of punctures or pest damage, have a foul smell, or contain a lot of liquid in the package (for some fruits, such as precut pineapple, it is okay to have liquid in the package). Attached leaves should not be wilted, and the color and texture of the produce should be appropriate for the type.
- It is not wise to "stock up" on fruits and vegetables. In most cases, they do not have a very long shelf life (exceptions include apples, citrus fruit, and potatoes).
- Don't get too caught up with tiny blemishes. Be smart; try to avoid unnecessary food waste.

Quality Grades for Fresh Fruits and Vegetables As a basis for trade, growers, shippers, wholesalers, and retailers make extensive use of the grade standards established for fresh fruits and vegetables by the U.S. Department of Agriculture (USDA). To a limited extent, these grade standards also are used in sales from retailers to consumers.

Although certain state laws and federal marketing programs require that certain fruits and vegetables be graded and labeled, the use of U.S. grade standards is voluntary. Packages of apples, pears, potatoes, and onions most often carry grade designations. Occasionally, other fruits and vegetables display grade designations.

The majority of fruit and vegetable packers grade their products, some even marking their packages with the grade. Note that if a package displays a grade, the packer is required under law to ensure that the product measures up to official grade requirements.

Below are the four grade designations for fruits and vegetables established by the USDA:

- **U.S. Fancy**: Premium quality, uniform shape, few defects. Only a small percentage of fruits and vegetables are packed in this grade.
- **U.S. No. 1**: Good quality, tender, fresh, free from bruises. This is the most commonly used grade for most fruits and vegetables.
- **U.S. No. 2**: Middle of the road; not as good as U.S. No. 1, but superior to U.S. No. 3.
- **U.S. No. 3:** The lowest grade practical to pack under normal commercial conditions. Still nutritious, but the appearance may not be as good as other grades.

Meat, Fish, Poultry, or Dairy

Consuming any meat, fish, poultry or dairy products that are less than fresh and wholesome can have potentially dangerous outcomes. Important information you should know when making your selections includes:

- Prevent cross-contamination, which occurs when harmful germs, like bacteria, get transferred from raw animal products to uncooked foods, such as fruits and vegetables. To prevent cross-contamination and foodborne illness, place raw seafood, meat, and poultry in plastic bags and keep them separated from other foods, either at the opposite end or underneath the shopping cart. This will help prevent their juices from dripping onto uncooked foods.
- Never select meat, fish, poultry or dairy products that feel warm to the touch or have a damaged or torn package. Place leaking packages in plastic bags.
- Select only pasteurized dairy products (milk, cheese, sour cream, yogurt, etc.). The pasteurization process ensures that no harmful bacteria will be present.
- Check the "use by" and "sell by" dates on all packages. Select packages with the most shelf life remaining.

Refrigerated, Frozen, and Hot Deli Foods

It is critical to ensure that hot and cold foods are not in the Danger Zone (between 40°-140°F) for more than two hours. Therefore, use the strategic approaches listed below when shopping for these items.

• Shop for refrigerated foods, frozen foods, and hot deli items last. Always keep cold foods cold (40°F or below)

and hot foods hot (140°F or above).

• Select only frozen food products that are frozen solid.

Shelf-Stable Foods

While these products offer greater longevity than other food items, there are still a number of things to consider when making your selections.

- Shop for shelf-stable foods (items stored in the pantry and cupboards) first.
- Purchase only cans that are in good condition. Never purchase cans that are swollen, bulging, leaking, or dented.
 Big dents can bend the metal, cause cracks in the can, and allow bacteria to get inside and grow.
- Always select cans and packages that appear to be new. Dusty cans and torn labels may indicate old stock.

Organic Foods

Previously only found at health food stores, organic foods are becoming increasingly available at local supermarkets. But what exactly qualifies food to be labeled "organic"? For meat, poultry, eggs, and dairy products to be considered organic, they must come from animals raised without the use of antibiotics or growth hormones; organic fruits and vegetables are grown without the use of chemical pesticides or irradiation. A government-approved certifier must inspect the farm where the food is grown in order to ensure total compliance with USDA organic standards before the food can be labeled organic.

Organic foods should be handled the same as non-organic foods. Organic foods are just as susceptible to microbial

contamination as non-organic foods.

Bagging It

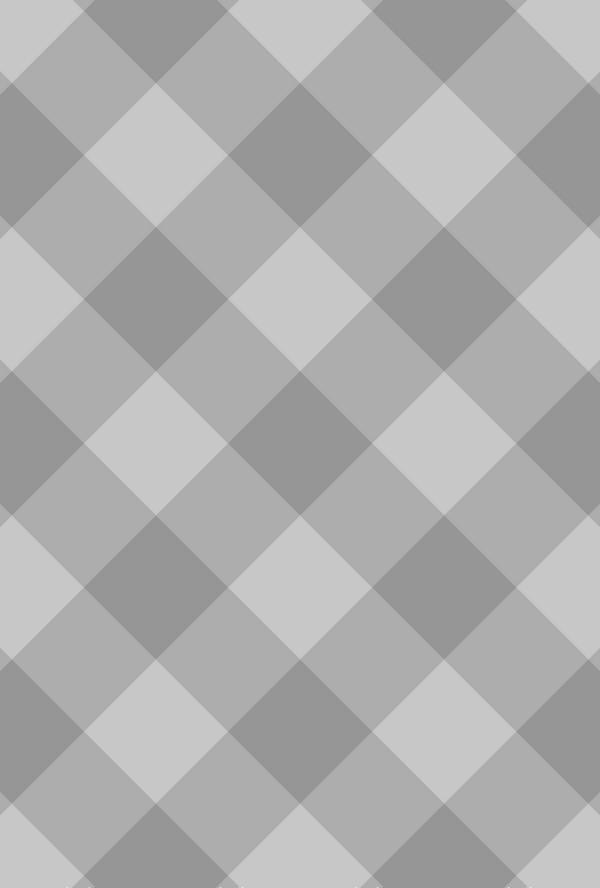
The next step toward ensuring your food's safety comes at the checkout counter. Proper packing of items is essential in maintaining their integrity.

- Always bag meats, fish, and poultry in a separate bag away from other foods.
- Bag cold and frozen items together. This will help maintain their proper temperature.
- Separate nonfood products, such as cleaning solutions, detergents, soaps, shampoo, lighter fluid, and charcoal, from food products.

Loading the Car and the Ride Home

Since cold foods need to remain at a temperature of $40^{\circ}F$ or below, they should be placed in the coldest part of the car (normally the back seat with the air conditioning on during the summer and the trunk during the winter).

Grocery shopping should always be the last stop on a person's list of errands, and perishable items should be put away within 30 minutes of leaving the grocery store. If this is not possible, a cooler with ice should be used to store perishable items during the ride home.



AN "A TO Z" GUIDE TO FRESH FRUITS AND VEGETABLES

Fruits Vegetables

An "A to Z" Guide to Fresh Fruits and Vegetables

These charts provide information about where to store your food and how long it will remain fresh and maintain ideal quality. The longevity of food is determined by several factors including origination, transportation, storage locations, and storage temperatures. These charts should be used only as a guide. Remember, **when in doubt, throw it out!**

Much of the information in the "A to Z" Guide comes from the Food Keeper consumer brochure with permission from the Food Marketing Institute. This brochure was developed by the Food Marketing Institute with the Cornell University Institute of Food Science, the USDA's Meat and Poultry Hotline, and the FDA's Center for Food Safety and Applied Nutrition.

Acai Berries				
Storage location:	Freezer (as puree only)			
Storage length:	5 years			
Availability:	Fresh fruit not easily accessi-			
	ble and highly perishable;			
	once harvested must be			
	eaten or transported to pro-			
	cessing unit			

Apples

Selection: Firm, crisp, well-colored, no

bruises or soft spots

Storage location: Shelf, refrigerator, or freezer

Storage length: Shelf: 1-2 days

Refrigerator: 3 weeks

Freezer: 8 months

Availability: Year-round

Apricots

Selection: Plump, firm but not hard,

golden-yellow color

Storage location: Shelf or refrigerator Storage length: Shelf: Until ripe

Refrigerator: 2-3 days

How to ripen: Keep in a paper bag in a

dark, cool place for 2 to 3

days. Avoid letting the apri-

cots touch each other.

Availability: June to July

Avocados

Selection: Skin green to almost black,

thin (California) or thick (Florida), smooth or rough, round

or oblong, fresh-looking, firm

but not hard

Storage location: Shelf or refrigerator

Storage length: Shelf: Until ripe

Refrigerator: 3-4 days (skin

will blacken)

How to ripen: Place in a brown paper bag

and store at room tempera-

ture; the process can be accelerated by adding a

banana or an apple to the

bag.

Availability: January to April (California),

July to January (Florida)

Bananas

Selection: Firm, bright in appearance,

free from bruises and brown

spots

Storage location: Shelf, refrigerator, or freezer

Storage length: Shelf: Until ripe

Refrigerator: 2 days (only

after banana is ripe, skin will

turn brown)

Freezer: 1 month (whole,

peeled)

How to ripen: Keep in temperatures between

60°F and 70°F to ripen. Higher

temperatures cause bananas

to ripen too rapidly. A banana is at its best eating quality

when the solid yellow color is

specked with brown.

Availability: Year-round

Helpful tip: Refrigeration turns banana

skins black, but the quality of

the fruit is not affected.

Berries (strawberries listed separately)

Selection: Bright, clean, fresh appear-

ance; solid and plump; no

mold or wetness; no stems or caps (except strawberry,

gooseberry, and currant)

Storage location: Refrigerator or freezer

Storage length: Refrigerator: 1-2 days

Freezer: 4 months

Availability: May to August (exact season

varies by type)

Helpful tip: Most berries are very fragile

and must be inspected care-

fully when purchased.

Cantaloupe

Selection: Stem gone; thick, coarse, and

corky netting/veining; yellowish-buff, gray, or pale

yellow color between netting

Storage location: Shelf (uncut until ripe), refrig-

erator (cut when ripe), or

freezer (melon balls)

Storage length: Shelf: 1-2 days until ripe.

Refrigerator: 3-4 days (for ripe

or cut cantaloupes)

Freezer: 1 month (melon

balls)

How to ripen: Leave at room temperature

for 2 to 4 days to complete ripening. A ripe cantaloupe will have a yellowish cast under the netting, a pleasant aroma, and yield slightly to light thumb pressure on blossom end of the melon.

Cut cantaloupe must be refrigerated.

Availability: Year-round

Helpful tip: If uncut (whole) cantaloupes

are left at room temperature, they will soften and become

juicier.

Carambola (Starfruit)

Selection: Light green to yellow,

smooth waxy surface

Storage location: Shelf or refrigerator

Storage length: Shelf: 2-3 days until ripe

Refrigerator: 2 weeks

Availability: Year-round

Helpful tip: Buy green and wait for fruit

to turn yellow; effective as a

garnish.

Cherimoya

Selection: Fresh, firm, medium size,

greenish-yellow, conical

shape

Storage location: Shelf or freezer (pureed

or juiced)

Storage length: Shelf: until ripe

Freezer: several weeks

How to ripen: To accelerate ripening, place

in a paper bag and set in a warm spot, like on top of the

refrigerator.

Availability: October

Cherries

Selection: Bright; plump; good color for

type; firm but not hard, juicy,

or dry

Storage location: Refrigerator or freezer

Storage length: Refrigerator: 1-2 days

Freezer: 4 months

How to ripen: If cherries have not reached

mature size and full color, set

on kitchen counter or place in

a paper bag.

Availability: Year-round

Coconuts, Fresh

Selection: Heavy for size; no cracks; no

indents that are damp, moist or moldy; should slosh with

liquid and sound full when

shaken

Storage location: Shelf, refrigerator, or freezer

Storage length: Shelf: 1 week opened; up to 4

months unopened at room

temperature

Refrigerator: 2-3 weeks opened; 4 days if grated; store in a tightly sealed con-

tainer

Freezer: 6 months if opened

or shredded only

Availability: Year-round; peak from Octo-

ber to December

Dates

Selection: Oval to cylindrical; golden-

yellow, amber, bright red, or

brown

Storage location: Shelf (in airtight container),

refrigerator, or freezer (tightly

wrapped)

Storage length: Shelf: 4 weeks

Refrigerator: 6-12 months

Freezer: 1 year

Availability: September to March

Helpful tip: Avoid dates with crystalized

sugars.

Dragon Fruit (Pitaya)

Selection: Bright, even-colored skin;

usually dark red in color; not

too soft or mushy; blotches

may indicate fruit is overripe

Storage location: Refrigerator (uncut in paper

bag) or freezer (as pulp)

Storage length: Refrigerator: 3 months

Freezer: 3 months

How to ripen: If very firm, ripen for a few

days at room temperature.

Availability: Summer and early fall

Helpful tip: Its flavor is a cross between

kiwi and pear.

Durian

Selection: Firm stalk, light-colored

spikes with no dark brown patches or white between

spikes

Storage location: Shelf, refrigerator, or freezer

Storage length: Shelf: 2-3 days

Refrigerator: several days

Freezer: 3 months

How to ripen: The fruit is unripe if it has no

odor. To ripen, store in a warm

place in an airtight container.

Availability: Year-round frozen

Helpful tip: Has a naturally very strong,

unpleasant odor.

Figs, Fresh

Selection: Clean and dry with smooth,

unbroken skin; soft and yield-

ing to the touch but not

mushy

Storage location: Refrigerator (in plastic pouch)

or freezer

Storage length: Refrigerator: 2-3 days

Freezer: 10-12 months

Availability: May to December

Helpful tip: Store in separate container

away from vegetables; overripe figs will have a bad smell.

Grapefruit

Selection: Firm; heavy for size; smooth,

thin skin

Storage location: Shelf (if using within 1 week)

or refrigerator (if keeping

more than 1 week)

Storage length: Shelf: 7-10 days

Refrigerator: 1-2 weeks

Availability: Year-round; peak from

November to May

Helpful tip: Pink grapefruit is generally

sweeter than white varieties.

Grapes

Selection: Well-colored, plump, firmly

attached to stem, no brittle

or dry stems

Storage location: Shelf, refrigerator (unwashed

in a plastic bag), or freezer

(whole)

Storage length: Shelf: 1 day

Refrigerator: 1 week Freezer: 1 month

Availability: Year-round

Helpful tip: Grapes do not ripen after

they are picked. Do not get them wet; wash them just

before serving.

Guava

Selection: Medium firm and fragrant,

bright green to light yellow

Storage location: Shelf, refrigerator (when ripe),

or freezer (as puree)

Storage length: Shelf: 2-5 days (or until ripe)

Refrigerator: 3-4 days

Freezer: 10-12 months

How to ripen: Keep in a paper bag with an

apple at room temperature.

Availability: Year-round

Helpful tip: May be eaten fresh or used

to make preserves.

Honeydew Melon

Selection: Soft, velvety texture; slight

softening at blossom end;

pleasant aroma; yellowishwhite to creamy rind color

write to creamy find cotor

Storage location: Shelf (uncut until ripe), refrig-

erator (cut when ripe), or freezer (melon balls)

Storage length: Shelf: 1-2 days

Refrigerator: 3-4 days

Freezer: 1 month

How to ripen: Place in a paper bag with an

apple until ripe; a hollow sound when the melon is

thumped and a sweet aroma

indicate ripeness.

Availability: Year-round; peak from June

to September

Kiwifruits

Selection: Firm; plump; fuzzy light-

brown skin that gives slightly

to the touch

Storage location: Shelf or refrigerator

Storage length: Shelf: Until ripe

Refrigerator: 3-4 days (ripe

kiwi only)

How to ripen: Ripen at room temperature,

or place in a paper bag with an apple or banana or in a

ripening bowl to speed up

ripening process.

Availability: Year-round

Helpful tip: The skin is edible, but the

fruit is usually served peeled.

Kumquats

Selection: Firm, smooth, bright orange

color with attached stem

Storage location: Shelf, refrigerator, or freezer

(as puree)

Storage length: Shelf: 3-4 days

Refrigerator: 3 weeks

Freezer: 6 months

How to ripen: If the skin is still a bit green,

the fruit will ripen at room

temperature.

Availability: January to September

Helpful tip: The skin is edible.