



# BAKING WITH WALNUTS

## A GUIDE FOR RETAIL BAKERS AND COMMERCIAL BAKERIES



[walnuts.org](http://walnuts.org)





## WALNUTS ARE A VERSATILE INGREDIENT USED IN A VARIETY OF BAKERY FOODS,

from handcrafted desserts to commercially produced pan breads. Walnuts deliver flavor, texture and a familiar ingredient that consumers love.

Who hasn't had walnut brownies during the holiday season? Or, noshed on walnut chocolate chip cookies for a late-night snack. These products showcase walnuts' value in bakery foods, however, this versatile tree nut can do so much more than sweet treats.

Walnuts are the perfect value-added ingredient for premium breads to boost nutritional value and protein content. They also can be blended with water to provide a dairy-free creamer in plant-based bakery foods, or ground into a paste or nut butter to be used as a filling.

Walnuts are truly a versatile ingredient in bakery foods. Consumers love them for their flavor and texture; bakers love them for their functionality and ability to elevate any bakery food.

## 3 REASONS WHY CALIFORNIA WALNUTS ARE PERFECT FOR BAKERY FOODS

### 1 FLAVOR

Walnuts impart a unique and subtle nutty flavor profile to bakery foods that complements both sweet goods and bread products. Walnuts possess a fairly mild flavor, but they also have a complex profile that includes tangy, acidic, buttery and sharp notes. The dual nature of the walnut — its sharp-flavored skins and a rich interior — enables it to play two roles in the pairing game. The bitter notes allow walnuts to combine with sweeter and higher-fat foods, balancing lighter citrus flavors.

### 2 TEXTURE

Walnuts have the perfect bite. Neither too hard nor too soft, they are the ideal inclusion in everything from food bars to artisan breads to brownies. With walnuts available in sizes ranging from whole pieces to walnut meal, food manufacturers have the ability to tailor the perfect mouthfeel in bakery foods using walnuts. Plus, walnuts' pliable texture makes them a great medium for seasonings in a nutritious snack.

### 3 PERMISSIBLE INDULGENCE

When a customer chooses to consume most bakery foods, they are seeking to indulge. Why not provide them with indulgence while still delivering nutritional properties? Walnuts deliver both nutrition and indulgence. Walnuts meet the criteria for a "healthy" food based on the important nutrients they provide, according to a September 2022 announcement from the U.S. Food and Drug Administration (FDA) detailing a new proposed definition and criteria for healthy foods. This announcement, released in conjunction with the White House Conference on Hunger, Nutrition, and Health, marks the first time the criteria for "healthy" has been updated since the 1990s<sup>1</sup>.

<sup>1</sup> <https://walnuts.org/blog/walnut-community/walnuts-pave-the-way-for-clean-ingredient-plant-forward-alternatives-in-2021/>







# CHOOSING THE PERFECT WALNUT FOR BAKERY FOODS

## WALNUT SIZES

Walnuts come in a variety of shapes and sizes, giving bakers the ability to tailor the bite of a specific bakery product based on the size of walnut used. Common sizes and applications include:

### WALNUT HALVES

Use walnut halves in products that best demonstrate its natural shape and visual appearance. Applications include garnishing and decorating baked goods, pies, granolas and trail mixes.

### LARGE PIECES

Use larger walnut pieces in applications where large nut pieces are desired for texture and appearance. Typical applications include energy bars and baked good toppings.

### MEDIUM PIECES

Use medium walnut pieces in products where equal flavor and texture is needed throughout the product. Medium pieces are perfect for baking mixes, artisan breads and sweet good inclusions where a visual and textural appeal are important.

### SMALL PIECES

Use small pieces in thick and crispy cookies, as well as in pan breads where texture is used to create an enjoyable eating experience. Small pieces work especially well in premixed bakery blends because the small size allows for even distribution throughout the entire mix allowing the nut flavor and texture to come through with every bite.

### WALNUT MEAL

Walnut meal can be used to partially replace gluten-containing flour, reduce carbohydrate content, increase fiber and help create richer textures. Meal can also be used in toppings and crumb crusts.

### ROASTED WALNUTS

Roasting walnuts heightens the flavor and aroma while increasing the crunchy mouthfeel. Roasted walnuts work well in applications that will not be further baked such as no-bake energy bars and ready-to-eat snack mixes.

## WALNUT COLORS

California walnuts are available in a range of colors, from extra light to amber, and blends in between. With each color variation also comes a range of flavor components.

### Light Walnuts

- Earthy notes
- Mild flavor
- Subtle tannins
- Greater availability

### Light Amber Walnuts

- Robust flavor
- Round tannins
- Slightly sweet finish







# STORING AND HANDLING CALIFORNIA WALNUTS

Walnuts’ shelf life can be affected by temperature, light and humidity. When stored properly, they can easily be kept for up to one year. Follow these tips to maintain the high quality, freshness, flavor and nutritional value of walnuts.

- Always store walnuts in airtight packaging and away from foods with strong odors.
- Rotate inventory, practicing First In, First Out protocols for food safety.
- For storage up to six months, refrigerate walnuts at 32°F to 41°F at 65% relative humidity. For storage longer than six months, freeze at 0°F.
- For commercially packaged foods with a shelf life of longer than six months, products should be packaged in materials that do not allow light or air to come into contact with the product.
- If buying large pieces, walnuts should not be broken up or ground until right before use
- The surface material of the grinder or chopper: inert materials reduce the nuts’ susceptibility to oxidize (stainless steel is better suited than steel or similar materials)
- Walnuts coated with chocolate, starges, gums, egg whites and sugar will have a longer shelf life because they are protected by a coated exterior.

# PURCHASING CALIFORNIA WALNUTS

Walnut halves and pieces are available in 25 lb. corrugated boxes lined with poly bags. Smaller kernel sizes are usually available in 30 lb. boxes. Suppliers also ship in 1,000 lb. to 2,000 lb. containers, #10 tins and other industrial sizes.

► **For information about where to source premium California walnuts, visit the Food Professionals section on walnuts.org and view our handler’s list.**

# NUTRITION IN A NUTSHELL

California walnuts are a whole food contributing many beneficial nutrients to the diet. Simply put, 90% of consumers recognize walnuts as a nutritious food.

## OMEGA-3 FATTY ACIDS

Walnuts are the only nut that has an excellent source of the plant-based omega-3 alpha-linolenic acid (ALA). Once ounce of walnuts offers 18 grams of total fat with 2.5 grams of monounsaturated fat and 13 grams of polyunsaturated fat, including 2.5 grams of ALA.

## HEART HEALTH

Walnuts are a heart-healthy food<sup>1</sup>, certified through the American Heart Association’s Heart-Check program.<sup>2</sup> Heart disease is the leading cause of death for both men and women in the U.S.<sup>3</sup> The good news is that many of the risk factors associated with heart disease can be controlled with dietary and lifestyle changes. Since 1993, published researchers have been investigating how eating walnuts affects various heart health markers such as LDL (“bad”) and HDL (“good”) cholesterol, blood pressure, inflammation and plaque formation. For more information on walnuts health benefits, visit [www.walnuts.org/nutrition](http://www.walnuts.org/nutrition).

## PROTEIN AND FIBER

An ounce of walnuts contains four grams of protein and two grams of dietary fiber.



<sup>1</sup> Supportive but not conclusive research shows that eating 1.5 ounces of walnuts per day, as part of a low saturated fat and low cholesterol diet, and not resulting in increased caloric intake may reduce the risk of coronary heart disease. One ounce of walnuts provides 18g of total fat, 2.5g of monounsaturated fat, 13g of polyunsaturated fat, including 2.5g of alpha-linolenic acid, the plant-based omega-3.

<sup>2</sup> Heart-Check Certification does not apply to scientific research by an organization other than the American Heart Association, unless expressly stated.

<sup>3</sup> CDC. Heart Disease Facts. <https://www.cdc.gov/heartdisease/facts.htm>



# A WALNUT MERCHANDISING CALENDAR FOR RETAIL BAKERS

This merchandising calendar offers retail bakers hints, tips and inspiration on how to incorporate walnuts in baked goods from New Year’s Day to New Year’s Eve and everything in between.

## FEBRUARY

- » AMERICAN HEART MONTH
- » VALENTINE’S DAY

California walnuts are certified through the American Heart Association’s Heart-Check program as a heart-healthy food. Walnuts are the only tree nut considered an excellent source of omega-3 alpha-linolenic (ALA) at 2.5 grams per ounce, which research has shown many be key for reducing which research has shown many be key for reducing the risk of cardiovascular disease. February is home to both American Heart Month and Valentine’s Day, one of the biggest baking days of the year.

February is also Great American Pie Month, and walnuts give bakers the versatility to add both sweet and savory ingredient combinations in plant-forward bakes.

### American Heart Month Recipe MAPLE WALNUT ENERGY BALLS

These American Heart Association certified<sup>1</sup> quick-to-prepare no-bake balls combine walnuts, oats, dates and maple syrup. They’re rolled in diced walnuts for added crunch.



### Valentine’s Day Recipe

#### SWEET AND SALTY CHOCOLATE WALNUT BARK

Everyone wants chocolate for Valentine’s Day, and this recipe is perfect for retail bakers looking to create a convenient, grab-and-go treat for consumers to bring home to their special someone.

## APRIL

- » EASTER

One of the biggest retail bakery holidays of the year — Easter — brings endless possibilities for pies, cakes and treats. Personalization and comfort are trending for consumers who are ready to celebrate the holiday, and cupcakes are a great way to please both the individual and the entire gathering at the same time.



### Easter Recipe

#### CARROT WALNUT CUPCAKES WITH LEMON BUTTERCREAM FROSTING

Satisfy everyone’s sweet tooth with these cupcakes made with a base of walnuts, carrots and pineapple. Don’t want to mess with individualization? The recipe can also be adapted into cake form for customers who wish to celebrate traditionally.

### Easter Recipe

WALNUT MACARONS WITH LIMONCELLO BUTTERCREAM  
Spring-inspired, Easter approved. These melt-in-your mouth macarons will delight your customers, thanks to California walnuts, limoncello and refreshing lemon zest.



## MAY

- » NATIONAL WALNUT DAY

May is chock full of reasons to celebrate, reflect and enjoy the summer sun surrounded by friends and family. Globally-inspired recipes are hot in the United States, and Cinco de Mayo is an excellent way for retail bakeries to highlight the festivity Stateside.

May also welcomes Mother’s Day, and we all know the best way to honor moms: sweet goods. Last, but certainly not least, May 17 is our day: National Walnut Day. You know what to do!



### National Walnut Day Recipe

#### APPLE HONEY WALNUT CAKE

Walnuts are showcased in this statement cake, as a part of the batter and as a crunchy, eye-catching topper. Complete with a honey glaze and your customers will be celebrating National Walnut Day with this bake for years to come.

<sup>1</sup> <https://www.heart.org/en/healthy-living/company-collaboration/heart-check-certification>



## OCTOBER

### » NATIONAL COOKIE MONTH » HALLOWEEN

Sink your teeth into one of the biggest retail bakery months of the year. Frightfully good cookies and dastardly desserts make up for some nutty Halloween options in the retail bakery space.



#### **National Cookie Month Recipe** GLUTEN-FREE WALNUT BROWNIE COOKIES

Chopped California walnuts are folded into the batter along with chocolate chips, brown sugar and vanilla in this frighteningly good gluten-free cookie recipe.



**Halloween Recipe**  
SPOOKY ENERGY BITE BATS  
Walnuts, chocolate chips and oats are combined to create these fun bites that are sure to fly off bakery shelves.

## NOVEMBER

### » THANKSGIVING

Thanksgiving is prime time for pies, tarts, cakes and other desserts perfect for busy bakeries that take pre-orders. Stock up now for your customers with these made-with-walnut faves.



#### **Thanksgiving Recipe** WALNUT PUMPKIN CREAM CHEESE TART

A fun alternative to pumpkin pie, walnuts are used throughout this part pumpkin, part cheesecake dessert: in the crust, in the filling and as a crumble on top.



**Thanksgiving Recipe**  
WALNUT STREUSEL PUMPKIN PIE  
Classic pumpkin pie gets a new twist with a crunchy walnut streusel topping.



**Thanksgiving Recipe**  
GLUTEN-FREE PUMPKIN WALNUT MUFFINS  
Looking to serve your customers a Thanksgiving morning treat? These muffins are perfect and carry flavor notes of pumpkin spice and toasty California walnuts.

## DECEMBER

### » CHRISTMAS » HANUKKAH » KWANZAA » NEW YEAR'S EVE

It's beginning to look like the grand finale, the pinnacle of the retail bakery year — December holidays. Holiday baking is a staple of many families, but for those too busy to gather in their own kitchens, they travel to their corner bakeries for the next best thing — your cakes, cookies, tarts, pies and everything in between.



**Holiday Recipe**  
MINI GINGERBREAD CHEESECAKES WITH CANDIED WALNUTS  
A holiday classic, gingerbread, is combined with walnuts, making for a unique twist on a nostalgic favorite. Customers will delight in these bite-sized treats, complete with a walnut graham cracker crust and topped with walnuts candied with sugar and cinnamon.



**Holiday Recipe**  
WALNUTTY EGGNOG CRANBERRY BREAD  
It's a season of gatherings and long-held traditions, and nothing is more of a holiday tradition than eggnog. We've designed eggnog with a twist, in the form of Walnutty Eggnog Cranberry Bread. This recipe calls for studded, lightly toasted walnuts and topped with a delicious eggnog glaze.



**Holiday Recipe**  
CALIFORNIA WALNUT AND APRICOT RUGELACH  
Rugelach are a regular pastry at Hanukkah and New Year celebrations, and they're a perfect addition to your holiday baking lineup. The crescent-shaped treats are made with California walnuts, a cream cheese pastry and filled with marmalade and spices like ginger or cardamom.



# WALNUTS IN COMMERCIAL BAKING

Walnuts have flavor, functional and marketing benefits in a variety of bakery categories, from cookies to pan breads. In packaged foods, walnuts provide premium positioning and enhanced flavor and texture.



## CATEGORY ANALYSIS: COOKIES

Walnuts have always had a home in the cookie aisle, adding texture to chocolate chip cookies or playing the star role in a Chinese Walnut Cookie. To home bakers, walnuts connote quality. To commercial bakers, walnuts make cookies premium and indulgent, with added nutritious attributes.

### WHAT’S TRENDING

- **Permissible Indulgence:** Clean-label cookies are filling the demand for consumers who want to snack responsibly. Walnuts play an important role in these products as a clean-label inclusion with nutrition attributes.
- **Thin and Crispy:** This style of cookie has dominated supermarket shelves, and walnuts give these types of cookies an engaging and unique bite.

### BEST IN CATEGORY



#### CHOCOLATE CHIP COOKIE WITH WALNUTS KODIAK CAKES

Popular “permissible indulgence” brand Kodiak Cakes’ Thin and Crispy line of cookies is made with all the natural ingredients that consumers love (butter, sugar, chocolate) and none of the ingredients they don’t (processed ingredients). It’s the perfect permissible indulgence. The Chocolate Chip Cookie with Walnuts variety has an exceptional bite, as the chocolate chips and walnuts complement the cookie’s crispiness.



## CATEGORY ANALYSIS: FOOD BARS

From an on-the-go snack to a complete meal replacement, the food bar category has grown at the same impressive rate as the amount of eating occasions for these products. Walnuts play a versatile role in food bars, serving as a source of ALA omega-3 in functional bars, delivering indulgence to clean label dessert-style bars and providing texture to a traditional granola bar.

### WHAT’S TRENDING

- **Better-for-You Bars:** A bar chock full of nuts provides protein, good fats and all natural calories. A bar chock full of walnuts provides all these things plus plant-based ALA omega-3 fatty acids.
- **Uniqueness:** The food bar category is extremely crowded and competitive, but few products have capitalized on walnuts’ ability to provide a point of distinction and make a product stand out.



### BEST IN CATEGORY



**CHOCOLATE WALNUT COLLAGEN BAR  
CAVEMAN FOODS**  
Need a chocolate fix? Grab these Chocolate Walnut bars, which have 5 grams of grass-fed collagen and all the flavor of a brownie with less guilt. The bars have 11 grams of protein and are gluten-, grain- and soy-free.



**BANANA BREAD BLISS  
TASTE BARS**  
These made-with-walnuts Banana Bread Bliss bars present the perfect nostalgic taste of home: banana bread. The low-carb, no-sugar-added, gluten-free bars provide seven grams of protein per bar, along with seven grams of dietary fiber.



# WALNUTS IN COMMERCIAL BAKING



## CATEGORY ANALYSIS: BAKING MIXES

The future of the dried baking mix category looks impressive as the global pandemic sparked a renewed interest in baking at home. Now that most people are back to work, they’re turning to bakery mixes to retain that made-at-home feeling, just with a bit more convenience. As a result, new brands are entering a marketplace that was once dominated by a few large players. Dried baking mixes have always been an excellent outlet for California Walnuts, as they provide a nostalgic and premium ingredient that consumers love.

### WHAT’S TRENDING

- **Inclusions:** As the category grows, so does the demand for products that more closely resemble what can be made at home. Mix manufacturers have started adding an array of clean label inclusions, especially walnuts, to products to elevate boring mixes into exciting new products.
- **Comfort Foods:** Will they ever stop trending? Comfort foods will always have a place on supermarket shelves, and walnuts provide a sense of comfort to brownies, cookies and banana bread mixes.

## BEST IN CATEGORY



**CALIFORNIA WALNUT BROWNIE MIX, DUNCAN HINES**  
Nothing screams premium more than adding “California Walnuts” to the name of a product. In fact, Duncan Hines name drops walnuts twice on the front of the packaging, in the product name and a call out that says “includes California Walnuts.” Did we also mention that there are big chunks of walnuts visible on the picture of the brownie on the package?



**SUPREME WALNUT BROWNIE MIX, BETTY CROCKER**  
The name on the packaging says it all: “Supreme Walnut. This brownie mix has large chunks of walnut pieces to transform the product from ordinary to extraordinary. In addition to the product name drop of walnuts, the packaging also features a callout that states “With Real California Walnuts.”

## CATEGORY ANALYSIS: PAN BREADS

In Japan, walnuts are a common inclusion in sandwich bread. We’re talking big chunks of walnuts to boost the protein content of the bread and enhance the eating experience. Although this trend has not made it to American shores yet, it’s starting thanks to imported bread options as well as some popular American brands that are starting to add walnuts into their products to boost texture and nutritious properties.

### WHAT’S TRENDING

- **Better-for-You Breads:** The bread category has gone through quite the transition from white bread to whole grain breads to functional breads. As bread gets more nutritious, the opportunities for walnuts grow as an inclusion that provides many nutritional benefits, as detailed on page 7.
- **Inclusions:** As pan breads become more artisan in nature, so do the use of inclusions such as nuts, seeds and various whole grains. In pan breads, walnuts provide the perfect texture, being not too hard and not too soft.

## BEST IN CATEGORY



**HEALTH NUT, BROWNBERRY**  
With a “Heart Healthy” label on the front of the packaging, it’s no surprise that popular pan bread is formulated with walnuts. In this product, walnuts provide nutrition attributes as well as texture, in combination with sunflower seeds.



**WALNUT PROTEIN BREAD, MESTEMACHER**  
This popular German bread brand is making inroads into the United States, thanks to a line of protein breads. The company’s Walnut Protein Bread contains 5% walnuts and 2.6 times more protein and 65% less carbohydrates than conventional whole wheat bread, the company says.





# ABOUT CALIFORNIA WALNUT COMMISSION

The California Walnut Commission, established in 1987, is funded by mandatory assessments of the growers. The Commission is an agency of the State of California that works in concurrence with the Secretary of the California Department of Food and Agriculture. The Commission is mainly involved in health research and export market development activities.



**California Walnut Commission**

If you have any questions about using walnuts at your retail bakery, please contact [kseiz@walnuts.org](mailto:kseiz@walnuts.org)