

Celebrating Bats!



A Cookbook of Goodies & Treats
Made with Bat-Dependent Ingredients



BATWEEK

A Foodie's Best Friend!

Take a peek inside your kitchen pantry and what do you see? Maybe a delicious mango, strawberry, or even a chocolate bar? Look a little farther and you might find something more exotic like papaya, agave syrup, avocados, or even tequila. Did you realize that these, and many other foods we enjoy, are made possible by bats?



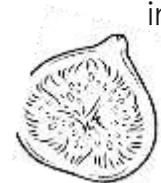
Believe it or not, many of the foods found on grocery store shelves and in your kitchen cupboard rely on bats. Bats help us obtain healthy foods. They do this in three very specific ways.



Food Protection: Bats are essential - they provide billions of dollars of protection to crops around the world every year. They do this by eating tons of insects (some like corn borer moths are serious agricultural pests, while others spread disease to humans or livestock). Bats help farmers provide healthy foods like almonds, apples, berries, carrots, citrus fruits, corn, dates, and most importantly – chocolate and beer!



Pollination: From deserts to rainforests, nectar-feeding bats throughout the world are critical pollinators. Drawn to pale, night-blooming flowers, pollinating bats bury their furry faces in flowers to lap up the tasty nectar. When they pull their faces out, they are covered with pollen that they carry to the next flower they visit. Through this process, known as pollination, plants are able to produce full-bodied fruit and viable seeds. Over 500 plant species rely, at least partially, on bats to pollinate their flowers, including some plants of great economic and ecological value such as wild bananas, avocados, coconut palm trees, vanilla, papaya and agave (from which we get tequila!).



Seed Dispersal: In the tropics, fruit-eating bats spread seeds for important trees such as fig, mango, banana, and allspice. Bats munch on juicy chunks of these fruits. Sometimes they spit out the seeds, and sometimes they swallow them. At that point, they make their way out through natural means and are dropped in other areas. Bats disperse seeds that are critical to restoring rainforests and may be responsible for 95% of the first new growth in these recovering forests. They have even been called the “farmers of the tropics.”

Between their role as predators of night insects, pollinators of night-blooming flowers, and spreading seeds across damaged landscapes, bats truly are heroes of the night skies. They are a farmer's, and a foodie's, best friend!

Bats ...

By eating pesty insects, pollinating plants and dispersing seeds, bats are responsible for some of our favorite foods! This table shows some of the foods we depend on bats for. This cookbook features recipes using these ingredients – each bat-dependent ingredient is **highlighted**. Can you create new batty recipes and share them on our Facebook page?

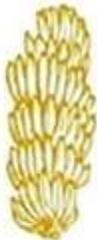
 Bats Protect	 Bats Pollinate	 Bats Spread Seeds
 beets	 agave	 figs
 coffee	 wild bananas	 mango
 tomatoes	 avocados	 almonds
 peppers	 coconuts	 cashews
 corn	 walnuts	 papayas
 cacao		

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All bat characters were created by Kim O'Keefe, a talented illustrator with The Save Lucy Campaign. The Tequila Bats appear courtesy of The Save Lucy Campaign,
www.saveLucytheBat.org



**Some of our delicious recipes were inspired by Bat World Sanctuary*

Batty Drinks!

Fruit Bat Loves Smoothie – 1 Serving

- † ½ cup **papaya** pieces
- † ½ cup **mango** pieces
- † ½ frozen **banana**
- † ¼ cup of **blueberries** or **blackberries**, frozen
- † ½ cup Greek yogurt
- † ½ cup soy or **almond** milk
- † 1 Tbsp carob powder
- † Juice of one large **orange**
- † Juice of ½ **lime**



Directions

1. Allow all frozen fruits to thaw slightly.
2. Place all the ingredients in a blender and blend until smooth.
3. Pour into glass and serve.



Batty Hot Chocolate

- † 3 Tbsp instant hot **chocolate** mix
- † 1 Tbsp **chocolate** syrup
- † ¾ cup boiling water
- † ¼ cup milk
- † ½ tsp ground cinnamon
- † 1 pinch **chili** powder
- † Mini-marshmallows (*optional*)

Directions

1. Bring water to boil in a saucepan.
2. Mix the chocolate mix, chocolate syrup, cinnamon, and chili powder into the hot water.
3. Pour in the milk and stir.
4. Pour the hot chocolate into a bat mug and top with marshmallow (*if desired*).



Bug Juice

- † 2 (3 ounce) packages of **lime** flavored gelatin mix
- † 1 quart of hot water
- † 46 ounces of **pineapple**
- † 24 ounces of frozen **orange** juice concentrate (*thawed*)
- † 2 cups of white **sugar**
- † 2 cups of cold water
- † 2 liters of **ginger** ale
- † **Lime** Sherbet (*optional*)



Directions

1. Pour one quart of water into a large saucepan and heat.
2. Dissolve the lime gelatin in the hot water.
3. Allow gelatin to cool.
4. Once cooled, pour the gelatin into a large punch bowl.
5. Stir in the pineapple juice, orange juice, sugar, and 4.5 cups of water.
6. Pour the ginger ale right before serving.
7. Optional – add dollops of lime sherbet to make a frothy drink!



Batty Appetizers!

Bat Trail Mix

- † 1 ½ cup of mixed raw nuts (e.g. **almonds**, **cashews**, **walnuts**, **pistachios**, **peanuts**, etc.)
- † 1 cup raw seeds (**sunflower seeds**, **pumpkin seeds**, etc.)
- † 1 cup unsweetened dried fruit (**cherries**, **banana chips**, **cranberries**, etc.)
- † ½ cup of yummy **chocolate** (*chips, M&Ms, etc.*)
- † ¼ tsp sea salt
- † ½ cup cinnamon or pinch of nutmeg (*optional*)



Directions

1. Combine all ingredients in a large bowl and mix well.
2. Serve immediately or store in a plastic sealing bag or mason jar
(will keep for 2-3 weeks)

Creamy Avocado Dip

- † 2 ripe **avocados** – peeled, pitted, and sliced
- † ½ cup low-fat sour cream or Greek yogurt
- † ½ cup of fresh cilantro leaves
- † 1 Tbsp of **lime** juice
- † 2 cloves garlic, minced
- † ½ tsp of coarse salt



Directions

1. Add all the ingredients into a food processor. Pulse until smooth, scraping down the sides as necessary.
2. Serve with tortilla chips (**corn** chips are a great choice!).



Artichoke Dip - makes 3 cups

- † 14 ounces of marinated **artichoke** hearts from a can, drained and chopped
- † 1 cup of mayonnaise
- † ½ cup of sour cream
- † 1 cup grated Parmesan cheese



Directions

1. Preheat oven to 375° F.
2. Combine all ingredients in a medium bowl.
3. Spread the mixture in a small baking dish (9X13 inch works well)
4. Bake dip until heated thoroughly, about 20 minutes (or until the dip turns bubbly and golden brown).
5. Transfer the dip to a small container.
6. Serve warm with sliced baguettes or pita chips.

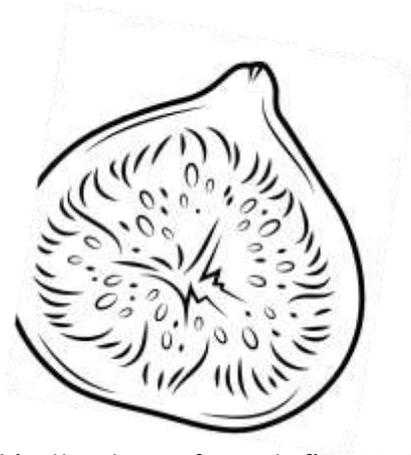


Bat Facts!

Did you know that bats are the only mammal that is capable of true flight?

12 figs

- † 12 fresh **figs**
- † 4 ounces of soft goat cheese
- † 1 tsp extra virgin **olive** oil
- † Salt and freshly ground black **pepper**
- † ¼ cup date honey or regular **honey**



Directions

1. Preheat oven to broil.
2. Trim off the stems of the figs and cut an "X" in the top of each fig. Make sure your cut goes about 1/3 of the way through the fig.
3. Place the figs on a greased or parchment-lined sheet tray.
4. Place goat cheese in a plastic bag and massage with warm hands until softened.
5. Cut a tip off one of the bottom corners of the bag and squeeze cheese into each fig. Be sure to divide your 4 ounces of cheese evenly between the 12 figs.
6. Lightly brush each fig with olive oil and sprinkle a little salt as well as a generous amount of freshly cracked black pepper.
7. Broil the figs for about 4 minutes or until the goat cheese starts to get little brown spots.
8. While the figs are in the oven, gently warm your honey in a small saucepan. You want it to be easily pourable, but not too hot.
9. Remove the figs from the oven and place them on a platter.
10. Drizzle the warm honey over the figs and serve.



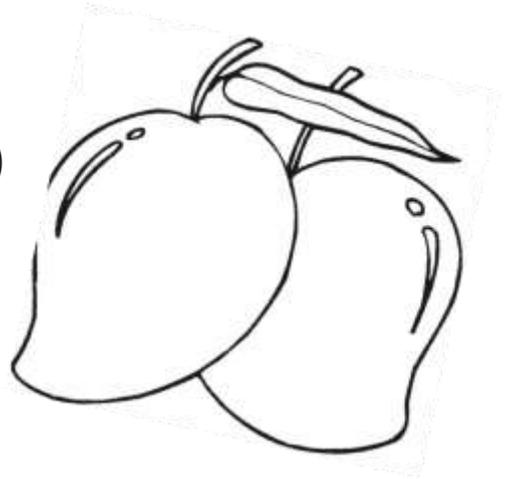
Bat Facts!

Did you know that the millions of Mexican free-tailed from Bracken Cave in Texas, the largest bat colony in the world, eat up to 200 TONS of insects each night? Yum!

Batty Desserts!

Mango Shortbread Bars

- † 1 ½ cup butter (softened)
- † ½ cup white sugar
- † 3 cups sifted all-purpose flour
- † 4 cups sliced mango (can substitute strawberries)
- † ¼ white sugar
- † ¼ cup all-purpose flour
- † 1 ½ tsp ground cinnamon
- † 1 pinch ground nutmeg



Directions

1. Preheat oven to 350° F
2. In a large mixing bowl, blend cream, butter, and ½ cup sugar together.
3. Blend in 3 cups of flour.
4. Press ½ of the mixture into the bottom of a small baking dish (9 X13 inch works well).
5. In a medium bowl, stir the mango, ¼ cup sugar, ¼ cup flour, cinnamon, and nutmeg together until well combined.
6. Pour mango mixture over shortbread mixture in the pan.
7. Sprinkle remaining shortbread mixture over mango mixture. Press down lightly.
8. Bake 1 hour until topping is golden brown. Let cool 15 minutes in dish before cutting into bars.

Bat Facts!

Did you know that the more than 1,330 species of bats account for about 20% of all mammals, making bats the second largest group of mammals in the world!



Pumpkin Rolls

Pumpkin Batter

- † 3 eggs
- † 1 cup **sugar**
- † 2/3 cup canned **pumpkin**
- † ¾ self-rising flour, sifted
- † 2 tsp cinnamon
- † 1 tsp nutmeg
- † ½ tsp salt

Directions

1. Preheat oven to 350 F.
2. Beat eggs for 5 minutes until fluffy.
3. Add sifted self-rising flour, sugar, and spices along with pumpkin. Mix together well.
4. Spread mixture into a greased and floured baking pan (*10X15 inch or a large cookie sheet*)
5. Bake for 15 minutes.
6. Take a medium sized kitchen towel (*larger than the pan or cookie sheet*), lay it flat and heavily sprinkle with sifted flour.
7. Invert cake onto towel and roll cake and towel together.
8. Cool in fridge.
9. Combine softened cream cheese, margarine, sifted powdered sugar, and vanilla with a mixer.
10. Once the pumpkin cake has cooled, unroll it and spread all cream cheese icing over the cake.
11. Roll the cake, but be sure that you do not put too much pressure on the cake (*you don't want that delicious icing to ooze out the sides*).
12. Place the cake on a large plate with the seam side down and refrigerate. When ready to serve, sprinkle the top with extra, sifted powdered sugar for decoration.

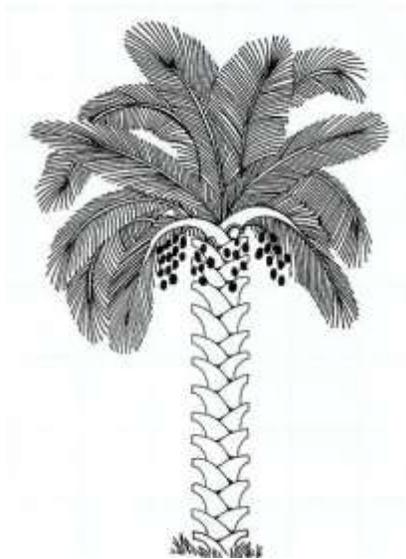
Icing

- † 1 cup powdered **sugar**, sifted
- † 8 ounces cream cheese, softened
- † ¼ cup margarine or butter, softened
- † 1 tsp vanilla



Date Squares – 12 servings

- † 1 ½ cups rolled **oats**
- † 1 ½ sifted pastry **flour**
- † ¼ tsp salt
- † ¾ tsp baking soda
- † 1 1/3 cup packed brown **sugar**
- † ¾ cup butter, softened
- † ¾ pound pitted **dates**, diced
- † 1 cup water
- † 1 tsp **lemon** juice



Directions

1. Preheat oven to 350 F
2. In a large bowl, combine oats, flour, salt, brown sugar, and baking soda.
3. Mix in the butter until crumbly.
4. Press half of the mixture into the bottom of a 9 inch square baking pan.
5. In a small saucepan, combine the dates, water, and 1/3 cup of brown sugar over medium heat.
6. Bring to a boil and cook until thickened.
7. Stir in lemon juice and remove from heat.
8. Spread this mixture into the baking pan.
9. Pat the remaining crumb mixture on top.
10. Bake for 20 to 25 minutes in oven (until the top is lightly toasted).
11. Cool before cutting into squares.



Bat Facts!

Did you know that the world's smallest mammal is the bumblebee bat of Thailand, weighing about 1 penny? The golden-crowned flying fox is one of the largest bats in the world, with a wing-span of up to 5'6" and weighing up to 2.6 pounds.

Chocolate-Dipped Coconut Macaroons

- † 1 14-ounce package sweetened shredded **coconut** (about 5 cups)
- † 4 large egg whites
- † 2/3 cups **sugar**
- † 1/3 cup all-purpose **flour**, spooned and leveled
- † 1/4 teaspoon kosher salt
- † 1/2 teaspoon pure **vanilla** extract
- † 6 ounces bittersweet or semisweet **chocolate**, melted and cooled to room temperature



Directions

1. Heat oven to 325° F.
2. In a medium bowl, combine the coconut, egg whites, sugar, flour, salt, and vanilla.
3. Drop packed tablespoonfuls of the mixture onto parchment-lined baking sheets, spacing them 1 inch apart
4. Bake, rotating the baking sheets halfway through, until lightly golden, 25 to 30 minutes. Cool slightly on the baking sheets, then transfer to wire racks to cool completely.
5. When cool, dip the bottom of each macaroon in the chocolate and place on a parchment-lined baking sheet.
6. Refrigerate until firm, 20 to 30 minutes. Store the macaroons in an airtight container at room temperature for up to 7 days.



Quick Chocolate Banana Pie

- † 1 frozen pie shell, pierced several times with the tines of a fork
- † 1 package instant **chocolate** pudding (prepare based on package directions)
- † 2 ripe **bananas**, sliced
- † 1 can spray whipping cream
- † 1 dark **chocolate** candy bar
- † 1/2 cup chopped **pecans** (optional)

Continued on next page

Quick Chocolate Banana Pie (continued)

Directions

1. Preheat oven to 425 F.
2. Bake pie shell for 10 to 12 minutes until golden.
3. Remove from oven and let cool.
4. Line the baked and cooled pie shell with a layer of chocolate pudding (use $\frac{1}{2}$ the prepared amount).
5. Add a layer of sliced bananas.
6. Top with the remaining chocolate pudding and bananas.
7. Cover the top with a giant dollop of whip cream.
8. Shave a chocolate bar using a vegetable peeler (decorate the top of the pie) and sprinkle with chopped pecans.
9. Serve immediately.



Pumpkin Chocolate Fudge (no-bake)

- † 1/2 cup **pumpkin** puree
- † 1/2 cup melted **coconut** butter
- † 1/4 cup pure maple syrup, **agave**, or honey
- † 1/4 cup **cocoa** powder
- † 1/2 tsp pure vanilla extract
- † 1/16 tsp salt



Directions

1. Either line an 8×5 loaf pan or any small pan with parchment or wax paper OR have candy molds ready. Set aside.
2. Combine all ingredients until smooth—it's smoother if you use a handblender, but it can also be done by hand, just make sure the coconut butter is melted before beginning.
3. Smooth the batter into either the prepared pan or candy molds, and freeze until firm.
4. Fudge can be stored in the fridge, or you can keep it frozen and thaw before eating.

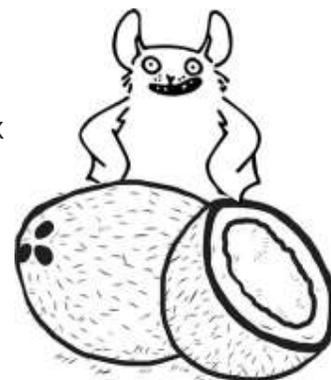
Coconut Cupcakes

Cupcakes

- † 2 cups flaked **coconut**
- † 1/2 cup sweetened condensed milk (from 14-oz can)
- † 1 box yellow cake mix
- † Water, vegetable oil and eggs called for on cake mix box

Icing

- † 3 cups powdered sugar
- † 1/3 cup butter or margarine, softened
- † 1/4 teaspoon salt
- † 1 teaspoon **coconut** extract
- † 1 to 3 tablespoons milk



Directions

1. Heat oven to 350°F (325°F for dark or nonstick pans). Place paper baking cup in each of 24 regular-size muffin cups.
2. In medium bowl, stir 2 cups coconut and the condensed milk; set aside.
3. Make cake batter as directed on box. Divide batter evenly among muffin cups (two-thirds full). Top each with about 1 heaping teaspoonful coconut mixture.
4. Bake as directed on box for 24 cupcakes. Cool in pans 5 minutes; remove from pans to cooling rack. Cool completely, about 30 minutes.
5. In medium bowl, beat powdered sugar, butter and salt with spoon or with electric mixer on low speed until well blended. Beat in coconut extract and 1 tablespoon of the milk. Gradually beat in just enough remaining milk to make frosting smooth and spreadable. Immediately frost cupcakes. Dip tops of cupcakes into toasted coconut. Store loosely covered.



More Bat Facts!

Bats are the only mammal that can truly fly
(as opposed to gliding mammals like flying squirrels and lemurs.)

Bats are nocturnal, they sleep during the day and are active at night.

Bats are fast, flying 60 miles per hour. Mexican free-tailed bats can even reach speeds up to 100 mph – that's more than 40% faster than a cheetah!

Baby bats are called pups and can be born one-at-a-time or in small litters of two-to-four pups, depending on the type of bat.

Bats have the longest lives of any mammal. The oldest bat caught in the wild was 39 years old at the age of recapture!

There are two main types of bats: Megabats (who usually eat fruit) and Microbats (who often eat insects.)

Economists estimate that without bats controlling insect populations, cocoa bean yields would decrease by 30%. That means thirty percent less chocolate for us to eat!

There are 23 species of bat currently listed as critically endangered, meaning they face immediate risk of extinction.

Nearly a quarter of bat species worldwide are considered endangered or vulnerable because of disruption of forests, over-harvesting of trees they call home, climate change, and disease. A fungus is causing a disease called "white-nose syndrome" that has significantly decreased many North American bat populations.

Tequila is made from agave plants,
that in the wild rely on bats as their only pollinator?

Scientists have concluded that insect-eating bats save U.S. farmers a minimum of 3.7 BILLION dollars each year by reducing crop damage and limiting the need for pesticides?

Several species of bats in Africa, North America and New Zealand, sing to attract mates?

BATWEEK

