

The Berry Latest

M-m-m-m...marvelous! Blueberry Muffins

Blueberry muffins are part of growing up in North America. Hot out of the oven, at the local bakery and in the grocery store, blueberry muffins are as American as blueberry pie. This issue salutes the blueberry muffin.

Where it all began. The actual origin of the blueberry muffin is a mystery. Linguistic use can be traced back to 18th century origins in Germany where the Low German muffen, or muffe referred to a small cake.

The All American Muffin!

The muffin was spread to England and then to Canada and the United States, where it became a true North American specialty. In earlier times blueberries, of course, found their way into the muffin because they were one of the few native American fruits available. Many of the baked goods mentioned in early America, such as the buckle, grunt, pie and tart, contained blueberries. Numerous muffin recipes appeared in the regions of the USA and Canada largely influenced by Germanic traditions.

The development of muffin tins in the 1900s encouraged bakers to make single serve, portion-controlled muffins. Typically the muffin contained flour, but in the Southern region cornmeal was also used. The main appeal of the muffin was stability and portability. The muffin would retain its freshness for more than a day, making it a good travel companion. We have even heard of muffins being served to soldiers on the frontier.

Throughout the 20th century, muffins were a part of the home baking tradition. Bakeries churned out muffins, but for the most part, muffins have been a home treat. Finally in the 1980s the muffin came of age as home-based recipe concepts were taken from Mom's kitchen into big-time commercial production. Bran muffins and granola muffins were the rage, and the muffin became a staple in local coffee shops right alongside pie, coffeecake, cookies and Danish. Today

Good Reasons to Use Blueberries!

We invite bakers to take a new look at the blueberry muffin and utilize nature's little nutrition powerhouse to produce consumer-pleasing products.

- Blueberries are high in antioxidants per ORAC measurements taken at Tufts University. (For details log onto www.blueberry.org)
- Blueberry is by far the most popular flavor muffin in the USA, and we are seeing increased acceptance in other parts of the world.
- Blueberries are sweet, juicy and most important, visible, when used in muffins and other baked products.
- IQF frozen blueberries are widely available and easily incorporated into scratch and mixes.
- Blueberries have been shown to reduce effects of age related disease in animal studies. (The potential is there for humans, although further research is needed.)
- Blueberries are a tasty and easy way to pack nutrition into products.
- Check your mixes very carefully. There still are some out there with artificial blueberries!

fresh muffins have a value of more than \$182 million. Sales rose more than 8.4% last year according to International Resources International.

Blue is in and so are Antioxidants!

Researchers at the USDA Center for Aging at Tufts University indicate that around one-half cup of blueberries provides a daily dose of antioxidants! Just how many cultivated berries make one-half cup? According to the USDA Nutrient Database for Standard Reference, one cup of raw blueberries equals 145 grams (5 oz.). Thus one-half cup equals 72.5 grams (2.5 oz.) of blueberries.

For answers to your blueberry questions contact
the Cultivated Blueberry Tech Line:

1-800-824-6395

or visit us on the internet at:

<http://www.blueberry.org>

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All questions, comments and suggestions may be directed to:
North American Blueberry Council's Food Technology Program

PO Box 281294

San Francisco, CA 94128-1294

Fax: (650) 340-8568

Email: bberry@blueberry.org

NORTH AMERICAN BLUEBERRY COUNCIL

P.O. Box 281294

San Francisco, CA 94128-1294

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Antioxidant bars, drinks and formulas sell for top dollar. Bakeries should get into the act!

Is it possible to create an antioxidant muffin that contains one-half cup of blueberries. That was the challenge we posed to Master Baker, Sam Bell. He incorporated 55 grams (2 oz.) of blueberry for each 140 gram (5 oz.) muffin without the use of added dough stabilizers. The formula, Ultimate Blueberry Muffin, follows. Let us know if you are able to make a similar size muffin that reaches the one-half cup (72.5 gram/2.5 oz.) level.

Basic Blueberry Muffin Yield: 13 dozen

Following is an easy-to-make blueberry muffin.

Ingredients	Bakers %	Kg.	Lb.	Oz.
Sugar, granulated	46.7	2.8	6	4
Shortening	21.4	1.3	2	14
Butter	7.2	0.4	1	0
Whole eggs	21.4	1.3	2	14
Flour, all purpose	100.0	6.0	13	6
Baking powder	3.6	0.2	0	8
Salt	3.6	0.2	0	8
Lemon flavor	0.9	0.05	0	2
Vanilla	0.9	0.05	0	2
Milk	57.2	3.5	7	10
Blueberries Whole	100.0	6.0	13	5

Procedure:

1. Cream sugar, shortening and butter until light.
2. Add eggs and cream well.
3. Sift together flour, baking powder and salt.
4. Combine lemon flavor, vanilla and milk.
5. Add milk mixture and flour mixture alternately to sugar mixture.
6. Mix until smooth.
7. Mix in fresh or frozen cultivated blueberries by hand.
8. Spoon into muffin pans.
9. Bake at 190°C (375°F) about 20 to 25 minutes.



Ultimate Blueberry Muffin! Yield: 13 dozen

Each muffin contains almost half a cup of antioxidant-rich blueberries.

Ingredients	Bakers %	Kg.	Lb.	Oz.
Flour, all purpose	100.0	4.6	10	4
Baking powder	3.9	0.2	0	6
Salt	2.5	0.1	0	4
Milk	32.3	1.5	0	5
Vanilla	3.2	0.1	0	5
Butter, softened	48.4	2.2	5	0
Sugar	67.7	3.1	7	0
Eggs	29.0	1.3	3	0
Blueberries Crushed	38.7	1.8	4	0
Blueberries Whole	146.5	6.8	15	8

Procedure:

1. Scale flour, baking powder and salt together.
2. Combine milk and flavoring.
3. Beat butter and sugar until light and fluffy.
4. Beat in eggs one at a time. Alternately add flour mixture then milk. Stir just to moisten.
5. Stir in crushed blueberries. Flour in whole blueberries.
6. Bake at 190°C (375°F) about 20-25 minutes.

To maximize the amount of antioxidant-rich blueberry in each muffin, IQF blueberries, as well as crushed blueberries were used in the batter. The result: each 8.25 x 7 cm. (3-1/4 x 2-3/4 in.) muffin contains about 55 gm. (2 oz.) of highbush blueberries