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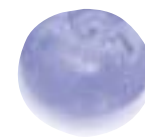
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## Breakfast is Back!

### There's something blue under the sun!

When the sun comes up and breakfast is on everybody's mind, it's time for blueberries. Blueberries are a natural for breakfast – from bagels, bars, and muffins, to cereals, yogurts, syrups and smoothies. Now more than ever, research is underscoring the



importance of a good breakfast for all age

groups. For adults, breakfast can help

with weight control,[1] and the importance of

breakfast for growing children is noted by the

American Dietetics Association.[2] Based on the USDA's

Healthy Eating Index eating breakfast greatly improves

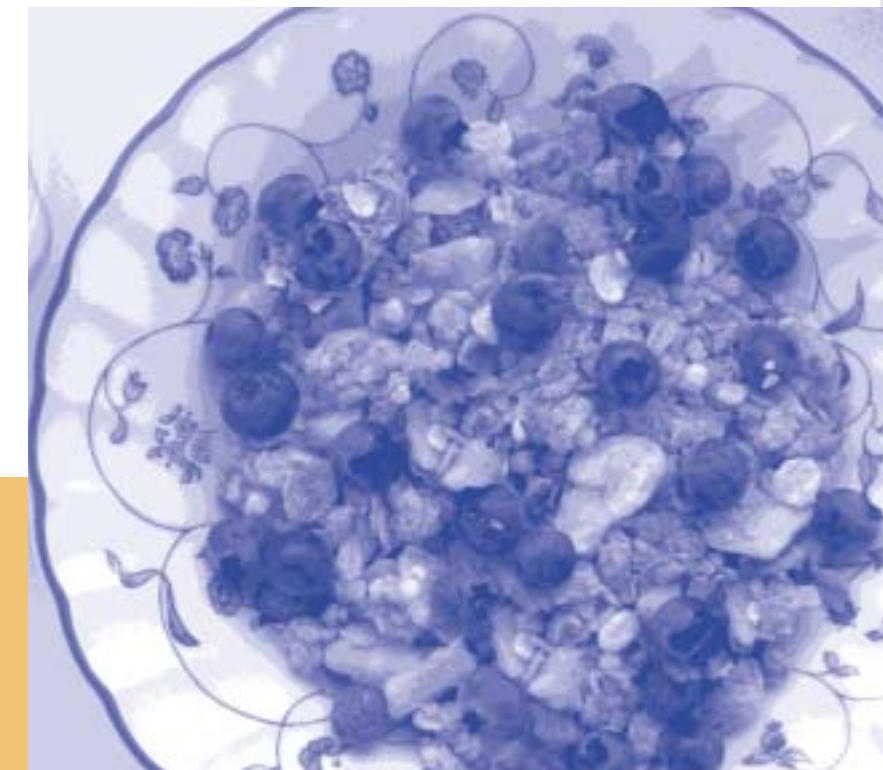
children's overall diet quality as documented by the

School Breakfast Program (SBP).[3] For young people,

especially school-age children, the SBP supports an

annual National School Breakfast Week[4] to emphasize

the importance of a nutritious breakfast.



*They report that new scientific research shows that a good breakfast can:*

- *Improve test scores, especially in math*
- *Boost attendance and on-time arrival*
- *Reduce disruption in class*

For food processors, blueberries are the perfect breakfast ingredient. Not only do they provide a healthy profile, they have that sweet, fruity, burst-in-the-mouth flavor that everybody loves. Blueberries are available year round in many convenient forms: whole, fresh or dried, freeze-dried, as purée, concentrate, or juice. A new format, the osmotically preserved cultivated blueberry, is prepared through a slow natural infusion process with stabilizers and carefully dried to preserve color and flavor.

### All fruits are good, but blueberries make your day!

Research at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University (Boston, MA)[5] has shown that blueberries may act to protect the body against damage from oxidative stress, one of several biological processes implicated in aging and in the development of a number of neuro-degenerative diseases. Compared to 40 other fruits and vegetables, blueberries rank highest in disease fighting antioxidants. Just one half-cup serving delivers as much antioxidant power as five servings of some fruits and vegetables. Antioxidants help neutralize harmful byproducts of metabolism, called free radicals, which can lead to cancer and other age-related changes in the body. Anthocyanin, the berry's blue pigment, is thought to be responsible for this health benefit. Blueberries are virtually fat-free, low in calories and are also a source of fiber.

## Formulate with Blueberries!

Following are some blueberry formats available to manufacturers. For more log onto the USHBC website at [www.blueberry.org](http://www.blueberry.org) Blueberries come in a variety of forms such as fresh, frozen, dried, canned, juice and concentrate.

FROZEN	PROCESS	PACKAGING	CHARACTERISTIC	STORAGE
IQF (Individually Quick Frozen)	*>Fresh blueberries>individually quick frozen> packaged.	Consumer packs: poly bags. Bulk: Poly-lined corrugated cartons 10-50 lb. (4.5 - 22.7 kg.) Poly-lined metal drums: 270 lb. (122.5 kg.)	Individual fresh fruit identity. Any formulation where fruit identity is important.	0° to -10°F (-18° to -23°C)
Straight Pack or Block Frozen	*>Fresh Blueberries> packaged> flash frozen.	Poly-lined corrugated cartons: 30-50 lb. (13.6 - 22.7 kg.) Poly-lined metal drums: 350 lb. (158.8 kg.)	High amount of fruit in a box, base ingredient for making toppings, syrups and fillings.	0° to -10°F (-18° to -23°C)
LIQUID	PROCESS	PACKAGING	CHARACTERISTIC	STORAGE
Single Strength Purée	*>Fresh blueberries> crushed>finished> pasteurized or cold filled in containers> frozen.	Plastic pails: 28, 30 lb. (12.7, 13.6 kg.) Poly-lined corrugated cartons: 25, 30 lb. (11.3, 13.6 kg.) Poly-lined metal drums: 55 gal. (208 l.) 400 lb. (181 kg.)	Brix: 8.0 -13.0 pH: 2.8 -3.5 >Used in sauces, flavorings and fillings.	0° to -10°F (-18° to -23°C)
Purée Concentrate	*>Fresh blueberries> crushed > heat/enzyme treated> vacuum concentrated > pasteurized > packaged > frozen.	Plastic pails: 4,6 gal. (15.1, 22.7 l.) 28,30, 60 lb. (12.7, 13.6, 27.2 kg.) Poly-lined metal drums filled to desired Brix levels.	Brix Ranges: 20,37, 40 pH: 2.8 - 3.4 >Juices, sauces, blends.	0° to -10°F (-18° to -23°C)

# What about the Skippers?

*The Skippers are those people who regularly skip breakfast. Breakfast Skippers come in all ages and sizes. They have every reason under the sun to skip breakfast. But whatever their objections, blueberries have the answer. Here are a few, based on the USDA's Human Nutrition Information Center (FNIC):*

## **"I'm in a hurry. I have no time"**

*Blueberries are a great fit for foods that are ready-to-eat or need little prep time. Blueberries are easy to incorporate in yogurts, cottage cheese, in ready-to-eat cold cereals, instant breakfast mixes.*

## **"I need something I can grab and go..."**

*Dried blueberries are a convenient, always-available ingredient for breakfast pastries, bagels, breakfast bars, trail mixes. In bar formulations and baked goods, blueberries keep the product moist while adding flavor and mouth-watering appeal. Dehydrated blueberries are perfect in all baking mixes even in sticky dough because they hold up to the mix. Blueberries contain no fat or cholesterol and are a source of fiber. Natural dried blueberries give bagels color, texture and that delicious chewy extra.*

## **"I want something to perk up my cereal"**

*Blueberries add color, nutrition and full lush taste to both cold and hot cereals.*

## **"I'm not hungry in the morning"**

*Have a nice glass of blueberry juice or a delicious light smoothie. Blueberries make great drinks and beverages and there are more of them every day. They are a favorite in smoothies, commercial drinkable yogurts, milkshakes, and juices. In fact, blueberries were the original smoothie ingredient in food service--just add frozen blueberries to the blender and push the button! Blueberries are blendable with a variety of ingredients. Use in rice and soy beverages. Add to milk products. Combine with fruits and vegetables and create innovative combinations of flavors. The blueberry provides a punch of color plus antioxidant benefits. Convenient to use formats, such a blueberry juice and blueberry purée, provide year-round blueberry availability for beverage manufacturers. Bottoms up with blueberries!*

## **"I'm on a diet."**

*The evidence shows that skipping meals does not help in losing weight. In fact, people who skip breakfast tend to eat more later in the day. Blueberries are nutritionally dense, contain 14 g. carbohydrate/100 g., low in calories and virtually fat-free; they contain no cholesterol, are a source of fiber and contain some vitamins, minerals and antioxidants.*

# The School Breakfast Program

Over 30 years ago, research at the University of Iowa Medical College found that children who skipped breakfast had trouble concentrating at school and became inattentive and restless by late morning. These behavior problems, linked to low blood sugar levels, are counter-productive to learning. These findings helped confirm that hungry children cannot perform well. To address this problem Congress enacted the School Breakfast Program as part of the Child Nutrition Act of 1966. Some studies have shown that children participating in a school breakfast program had improved test scores as well as reduced rates of tardiness and absenteeism.[6]



## Blueberries by the Book

In his new book, "Emeril's There's a Chef in My Family," Emeril Lagasse includes a special Mother's day breakfast. He calls it "Ooey Gooley Blueberry French Toast," which is described as "a cross between French toast and bread pudding – two of my favorite things to eat any time of the day. It is rich and creamy and ooey and gooey and chock full of blueberries all at the same time." Not only is it bursting with ultra-nutritious blueberries, it's topped with a blueberry sauce! "Don't skip the blueberry topping," Emeril advises; "it's the crowning glory!" He suggests spooning blueberry sauce over pancakes, waffles and chunks of melon.

*In his book "SuperFoods Rx: Fourteen Foods That Will Change Your Life," Dr. Steven Pratt says, "Everybody loves blueberries and there are few foods more densely packed with healthful benefits."*

**He especially enjoys them for breakfast in many different ways. He provides a list in his book "My Favorite Ways to Eat Blueberries."**

1. Sprinkle berries and wheat germ on yogurt. 2. Mix frozen berries into hot oatmeal. 3. Toss onto cold cereal. 4. Whip into smoothies with yogurt, banana, ice and soy or nonfat milk. 5. Drop some onto whole wheat buttermilk pancakes just before turning them. 6. Enjoy a cup of berries in soymilk sweetened with buckwheat honey. 7. Nibble from a big bowl of fresh blueberries while sitting on the porch. 8. He also writes: "My wife and I munch on fresh berries while having our morning hot beverage. My favorite way to eat them is to take a bowl of berries, add a sliced banana, pour over 1/2 to 1 cup of soymilk, drizzle the whole thing with 1 to 2 teaspoons of buckwheat honey, and mash it all with a fork. Sound weird? Try it; you'll be a convert."

## Breakfast Ideas with Blueberries

- Blueberry Bars • Blueberry Bread • Blueberry Pudding
- Blueberry Casserole • Blueberry Burritos
- Blueberry Calzones • Blueberry Pie
- Blueberry Fritters • Blueberry Pizza
- Blueberry Wrap • Blueberry Bites
- Blueberry Strata
- Blueberry Bagels
- Blueberry Gingerbread
- Blueberry Swirl
- Blueberry Pancakes
- Blueberry Johnny Cakes
- Blueberry Quiche
- Blueberry Parfait
- Blueberry Focaccia
- Blueberry Granola
- Blueberry Oatmeal
- Blueberry Muesli • Blueberry Sushi • Blueberry Grits
- Blueberry Crunch Bars • Blueberry Silver Dollar Pancakes

[1] "For Your Weight Control Effort, Breakfast," Health and Nutrition Letter, Tufts University, March 2004. (<http://healthletter.tufts.edu/issues/2004-03/breakfast.html>). [2] J Am Diet Assoc. 2004; 104: 663. [3] USDA. "Eating Breakfast Greatly Improves Schoolchildren's Diet Quality," Nutrition Insights. Center for Nutrition Policy and Promotion, Insight 15, Dec. 1999. (<http://www.usda.gov/cnpp>) [4] <http://www.fns.usda.gov/cnd/Breakfast/Default.htm> [5] <http://www.hnrc.tufts.edu/> [6] <http://www.kidsource.com/kidsource/content4/school.breakfast.part.html>, <http://www.frac.org/pdf/cnusb.pdf>, <http://216.198.222.116/childnutrition/background.htm>