

Milking It

Udderly new ideas for an old familiar drink

by **MADELEINE GREY**

Milk is in the midst of a makeover. Once simply white and, some might say, boring, today's *new* milk is fortified, flavoured, micro-filtered and packaged into something so snazzy even tweens and teens can't ignore it. The selection is staggering, making for tricky navigation through the dairy case. Here's a guide to the growing array of products and lingo:

PERCENTAGE POINTS

Plain milk comes in four basic varieties: skim, 1%, 2% and homogenized or whole milk. The key to understanding those figures is noticing the two letters beside them: M.F. That stands for milk fat, which is calculated by weight per 100 g. Thus, 100 g of 1% milk has 1 g of milk fat. Following this logic, does whole milk have 100% milk fat? Not quite. Check the small print and you should see 3.25% M.F. on homo milk. Skim has less than 0.1 g of fat per 100 g of milk, which means it is almost fat-free. Watch out for that term "partly skimmed" — it doesn't mean skim milk, it refers to 1% and 2% milk.

FILTERED VIEW

If milk is so pure, why does it need to be micro-filtered? According to Rola Zahr, a nutrition educator with BC Dairy Foundation, pasteurization kills 99.4% of the bacteria found in milk and micro-filtration kills 99.9%. "It is not much of a difference in terms of bacterial count," she says, "and it's safe to consume in both cases."

So why do it? To extend refrigerated shelf life, making it that much more convenient. Micro-filtered milk can last up to 30 days, refrigerated,



The Dish on Portions

calories	171
protein	5.6 g
fat	3.2 g
fibre	3.2 g
calcium	17%*
folate	13%*
vitamin A	12%*
vitamin C	32%*

*of recommended daily intake

Raspberry Smoothie

Make your own flavoured milk with this fresh alternative!

- 1 really ripe banana
- 2 cups (500 mL) frozen or fresh raspberries (or strawberries, if you prefer)
- 1½ cups (375 mL) milk
- 1 cup (250 mL) plain yogurt
- 1 cup (250 mL) mango or apricot juice
- 2–3 tbsp (30–45 mL) honey (optional)

Put all the ingredients in a blender and blend until smooth.

Makes just over 5 cups (1.25 L).

Our recipe tester, Adell Shneer, tests our Nutrition column using both imperial and metric measurements. However, proportions in the metric version may differ slightly from the original, causing small variations in the result.

unopened, but regular milk has a shorter (refrigerated, unopened) shelf life of 16 to 20 days.

INTOLERANT ISSUES

It comes by many names, be it Gay Lea Lacteeze, Beatrice Lactaid or the more common, lactose-free label used by Neilson, Dairyland and Natrel. All these milks are designed for the lactose intolerant: people who do not produce enough lactase enzyme to

digest lactose, the sugar naturally found in milk. (Interestingly, the lactose is removed from this milk by adding the lactase enzyme to it during processing, performing the same job your stomach does — if you're not lactose intolerant!)

Lactose-free milk has the same nutrients as those found in regular milk, and Beatrice claims "it tastes sweeter and fuller than regular milk." These milks also cost more.

NUTRITION

ORGANIC OR NOT?

Should we choose organic milk to avoid hormones and antibiotics? According to BC Dairy Foundation, growth hormones such as BST or rBGH are not legal in Canada and, therefore, not permitted for use with any dairy cows. According to Organic Meadow's website, its milk production goes one step further, prohibiting the use of *any* hormones, growth promoters, medicated feeds or indiscriminate medications.

Canadian (conventional) dairy regulations stipulate that milk must be discarded for a specific withdrawal period if antibiotics are used to treat cows with bacterial infections. No residue is permitted in Canada and all milk is tested for it. If a milk tests positive, it must be discarded and the farmer pays an infraction. Organic farmers, on the other hand, have zero tolerance for antibiotics. If a cow must be treated with antibiotics, it is no longer milked. Plus, organic milk is produced from cows raised on certified organic feeds, produced without synthetic fertilizers or pesticides.

Organic milk can be a lot pricier than regular — up to double the cost. But demand for organic milk continues to grow, as does production. Quebec is the leader, with production more than tripling in the past three years, from 5.4 to 16.4 million litres annually.

MORE MIGHT

Few liquids pack the wallop that milk does, with 12 essential nutrients in every gulp. Is more always better? All the major milk producers in Canada have upped the ante and come out with calcium-fortified products, adding from 33 to 35% more (250 mL of regular milk already has 300 mg of calcium). The National Academy of Medicine (Canada and US) recommends that children four to nine years old get 800 mg of calcium per day and children 10 to 18 years get 1300 mg. These are called dietary reference intakes or DRIs.

Here's how the milks compare:

- For kids aged four to nine, 250 mL

of regular milk supplies 39% of a day's calcium needs; calcium fortified milk supplies 54 percent.

- For kids 10 to 18, 250 mL of regular milk supplies 24%; calcium fortified supplies 33%.

Not content to stop at just calcium, Saputo has a line called Dairyland Plus that's all about extras. One such extra is *acidophilus bifidus* milk with the same culture found in many yogurts that is heralded as a probiotic (or a good bacteria) aiding in digestion. Natrel now has two lines of calcium-fortified milk products plus Natrel 24, which (you guessed it) contains 24 different nutrients. This fortified 1% milk product is sold in a 350 mL single-serving plastic bottle.

OMEGA PLANS

Essential fatty acids are one of the most talked about missing nutrients in the diets of Canadian children and adults, and milk processors have a solution in a big glass of milk. Neilson Dairy Oh comes from cows fed a special diet resulting in milk that is high in DHA, an omega-3 fatty acid. The best sources of DHA are cold-water fish, such as herring, salmon and tuna. Other fish, such as trout and halibut, contain DHA, but in smaller amounts. Scientists at Guelph University in Ontario came up with a novel idea — put herring in cow feed. The result is milk high in DHA, which promotes brain, retina and nerve function — especially important for growing babies and children.

There are three types of omega-3 fatty acids: DHA, EPA and ALA. Beatrice, Lactantia, Natrel and Dairyland have all recently come out with omega-3 milk which differs from Neilson Dairy Oh because it has ALA, not DHA. These milks have added flaxseed oil, thus fortifying the milk with ALA (found in several plant sources, including flaxseed, canola oil, walnuts and soy). Despite the addition of flaxseed oil, most tongues cannot taste the difference. Neilson's DHA approach — feeding cows herring — is much more expensive, innovative and

involved, but offers fish-hating consumers a source of hard-to-find DHA.

FLAVOUR FACTORS

Those old-style, single-serving cartons of white milk never seemed to work well in vending machines. Machines didn't work properly, milk spilled, soured, and sales were stinky. But that didn't drop the desire to get milk into schools. And advocates have been spurred on by the evacuation of soft-drink vending machines in elementary and junior public schools. Extended-shelf-life technology has helped and the knowledge that kids like flavoured milks. According to Joanne Morrison, who coordinates the elementary school milk program for the Dairy Farmers of Canada (Ontario), "three-quarters of all our milk program sales go to chocolate milk." She says that around grade five, many kids feel it's not cool to drink milk from a carton. Enter Saputo/Dairyland with Milk 2 Go — a hip new drink with bright modern graphics that appeal to older kids. So do the vending machines, which are also owned by Saputo and have been placed in schools in Ontario and British Columbia with plans to "roll across the nation" according to David Lynn, senior VP of marketing at Saputo Dairy Products Canada. Milk 2 Go comes in strawberry, vanilla, banana, chocolate and plain and can last 60 to 75 days, unopened and refrigerated. Tetra Pak Canada has also jumped into the vending scene, since milk sold in their aseptic packaging does not require refrigeration until opened, making it easier to distribute and store. In Nova Scotia, Farmers' Dairy has placed their vending machines, stocked with flavoured Twist & Go milks, in 60 schools.

That's a lot of change for one drink. But only time will tell if milk's makeover will give it more mass appeal. ❤️

Today's Parent
com

Looking for more info on your food choices? On June 7, ask Madeleine Greyy your questions in her monthly food forum at Todaysparent.com/forums.