

eat right boston

SUMMER 2018



N E W S L E T T E R

a2 Milk

You may have noticed a new milk at the grocery store with an R2D2 sounding name. It gets its alphanumeric name from a naturally occurring protein (A2) found in *some* cows. Published research is showing that it's actually the type of protein in milk that causes stomach upset for some people, and not necessarily the sugar. While a2 Milk® is still relatively new to the U.S., it has been available in Australia for over a decade.

Now for that science I always love to impart! Milk is made up of carbohydrates (i.e. sugar, namely lactose), fat (unless it's been removed), and protein. There are two types of protein in milk: whey and casein. It's the casein protein that's different in the a2 Milk® versus ordinary milk. Ordinary cows naturally produce A1 protein, A2 protein, or a blend of both, while a2 Milk® only contains the A2 protein. Researchers suggest that it is the size of the protein that bothers some people. When you digest A1 protein, a small piece of protein breaks off and can lead to tummy aches, whereas the A2 protein stays in larger sections and may not cause the same inflammatory response in the intestines. An interesting note is that goat, sheep and camel milk only contains A2 beta casein protein.

There is no taste difference between this milk and regular milk. Lactose reduced milk is naturally sweeter tasting (no, they don't add sugar to it!). The a2 Milk Company also advertises that their handpicked cows are not treated with growth hormones, rBST or antibiotics, and that the milk is certified Kosher Dairy. The manufacturers make it clear that they "do not recommend it to people who have been *medically* diagnosed with lactose intolerance."



I love milk! I never bought the idea that after the age of two, we should not drink cow's milk. It is naturally a good source of calcium, riboflavin, phosphorous, Vitamin B12, potassium, Vitamin A and D (fortified), and protein. Why take extra supplements if Mother Nature has already handed you a gem? 1

A is for Acrylamide

Acrylamide is back in the news again. This time it pertains to coffee in California; specifically to Proposition 65 (AKA, The Safe Drinking Water and Toxic Enforcement Act). Let's back up to 1986, when California voters approved an initiative to address their concerns about exposure to toxic chemicals. Under Proposition 65, businesses are now required to notify customers if their products contain any of 65 chemicals (including acrylamide) that are linked with cancer, birth defects or other reproductive issues.

In March 2018, a California trial court ruled that a Prop 65 warning is required for (California) coffee shops and that failing to post possible cancer risks of the beverage (associated with acrylamide) renders the coffee merchants in violation of the regulation. This case prompted me to revisit the warnings associated with this chemical.

We started hearing about acrylamide over 20 years ago when Swedish scientists discovered it in a variety of foods, including French fries. More science! The browning reaction in foods is called the Maillard reaction. Acrylamide in food is formed when the amino acid, asparagine (naturally found in foods), combines with sugars at high temperatures like frying or broiling to cause foods to brown. As a result of the Swedish findings, the Food and Drug Administration tested foods in 2004 for acrylamide levels and found that potato chips and French fries were high in it. Tobacco smoke also contains acrylamide.

Since then, not enough studies on the effects of acrylamide on *humans exist but it's still good to be aware of. Here are some tips on how to cut down on acrylamide:

- Boil, steam, bake, roast or microwave starchy foods like potatoes.
- Store potatoes in a cool, dark place. Cold temperatures can turn the starch and potatoes into sugar, so not in the refrigerator!
- Soak raw potato slices in water for 15-30 minutes before frying or roasting to reduce acrylamide formation during cooking.
- Thinner potato chips have less acrylamide as they have less cooking time exposure to high temperatures.
- Sweet potato chips have more acrylamide than regular potato chips.
- Choose thicker French fries (acrylamide forms near the surface).
- Veggie chips and sticks that are made from dehydrated potatoes may have more acrylamide than potato chips.
- Dark roast coffee has less acrylamide than light roast. Acrylamide is created early during the roasting process but levels decline as roasting continues.
- Toast bread to the lightest color acceptable.
- Fry foods at lower temperatures.
- Try and stick with raw nuts, as they have no acrylamide. Avoid roasted almonds.

More information can be found at:

<https://www.cancer.org/cancer/cancer-causes/acrylamide.html>

*The International Agency for Research on Cancer (IARC) is part of the World Health Organization (WHO). Its major goal is to identify causes of cancer. IARC classifies acrylamide as a “probable human carcinogen” based on data showing it can increase the risk of some types of cancer in lab animals.

The National Toxicology Program (NTP) is formed from parts of several different US government agencies, including the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA). In its most recent *Report on Carcinogens* (2014), the NTP has classified acrylamide as “reasonably anticipated to be a human carcinogen” based on the studies in lab animals.

Sarcopenia. Use It or Lose It!

We all know that regular exercise is essential for healthy aging. It helps to strengthen our hearts and lungs, helps our gastrointestinal system stay regular, and keeps our aching joints and muscles more flexible. Research is also showing that it's also good for the brain and may help to minimize dementia. While aerobic activity helps with cardiovascular conditioning, maintaining muscle mass is critical for the elderly. Beginning in the early 30's, we begin to loss 1% of our muscle mass. After age 50, it increases even more.

Sarcopenia is the medical term for *progressive loss of skeletal muscle mass and strength that is specifically associated with aging*. Its primary cause is inactivity. Resistance training increases muscle size and helps to improve balance and range of motion and it helps to maintain bone density. More muscle also helps us to burn calories better and keep trim. The American Heart Association and the American College of Sports Medicine suggest strength training be done twice a week and always seek professional help if you have never lifted a dumb bell!

What you eat is also an important factor in maintaining muscle mass. If you don't eat enough calories, your body will go looking for those glycogen calories that get stored in your muscles. How much protein do you need? The Institute of Medicine recommends that adults consume 0.36 grams of protein per pound of body weight every day. So, if you weigh 160 pounds, then you would need 58 grams of protein a day. Some researchers are going so far to suggest that 0.5 grams of protein per body weight is necessary to keep the elderly from getting sarcopenia.



They also suggest eating protein at every meal (no skipping breakfast!) to ensure muscle synthesis. It's easy to track your intake on phone apps like Lose It or My Fitness Pal. Generally speaking, 8 ounces of soy or cow's milk; or one whole egg provides 8 grams of protein. So breakfast could be a glass of milk, a whole grain English muffin with an egg (or) 2 tablespoons of nut butter, which provides 20 grams of protein. Or a Greek yogurt, which averages 12-14 grams of protein per serving with added nuts.

Lifestyle Intervention Can Prevent Diabetes

According to the Center for Disease Control (CDC) nearly one third of the U.S. population (approximately 84 million adults), have prediabetes but don't know they have it. Having prediabetes puts you at risk of developing type 2 diabetes, heart disease, and stroke. Being overweight or having a genetic predisposition can put you at risk for developing prediabetes, which presents with higher blood sugar levels, but not so high to be diagnosed as having diabetes... yet!

According to the CDC, a structured lifestyle change program called the *National Diabetes Prevention Program*, can decrease one's risk of developing diabetes by as much as 58% (71% if you're over age 60). Meeting with a registered dietitian can easily get you started on a personalized, healthy lifestyle program of your own!

You can find more information at the CDC website: <https://www.cdc.gov/diabetes/prevention/index.html>

My Favorite Salads to Eat



The one on the left is often traditionally referred to as a Greek “Village Salad” (notice, no lettuce). And the one on the right is a lettuce base, packed with avocado, mozzarella cheese, egg whites, and chickpeas. Easy enough to toss in grilled chicken to either one to make a complete meal!

Aruba is still a fun spot in my heart! Look at that view in the reflection! Time to go back!!
Enjoy your summer!
Sophie



Sophia Kamveris, MS, RD, LD
22 Mill St-Suite 105-Arlington, MA 02474
www.eatrightboston.com
(P) 617-515-8984