



Beat the Autumn blues with this nutrient duo!

[Important after a year of turmoil]

This month is the autumnal equinox. The days will start getting shorter and darker. But so might your mood. (Especially coming off a year of lockdowns, social isolation, and economic turmoil.)

Indeed, these seasonal impacts have long been a major feature of ancient medical traditions in China, India, and elsewhere—as they influence your biological clock, your physiology, and your mental health. Even colonial physicians in early America factored climate and weather in their medical considerations!

But in our modern era of electricity, artificial lighting, and technology, mainstream medicine has put these seasonal considerations aside. (After all, modern medicine is one of the biggest users and abusers of high-tech approaches.)

Ignoring these implications, however, has consequences. In fact, two major new studies have found that people whose sleep patterns go against their natural body clocks are substantially more likely to experience depression and low mood.

The good news is, these studies also show that two nutrients you're (hopefully) already taking can help END these seasonal changes and BOOST your mood. Even during the shorter, darker days...

What truly influences your sleep patterns

We live in a society that's geared toward morning people. For instance, standard working hours of 8:00 a.m. to 5:00 p.m. mean that many people need to wake up between 6:00 and 7:00 a.m., or earlier, to get to work on time.

But what if you're a night owl?

Well, according to two studies of about 1.3 million people conducted by U.K. and U.S. researchers, you might be at risk for major depression.

In fact, scientists have previously discovered more than 340 commonly recognized genetic variations in the so-called "clock gene" that affects our biological clocks. And that these genetic variations influence your tendency to sleep at certain times.

So, in the first study, University of Exeter scientists expanded on this theory.¹ They found that genetics account for between 12 to 42 percent of people's sleeping preferences. Meaning it was external factors (like shift work and exposure to light) that were more likely to determine when subjects went to bed and woke up—not their genes.

The researchers then looked at questionnaires from just over 451,000 adults, which revealed whether the respondents considered themselves morning people or night

people. Those respondents also underwent seven tests measuring their mental health and well-being.

Lastly, the researchers measured sleep patterns in more than 85,000 people via physical-activity monitors on their wrists.

The researchers ultimately discovered that the people whose sleep *wasn't* aligned with their natural biological clock "genes" were more likely to experience anxiety, depression, low mood, and reduced well-being.

The morning lark versus the night owl

The second study, which included the data from the Exeter study, looked at the sleep patterns and biological clocks of 840,000 people.² About

In this issue:

Eve's forbidden fruit really does help keep the doctor away—and so much more3

One of my favorite foods should be included in your heart-healthy diet—not restricted!6

What's brewing in the kitchen?8

Marc S. Micozzi, M.D., Ph.D., is a worldwide leader in nutritional and complementary/alternative medicine. He has had a distinguished career as a researcher and physician executive at the National Institutes of Health and Walter Reed National Military Medical Center in Washington, DC, and the College of Physicians in Philadelphia PA. He has published over 30 medical and trade books, and founded and edited the first scientific journal, and the first textbook, on complementary/alternative and nutritional medicine, now available in a 6th edition and continuously in print since 1995.

Dr. Micozzi's *Insiders' Cures* is published monthly by OmniVista Health Media, L.L.C., 100 W. Monument St., Baltimore, MD 21201 for \$74 per year (\$6.16 an issue).

POSTMASTER: Send address changes to *Insiders' Cures*, 100 W. Monument St. Baltimore, MD 21201.

Author: Marc S. Micozzi, M.D., Ph.D.
 Publisher: Katherine Wheeler
 Executive Editor: Natalie Moore

All material in this publication is provided for information only and may not be construed as medical advice or instruction. No action should be taken based solely on the contents of this publication; readers should consult appropriate health professionals on any matter relating to their health and wellbeing. The information provided in this publication is believed to be accurate and sound, based on the best judgment available to the authors, but readers who fail to consult with appropriate health authorities assume the risk of any injuries. The opinions expressed here do not necessarily reflect the views of the publisher. The publisher is not responsible for errors or omissions.

For questions regarding your subscription, please contact reader services at www.drnicozzi.com.

Copyright © 2021 OmniVista Health Media, L.L.C., 100 W. Monument St., Baltimore, MD 21201. Reproduction in whole or in part is prohibited without written permission of the publisher.

one-third of the people said they were morning larks, 9 percent were night owls, and the rest were somewhere in the middle.

Overall, the average sleep schedule entailed going to bed at 11 p.m. and waking up at 7 a.m. (for those who slept eight hours).

The researchers found that for the people who *didn't* adhere to this schedule (and therefore who may experience declines in their mental health, according to the first study), simply going to bed one hour earlier, and waking up one hour earlier could slash their risk of having major depression by 23 percent.

Why? Well, some research suggests that getting more light exposure during the day (by waking one hour earlier) results in hormonal influences that impact mood.

And on the psychological front, being a night owl can sometimes be depressing in itself. In fact, study author Iyas Dahlas even said, “We live in a society that is designed for morning people, and evening people often feel as if they are in a constant state of misalignment with that societal clock.”³

So adjusting those sleep and wake times even just slightly may help those people feel more aligned with and connected to others.

Of course, if you have the ability to “work from home”—which has grown in popularity, especially with the pandemic panic—you might also be able to adjust your work hours in a way that’s more in tune with your natural biological clock...and that feels right for *you*.

There are also dietary steps you can take to lower your risk of depression—even if you can’t change your sleep schedule...

There’s nothing fishy about depression

Research has linked the omega-3 fatty acids in fish oil with a reduced risk of depression before. But a recent study found that a whopping *68 percent of American adults* and *95 percent of children* don’t get enough omega-3s, as recommended by U.S. Dietary Guidelines. (And those guidelines are way too low anyway, according to the latest research).⁴

This is particularly depressing news, so to speak, in light of a new study from King’s College in London.

Prior studies have shown that depression is associated with higher levels of inflammation. And in the recent study, British researchers postulated that the omega-3s in fish oil (EPA and DHA) exert *anti-inflammatory* effects on the brain. (It’s thought that omega-3s easily pass through the blood-brain barrier and into brain cell membranes.)

The researchers looked at 22 people diagnosed with major depression. Participants took either 3,000 mg of EPA or 1,400 mg of DHA daily for 12 weeks. DHA and EPA were measured in the blood before and after treatment, and the participants’ depression symptoms were also assessed.

Results showed that both DHA and EPA were associated with significant improvements in mood. In fact, the EPA group had an average 64 percent drop in depression symptoms. And the DHA group’s response was even better, with a 71 percent decrease in symptoms.

The researchers noted that it’s unlikely these amounts of DHA and EPA can be obtained by eating oily fish alone—so they suggest fish oil supplementation. But like others, they don’t really know how to gauge your supplement intake according to your

consumption of fish, or lack thereof.

So, to take advantage of these anti-inflammatory effects yourself, I recommend finding a high-quality brand you can trust. Then, here are my supplementation recommendations, based on diet:

- **If you eat fish every day...** there's no need to take fish oil supplements.
- **If you eat fish four to six times a week...** supplement with 1 to 3 grams of fish oil daily, containing 400-950 mg of EPA and 300-700 mg of DHA.
- **If you eat fish one to three times a week...** take 4 to 5 grams of fish oil supplements daily, containing 1,400-1,800 mg of EPA and 1,000-1,300 mg of DHA.
- **If you don't eat any fish...** take 6 grams of fish oil daily, containing 2,000 mg of EPA and 1,500 mg of DHA.

D is for depression

As bad (and sad) as the American deficiency in omega-3s may be, there's another widespread deficiency that may also be putting people at risk of depression. And it's in a nutrient you

need to be particularly concerned over, starting around this time of year...

I'm talking about Vitamin D.

Vitamin D has a long-established and well-known benefit for mood. And now, a large new study from The University of Leipzig in Germany found that higher vitamin D levels are associated with reduced symptoms of depression.⁶

The researchers linked this beneficial effect to the vitamin's influences on three specific markers of inflammation: C-reactive protein (CRP), interleukin 6 (IL-6), and total white blood cell (WBC) count.

The study analyzed data from 9,640 men and women, ages 18 to 80 years, during August 2011 to November 2014. In addition to a battery of clinical and medical assessments and lab tests, participants' symptoms of depression during the prior week were measured.


Ultimately, higher concentrations of CRP, IL-6, and WBC were associated with greater symptoms of depression. But vitamin D may be able to help...

Scientists believe vitamin D is active within brain regions that influence mood, as it can increase the serotonin synthesis that's altered in depression.

In other words, D helps naturally increase levels of serotonin, the feel-good hormone. (This is something antidepressant drugs can't even do! Instead, those drugs trap abnormally high levels of serotonin in the synapses between brain cells, by interfering with normal re-uptake of serotonin into brain cells.)

Vitamin D also protects brain cells from degeneration. And it modulates immune-system responses that may lead to inflammation and mood alteration.

Of course, you already know that from October to March, in latitudes north of Atlanta and Los Angeles, your body is unable to synthesize enough vitamin D from the sun. That makes supplementation especially important during this time of year.

So, I suggest you celebrate the autumnal equinox by making sure you're adequately supplementing with vitamin D. As always, I recommend taking 250 mcg (10,000 IU) of D daily, along with adequate amounts of fish oil. You'll likely find yourself staying healthier and happier as the days shorten, the air becomes crisper, and the leaves begin to fall. 

Eve's forbidden fruit really *does* help keep the doctor away...and so much more

In the early days of *Insiders' Cures*, I wrote about a rather tongue-in-cheek study that found that people who ate an apple a day didn't go to the doctor *any less* than non-apple eaters.

But the researchers did find that the apple eaters used fewer prescription drugs.¹

In my view, that's the whole point.

And it leads to the bigger picture: People who regularly eat apples have been shown to have a lower risk of numerous chronic diseases.

Apples are high in fiber, vitamins B and C, calcium, potassium, and phosphorus. Plus, compared with other commonly consumed fruits in the U.S., apples rank second highest

in antioxidant activity. They also rank highest in healthy phenolic compounds.²

And now, groundbreaking science shows exactly *why* and *how* apples work in so many different ways to benefit your health.

So, in honor of apple harvest season, let's take a look at what Eve's

forbidden fruit can do for five key aspects of your health.

Five ways apples help keep the doctor away

A growing body of evidence reveals the following five health-boosting benefits of apples...

1.) Combat constipation. Because they're an excellent dietary source of natural fiber, apples are a great way to go, so to speak.

Just make sure to eat the skin of the apple as well. The skin contains the highest concentration of nutrients. It also contains insoluble fiber, which helps bulk up your stools and pushes the waste through your intestines in a timely manner. (Of course, you also want to drink plenty of water to help lubricate this whole process.)

Some health practitioners recommend taking fiber supplements for constipation. But, as I explained in the very first issue of *Insiders' Cures*, fiber is a complicated and misunderstood nutrient. And the wrong fibers can actually *increase* your risk of chronic diseases.

In other words, fiddling with fiber powders and pills is a dangerous game. That's why I recommend allowing Nature to take out the guesswork by eating apples—as part of your healthy, balanced diet—instead.

(I can also remember the old commercials for ridiculous, useless laxatives for constipation that claimed to have as much “bulk” as so many apples. Which always made me wonder: Why not skip the laxative pills and just eat apples instead? Apples are certainly a tastier option—not to mention, healthier.)

2.) Nourish your gut. As I've written before, a healthy microbiome equals a healthy body and brain. And

a recent study found that organic apples contain natural probiotics that nourish your gastrointestinal (GI) microbiome. Which may have been what the “apple a day” saying meant all along.

Researchers in Austria analyzed how much probiotic (“good”) bacteria apples contain, and whether the amount varies between organic and conventional varieties.³ They found that a typical apple—organic *or* conventional—has about the same amounts of probiotic bacteria. (Most of the bacteria are in the seeds, but even if you toss out the core, you still get about 10 million bacteria.)

The difference, however, is that organic apples have a *more balanced, diverse, and evenly distributed* population of probiotic bacteria, compared to conventionally grown apples.

Organically grown apples (like all organic produce) legally can't be sprayed with pesticides. These chemicals are harmful to plants in many ways—including killing their naturally occurring probiotic bacteria. Plus, foods contaminated with pesticides harm the beneficial probiotics in your GI microbiome.

The researchers also found that organic apples didn't contain *E. coli* and other bacteria that are known pathogens—but conventional apples did. And as an added bonus, they discovered that the probiotic bacteria found in organic apples help them taste better, too.

I should also note that the researchers explained how the probiotics on fruits are affected by cooking.

Consequently, organic apples and other fruits should be eaten *fresh* and *raw* (in contrast to many vegetables, which are richer, nutritionally, when cooked).

3.) Make your mouth happy. The mouth and teeth are a key part of the GI system—in fact, the mouth is where it all begins. That's why it's good news that in addition to keeping the doctor away, apples can also help keep the dentist away!

Eating apples naturally cleans the teeth and helps control food odors and bad breath. It also promotes saliva, which is good for oral health and digestion. And of course, your taste buds always appreciate a sweet, juicy apple!

4.) Stave off blood sugar spikes. Studies show that apples have metabolic benefits that help regulate blood sugar and reduce the risk of Type II diabetes. And that the phytonutrients in apples help prevent spikes in blood sugar in three main ways...

First, they inhibit enzymes involved in the breakdown of complex carbohydrates into simple sugars. Second, they naturally stimulate the pancreas to produce insulin. And third, they decrease the absorption of sugars into the bloodstream by slowing digestion and trapping sugars and carbs in their complex food biomatrix.

All of this means that apples can be a good source for natural energy. In addition to providing that healthy energy boost (which is far better than consuming sugary candy bars or “energy drinks”), the vitamin C and phenols in apples counter the effects of oxidative stress—which you want to reduce for healthy aging. Plus, apples' natural malic acid content is good for muscle energy and function.

Finally, apples also help satisfy your hunger and register high on the satiety index that determines how much foods contribute to caloric intake, high blood sugar, and obesity.

5.) Slash your risk of cardiovascular disease. According to a recent British study, eating an apple a day could prevent nearly 8,500 deaths from cardiovascular disease per year.⁴ And that's just in the U.K.! Imagine what the numbers would look like in the U.S., which has almost *five times* as many people. (This always makes me wonder *why* studies like this *aren't* conducted in the U.S.?!)

The researchers used a risk-assessment model to calculate what would happen if 70 percent of people in the U.K. over the age of 50 ate an apple a day. Using this model, everyone's total calorie intake would stay the same; they would just need to replace another food with an apple.

The researchers found that eating an apple a day would prevent almost as many deaths as taking 40 mg of simvastatin (Zocor®)—a statin. (Of course, newer studies have discredited old drug company data about the benefits of statins. Meaning the benefits of eating an apple a day to help protect your heart health would be *even more* influential—and *without* the known side effects of statin drugs.)

The researchers also estimated that prescribing statins to all of those people would lead to 1,200 cases of cardiomyopathy, which involves serious *damage* to the heart muscle. In addition, statins would lead to 200 cases of rhabdomyolysis (destruction of skeletal muscles). And they would cause 12,300 new cases of diabetes—which, ironically, is a leading cause of heart attacks.

On the other hand, according to this study, you could simply eat an apple a day and potentially avoid all of these statins and their related complications—while also lowering your risk of heart disease...plus much *more*.

In fact, in one notable study involving 9,208 men and women, researchers found that those who ate the most apples over a 28-year period had a lower risk for thrombotic stroke, too (which is caused by blood clots).⁵

But aren't apples problematic because of the sugar?

Now, for *years*, many nutritionists, health practitioners, and even chemists told us that *all* types of sugar are the same. They said whether you eat an apple or a cookie, you metabolize it the same way.

But this couldn't be further from the truth.

The “meat” (or white) of the apple does contain some natural fructose (the sugar found in fruit). But your body digests and metabolizes this natural sugar differently than it does sucrose (table sugar)—particularly when you eat the whole fruit. So, it's really another medical myth that eating apples or other fruit contributes to blood sugar-related diseases like diabetes or heart disease.

In fact, I recently reported on the results of a new study that eating fruit is *not* a metabolic problem for people with high blood sugar and diabetes.⁶ The researchers found that people who ate two servings of whole fruit a day actually had a whopping 36 percent lower risk of developing Type II diabetes than people who consumed half a serving of fruit or less.

Why? It has to do with fruit consumption and insulin sensitivity. The researchers found that people who consumed more fruit had to produce less insulin to lower their blood sugar levels. This is important because high insulin levels not only lead to diabetes, but are also associated with obesity and heart disease.

And that's not the only new study

Forgotten fruits: “The lost apples”

Apples originated on the hillsides in what was temporarily known as Soviet Central Asia. Early apples looked more like crabapples than the big, round fruits we're familiar with today. That may explain why, after Russian apples migrated to Europe and North America, the fruits were primarily used to make apple cider (especially since water in urban areas wasn't safe to drink).

But during the 20th century, as municipal water sources became less dangerous to drink, apples began to be cultivated more for *taste* than for their ability to be made into cider. So, we need to consider whether the old admonition about a daily apple was also about the safety of drinking cider rather than eating the whole fruit.

Today, there are about 4,000 varieties of apples. That seems like a lot... until you consider that there were once 17,000!⁷ The ban on hard cider during Prohibition—coupled with the rise of industrialized agriculture and increased demand for more reliably blemish-free fruit—culled thousands of varieties of apples in the U.S.

About a decade ago, a retired FBI agent and a Vietnam veteran began hearing about hidden apple orchards in the Pacific Northwest. Many of these orchards were planted by pioneers who traveled west due to the Homestead Act of 1862, but had long since been abandoned.

Using old maps, county fair records, newspaper clippings, and nursery records, the two men began identifying the likely locations of these old, overgrown orchards. Then they used GPS tracking to find them.

So far, these fruit sleuths have discovered about 30 apple varieties that were thought to be extinct. A team of volunteers grafts the historic stock onto new trees and sells them through the Whitman County (Washington) Historical Society's Lost Apple Project.⁸ You can learn more via their Facebook page, The Lost Apple Project.

showing the health benefits of just two servings of fruit a day...

New, breakthrough research on the general benefits of eating fresh produce convincingly demonstrates

that consuming just three servings of vegetables and two servings of fruit per day appears to be optimal for your diet.

This is substantially less than the six to eight servings of fruits and veggies that some so-called nutritionists continue to push. And yet, many Americans don't even eat just *one* serving of fruit a day, let alone two. If that sounds like you, why not start with eating an apple a day, and then work your way up to another serving of fruit as well? Apples are easy to find year-round, and can be added to your diet in many ways.

You can cut them up and combine them with other healthy ingredients like raisins or cranberries (in moderation), nuts, lemon juice,

cinnamon, cloves, and ginger.


You can also add fresh apples to your favorite dishes. A simple tip is to find ways to incorporate them into healthy foods you normally eat, like yogurt or cottage cheese. Try adding them on your favorite sandwich. Or throw diced or sliced apples into just about any type of salad for a crispy, tasty surprise.

(Just remember to skip the apple juice, which is processed and tends to be mostly sugar water.)

I suggest keeping a few apples (and other fruits) on the countertop so you're more likely to see them and remember to eat them. (I keep my fruits in a three-tier, hanging basket in the kitchen, with sections

for onions, garlic, and ginger and turmeric root, as well as different fruits.) This also keeps your fruit at room temperature, which I believe gives it a better taste and texture than the refrigerator does—and makes it easier to eat.

And remember—you don't have to save your fruits for regular mealtimes. Enjoy them as a healthy snack anytime, throughout the day.

So, when you're out and about on your daily walk or weekend outing this fall, pick a crisp, organic apple from a bountiful tree, or buy a bushel at your local farmer's market. After all, it's just what the doctor ordered, and what science shows can keep you healthy, naturally. 

One of my favorite foods should be included in your heart-healthy diet—not restricted!

Mainstream approaches to lower blood pressure readings have been all wrong, all along

The only drugs for blood pressure I've ever used (or recommended) are the old generic standbys. But I keep reading about how these generic drugs are now contaminated with carcinogens—and carry a whole host of potential side effects ranging from dizziness to diarrhea.

That's why I can no longer recommend *any* drugs for hypertension (high blood pressure), unless your blood pressure reaches life-threatening levels. (Which makes controlling your blood pressure even *more* important.)

Of course, I recommend controlling it naturally. And, as usual, that begins and ends with your diet.

Indeed, there are reams of research showing that simple diet (and lifestyle) modifications can result in meaningful reductions in your blood pressure—*without* drugs.

And now, a pair of new studies found that eating certain vegetables (including one you'll never guess!) can *significantly* lower your blood pressure—and reduce your risk of cardiovascular disease.

Nitrate-rich vegetables can affect your blood pressure at the cellular level

Foods that are high in naturally occurring nitrates, including leafy green vegetables (like kale and spinach) and beets, are already well

known to lower the risk of cancer and other chronic diseases.

And now, new research from Denmark suggests they also act to lower blood pressure *and* substantially reduce the risk of heart disease.¹

The study tracked 53,150 men and women, with a median age of 56, for 23 years. None of the participants had cardiovascular disease at the beginning of the study, but by the end, 14,088 did.

The researchers measured how many nitrate-rich vegetables the participants ate. Along with leafy green vegetables and beets, the researchers noted that other nitrate-rich foods include potatoes, celery,

and carrots. (Dietary nitrates have been shown in other studies to help the body produce nitric oxide, which appears to influence the cells that support the healthy function of blood vessels—including proper blood flow and blood pressure.)

The study showed that the participants who consumed the most dietary nitrates had about a 3 mmHg lower systolic blood pressure (the top number) and a 12 to 26 percent lower risk of heart disease, compared with those who consumed the least nitrates.

Interestingly, the researchers noted that the reduction in blood pressure accounted for just about 22 percent of the total association between vegetable intake and incidences of cardiovascular disease.

Meaning that these vegetables hold many *additional* benefits. In fact, just as there are more than just nitrates in these foods, there's more involved in the vegetable-blood pressure-heart health connections, too.

Of course, I always find it shortsighted to try to explain *all* of the effects of diet and nutrition by focusing on *any* one “magic bullet” ingredient, like nitrate. So, this finding makes perfect sense to me.

Another key finding from the study is that eating just one cup per day of raw nitrate-rich vegetables, or half a cup of cooked vegetables, conferred optimal benefits. And that eating more *didn't* give the study participants any further blood pressure or cardiovascular advantages.

This illustrates what I note on page 6—that science shows it's only necessary to eat *moderate* amounts of fresh fruits and vegetables (three servings of vegetables and two servings of fruits each day) for optimal health—including cardiovascular health.

The researchers also found that antibacterial mouthwashes and heartburn drugs like proton-pump inhibitors (PPIs) can actually hinder the conversion of nitrates in vegetables to nitric oxide in the body. Which is yet another reason to avoid these products.

Potatoes' one-two punch against high blood pressure

Potatoes are listed as a nitrate-rich vegetable in the Danish study. But this much-maligned vegetable also has blood pressure benefits beyond nitrates, as illustrated in another new study.

In fact, potatoes are an important source of potassium in the diet. And one medium-sized potato provides about 10 percent of our required daily potassium intake.

Potassium is key for a variety of body functions, including regulating fluid balance, muscle contractions, and nerve signals. Research shows it also helps protect against strokes, osteoporosis, and kidney stones. And it may help lower blood pressure.²

That's why I was intrigued, but not surprised, when I read that some researchers at Purdue University recently found that eating potatoes can actually help control blood pressure *better than* taking potassium supplements.²

The researchers gathered 30 men and women with hypertension or pre-hypertension. Then, they split the participants into four groups.

For 16 days, one group consumed a “typical” American diet that included 2,300 mg of potassium per day (which scientists consider to be too low in potassium). Another group ate the “typical” diet plus 1,000 mg of potassium a day from baked, boiled, or pan-heated potatoes, with

no additional fat. The third group ate the “typical” diet plus 1,000 mg of potassium a day from a 330-calorie serving of baked French fries. And the final group ate the “typical” diet along with a 1,000 mg potassium supplement daily.

Results showed that the group that ate the baked, boiled, or pan-heated potatoes had the lowest systolic blood pressure levels. In fact, this group had lower blood pressure levels than the supplement group!

Also, eating French fries was not detrimental—the study showed that the French fry group *didn't* have increased blood pressure. (Just remember, these were baked French fries, not deep-fried.)

The takeaway from these new studies is this: Potatoes are an important part of a heart-healthy diet, and focusing on sodium reduction for blood pressure control has been all wrong, all along.

Instead, getting *enough* healthy nutrients from the diet, like potassium and nitrate, appears to be the key—and helps explain the many health benefits of vegetables. Of course, vegetables also contain hundreds of additional vitamins, minerals, and phytonutrients that are good for your overall health, too.

So, if you want to naturally lower your blood pressure—and coincidentally reap many other health benefits—follow a healthy, balanced diet full of fresh produce and hearty potatoes (prepared properly).

For additional, natural pathways to a healthy heart (and lower blood pressure), check out my *Heart Attack Prevention and Repair Protocol*. For more about this innovative, online learning tool—or to enroll today—[click here](#) or call 1- 866-747-9421 and ask for order code EOVS3X900.

What's brewing in the kitchen?

(Try these healthy beer recipes)

This is the time of year when beer lovers around the world celebrate Oktoberfest. Despite its name, Oktoberfest actually occurs in September—as a welcome for the October harvest.

And as I wrote in last month's issue, beer is a natural product made from plants and yeast. It's loaded with vitamins, minerals, amino acids, flavonoids, and antioxidants—giving it anti-cancer, neuroprotective, estrogenic, anti-inflammatory, and antimicrobial properties.

With all of these nutrients, it's no surprise that studies have found that a brew or two can boost the health of your brain, heart, liver, bone, and gastrointestinal (GI) microbiome.

That's why I often encourage you to toast to good health with a tall, cold beer. But you can also gain benefits from *cooking* with this healthy beverage, too.

For instance, there's evidence that cooking meat at high temperatures may cause the formation of heterocyclic amine (HCA) compounds—and some researchers pursue a theory that they may contribute to cancer. But a Portuguese study found that marinating steak *in beer* for six hours before cooking can eliminate nearly 90 percent of these potentially carcinogenic compounds.¹

And, of course, adding beer to your marinade or other recipes also contributes to the flavor.

So, this Oktoberfest, rather than just enjoying a few beers with dinner, I invite you to toast to your health through your cooking, as well.

Here's one of my favorite beer marinades for grilling meat or veggies, along with a recipe for one of my favorite dishes—carbonnade a la flamande. This delicious beef and beer stew is a staple of Belgian cooking (where they know a thing or two about beer), and apparently helps keep all of those European Union bureaucrats in Brussels well-fed. Enjoy!

All-purpose beer marinade for grilling²

- ¼ cup olive oil
- 2 tbsp Worcestershire sauce
- ¼ cup balsamic vinegar
- ½ cup Guinness extra stout beer
- 3 cloves garlic, grated
- 2 tbsp brown sugar
- 2 tsp onion powder
- 2 tsp chili powder
- 2 tsp ground cumin
- 1 tsp smoked paprika
- 1 tsp ground black pepper
- 2 tsp salt

Combine all of the ingredients in a large bowl. Add meat, poultry, fish, or vegetables and marinate in the refrigerator for 2 to 12 hours (depending on how much flavor you want) before grilling. Grill as you normally would (and remember to keep some marinade for basting, which also adds extra flavor).

Carbonnade a la flamande (beef and beer stew)³


- 3 1/2 lbs organic, grass-fed chuck roast, cut into 1-inch pieces
- Salt and freshly ground black pepper
- 4 tbsp butter, divided in half
- 3 medium yellow onions sliced about 1/4 inch thick (about 8 cups)
- 3 tbsp all-purpose flour
- 1 1/2 cups chicken or beef broth

- 1 1/2 cups (12 oz bottle) Belgian beer
- 4 sprigs fresh thyme
- 2 bay leaves
- 1 tbsp whole-grain mustard
- 1 tbsp brown sugar

Season the chuck roast with salt and pepper. On the stovetop, heat 2 tablespoons of butter in a large Dutch oven (with apologies to the Belgians) over medium-high heat until hot, almost smoking. Working in batches, brown the meat, about 3 minutes on each side (don't stir; allow the meat to brown well). Transfer the browned beef to a separate bowl.

Add 2 tablespoons of butter to the Dutch oven; reduce heat to medium. Add the onions and 1/2 teaspoon of salt; cook until onions are browned, about 15 minutes. Add the flour, and stir until the onions are evenly coated and the flour is lightly browned, about 2 minutes. Stir in the broth, scraping the pan bottom to loosen browned bits; stir in beer, thyme, bay leaves, and browned beef. Add salt and pepper to taste.

Increase heat to medium-high and bring the mixture to a full simmer. Then reduce heat to low, partially cover the Dutch oven, and let the mixture cook 2-3 hours until the beef is fork-tender. (You can also cook in the oven at 300°F.) About 30 minutes before the mixture is finished cooking, add the mustard and brown sugar.

You can serve this dish on its own or over potatoes (see page 7) or organic, whole-grain noodles. The type of beer you used in the recipe also makes a great accompanying beverage to go with it. 

Citations for all articles available online at www.DrMicozzi.com