



The Younger You

Monthly newsletter about Wellness, Science, and a Physician-Led Revolution

This Issue

EDITION 9

Rice Flour, Nerve Hypersensitivity and Psychology, Cupping Therapy, Regenerative Medicine



Andrew Clary, D.O.

Dr. Clary has always had special interest in coaching, educating, and speaking about nutrition as well as lifestyle. He has a professional interest and training in both spine care and nutrition (receiving his Bachelor of Science in Applied Nutrition before medical school) and continues a lifelong journey of learning. He is always looking for ways to inspire, grow, and benefit others with even small daily changes.



Anthony Sterk, PA-C

Anthony Sterk is a hardworking, meticulous, and dedicated provider. He is a Physician Assistant and has been working in orthopedic spine specialty the past four years. He has a drive to continue learning new and innovative ways to help patients achieve their goals. His passions include running, hiking outdoors, and spending time with his family.

WHO CARES ABOUT RICE FLOUR?

Many of us label readers shriek when we read a product ingredient label that says “bleached white flour” as a primary component. I thought it would be helpful to understand some of the fallacies of the alternatives out there, including wheat and other flours. As we advocate for a whole-food plant-based diet, we need to understand what grains to be cautious of and to understand what to consume. As a funny reminder, the food pyramid has changed so much over the past 15 years that it’s hard to keep track of the foundation of a recommended diet.

First, you should know that the food pyramid and most society recommendations are made by conservative theorists who make often only loosely evidence-based recommendations. Heart Healthy advocates jibing with Diabetes societies as well as the old-guard heads of many of these groups are VERY slow in adapting recommendations. Hence, the continual evolution of the Food Guide Pyramid. This model was released in 1992 and strongly criticized by Harvard’s School of Public Health, among others, was replaced with an even more confusing 2005 release of MyPyramid. In my opinion, it’s a terrible model and very unhelpful to anyone seeking even generic advice. In previous newsletters, you may have seen my review of a large systematic review of over 100,000 patients and carb consumption and longevity. As a summary, if your diet is 55% carbohydrates you will live the longest. Less or more, you die sooner (is basically what the research says.) What it doesn’t define, other than saying to eat whole foods, is what exactly we should eat regarding carbs.

One of my friends, Brad, and I have had interesting discussions about how vegetarians often are criticized for not eating enough protein. He always highlights the elephant, who is entirely vegetarian and is one of the biggest animals in the world! Gorillas, too, are huge, very muscular and aside from sometimes eating ants, they are predominantly vegetarian, eating fruits and bamboo. I laughed with my sister-in-law who is an emergency room physician who asked if you eat strictly vegetarian, how can you get enough protein? In the U.S., have you ever seen someone present to the ER with kwashiorkor? (Google this

and you will see kids in undeveloped countries who don’t eat really any protein, and the fluid in their bloodstream escapes with nothing to hold it in and they accumulate fluid in their abdomen instead) Of course not. Did you know that even half a cup of peas is already over 10% of your protein intake for the DAY? More on this obsession with protein in future newsletters.

Back to flour. Bleached or traditional all-purpose flour helps enzymatically (with benzoyl peroxide) break down the texture of a wheat grain. There’s gluten in both all-purpose and whole wheat flour, something that is controversially causative of inflammation in the body (there are many predisposed to this, but not everyone is, I argue). Peter Gibson, since his 2011 study about the gluten-allergy myth, did a follow-up study that found: “in contrast to our first study ... we could find absolutely no specific response to gluten.”

Because many people will have an allergy to wheat, rice flour may be a nice alternative. But wait, what if you want brown rice just as you use whole-grain flour instead of white flour to help supplement more nutrients? Well, it’s complicated. Whole-grain rice is often used, but not always, and isn’t often specified in “rice flour.”

So here are some differences — rice flour versus traditional wheat flour:

- » Rice flour is high in starch content
- » No gluten in rice flour
- » No risk for a wheat allergy
- » No sodium or potassium, really, in rice flour
- » Rice flour has a higher glycemic index (raises blood sugar much faster)
- » Wheat flour has nearly twice as much protein as rice flour
- » White rice has almost one-third the fiber of wheat flour (not ideal)

As a summary, we just need to be cautious that reading labels and seeing something different doesn't mean it's healthier. I do think whole wheat flour, unless you have a diagnosed issue of celiac disease, would be my recommendation and seeing it on a label would not scare me as much as rice flour.

NERVE HYPERSENSITIVITY AND PSYCHOLOGY

Due to the COVID pandemic, we have seen an increase in varying degrees of depression and anxiety. This may be attributed to at-home emotional stressors, financial difficulties, and/or quarantine isolation from family and friends. The added psychological stress does seem to coincide with increased rates of neck and low back pain. Portions of spine pain can be influenced by mental health. In fact, some antidepressants can treat spine and chronic pain due to action on various neurotransmitters, such as serotonin and norepinephrine. Some have significant relief with nerve-based medications, such as gabapentin or pregabalin (Lyrica), due to these medications treating neuropathic-specific pain. Beyond medications, pool physical therapy or water-based exercise has been shown to give therapeutic relief. There are many options for treating spine disorders, and both patient and provider need to identify when pain may be related more to psychologic than to physical ailment. We have many resources at our disposal if you are feeling depressed or anxious. Talk to your family doctor if you think this is affecting your quality of life.

—Anthony Sterk, PA-C

WHAT IS CUPPING?

Cupping therapy is an ancient Chinese practice of applying suction to the skin to cause healing. It can help a range of conditions ranging from headaches to skin disorders. Manual suction from a small cup causes, within a few minutes, a deep feeling of relaxation. Commonly, the culprit we are affecting is to open up regions of previously blocked blood flow. Microcirculation causes a recovery of whole-body circulation. Specifically, its benefits are:

- » Pain reduction
- » Relief of muscle tension
- » Better immune system regulation
- » Better sleep
- » Clearer skin
- » And so many other benefits

There is some good scientific evidence supporting cupping as a safe and effective therapy. A 2010 systematic review of over 500 studies on cupping and pain relief was conducted on the topic. The study conclusion was that “the majority of studies show potential benefit on pain conditions,

herpes zoster, and other diseases.” A 2016 NIH comprehensive study appreciated that “cupping could be effective in treating the pain and disability associated with chronic neck ... and low back pain in the short term.”

Basically, this is a very effective and safe option that uses a holistic attempt at healing underlying problems within the body. It is a great option for many patients.

Thanks to Joanna Willis at Selby Acupuncture for contributing to our newsletter. I think their group is the best in the region when you're looking for alternative treatments! Call them 651-224-6678.

(FYI I have no disclosures or personal investment or benefit to recommending them.)

REGENERATIVE MEDICINE – BONE EDEMA

Back pain is a complex diagnosis. While discs can hurt, bones can hurt, and nerves can hurt, there are some of these that are easier to treat than others.

When we treat pain from a disc (the disc itself hurts and sends pain signals), often there are two problems. First, the disc tissue has some mild swelling and inflammation inside (something that most often shows up as a texture/density change on MRI). Secondly, the bone itself, called the endplate of the vertebral body (the bones that are on either side of the disc) can get swollen. For this reason, fusion surgery does not get rid of back pain because even if you take the disc away, the bone may still ache. And unfortunately, regenerative medicine basically isn't possible at that point onward.

In our extensive experience and literature readings as well as mentorship from world experts, it's apparent that this bone edema (swelling) is a big culprit for both joint (spine and peripheral joints like knee or hip) as well as spine pain. There are some good studies about intraosseous (putting needles into the bone itself and injecting cells within) stem cell/regenerative medicine procedures with excellent outcomes. Other than that, we're left with replacement surgery (removing the painful, swollen bone). This isn't possible for the spine. What we've found is that intradiscal regenerative medicine procedures will treat pain in both the disc as well as the endplates (swelling in these bones is called Modic change and has a high correlation to back pain and is a sign of long-term disc degeneration).

We're fortunate at Summit to have learned, pioneered, and tailored an effective treatment for these complex issues, including joints and spine complaints. We hope to continue to evolve this therapy and use bleeding-edge research to get you the best 21st century medicine has to offer.