METABOLIC REVOLUTION

OUR HEALTH, OUR RIGHT

Our Health, Our Right!

Dear Friends and Advocates,

At Metabolic Revolution, we refuse to accept an America where 93% of adults suffer from chronic conditions. We do not need to stand by and let this happen. One of the most powerful tools we have is ***the power of choice***: the choice to reject the foods that fuel chronic disease and instead, embrace the foods that heal.

One of the most pervasive culprits behind this health crisis is hidden in plain sight. Added sugar isn't just contributing to our metabolic dysfunction; it's hijacking our brain's reward system, creating addiction-like responses that keep us trapped in cycles of cravings and chronic disease.

Today, we're honored to share an article written by Dr. Nicole Avena , a pioneering research neuroscientist whose work on food addiction supports the scientific foundation for the metabolic revolution we desperately need.

Unmasking Sugar: The Hidden Culprit Behind Chronic Disease

By Nicole Avena, PhD

Sugar is a silent killer, and most of us are hooked on it. You aren't going to drop dead from eating one cookie, but many years of having a poor diet that is rich in added sugar will result in the damaging effects of sugar, and the damage goes even further than I initially thought. Sugar has not only been shown to have destructive effects on metabolic health, but new research shows that it can negatively impact learning, memory, and impulse control as well, just to name a few things. [1] Many of the medical conditions that plague adults, such as diabetes, cardiovascular disease, and fatty liver disease, are now being tied back to our diet, with sugar as the main culprit.

Sugar is so hard to give up, because we can become addicted to it! Sugar is an ingredient found in over 60% of food in American grocery stores. [2] Our modern food industry has made sugar cheap and easily accessible for companies, and the science shows that the more sugar added to foods, the more we stay addicted to sugar.

But how? How can we all be addicted to sugar? Added sugar intake causes a dopamine response in the brain. When we eat sweet things, we feel pleasure and comfort. Over time, the brain gets used to this feeling and requires more and more sugar to feel the same warm and fuzzy feelings. This is a phenomenon known as tolerance - and yes, the same tolerance we see in drug addictions like opioids. [3]

We learn from a young age that sweet means good, and for good reason! Breast milk is naturally sweet, and the preference for sweet-tasting foods is innate. Where we begin to run into trouble is when we grow older, and our brains continue to rely on the boost of pleasure and happiness sugar brings. We don't need added sugar to live. There is a very big difference between the impact that added sugar has on our brain and behavior compared to what happens when someone consumes other carbohydrates.

Confusion can come when we think about the physiological role of "sugar". The brain does need "sugar" - in the form of glucose - from foods containing carbohydrates to function optimally. The brain cannot store sugar to use as energy, which can lead to cravings if one is not consuming enough food or energy throughout the day.

The major difference between added sugar and a complex carbohydrate is in their digestion. Yes, both products equal glucose to the bloodstream, but added sugar or simple carbs like ultra-processed foods digest very quickly, leading to a larger and stronger blood sugar spike. Remember when you were a child and your parents would stop you from eating all your Halloween candy at once with the fear of getting a "sugar rush"? That's not a fib - and a sugar rush - aka a high blood sugar spike - leads to a hard crash on the other side, which also contributes to keeping our brain hooked on the high.

Recommended tools to start your journey to having less sugar:

- **Identify triggers -** Triggers can come in multiple forms and are unique to everyone! Recognizing yours and being able to manage the situation without reaching for the sugar is key in your journey.
- **Start small -** Cutting one food or drink with added sugar is far better than none, so start small! This makes the process seem far less daunting, and over time. your pantry will become fully sugar-free.

Dr. Avena's book Sugarless, gives a step-by-step science backed guide to quitting sugar, supported by 30 easy recipes - available now wherever you get your books.

From Our Community Kitchen: Vegan Keto Tofu Scramble

One of our community members recently shared this delicious, protein-rich scramble that makes a satisfying meal while keeping carbs low and avoiding blood sugar spikes Dr. Avena describes.

Vegan Keto Tofu Scramble *Serves 1 · 20 minutes · Great for leftovers!*

Ingredients:

- 6 oz firm tofu, drained
- 1/8 tsp turmeric
- 1/2 tablespoon nutritional yeast
- 2/5 cup unsweetened almond milk
- 2-3 cups of kale, arugula, or another low oxalate/low carb green

Optional toppings & sides: *sliced avocado, a handful of olives, or your favorite low-carb veggie*

Instructions:

In a large, non-stick frying pan, break the tofu into bite-sized pieces, but not too small, as the pieces break down during cooking.

Over medium heat, stir in the turmeric and nutritional yeast until well combined and cook for 5 minutes.

Add the almond milk and simmer for 10 minutes, stirring now and then until the tofu gets a little creamy.

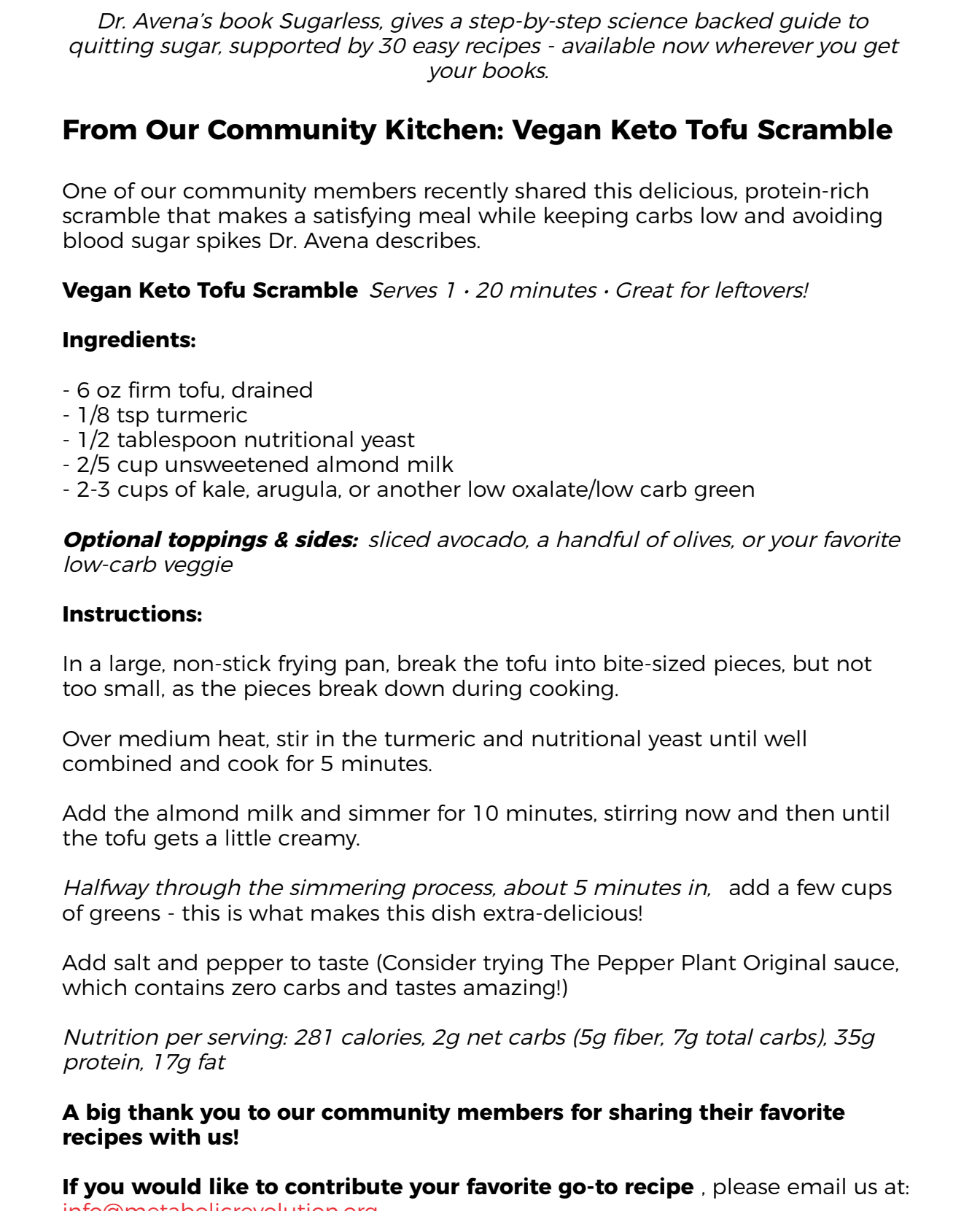
Halfway through the simmering process, about 5 minutes in, add a few cups of greens - this is what makes this dish extra-delicious!

Add salt and pepper to taste (Consider trying The Pepper Plant Original sauce, which contains zero carbs and tastes amazing!)

Nutrition per serving: 281 calories, 2g net carbs (5g fiber, 7g total carbs), 35g protein, 17g fat

A big thank you to our community members for sharing their favorite recipes with us!

If you would like to contribute your favorite go-to recipe , please email us at: info@metabolicrevolution.org



Spread the Nourishment

If Dr. Avena's insights about sugar addiction or today's recipe resonated with you, **would you consider sharing this newsletter with a friend or family member who might benefit from or enjoy this information?**

When we share knowledge, we help spark a movement of positive change that can *transform lives.*

Let's increase awareness of the powerful healing that metabolic therapies can provide, *together.*

In health and hope,
Chérie St. Arnauld
Executive Director, Metabolic Revolution

References

[1] https://pmc.ncbi.nlm.nih.gov/articles/PMC10780393/

[2] https://www.thelancet.com/journals/landia/article/PIIS2213-8587(15)00419-2/abstract

[3] https://www.uphs.upenn.edu/addiction/berman/neuro/dopamine.html

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