

# **CMS Fitness Center Newsletter**

February 2019



## **Article of the Month**

### **February is American Heart Month**



February is Heart Health Month. If you're planning on making improvements to your hearts health start now and celebrate those wins during heart health month.

We're sharing 5 impressive, fun, helpful and sometimes shocking facts about the heart in an effort to draw attention to the importance of good cardiovascular health.

#### **Heart Health Fact #1**

With every beat of your heart blood is sent flowing through 60,000 miles of blood vessels, delivering important nutrition and oxygen to all your organs and tissues. If you stretched the blood vessels in your body end-to-end, they'd circle the Earth almost 2.5 times! [*Cleveland Clinic*]

#### **Heart Health Fact #2**

Laughing may, in fact, be good for your heart and overall health! Research suggests a good belly laugh can increase your blood flow by 20%. The positive effects of this chuckle can last for 24 hours. [*American Heart Association*]

#### **Heart Health Fact #3**

Sadly, only 27% of people can identify all the major symptoms of a heart attack and know to call 911 immediately when they occur. Immediate action saves lives! According to the CDC, the major signs of a heart attack are:

- Chest pain or discomfort.
- Upper body pain or discomfort in the arms, back, neck, jaw, or upper stomach.
- Shortness of breath.
- Nausea, lightheadedness, or cold sweats.

#### **Heart Health Fact #4**

A woman's heart typically beats faster than a man's. On average, a woman's heart beats 78 times per minute while the average man's beats 70 times. [*Chilnick, Lawrence. 2008. Heart Disease: An Essential Guide for the Newly Diagnosed. Philadelphia, PA: Perseus Books Group.*]

#### **Heart Health Fact #5**

Evidence of heart disease found in ancient mummies from around the world suggests heart disease has been an issue for thousands of years. Not long ago, researchers reviewed CT scans of 76 Egyptian mummies, and 38 percent were found to have probable or definite calcification in their arteries. [*Global Heart Journal*]

## Workout Move of the Month:

### **Clean and Press**

This clean and press movement targets your shoulders, legs, and adds slight cardio into the mix. If you're not challenging yourself then you're not going to get the results you want.

Start with your feet slightly wider than shoulder-width apart. Bend your knees and hold onto a dumbbell with one hand with weight on the floor. Place your other hand behind you or on your hip. This is your starting position.

Exhale, engage your core and extend your legs by pushing through your heels and thrusting your weight through your hips. Keep your knees slightly bent to avoid over-extension. Flip the weight up by your shoulder while simultaneously standing up.

Inhale, and press the dumbbell up to the sky.

Reverse the steps to return back to your starting position. Perform for 12 repetitions for 3-4 sets then switch arms.



## Hip Stretches for Low Back Pain Relief

*Stretch your quadriceps in the prone position*



Did you know that stretching your hip muscles could help your back? The pelvis is a key structure when it comes to back health, partly because it is fixed to the lower spine. Not only that, but hip muscles attach onto the pelvis. Chronically tight hip muscles have the power to pull the pelvis out of alignment, and indirectly affect spinal positioning as they do. Your risk for an injury may increase, as well. If you already have one you may find that it's either made worse or irritated by your chronically tight hip muscles. At the very least, the tension and/or spasm in muscles that cross over the hip and attach onto the pelvis can contribute to imbalance (in terms of how strong and flexible each muscle group is relative to the others.) Muscle imbalance can make for pain, limitation and/or posture problems. It can also increase the healing challenge put to you by an existing injury or condition (for example, scoliosis.)

### Develop Your Hip Stretching Strategy

*Put your hips in extension to test for tight quadriceps.*



Releasing tight hip muscles is an indirect approach to relieving back pain. Because of that, you might consider taking a strategic approach based on where you're the tightest. One thing to keep in mind as you create your hip muscle stretching strategy (and pick out the exercises you'll do) is that in general, muscles that work your hips are categorized according to their location: Front, outer, back and inner. To a great extent, the muscle's location determines the type of movement it can produce.

For example, your quadriceps muscles are located at the front of the thigh; their job is to flex the hip, which brings your lower extremity (thigh, lower leg and foot) forward, in front of you. On the other hand, your hamstring muscles are located at the back of the thigh. When they contract, they extend the lower extremity, bringing it behind you.

Keep reading and you'll learn a bit about each of the hip muscle groups and get ideas on ways you can increase their flexibility.

### Quadriceps Hip Stretches for Low Back Pain Relief

*Stretch your quadriceps muscles with a hip bridge.*



Your quadriceps are located at the front of the thigh. They cross over hip joint in front, which means they produce hip movement (in this case, hip flexion.) The quadriceps are unique

from most of the body's muscles because they are what is known as "2-joint muscle." This simply means that along with crossing over and affecting motion in your hip joint, they also cross over and affect your knee. (The quadriceps extends i.e., straighten, the knee.)

The quadriceps muscles work when you do things like walking, running, climbing stairs and more. They can be very much affected by long hours of sitting, as when you work at a computer all day. Sitting puts the hip joint in constant flexion, which we've already said is what happens when the quadriceps contracts. When you sit all day the quads, as they are often called for short, stay in a constant state of contraction – not very healthy for the muscle or for your lower back.

To stretch your quadriceps at the hip, the idea is to do the opposite movement to flexion, i.e., extension. You can perform extension moves at the hip while standing, lying on your side, lying prone (on your stomach) and kneeling. Even basic stretches done at a pain free level where you can feel a small bit of challenge, and that are held continuously for approximately 30 seconds may translate to better posture and less back pain.

### **Hamstring Hip Stretches for Low Back Pain Relief**

*Increase your hamstring stretch by asking a partner to help.*



Like quadriceps, the hamstrings are 2-joint muscles. Unlike the quadriceps, though, the hamstrings are located at the back of your thigh. They attach at the sitting bones, which are located on the underside of your pelvis. When they contract, the effect is to pull the back of the pelvis down toward the back of the thigh, or to bring the lower extremity back behind you. Either way, this move is called "hip extension."

You use your hamstrings when you walk, run, and climb stairs. You might also use them in sports that require explosive jumping such as basketball. Usually, hamstrings are weaker than the quadriceps, but when they are tight, this may lead to a posture issue called flat low back.

To stretch the hip portion of your hamstrings, perform hip flexion movements. It doesn't matter if you're an experienced athlete or a beginner – there's a hamstring stretch for every type of person. For a few ideas about how to stretch your hamstrings (including dos and don'ts and a few of my special alignment tips, check out:

<https://www.verywellhealth.com/great-hamstring-stretches-296849>

## Outer Hip Muscle Stretches for Low Back Pain Relief

### *Hip abductor and rotator stretch*



Muscles on the outside of the hip help to stabilize your body posture. They play important roles in walking and standing, as well as overall balance of the pelvic position. For this reason, it's important to keep them in good working order.

While we're on the topic of outer hip muscles, let's consider spinal rotation for a minute. You may believe that when you've got your spine in a twist, it's all happening in the back, however, in a well-working spine, this is not completely true. The hip joints play an important role by adapting the pelvic position to support and increase the rotation. Their construction allows for swiveling action to take place, which may increase your twisting range of motion as well as keep your back safe. But if your outer hip muscles are tight, your rotational range may be limited. This is another reason why stretching your outer hip muscle may be a good idea.

## Inner Hip Muscle Stretches for Low Back Pain Relief

### *Basic inner thigh groin stretch*



Inner hip muscles, aka groin, or adductor, muscles contribute balance to standing and locomotion. They also work with the outer hip muscles to keep your pelvis aligned horizontally. When chronic adductor tension causes pelvic tilting (which may be viewed as one hip higher than the other,) your sacroiliac and/or low back may be affected. Believe it or not, many people are tight in their groin muscles without realizing it; perhaps they never venture to stretch this area. [www.verywell.com](http://www.verywell.com)

# Supplements for Brain Health

by Hallie Levine

Turns out ginkgo biloba isn't all it's cracked up to be!  
What might be worth popping?

Taking steps to keep your brain healthy as you age is certainly a wise move, and studies show that things like healthy eating, exercise and getting enough sleep can significantly lower your risk of Alzheimer's disease. As for popping "brain-boosting" supplements, sales of which increased 74 percent between 2006 and 2016, the jury is a little more mixed.

"There are a lot of supplements out there that don't work," cautions Majid Fotuhi, M.D., medical director of NeuroGrow Brain Fitness Center in McLean, VA. One of these supplements is one you've no doubt heard of – ginkgo biloba. One study published in the medical journal *The Lancet Neurology* of almost 3,000 adults over age 70 with memory complaints found that this herb didn't reduce rates of developing Alzheimer's compared to those who took a placebo. Similarly, faddish DHEA supplements also recently failed to pass muster in studies. Here's a look at three supplements you might want to consider specifically for brain health – and another, fish oil, that comes with some caveats.

## **B vitamins**

Certain B vitamins may help slow memory decline when they're taken for at least 18 months, says Tod Cooperman, M.D., president of ConsumerLab.com, one of the country's leading independent evaluators of dietary supplements. One two-year study of people age 70 or over that had mild cognitive impairment, for example, found that those who took a combination of B vitamins (800 mcg of folic acid, 500 mcg of vitamin B-12 and 20 milligrams (mg) of vitamin B-6) had slower cognitive decline than those who took a placebo. These vitamins, especially B-12, are important for brain health because they help insulate and build up brain neurons, says Fotuhi. Yet "about thirty percent of people over the age of 50 don't absorb B-12 properly from food," notes Cooperman. As a result, they're more likely to be deficient.

If you're over 50, it's a good idea to get your B-12 levels tested, advises Cooperman. If they're low, talk to your doctor about temporarily taking a 100- to 500-mcg daily supplement of B-12, along with possibly 400 mcg of folic acid. It's also important to make sure that you get the recommended daily allowance of B-6, which is 1.7 mg. You can easily get this particular vitamin through your diet, and supplements aren't recommended since high doses have been linked to reduced kidney function and stroke. A list of foods rich in this vitamin can found [here](#).

## **Curcumin**

This compound is found in the spice turmeric and is what gives it its orange-ish color. It also provides a host of anti-inflammatory and antioxidant properties. Some research has also found that it may benefit both your thinking and memory. "We think it's one of the reasons that senior citizens in India, who eat curcumin virtually every day, have a lower prevalence of Alzheimer's disease," says Gary Small, M.D., director of geriatric psychology at UCLA's Longevity Center. A study done by Small and published this past January in the *American Journal of Geriatric Psychiatry* on 40 adults between the ages of 50 and 90 with mild memory complaints found that those given 90 mg of curcumin twice a day for 18 months experienced significant improvements in their memory and thinking abilities compared to those who just took a placebo. They also had less buildup of amyloid and tau in their brains, two substances known as biomarkers of Alzheimer's disease.

A teaspoon of turmeric spice contains about 150 mg of curcumin, so you can reap its benefits by adding a dash to your food every day. (If you do opt for a spice, use it in a meal that contains fats or oils, which increases absorption, says Cooperman.) If you take a supplement, be cautious, as many commercial brands don't contain the amounts they claim on their label. The four that have recently passed ConsumerLab's testing requirements are Doctor's Best High Absorption Curcumin, NOW Curcumin, NutriGold Turmeric Curcumin Gold, and Swanson Ultra Turmeric Phytosome.

### **Cocoa Flavanols**

These compounds, found in chocolate, have also been linked to improved memory and thinking skills. Flavanols are particularly abundant in the cacao bean, which is found in unsweetened cocoa powder. One 2015 Italian study published in the American Journal of Clinical Nutrition found that healthy people aged 61 to 85 who consumed a daily drink that contained anywhere from 520 to 993 mg of flavanols saw significant improvements on memory tests after eight weeks compared to those whose drink contained only about 50 mg. Another 2012 study published in the medical journal Hypertension found that drinking cocoa flavanols each day improved thinking skills in adults who already had mild cognitive impairment.

You need to be careful with cocoa powders since many of them are contaminated with the toxic heavy metal cadmium, warns Cooperman. Consider using an extract like CocoaVia instead. If you have your heart set on a drink made with traditional cocoa powder, limit yourself to a cup a day. ConsumerLab's testing has found that Hershey's (100% Cacao Natural Unsweetened) powder has the highest levels of flavonoids with the least contamination with cadmium or other heavy metals.

### **Fish oil**

If you're healthy, with no memory problems, there's little evidence that you'll benefit from this popular supplement. Research shows positive effects have been seen in people who already are suffering from early-stage dementia. One study published in the British Journal of Nutrition followed people over the age of 65 who had mild cognitive impairment for six months and found that those who took daily fish oil pills improved their scores on verbal fluency, a type of memory-related test where you have to produce as many words as possible from a category in a small amount of time. But a 2012 Cochrane Library review looked at the use of fish oil in more than 3,500 cognitively healthy older people for up to 40 months and saw no benefit. Chances are, if you eat fatty fish such as tuna, mackerel or salmon at least twice a week, you're getting enough fish oil, and a supplement won't make a difference, explains Cooperman.

## **RECIPES OF THE MONTH**

### **Heart Healthy Pineapple Green Smoothie**



#### **Ingredients**

½ cup unsweetened almond milk  
⅓ cup nonfat plain Greek yogurt  
1 cup baby spinach  
1 cup frozen banana slices (about 1 medium banana)  
½ cup frozen pineapple chunks  
1 tablespoon chia seeds  
1-2 teaspoons pure maple syrup or honey (optional)

#### **Directions**

Add almond milk and yogurt to a blender, then add spinach, banana, pineapple, chia and sweetener (if using); blend until smooth.

#### **Nutritional Information**

Serving size: about 1½ cups

Per serving: 297 calories; 6 g fat (1 g sat); 10 g fiber; 54 g carbohydrates; 13 g protein; 113 mcg folate; 4 mg cholesterol; 29 g sugars; 0 g added sugars; 3,216 IU vitamin A; 61 mg vitamin C; 297 mg calcium; 2 mg iron; 145 mg sodium; 1,038 mg potassium

Nutrition Bonus: Vitamin C (102% daily value), Vitamin A (64% dv), Calcium (30% dv), Folate (28% dv)

Carbohydrate Servings: 3½

Exchanges: 3 fruit, 1 low-fat milk, ½ fat

## Fueling Up With Freekeh

Sub freekeh for rice and get an extra dose of fiber, protein, glutamine and prebiotics.

Freekeh (pronounced free-kah) has been around for a while. This wheat variety is harvested while still green, and then it's toasted and rubbed to reveal the young grains. As a result, it has an earthy, nutty and slightly smoky flavor that can breathe new life into your humdrum recipes. Here are five ways to use this supergrain to supercharge your meal plan.



### 1. As a high-fiber rice substitute

Freekeh has three times the amount of fiber as brown rice, and according to research published in the *Journal of the American College of Nutrition*, increased fiber consumption helped people lose more weight over the course of a year. Swap white or brown rice for freekeh in casseroles, burritos, soups and pilafs.

### 2. As a gut-friendly salad

Freekeh contains resistant starch, which is the prebiotic nosh of choice for your healthy gut bacteria. Prebiotics also help treat leaky gut syndrome, candida and irritable bowel syndrome. Freekeh Salmon Salad: To a large bowl, add 2 cups cooked freekeh, 8 cups spinach, 1 large avocado (diced) and 1 large tomato (chopped). Top with 8 ounces cooked salmon fillets and drizzle with olive oil and vinegar (to taste).

### 3. As a high-pro vegan bowl

Step aside quinoa — freekeh has twice the protein per serving, making it the ideal choice for plant-based athletes. Freekeh-shly Good Breakfast Bowl: Cook 1 cup freekeh according to package directions. Split into 2 bowls and top with fresh fruit, pumpkin seeds, nut butter and cinnamon.

### 4. As an endurance-boosting side

Freekeh is high in glutamic acid, which helps synthesize glutamine, enhancing endurance and strength. Righteous Rosemary Freekeh: Add 1 cup cooked freekeh to a bowl with ¼ cup chopped pecans, 1/8 cup chopped dried apricots, 1 tablespoon macadamia nut or avocado oil, 1 teaspoon finely chopped fresh rosemary and 1/8 teaspoon salt. Mix well to combine.

### 5. As a nutrient-boosted baked good

Freekeh is available commercially as a flour and can be used in recipes in place of refined flour products for added fiber, protein, antioxidants, calcium and iron.

## Chocolate Freekeh Muffins

- 1 cup cooked freekeh
- ½ cup freekeh or coconut flour
- 3 tsp. baking powder
- 2 cups unsweetened almond milk
- 2 eggs
- 1 tsp. cinnamon
- 4 tbsp. cocoa
- 3 tbsp. brown sugar
- pinch salt
- handful dark chocolate chips

Preheat oven to 375 F. Mix all ingredients in a bowl and pour into a greased muffin pan. Bake 20 to 22 minutes. Allow to cool. Recipe provided by [www.nowfoods.com](http://www.nowfoods.com).