

Quinoa Fruit Salad

TIP OF THE WEEK:

Use Siri as a personal assistant. Ask her to remind you to pick up the dry cleaning or call back a colleague. She can be very handy!

Ingredients:

- 1 cup uncooked quinoa
- 1 1/2 cups strawberries, diced
- 1 cup blackberries
- 1 cup blueberries
- 1 mango, diced

Honey Lime Glaze:

- 1/4 cup honey
- 2 Tbsps lime juice
- 1 Tbsp chopped basil

Instructions:

1. Rinse and prepare the quinoa according to package directions. Let quinoa cool to room temperature.
2. In a large bowl, combine the quinoa, strawberries, blackberries, blueberries and mango.
3. In a small bowl combine the honey and lime juice. Drizzle over the salad, and toss to coat. Garnish with the basil.



Lee Hi Lanes

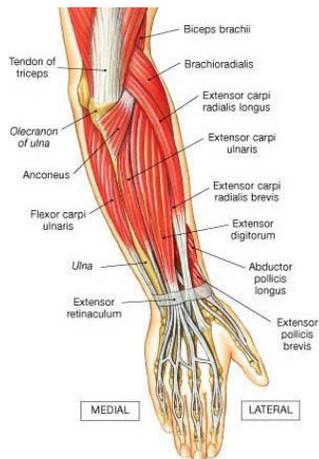


If you're looking for something to do on a weekend around Roanoke, take a quick drive down Electric to Apperson and Lee Hi Lanes. The bowling alley has hours everyday and rates are reasonable at just over \$2.00 per person per game (\$3.50 for shoes).

<http://www.leehilanes.com/>

Exercise What You're Learning

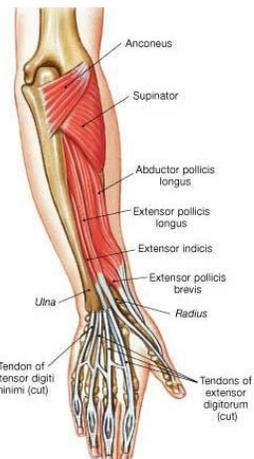
YOUR
ONLY
LIMIT
IS YOU



(d) Posterior view, superficial



(e) Posterior view, middle



(f) Posterior view, deep

Training comes with injury risk. Avoid injury by consulting a trainer regarding form & weight.

Images from: studyblue.com; myprotein.com; leehaywardfitness.com

Get the Facts - Sweating it Out

Myth:

Sweating helps burn calories and release toxins.

Fact:

Personal and home gyms everywhere invest in large rooms which are only used to sit in and sweat. They are made to get to temperatures up to 130 degrees Fahrenheit and serve no other purpose. You've probably guessed that I'm referring to saunas. If you ask most people who use these regularly, they will tell you "to lose weight" or "to release all of the toxins from my body." One cringeworthy statement made multiple times (once on public radio) is that people can sweat out "toxic sludge."

Personally, I think I would've noticed sludge leaking from my pores.

First, the calorie myth. Sweat glands are regulated by sympathetic and parasympathetic nerves arising from the anterior hypothalamus. The signals travel down through the spinal cord and terminate at all the glands in the body. Cholinergic neurons stimulate the flow and secretion of products by endothelial cells lining the ducts. This stimulation is no different than the hundreds or thousands of other regulatory mechanisms going on throughout the day so there is no net increase in energy demand for this to happen. Also, the basal metabolic rate will ultimately decrease in prolonged heat stress environments to reduce the amount of heat generated by normal cell activity. So, in reality, placing yourself in a cold environment will cause you to increase metabolic activity to warm the body back up and shivering is muscle contractions which again will increase energy expenditure to increase body temp.

Now for the "toxic sludge" part of the myth. Sweat arises from components of blood. That fact alone should debunk this myth unless people think they are walking around with these toxins in their blood. This means sweat is mostly the same makeup as blood plasma without all the larger plasma proteins. The majority (90%) is sodium and chloride ions with water. Deeper investigation into the components of sweat have been made to explain why people get allergic reactions to their own sweat. One study by Manesh et al. found some smaller protein types in sweat including: enzyme components, proteins with binding actions, protease inhibitors, and antimicrobial protein fragments (antibodies). The allergic reactions are thought to be caused by an auto-reaction from the antibodies secreted. This point aside, nothing here is toxic to the body and there is no mystical element that makes us sick or feel bad that is invisibly secreted through sweat.

Conclusion:

Sweating may help exfoliate, clear debris from clogged or dirty pores, and even help with acne, but there is no evidence to suggest (and actual evidence against) the idea that sweating burns calories or releases toxins from the whole body. If you want to use the elements to your advantage try a cold room, the shivering and increased metabolic activity may increase your calorie consumption (not sure if it would be a significant source of calorie loss, but hey you can try it for science). Or better yet, try skiing/snowboarding, cold AND exercise!

Article By: Adam Heilmann, M2

References:

- Manesh, S., Cai, W., Lim, T., Lin, Q., & Chew, F. (2009). The Human Sweat Proteome and Auto-IgE Responses to it's Components. *Journal of Allergy and Clinical Immunology*, 123(2). doi:10.1016/j.jaci.2008.12.242
- Wilson, T. E. (2013). Sweating the details: what really drives eccrine output during exercise-heat stress. *The Journal of Physiology*, 591(11), 2777-2777. doi:10.1113/jphysiol.2013.255430
- Hall, J., & Guyton, A. (2010). Guyton and Hall Textbook of Medical Physiology (Vol. 12). Saunders.

Wellness Weekly Challenge

Feedback. Do you over-inflate the negative and neutralize the positive? The next time you receive feedback for improvement, instead of berating yourself, slamming the professor or doctor on Facebook, and/or texting your friends to reinforce that you're not a failure; breathe & calm your emotional reaction, then write three lessons on how you can grow professionally.

- 1.
- 2.
- 3.

Night at Home - Lemon-Garlic Shrimp & Grits

Ingredients:

- 3/4 cup instant grits
- Kosher Salt & ground pepper
- 1/4 cup grated parmesan cheese
- 3 Tbsp unsalted butter
- 1 1/4 lbs peeled & deveined shrimp
- 2 large cloves of garlic, minced
- Pinch of cayenne pepper (optional)
- Juice of 1/2 lemon, plus wedges for serving
- 2 Tbsp chopped parsley

Directions:

1. Bring 3 cups of water to a boil in a medium saucepan over high heat covered. Uncover and slowly whisk in the grits, 1 tsp salt and 1/2 tsp pepper. Reduce the heat to medium low and cook, stirring occasionally, until thickened, about 5 minutes. Stir in the parmesan and 1 Tbsp butter. Remove from heat and season with salt and pepper. Cover to keep warm.
2. Meanwhile season the shrimp with salt and pepper. Melt the remaining 2 Tbsp butter in a large skillet over medium-high heat. Add the shrimp, garlic and cayenne, if using and cook until the shrimp are pink, 3 to 4 minutes. Remove from heat and add 2 Tbsp water, the lemon juice and parsley; stir to coat the shrimp with the sauce and season with salt and pepper.
3. Divide the grits among shallow bowls and top with the shrimp and sauce. Serve with lemon wedges.

