

Heart TALK

Heart-healthy and Stroke-free Living with Dr. Amy L. Doneen, DNP, ARNP

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*Thoughts
from
Dr. Amy*

Protecting Women's Hearts: A discussion of the Gender- Specific Dynamics of Heart Health

Cardiovascular Disease, which includes both heart attack and stroke, remains the number one cause of death in Women in the United States. In fact, more women die from heart disease and stroke than the subsequent five causes of death combined! Unfortunately, despite robust public health campaigns, still only 44% of women recognize cardiovascular disease as their greatest health threat. Women (and their healthcare providers) simply do not recognize their risk.

In 2022, the American Heart Association published a Call to Action for Cardiovascular Disease in Women to increase a sense of urgency when it comes to heart and vascular disease in women. This strong statement from the AHA illuminates the continued gaps in knowledge and care delivery

for women with and at risk for cardiovascular disease; issues caused in part by the pervasive lack of representation of women in cardiovascular disease research (38% participation) and the continued false assumption that women are at lower risk for heart disease than men.

Women's heart health is of the utmost importance to us. With February being Women's Heart Month, we are choosing to dive into female specific aspects of cardiovascular disease recognition and prevention as part of our overall goal to continue advocating for optimal women's healthcare.

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WHY ARE WOMEN AT RISK?

When it comes to heart disease risk in women, there are some things we simply cannot change; these include family history, aging and menopause, genetics, breast cancer with radiation treatment, autoimmune disease and history of pregnancy related complications including gestational diabetes and pre-eclampsia.

However, there are many risk factors that we DO have control over. These include how we manage stress, how much we move our bodies, if we develop diabetes or insulin resistance, our body weight, waist circumference, oral health, sleep patterns, blood pressure, smoking history and cholesterol levels. These modifiable risk factors are where we need to focus our efforts, and it is never too late!

ARE MEN TRULY AT HIGHER RISK THAN WOMEN?

The complicated nature of heart disease risk in women is likely one of the driving factors behind the belief that men are at higher risk. The truth is, men are at higher risk for cardiovascular disease at an earlier age than women; however, once women hit age 65, the playing field is leveled. One reason for this is as we age, our high levels of protective endogenous (our own) estrogen drop dramatically. Likewise, if a woman has surgically or medically induced menopause at any age, the same physiological process takes place.

The effect of dropping insulin levels is so dramatic that 10 years after menopause (generally between age 60-65), the protection provided by estrogen early in life is no longer applicable. Where 1 in 9 women have some type of heart disease at age 45, 1 in 3 exhibit disease by age 65 (the same as men). While sex-based risk is equal at this age, women still tend to experience a delay in care and worse outcomes.

DIFFERING SYMPTOMS BASED ON SEX

One reason women tend to experience a delay in treatment is the different symptoms exhibited by women vs. men during a heart event. In fact, a 2022 study published in the Journal of Therapeutics and Clinical Risk Management demonstrated that 62% of women exhibited no chest pain during an active heart attack, as opposed

For an exciting and more in-depth look at cardiovascular disease risk in women, tune in to Dr. Amy's Women's Heart Health talk on Feb. 28 at 5:30pm PST on Zoom!



to only 36% of men. Women are also much more likely to report vague symptoms such as nausea, dizziness, sweating, shortness of breath, anxiety, arm pain or neck/jaw pain.

In the same 2022 study, 72 percent of women experiencing a heart attack waited more than 90 minutes to call 911, as compared to 54% of men. The absence of traditional "heart attack symptoms" has contributed to the unfortunate fact that a woman's risk of dying of a heart attack is higher than a male at similar age.

A 2022 study published in the Journal of the American Heart Association looked at millions of ER visits to determine differences in care delivered to men and women experiencing heart attack symptoms. On average, women waited 11 minutes longer than men to see a healthcare provider and were subsequently less likely to be admitted to the hospital and less likely to receive even basic cardiovascular testing such as an EKG or cardiac enzyme testing. The AHA also notes that women are less likely to receive bystander CPR during a cardiac event due to fear of accusations of inappropriate touching.

THE EFFECTS OF MENOPAUSE

The timing of increased risk aligns perfectly with the menopausal transition in women. There are many reasons this may be true: poor sleep, the stress of caregiving for elderly parents, parenting transitions, etc. But one significant reason is the change in estrogen levels. Early in life, women benefit from the protective effects of estrogen on the arteries. Naturally produced estrogen is anti-inflammatory, leading to more "stretchy" and supple, less-inflamed arteries throughout the body. Once

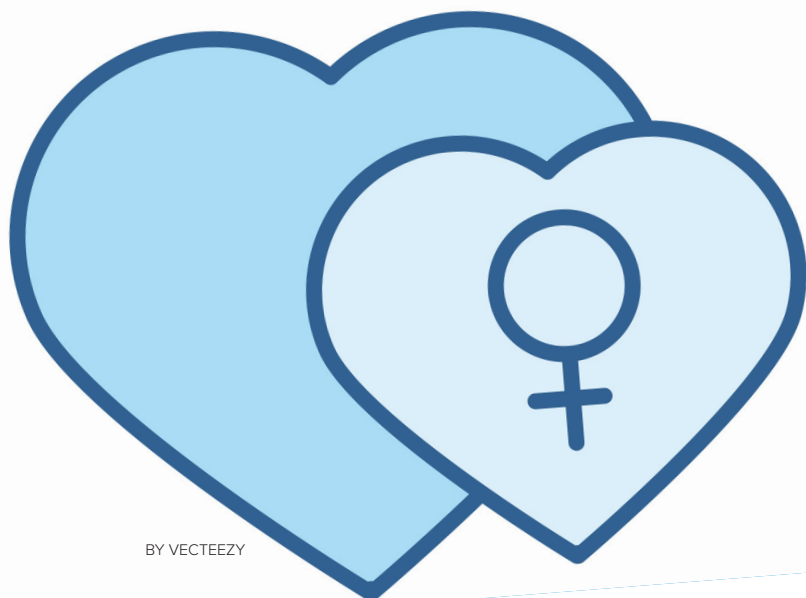
natural estrogen levels drop, chronic inflammation can ensue, coupled with less flexible and more unhealthy arterial walls. Cardiovascular disease occurs when the lining of the arteries become inflamed, allowing for the trapping of lipid particles within the artery wall (plaque). The lack of estrogen in men explains the general increased risk earlier in life.

This may seem like a statement of inevitability: menopause leads to heart disease. On the contrary, we encourage you to see this as an incredible opportunity to engage. The gap between the average onset of perimenopause (45) and the onset of increased risk due to lack of estrogen (65) spans twenty years! Those are the years we see as an invitation to set the groundwork for healthy aging.

10 STEPS YOU CAN TAKE NOW

- Connect with a healthcare provider you trust.
- Get your labs tested and follow the results! Perimenopause and menopause are when lipids, inflammation and insulin resistance markers start to rise. If these issues start popping up, address them!
- Get an annual CIMT scan to follow any inflammation or plaque formation within the carotid artery walls and address root causes.
- Avoid all nicotine products.
- Manage your stress. Engaging in mindfulness and meditation exercises, yoga, gratitude journaling, grounding, exercise, sex and therapy can all help to lower cortisol levels and the effects of chronic stress on overall health.
- Take care of your teeth and gums! Brush at least twice daily with an electric toothbrush, floss correctly, use a water pick, see your dentist regularly and have oral pathogens tested.
- Test for and treat sleep apnea.
- Eat a varied and balanced diet full of whole real foods, ideally tailored to your genetics (ApoE and haptoglobin genotypes).
- Move your body! At least 22 minutes/day at a bare minimum, working up to more. For women, resistance exercise is particularly important for longevity, bone strength and insulin sensitivity.
- Ensure adequate vitamin D.

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Exploring the Intimate Link Between Women's Sexual Health and Heart Health

There has been growing recognition of the interconnectedness between various aspects of women's health. One particularly intriguing area of research that has emerged is the intricate relationship between women's sexual health and their cardiovascular well-being. Studies suggest that understanding and addressing women's sexual health may have implications for assessing their risk for heart disease.

While the association between sexual health and heart health may seem tangential, research suggests they are closely linked. Both sexual and cardiovascular health share common risk factors, including hormonal changes, age and body weight.

THE BENEFITS OF SEXUAL ACTIVITY

Numerous studies have highlighted the positive impact of an active sex life on cardiovascular health. Regular sexual activity has been associated with improved circulation, better sleep, decreased anxiety, stress reduction and reduced blood pressure.

These effects are likely associated with hormonal shifts during intimacy, specifically neurotransmitters, oxytocin and a reduction in cortisol.

THE INFLUENCE OF HORMONES

Hormonal fluctuation over the lifespan (menarche, menstruation, pregnancy, breastfeeding and menopause) influence both cardiovascular and sexual health. Estrogen, a hormone playing a leading role in female reproductive health, is also known to have cardioprotective effects on the arteries. Likewise, the drop in natural estrogen levels during both natural or medical/surgical menopause influences increased cardiovascular risk in women.

BIRTH CONTROL AND HEART HEALTH

Hormonal birth control with estrogen is known to increase the risk for cardiovascular complications including strokes, heart attacks and blood clots; specifically in women already at higher risk. While discussing the need for contraception, a full cardiovascu-

lar history and assessment should be considered while deciding on the safest form of birth control.

COMMON RISK FACTORS

There are several shared risk factors for the development of cardiovascular disease and sexual dysfunction. These include high blood pressure, diabetes, smoking, poor sleep, unhealthy eating patterns, sedentary lifestyle and high stress levels. Recognizing and addressing the intersection of these risk factors can positively impact both sexual and cardiovascular health.

Research continues to illuminate the connections between women's sexual health and heart health. To optimize women's heart health in a holistic way we must recognize the intersection between sexual well-being and cardiovascular wellness. Sexual health should be assessed as part of a comprehensive health history, as a healthy sex life can be a wonderful indicator of a healthy cardiovascular system, while improvement in cardiovascular conditions can improve sexual wellness.

• *February Recipe* •



ADAPTED FROM EVERYLASTBITE.COM
(WWW.EVERYLASTBITE.COM/BALSAMIC-CHICKEN-FIGS/)

Natural Aphrodisiacs: Balsamic Chicken with Figs

In the spirit of February and Valentine's Day we are focusing on aphrodisiac foods! Do they really work to increase libido and help "set the mood?" When looking at the nutritional content of proclaimed aphrodisiacs, there is some truth to these claims. Here are some of the physiological effects that aphrodisiac foods may have on the body: increasing blood flow (in all the important places), enhancing mood, supporting sex hormones, producing energy, boosting libido and mimicking pheromones. How great does that sound? The recipe this month includes figs, which are known as a natural aphrodisiac. We hope you enjoy this dinner and anything that may follow.

INGREDIENTS

- 1 tbsp. olive oil
- ½ tsp. salt
- ½ tsp. pepper
- 6 bone-in, skin-on chicken thighs
- 2 tbsp. balsamic vinegar
- ½ tbsp. Dijon mustard
- 1 tbsp. honey
- 3 shallots, finely diced
- 2 cloves garlic, crushed
- 2 medium red onions, thinly sliced
- 1 tsp. fresh thyme
- 1 cup chicken stock
- 2 cups shredded curly kale
- 5 figs cut into halves/quarters, depending on size

DIRECTIONS:

1. Preheat the oven to 350 degrees Fahrenheit.
2. In a large cast iron skillet (or oven-proof pan) heat the olive oil. Season the chicken thighs on both sides with salt and pepper and then cook for four minutes per side in the oil until golden in color. Once cooked, transfer to a plate.
3. In a bowl whisk together the mustard, honey and balsamic vinegar.
4. Add the diced shallots and garlic to the pan and cook for four minutes until the shallots begin to soften. Add in

- the sliced red onions and thyme and let cook for three minutes before pouring in the balsamic/mustard mixture and chicken stock.
5. Let everything simmer for four minutes before adding in the chopped kale. Return the chicken thighs to the skillet and arrange the fig pieces around the pan. Spoon some of the sauce over the chicken and then bake in the oven for 35 minutes until the chicken is cooked through.
6. Sprinkle with more thyme before serving.
7. Serve with cauliflower rice or quinoa for a complete and balanced meal.

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TO REPLACE OR NOT TO REPLACE? THE COMPLEXITY OF HRT

If estrogen is so wonderfully protective, what about hormone replacement therapy? The answer is: it's complicated. In its endogenous form (created by our bodies) estrogen is cardioprotective. However, synthetic estrogen can both help and harm, and the decision to utilize synthetic hormones is highly personal and individualized based on timing, symptoms and personal history.

Hormone Replacement Therapy initiated before or within five years of menopause for symptom management may reduce the risk for heart disease and could improve some other cardiovascular markers. This window appears to be the safest time to utilize HRT, as

HRT utilized 8-10 years after menopause has been associated with increased risk for heart attack and stroke. Additionally, a 2023 study in the Journal of Hypertension found that utilizing hormone replacement therapy may increase the risk of high blood pressure.

While endogenous estrogen promotes supple, healthy arteries, no studies (on synthetic or bio-identical hormones) have demonstrated restoration of this effect. Women should be placed on HRT only if symptoms warrant the conversation, not simply to protect their hearts. The focus of our efforts for promoting heart health must remain on the modifiable risk factors as discussed above.

CONCLUSION

Women are biologically different from men and thus have a different risk

profile and timeline for cardiovascular disease. Lack of awareness of the factors that put women at increased risk, as well as the way in which symptoms differ for women, continues to cause delays in both preventive and acute treatment.

It is our goal to empower women with knowledge about their unique cardiovascular risk factors and tailor lifestyle modifications and medical therapy to the individual. By viewing mid-life as an opportunity to engage and by addressing both modifiable and non-modifiable risk factors we can significantly impact the threat of cardiovascular disease as we age. It is a privilege to work with motivated women. Together we are laying the groundwork for a future where women's heart health can take center stage in preventive care.