



All in a Flash

The Functional Medicine Approach to Understanding Hot Flashes

By Scott Vander Wielen, DC

More women than ever are coming in for help surrounding their hormonal health. At the top of the list are concerns and questions about hot flashes. Often I get asked, “What is happening to me that I get these frequent and severe hot flashes?” One patient used the word “whoppadoey” to describe a very strong hot flash: “This morning while I was lying in bed, I could feel it coming on, and I thought, uh oh, here comes a whoppadoey!” The purpose of this article is to help answer questions about hot flashes.

In a 2010 article in *Menopause*, a peer review medical journal, the author states point blank, “The understanding of the physiology of hot flashes is incomplete.” Despite that admission, the article opened the door to a better understanding of the physiology of hot flashes, and is worth repeating and informing people about the findings.

There is more going on during a hot flash than increased heart rate, flushing and night sweats. Research is showing that women who experience hot flashes have greater health risks. In the Study of Women’s Health Across the Nation (SWAN) heart study, women who reported hot flashes had greater evidence of cardiovascular disease (CVD) compared to women not reporting hot flashes. Even with hormone therapy, both the Women’s Health Initiative and the Heart and Estrogen Replacement Study (HERS) showed that women with hot flashes experience the highest risk of incident coronary heart disease (CHD). A 2009 *Menopause* journal article concluded that women who experience night sweats have lower bone mineral density compared to women without night sweats. Lastly, a 2010 article in the *Journal of Endocrinology and Metabolism* concluded, “Severity of hot flushes is the main determinant of endothelial dysfunction in early menopausal women.” (Endothelium is referring to all the inner surfaces of the veins and arteries.)

Certainly, the hormone picture is very important. Menopausal and perimenopausal women begin to produce less estrogen from their ovaries. Less estrogen production can have serious health consequences because the benefit that estrogen provides is no longer present. Estrogen is an excellent methylator, and loss of methylation due to menopause is the reason why many diseases women have occur after menopause. A nutritional strategy ought to take into account the loss of methylation due to lower estrogen levels as a long-term health issue for every perimenopausal and postmenopausal woman. There are additional nutritional strategies that are very effective in reducing the frequency and severity of hot flashes when coupled with healthy lifestyle habits.



In this example, heart rate variability (HRV) was measured in women experiencing hot flashes. HRV is the measurement of time in milliseconds between heartbeats. It was physiologically recorded continuously from the minutes leading up to the hot flashes, through the hot flashes and to the minutes following the hot flashes.

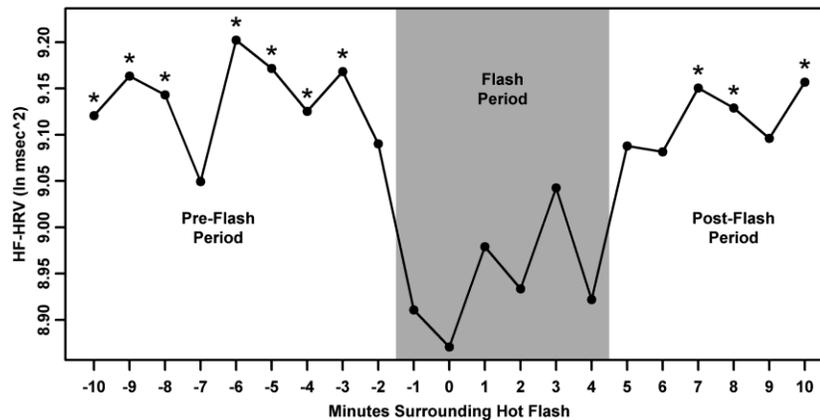


Figure 2.
Minute-by-minute heart rate variability (HF-HRV) power in relation to hot flash occurrence.
*p<0.05 as compared to time 0

So what does this mean? It means that the physiology of hot flashes involves the part of the nervous system that controls all organ functions. Therefore, blood sugar regulation, immune system function, inflammation, stress management (yeah, it is always a factor), and any burden to your physiology are factors that affect overall health.

Hot flashes are more than just a hormonal imbalance; they are a signal of greater health risks, including cardiovascular disease, lower bone mineral density, endothelial dysfunction and methylation insufficiency. For most women, therapeutic lifestyle changes – including a sensible nutritional program – will go a long way to reducing or eliminating hot flashes and promoting well-being for a long and healthy life.

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