

CODA

Med Life with Dr. Horton

On nutrition for performance in medicine

Jillian Horton MD

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This is an excerpt from a longer podcast. You can listen to the full interview here: cmaj.ca/medlife

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The interview was conducted by Dr. Jillian Horton, director of the Alan Klass Health Humanities Program at the Max Rady College of Medicine, University of Manitoba, Winnipeg. She hosts *Med Life with Dr. Horton* on CMAJ Podcasts.

Jillian Horton: Your work looks at the intersection of physician health and nutritional sciences. How did you end up in this field?

Maryam Hamidi: I was working in an osteoporosis clinic. One day, a friend who worked at Air Canada reached out to me and said, “We need someone to teach our pilots about nutrition and management of sleep and fatigue. Do you know anyone who does that?” I started looking and I could not find anyone specializing in nutrition and fatigue management. So I started teaching Air Canada pilots about fatigue management and nutrition, and how they could reduce their fatigue and feel more alert and less sleepy during their long-haul flights. Then I realized: there is a parallel universe going on between medicine and aviation; sometimes it is worse for physicians. Dr. Jane LeMaire at the University of Calgary has been a pioneer in physician nutrition and I’ve learned a lot from her, and I’ve realized there are few people in the world who have been looking into this. It became a passion for me.

JH: You’ve worked to delineate the complicated relationship between sleep and dietary behaviours. What have you found?

MH: We know that when people are sleep deprived they are more likely to choose foods that are higher in calories and more rewarding. There are some studies that show when we have higher blood sugar we are more likely to have a stronger willpower and engage in activities we are dreading. It makes sense for you to grab something sweet, to have something that lifts your mood and blood sugar when you have to do something that seems difficult for you. We also know diets that are high in saturated fat and sugar impair sleep. It becomes this vicious cycle of people feeling tired and wanting to eat more unhealthy food, and the cycle repeats itself.

JH: What about nutrition and physician performance?

MH: There are studies that show women are more sensitive to the effects of diet. Women benefit greatly from a diet that is high in fruits and vegetables and healthy fats, whereas men have a bit more flexibility in that. If men eat an average diet, they do not suffer the performance consequences as much as women do. In the observational studies, we looked at dietary pattern and saw that physicians who had a preference for diets that were higher in green leafy vegetables had lower rates of sleep-related impairment compared with those who had a preference for diets high in saturated fats and added sugars. Hydration also affects physician performance. One study involving physicians showed short-term memory impairment when they were dehydrated. Dehydration changes our visual acuity and also attention — imagine a neurosurgeon who is dehydrated. What if we can reduce medical errors if we can pay attention to proper nutrition and hydration? One interesting finding was that health care providers who were provided with 500 mL of water tended to feel better and less aggressive on night shifts. So, water can be one simple strategy to improve our mood.

JH: What do patients think if doctors eat or drink around them?

MH: That is one of the misperceptions — that it would not be professional to eat and drink in front of patients. A study in the United Kingdom found that more than 80% of patients said they would not have a problem if their physicians ate or drank in front of them.

JH: Tell me about some of the strategic uses of caffeine.

MH: One is a “caf-nap.” Physicians can have a caffeinated beverage and take a nap, and by the time they wake up in 30–40 minutes, the caffeine has kicked in and they have had their nap. Caffeine also reduces sleep inertia, the groggy feeling after a nap. For people who do not want to have caffeine, there is chewing gum. Studies have shown that the act of chewing gum reduces stress and helps with alertness. Little things can make a difference.