

TITLE 1: “Ask the Doctor”

TITLE 2: Question 2

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KEYWORDS:

- Diet & exercise
- Iron
- Brain

ABSTRACT OVERVIEW: A question from a reader about exercise and its connection to RLS.

COPY OF ARTICLE:

Q. *I would like to know if there is a relationship between cardio-vascular exercise and Restless Legs Syndrome.*

A. In the summer, 2003, issue of NightWalkers, Dr. James Connor, PhD, reported that



researchers discovered that a specific receptor in the neuromelanin cells of the substantia nigra in the middle of the brain was not delivering and packaging an adequate amount of iron in patients suffering from Restless Legs Syndrome. Neuromelanin cells manufacture dopamine. Dopamine synthesis requires iron.

A. Cardio-vascular exercise releases dopamine which reduces stress and provides a “high.” Can years of jogging or using a Nordic Track ski machine dull or change the shape of the protein iron receptors in the middle brain and be a direct cause of RLS? Is the demand for dopamine production in excess of what the human body was created for?

A. During the last forty years jogging has become an obsession with many people. My friend George has RLS. He is over sixty. He has jogged faithfully for many years and has always been very thin. For the last several months he has been losing weight and getting very weak. A trip to

Mayo Clinic resolved nothing. George is still extremely weak and not gaining weight.

A. I have used the Nordic Track since 1988. My RLS symptoms while sleeping are much more pronounced if I have exercised that evening. The C-Pack has reduced my symptoms significantly. I am 65 and did not have symptoms until after several years of using the Nordic Track.

A. The issue of exercise and RLS is a controversial one. Some anecdotal evidence claims that exercise improves RLS symptoms while others claim the opposite. In either case, we certainly cannot say anything about the possible mechanisms involved. Our recent experience in Iceland with > 400 RLS sufferers and my own anecdotal experience with US patients is consistent in suggesting that exercise more often worsens than helps symptoms (as you have experienced yourself). Specifically, in Iceland > 3/4s of patients with onset of RLS at a young age report worsening with exercise induced fatigue. When queried directly, most RLS sufferers there note symptom onset when they were “tired in the legs” when playing as young teens.**A.**

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