Regular caffeine consumption is associated with a lower risk to develop Parkinson’s disease\(^1\). This has been proved and documented. However, during the last Saucier – Van Berkom Research Symposium on February 21, Dr Ron Postuma shed some light on the link between caffeine and Parkinson’s disease.

Indeed, the neuroprotection role of caffeine is well-known following epidemiological studies, but what about the effects of coffee on the symptoms of people already living with Parkinson’s disease? This is precisely the question treated in Dr. Posthuma’s presentation. During research conducted in 2012\(^2\) and published in the prestigious Neurology journal, he discovered that a 100 to 200 mg coffee intake, twice a day for 6 weeks had a beneficial effect on motor symptoms of the disease, but no effect on the excessive drowsiness often associated with the disease. It was a randomized study, meaning a study where the tested subject was randomly distributed in a number of groups equivalent to the number of conditions to be tested (here the group who consumed caffeine and the group who consumed the placebo). This technique eliminates the bias in selecting participants. The hypothesis suggested was that caffeine may provoke a delay in the onset of the motor symptoms associated with the disease. Dr Postuma then decided to pursue this study for a six months’ period instead of just six weeks. In that case, twice as many patients were selected (61 patients in the placebo group and 60 in the caffeine group). This time, the objective was to confirm coffee’s beneficial effects in slowing the appearance of the motor symptoms, but on a longer period of time. As it had been noticed in the first study, coffee had no effect on the excessive drowsiness that affects patients. However, contrary to the first study, regular consumption of coffee did not reduce how strong the symptoms were and did not reduce dyskinesia. Thus, one of the message to remember following this presentation is to appreciate the scientific strength of long-term randomized studies. It allows to emphasize the important differences that can happen between studies conducted with serious scientific method versus simple observations. Following this presentation, we can conclude that a regular consumption of coffee does not reduce the importance of the motor symptoms and the excessive drowsiness in Parkinson’s disease patients. However, the first sentence of this bulletin remains true a regular caffeine consumption is associated with a lesser risk to develop Parkinson’s disease.

Do not forget this next time you drink your espresso, machiato or capuccino. Enjoy your coffee!

Sources:
1- *A meta-analysis of coffee drinking, cigarette smoking, and the risk of Parkinson’s disease.*
Hernán MA1, Takkouche B, Caamaño-Isorna F, Gestal-Otero JJ.,
Annals of Neurol. 2002

2- *Caffeine for treatment of Parkinson disease: a randomized controlled trial.*
Neurology. 2012