

Editorial**To Caffeinate or not?****Mohsin Masud Jan**

Editor

Our Pakistani population is, for lack of other words, addicted, on a large scale, to tea. The rapid development and the booming business of tea houses and coffee shops all over the country is testament to this fact. Everyone drinks it, from the children to the senior citizens of our population, everyone is hooked. Some take it with sugar, some add sugar free sweeteners, some like it strong, others light. Everyone loves the buzz it provides, the increased attention, the jolt that a cup of coffee or tea can provide early in the morning when you're looking for a pick me up, or the extra shot of energy you need halfway through a grueling day and you reach for that energy drink, or order a cup of coffee or tea. All of that, is the effect of caffeine that you consume in that drink.

Lately, a debate has begun, whether or not caffeine is beneficial to us. Considering the vast amount of research being done, let us consider the benefits of caffeine consumption according to modern science.

- Coffee has been shown to reduce the risk of stroke by as much as 22%.¹
- Several researches have shown that coffee can help reduce the risk of a myriad of cancers.^{2,3,4,5}
- Coffee consumers have been shown to have a decreased risk of type 2 diabetes.⁶
- Coffee has also been shown to reduce the risk of kidney stones.⁷

Now that we've enlisted a few of the benefits from coffee, let's just bear in mind that these benefits come largely from the caffeine content in the coffee. The benefits seen in stroke and blood pressure come largely from the vasodilator effect of caffeine. Decaffeinated coffee just does not pack the same punch, there are benefits, but, reduced when compared to caffeinated coffee. And all of this being considered, there are limitations to caffeine intake itself, the recommended daily dosage does remain around 300mg of caffeine a day, which is 3-4 cups a day.

So the lesson for today is, all you caffeine guzzlers out there, drink away, but remember, keep that drinking in moderation.

REFERENCES

1. Garcia EL, Artalejo FR, Rexrode KM, Logroscino G, Hu FB, Van Dam RB. Coffee Consumption and Risk of Stroke in Women. *Circulation* 2009; 119: 1116-1123.
2. Holick CN, Smith SG, Giovannucci E, Michaud DS. Coffee, tea, caffeine intake, and risk of adult glioma in three prospective cohort studies. *Cancer Epi Bio Prevention* 2010;19(1): 39-47.
3. Wang G, Bhoopalan V, Wang D, Wang L, Xu X. The effect of caffeine on cisplatin-induced apoptosis of lung cancer cells. *Exp Hematol Oncol* 2015; 4(1): 5.
4. Loftholm E, Freedman ND, Graubard BI, Hollenbeck AR, Shebl FM, Mayne ST, et al. Coffee Drinking and Cutaneous Melanoma Risk in the NIH-AARP Diet and Health Study. *J Natl Cancer Inst* 2015; 107(2): 421.
5. Rosendahl AH, Perks CM, Zeng L, Markkula A, Simonsson M, Rose C, et al. Caffeine and Caffeic Acid Inhibit Growth and Modify Estrogen Receptor and Insulin-like Growth Factor I Receptor Levels in Human Breast Cancer. *Clin Cancer Res* 2015;21(8):1877-1887.
6. Ding M, Bhupathiraju SN, Chen M, Van Dam RM, Hu FB. Caffeinated and Decaffeinated Coffee Consumption and Risk of Type 2 Diabetes: A Systematic Review and a Dose-Response Meta-analysis. *Diab Care* 2014; 37(2): 569-586.
7. Ferraro PM, Taylor EN, Gambaro G, Curhan GC. Caffeine intake and the risk of kidney stones. *Am J Clin Nutr* 2014;100(6): 1596-1603.