Application number/Title: 44407 - The association between coffee consumption and metabolic syndrome

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Keywords provided by the Applicant PI to describe the research project:
Cardiovascular, coffee, metabolic syndrome, obesity, single nucleotide polymorphisms, sugar

Application Lay Summary:

Coffee is one of the most commonly consumed drinks in the world. While coffee is best known for its effect on improving alertness, the health effects brought about by drinking coffee have also been topics of intense research. Many population-based studies have concluded usual coffee drinkers were less likely to suffer from several lifestyle-related chronic diseases, such as type 2 diabetes (T2DM) and cardiovascular diseases (CVDs).

Metabolic syndrome refers to the condition of having several metabolic disorders at the same time, such as obesity, high glucose level, high blood cholesterol and lipid levels, and high blood pressure. These components of metabolic syndrome are greatly related to T2DM and CVDs, which were found to be protected against by drinking coffee in previous study findings. Hence, coffee drinkers may potentially be less likely to have metabolic syndrome, yet this relationship was seldom studied previously. Therefore, this project aims at investigating this linkage.

The findings from this project will enhance our understanding towards the protective effect of drinking coffee against metabolic syndrome. The effects of some factors regarding the effects of drinking coffee will also be studied, such as the effects of drinking different types of coffee (e.g. espresso, instant, and boiled coffee), the effects of adding of milk and sugar into coffee, and the role played by genetic variations. This project is expected to last for two years.