

# The Effect of functional drink “Kum Lung Jai” (Ginger, Chinese Jujube, and Black Jelly Ear Fungus) on plasma level of Triglyceride and Cholesterol: an Observational study

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**Background:** Hyperlipidemia is the condition that the lipid profile level is higher than the normal level which causes the risk to atherosclerosis and finally leads to cardiovascular diseases. There is an important role of traditional medicine and food in prevention of hyperlipidemia. “Kum Lung Jai” (KLJ) is an available functional drink in general market. It made from the decoction of 3 herbs: Ginger, Chinese jujube, and Black jelly ear fungus which has been traditionally used to ameliorate dyslipidemia and atherosclerosis condition. Some recent in vivo studies confirmed that Chinese jujube and Black jelly ear fungus potentially have cholesterol-lowering properties. This study therefore aimed to assess the change of serum level of triglyceride and cholesterol of subjects aged over 45 years old who had drink KLJ everyday consecutively for 90 days.

**Method:** Two hundred volunteers aged over 45 years old who had serum level of triglyceride (TG) more than 150 mg/dl, were recruited. All volunteers were received the standard treatment from the Family Medicine and/or Primary Care Unit of Chanuman Hospital or Amnat Charoen or Ubon Ratchathani Cancer Hospital. Laboratory assessment was done 2 times at starting point (Day0) and at last day (Day90). The functional drink KLJ were intake at amount of one bottle per day (265 mL) in 100 volunteers and 2 bottles per day (530 mL) in another 100 volunteers.

**Results:** The subjects who drank the KLJ herbal drink for 265 mL per day, with the check-up for the first time and 3 months afterwards, the comparison of the normal level of Triglyceride level found to be increased for 57.14%. The comparison of the subjects with high level of Triglyceride found to be decreased for 12.12%. The comparison of the subjects with normal level of Cholesterol found to be decreased for 28.57%. The comparison of the high level of Cholesterol found to be increased for 15.38%. For those subjects who drank KLJ herbal drink for 530 mL per day, the comparison of the normal level of Triglyceride in blood found to be increased for 100%, while the comparison of the high level of Triglyceride found to be decreased for 28.2%. The comparison of the subjects with normal level of Cholesterol found to be decreased for 15.38% and the comparison of the subjects with high level of Cholesterol found to be increased for 5.26%.

**Conclusion:** The study found that the subjects who drank the KLJ herbal drink for 265 mL per day would have the increased number of normal level of Triglyceride subjects. The subjects who drank the KLJ herbal drink for 530 mL per day would have the increased number of normal level of Triglyceride for 100%. For those who have high level of Triglyceride were found to have less Cholesterol when drinking the KLJ herbal drink for 530 mL per day.

## Reference:

<sup>(1)</sup> Bureau of Policy and Strategy (2015). Report of important statistics of 2015. Nonthaburi: Bureau of Policy and Strategy. Ministry of Public Health