LOGO

Coffee Consumption and Metabolic syndrome

https://www.ncbi.nlm.nih.gov/pubmed/19274481

LOGO

OBJECTIVE

Metabolism Syndrome is a large factor for diabetes mellitus type 2 (DM 2) and Cardiovascular disease (CVD). It is known that the risk of DM 2 can be decreased by coffee consumption. Therefore, the Amsterdam Growth and Health Longitudinal Study (AGAHLS) examined the association between Coffee consumption and the component of Metabolic Syndrome. Prospective data from AGAHLS was used to analyze the association over a period from 27 years to 42 years.

The results showed that moderate and high (>2 cups/day) coffee consumption was significantly associated with lower HDL in women. For Men, coffee consumption was not associated with any of the components of the metabolic syndrome.

BACKGROUND

Cardiovascular Disease (CVD) and diabetes mellitus type 2 (DM 2) are major health problems. Metabolic syndrome (MS) is the large risk factor of these diseases. It consists of five components:

- Elevated Blood Pressure
- Low HDL Cholesterol levels
- High triglycerides levels
- High fasting glucose levels
- Abdominal Obesity

When three of five components are present, metabolic syndrome is diagnosed.

The presence of MS is associated with approximately two-fold elevation in the risk of fatal CVD in men and nonfatal CVD in women. A threefold increase in risk for coronary heart disease and stroke were also reported.

The main causes of Metabolic syndrome (MS) are obesity, genetic factors and lifestyle factors like nutrition, smoking behavior and alcohol consumption.

A common lifestyle aspect, Coffee Consumption is often not studied in relation to the metabolic syndrome.

The effects in previous studies were found inconsistent. But most of these studies focused on short term effects of coffee consumption.

In the present study, long term coffee consumption and MS components were investigated.

METHOD

- Performed observational longitudinal study started in **1976 with 450 boys and girls**
- The mean ± SD age of subjects were **13.1 ± 0.8**
- Anthropometric(height, weight), biological(blood pressure, lipoprotein), lifestyle and psychological data collected over 30 years
- Coffee consumption was measured with questionaire at age of 27, 29 32, 36 and 42 years of age expressed in cups/day
- Covariates like Physical activity, Energy intake, Smoking was measures through different questionaires
- To examine the association **"Two Stages LINEAR REGRESSION"** analysis was used.
- In Men, coffee consumption was categorized in (≤2, >2 and ≤4, >4 and ≤6, >6 cups/day)
- In Women, it was (≤2, >2 and ≤4, >4 cups/day) because group size on highest category was small
- To evaluate main effect, a 5% significance level was assumed

DATA

- List methods and descriptions here
- Method 1
- Method 2
- Method 3

RESULTS

- Result 1
- Result 2
- Result 3

LIMITATIONS

CONCLUSIONS

- Conclusion 1
- Conclusion 2
- Conclusion 3