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# Vol. XXVIII (LXIV) - 2023 <br> THE COFFEE CONSUMPTION AMONG WOMEN OVER 40 YEARS OLD 

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#### Abstract

The aim of this study was to evaluate the coffee consumption among 204 premenopausal and postmenopausal women. $84.31 \%$ of subjects steted that they consume coffee daily, $65.12 \%$ of them prefer to add sugar to coffee, $21.51 \%$ add sugar and milk and only $13.37 \%$ drink black coffee. Regarding the amount consumed daily, $47.67 \%$ of women stated that they consume 2 cups of coffee per day, 38.37\% consume 1 cups per day and only 13.95\% consume 3 or more cups daily. $24.74 \%$ of women were smokers. $23.84 \%$ of subjects have insomnia if they drink coffee în the afternoon or in the evening. 56.86\% of women considered that coffee has benefical effects on health and $38.23 \%$ stated that they do no know how to answer.


## INTRODUCTION

Coffee is the most consumed drink next to water. An estimated 2.25 bilion cups worldwide are consumed daily (Surma \& Oparil 2021).

Coffee is actually considered a super functional food. Coffee is a complex mixture of more than 1000 volatile compounds. Coffee bioactive components include phenolic compounds like chlorogenic acids, alkaloids like caffeine and trigonelin, kahweol, cafestol, ferulic acid and melanoidins (Pereira et al. 2020, Nieber 2017).

Coffee may contribute to the prevention of inflammatory and oxidative stress-related diseases, such as obesity, metabolic syndrome and type 2 diabetes (Baspinar et al. 2017, Moon et al. 2021).

The properties of coffee favor gastrointestinal tract, nervous system, kidney function, psychic activity, metabolism. New experimental researches suggest that coffee consumption may help to prevent several chronic diseases. Coffee consumption seams to be associated with a lower incidence of several types of cancer. The habitual and moderate coffee consumption has beneficial effects on health. The consumption of up to $400 \mathrm{mg} / \mathrm{day}$ ( $1-4$ cups per day) of caffeine is considered safe (Barrea et al. 2023).

Most prospective cohort studies have not found coffee consumption to be associated with a significantly increased cardiovascular disease risk (Chieng \& Kistler 2022).

## MATERIAL AND METHODS

The aim of this study was to evaluate the coffee consumption among 204 premenopausal and postmenopausal women, aged between 42 and 75 years old.

The study was conducted between January 2023 - June 2023. The study was carried out by conducting face-to-face interviews and completing a questionnaire that covered the following aspects:
-the age of the participants;
-the daily or occasional coffee consumption;
-the amount of coffee consumed daily;
-the age at which they started consuming coffee;
-the consumption of caffeinated or decaffeinated coffee;
-the consumption of a certain variety of coffee, regarding the quality, origin or brend;
-the addition of sugar, milk or cream to coffee;
-the occurrence of side effects, such as palpitations and insomnia;
-the beneficial or adverse effects on human health;
-the association with the habit of smoking;
-the addiction to coffee consumption.
RESULTS AND DISCUSSIONS
172 women, representing $84.31 \%$ of subjects stated that they consume coffee daily (Figure 1).


Figure 1. The repartion of the cases according to the caffee consumption
Regarding the amount consumed daily expressed by the number of cups, $38.37 \%$ stated that they consume only one cup of coffee per day, $47.67 \%$ consume 2 cups per day and $13.95 \%$ consume 3 or more cups. One cup contains about 150 ml of coffee (Table 1, Figure 2).

The repartition of the cases according to the coffee amount consumed daily

| Daily coffee consumption | Number of cases | Percentage |
| :---: | :---: | :---: |
| 1 cup | 66 | $38.37 \%$ |
| 2 cups | 82 | $47.67 \%$ |
| $\geq 3$ cups | 24 | $13.95 \%$ |
| Total | 172 | $100 \%$ |



Figure 2. The repartition of the cases according to the coffee amount consumed daily

The evaluation of coffee variety showed that the majority of the participants ( $97.09 \%$ ) preferred caffeinated coffee, but without choosing a specific brand, a quality coffee or coffee with a certain origin.

The evaluation of the addition of ingredients with caloric content showed that $21.51 \%$ prefer to add sugar and milk, $65.12 \%$ consume coffee only with sugar and $13.37 \%$ drink black coffee (Table 2, Figure 3).

Table 2
The repartion of the cases according to the caloric ingredients added to coffee

| Ingredients | Number of cases | Percentage |
| :---: | :---: | :---: |
| Sugar | 112 | $65.12 \%$ |
| Sugar and milk | 37 | $21.51 \%$ |
| No sugar/ milk | 23 | $13.37 \%$ |
| Total | 172 | $100 \%$ |



Figure 3. The repartion of the cases according to the caloric ingredients added to coffee

Regarding the age at which they started drinking coffee, 93 women ( $54.07 \%$ ) stated that they started drinking coffee after the age of 20 and 61 women (35.46\%) after the age of 30. Only 18 women (10.46\%) started consuming before the age of 18.

Of the 204 women interviewed $4.90 \%$ ( 10 cases) considered coffee to be harmful and $56.86 \%$ ( 116 cases) considered it beneficial. $38.23 \%$ ( 78 cases) stated that they do not know how to answer.
$23.84 \%$ of the subjects ( 41 cases) stated that they have insomnia after consuming coffee in the afternoon (after 5 p.m.), so avoid this.
$5.23 \%$ of women ( 9 cases) stated that drinking large amounts of coffee causes tremor in their extremities, one of them giving up drinking coffee after the age of 40 , for this reason. $23.25 \%$ of women ( 40 cases) have palpitations if they drink too much coffee.
$26.74 \%$ of women ( 46 cases) were smokers. It is considered that smoking influences the coffee consumption.

Most women do not consider themselves addicted to coffee consumption, but prefer to consume it because of the well-being it gives them, with the stimulation of neuro-psychic and motor activity, especially in the morning when they have to carry out different activites. 5 women ( $2.90 \%$ ) stated that they have headaches if they do not drink coffee daily.

Taking into account the very high prevalence of arterial hypertension in the world ( $31.1 \%$ of adults), much controversy has been raised about the influence on coffee consumption on blood preasure and the risk of arterial hypertension. The results of numerous studies indicate that moderate coffee consumption does not increase the risk of developing arterial hypertension. Moderate consumption of 1-3 cups of coffee per day does not adversely affect blood preasure in most people, including those with hypertension. Occasional coffee consumption may have hypertensinogenic effects (Surma \& Oparil 2021).

25 observational studies which assessed the risk of hypertension în the highest category of coffee consumption in comparison with the lowest intake showed that higher coffee consumption was associated with $7 \%$ reduction in the risk of hypertension (Haghighatdoost et al. 2023).

Mild-moderate coffee consumption, at 2-3 cups/ day reduces the risk of coronary heart disease, heart failure, arrhythmia and stroke (Chieng et al. 2022).

Coffee consumption is not associated with overall cancer risk. The evidence suggests no association of coffee intake with cancers of the stomach, pancreas, lung, breast, ovary and prostate. Data are limited for neoplasms of the esophagus, small intestine, gallbladder, biliary tract, skin, kidney, brain, thyroid and lymphohematopoietic cancer (Alicandro et al. 2017).

The results from 15 epidemiological studies on the relationship between coffee consumption and gastric cancer risk are inconclusive. The dose-response analysis suggested no significant effect on the risk of gastric cancer per 1 cup/ day (Song et al. 2022).

A populational-based case-control study made in northern Israel showed that coffee consumption was associated with $26 \%$ lower odds of developing colorectal cancer (Schmit et al. 2016).

Coffee is linked to a reduced risk of liver and endometrial cancer (Guercio 2022).

Caffeine has many positive actions on the brain. It can increase alertness and well-being, help concentration, improve mood and limit depresion. Caffeine may disturb sleep and may raise anxiety, but only in sensitive individuals. Coffee does not seems to lead to addiction, although a minority of people experience withdrawal symptoms. Caffeine can potentiate the effect of analgesic drugs in headaches and migraine. Lifelong coffee consumption reduced risk of developing Parkinson's disease, but aparently is not protective against dementia and Alzheimer's disease (Nehlig 2016, Camandola et al. 2019, Guercio 2022).

Coffee can impact gene expression via alteration of DNA methylation, histone modificationes and ncRNA expression. Understanding the epigenetic effects is important to finding ways for improving human health (Ding et al. 2023).

## CONCLUSIONS

The results of this study show that $84.31 \%$ of women over 40 years consume coffee. $86.04 \%$ of them consume $1-2$ cups of coffee a day, so a moderate amount, which is considered to have beneficial effects on health. Unfortunately, most women add sugar to coffee, which can have negative effects on metabolism, especially if it is associated with an increased body mass index or other diseases.
$56.86 \%$ of the women who consume coffee consider it beneficial for their health, and the rest of the women, although they do not know what effects it has, consume it because of the well-being it causes them.

In conclusions, it is necessary to teach courses in school, high school and universities, which contain notions about the impact of nutritional factors on health.

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