Introduction:
Coronary heart disease (CHD) is the cardiovascular disease which represents the leading cause of mortality in Algeria and in the world with a rate of 34% per year according to figures from the National Institute of Public Health (INSP, 2021)[1]. This is a disease that affects one or more coronary arteries whose function is to irrigate the heart; it is the consequence of atherosclerosis which leads to the hardening of the arteries and the slowing of the blood flowing through them. Coronary heart disease is caused by atherosclerosis, a build-up of fatty material in the blood vessels leading to a narrowing of the coronary arteries. This is a narrowing of one or more coronary arteries. It is caused by atherosclerosis which is due to the action of fatty deposits of cholesterol. When blood flow is slowed by a blocked artery, the myocardium is no longer properly oxygenated. Coronary heart disease represents a major socio-economic challenge. In addition to genetics, the main risk factors for coronary heart disease are lack of physical activity, smoking, alcohol abuse and poor diet. The mortality rate linked to CHD in the world and in Algeria is 34%. Our study involved 40 patients taken at random. It was carried out by collecting biological, clinical and anthropometric data collected during consultations. Our objective was to show the benefit of diet in the prevention of modifiable risk factors (hypertension, diabetes, dyslipidemia, obesity, sedentary lifestyle, smoking and alcohol) and compare our results with those found in the literature.

Materials and methods
This is a retrospective cross-sectional study carried out on 40 randomly selected patients. Patients suffering from valvular heart disease, aortic dissection or pericarditis or others were excluded from our study. Clinical data were collected from a questionnaire-based interview. The information collected is: (age, sex, height, weight, family history), and search for risk factors (hypertension, diabetes, dyslipidemia, smoking, sedentary lifestyle). The biological parameters retained (HbA1c, TG level, HDL-C level, LDL-C level). Were retrieved from patients' medical records. The anthropometric data are the height and weight which made it possible to measure the body mass index (BMI). The dietary data made it possible to evaluate energy needs: We calculated the total energy expenditure (DET) for each patient. Carried out a dietary survey with the aim of knowing eating habits and calculating daily energy intake (AEJ) from the CQUAL table. Statistical analysis: carried out using correlation and Student tests with a degree of significance (p < 0.05).

Résults:
The majority of our patients were male; 65% men 35% women. The average age was 62.8 years and with extremes of 38 to 80 years. 40% of patients had a history of risk factors for first-degree relatives (hypertension, diabetes and CD). The average BMI was 28 ±5.1kg/m². 58% of patients were diabetic with HbA1c levels above normal (6.5%).
68% of our patients were sedentary (27 patients) LDL-C levels higher than normal (>1.6 g/l) were found in only 3 patients as for low HDL (<0.4g/l), it was found in more than half of the patients (53%). 19 patients (48%) had elevated triglycerides (TG)

Keywords: coronary heart disease, nutrition, dietetics, risk factors, atherosclerosis, BMI, DET, AEJ, Mediterranean diet.
our results found 19 patients smoking for 15 years (73%) and the majority were sedentary the daily energy expenditure (DEJ) was 2636.23 ± 649.9Kcal and the average of their daily energy intake (AEJ) is 3002.71 ± 825.9Kcal. Our results show that the average of AEJ is higher than the average of DEJ. 

The comparison of the quantitative variables of our results was carried out with the correlation test: and a probability of P < 0.05 was considered significant. Our results were all non-significant except obesity and smoking. The comparison between DET and AEJ of our results was carried out with the Student t test and a probability of P < 0.05 was considered significant and our result (P = 0.03 < 0.05) was significant.

Discussion:

1/ Age: constitutes a non-modifiable risk factor; 67.5% of our patients were aged between 59-80 years and our results are in agreement with those found in the literature of (MONICA, 2006)[13]. This means that the risk of CD increases with age.

2/ Gender: we noted a male predominance of 65% compared to 35% of women. The results found are in agreement with those of (MERGHIT et al., 2021)[14] and contradictory with those of (FOURATI, 2004)[15].

3/ Familial ATD: we found 48% of our patients having familial ATD; this is contradictory with the study of MERGHIT et al., 2021[14] and contradictory with those of (FOURATI, 2004)[15]. Among the modifiable FDRs: 68% of subjects were hypertensive. The correlation test was carried out between AET and HTA (P = 0.72, R = 0.05) which is statistically insignificant. Our results are in agreement with those of (MERGHIT et al., 2021)[14]; PESSINABA, 2013[16]; AMIOT-CARLIN.M.J, 2019[8]; MCEVOY,2014[22]; OPPERT.J.M,2004[11].

Conclusion:

At the end of our work and in the light of our results we can say that coronary heart disease is clearly increasing in our country and in the world, it is directly linked to the lack of physical activity and a poor quality diet adopted by the majority of people. This type of behavior causes an explosion of metabolic diseases (hypertension, diabetes, dyslipidemia); the only treatment for this pathology remains secondary prevention of modifiable risk factors (CHIRONI.G, 2010)[23], this prevention requires a balanced diet of good quality such as the Mediterranean diet (POIRIER, 2019)[24], the quality of which is no longer to be demonstrated, and moderate-intensity physical activity.

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