specific, in order to understand which outcomes for cardiovascular diseases (CVD) could be translated from animal to human studies.

**Introduction:** CVD stand as a great cause of morbi-mortality worldwide and polyphenol-rich diets have been associated with improved cardiovascular risk profiles. Although rodent models have been a resourceful means of understanding the CVD mechanisms and possible outcomes of the use of polyphenols in that context, most experimental models do not fully reproduce human CVD.

**Methods:** Database searching was carried out on PubMed and Google Scholar using specific keywords concerning CVD, retrieving close to 300 publications. After excluding irrelevant results, proteome data was organized in Excel® spreadsheets and the Cytoscape platform, ClueGo + CluePedia and Venny 2.1.0 were used to explore the biological processes influenced by flavonoids in the approached CVD.

**Results:** This study was mainly focused in the species Rattus norvegicus and Homo sapiens and in flavonoids, a polyphenol sub-group. Only about 5% of the BP influenced by flavonoids were common to both species and they were mostly related to the maintenance of blood pressure and the fatty acid metabolic process. Nevertheless, these effects were accomplished through different proteins/pathways and different subgroups of flavonoids.

**Conclusion:** Our research highlights the need for a careful translation of the flavonoids’ effects observed in rat models to clinical trials, since different proteins and subgroups of flavonoids mediated the observed actions. Though this type of studies can provide insights to help choosing the most adequate polyphenols as preventive approaches or therapies for human CVD, further investigation should be performed to clarify the described effects. Besides, pharmacokinetic aspects of the flavonoids’ action should also be considered when planning clinical trials.

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**Aim:** The aim of this study was to evaluate ECG interpretation skills among study population, and analyze factors determining their score.

**Introduction:** The electrocardiogram examination is one of the most frequently performed diagnostic test. Correct interpretation of the ECG, particularly in life-threatening scenarios (LTS) may influence the decisions on appropriate actions and consequently have an impact on the lives and health of patients. It is important for medical, nursing and emergency medicine students to acquire this skill.

**Methods:** ECG interpretation skills were assessed by self-prepared questionnaire including questions about demographic data and 20 ECG problems with 17 cases. In 6 cases there were LTS. Three questions evaluated basic knowledge about rhythm, heart rate and axis. The survey was conducted via Internet. Study population consist of 551 medical, nursing and emergency medicine students.

**Results:** The overall score among Polish medical students is 46% which is higher than nursing and emergency medicine students (22% and 37% respectively; \(p < 0.001\) in both). English division students scored almost similarly (49%; \(p = 0.27\). Polish medical students scored better in LTS than the nursing students (37% vs 23%; \(p < 0.001\). Among Polish medical students: Students in year “4–6” scored higher than those from year “1–3” (overall score: 51% vs 31%; \(p < 0.001\). Additionally, members