



### Molecular Bioinformatic Analyses for Systematic Reviews on Polyphenols and Cardiometabolic Health

Systematic reviews and Molecular meta-analyses





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### Systematic Reviews



SEARCH FOR PAPERS THAT HAVE ALREADY BEEN PUBLISHED PREPARE A NARRATVE REVIEW



POSSIBILITY TO EXTRACT RELEVANT EXPERIMENTAL DATA



CONDUCTING INTEGRATIVE
BIOINFORMATIC ANALYSES OF THE
EXTRACTED DATA
PREPARE A MOLECULAR META
ANALYSIS

### Strategy



#### Keywords

Literature searches performed on PubMed and Web of Science



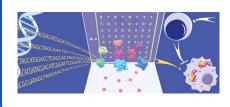
Preparation of Template for the data extraction



Screening of selected papers



**Data extraction** 



Data integration

# 1. What is known about the molecular mechanisms of action of flavanols, in terms of gene regulation, in cellular models relevant to cardiometabolic diseases





#### **PAPER**

View Article Online
View Journal



Cite this: DOI: 10.1039/d0fo00701c

# Systematic bioinformatic analysis of nutrigenomic data of flavanols in cell models of cardiometabolic disease†

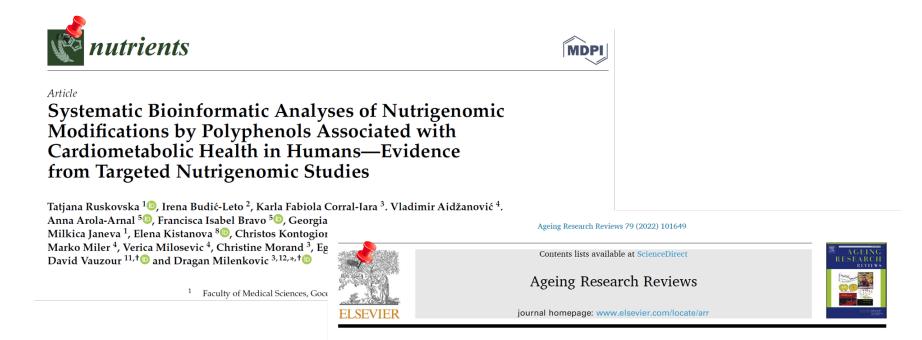
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Flavanol intake positively influences several cardiometabolic risk factors in humans. However, the specific

# Why are these analyses important?

- To identify MOLECULAR MECHANISMS OF ACTION of polyphenols and cardiometabolic health.
- To identify THE KEY MOLECULAR PLAYERS on polyphenols and cardiometabolic health.

## 2. What is known about the nutrigenomic effects of polyphenols related to cardiometabolic health in humans

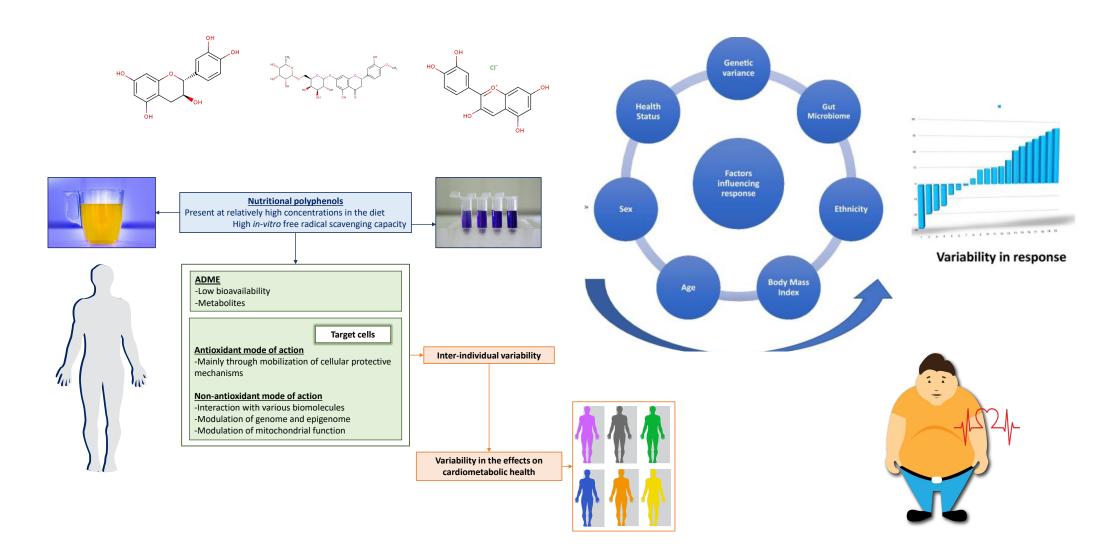


Systematic analysis of nutrigenomic effects of polyphenols related to cardiometabolic health in humans – Evidence from untargeted mRNA and miRNA studies

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### (Poly)phenols and Cardiometabolic Health – Inter-individual Variabilities



### **ACKNOWLEDGEMENTS**

### **Collaborators**

- -Dragan Milenkovic
- -Marika Massaro
- -David Vauzour
- -Irena Budic-Leto
- -Filip Postolov

**COST POSITIVe** 



