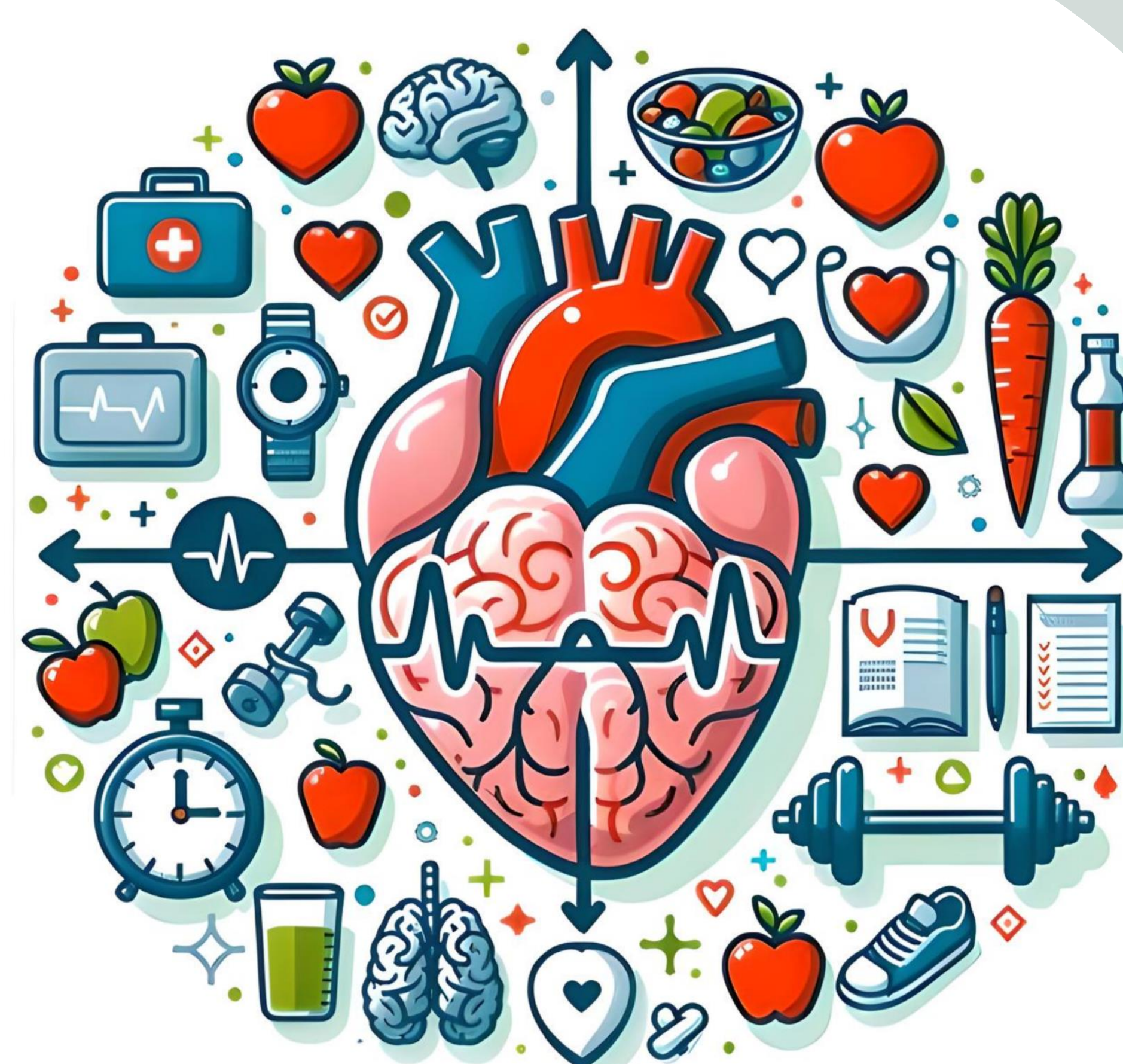


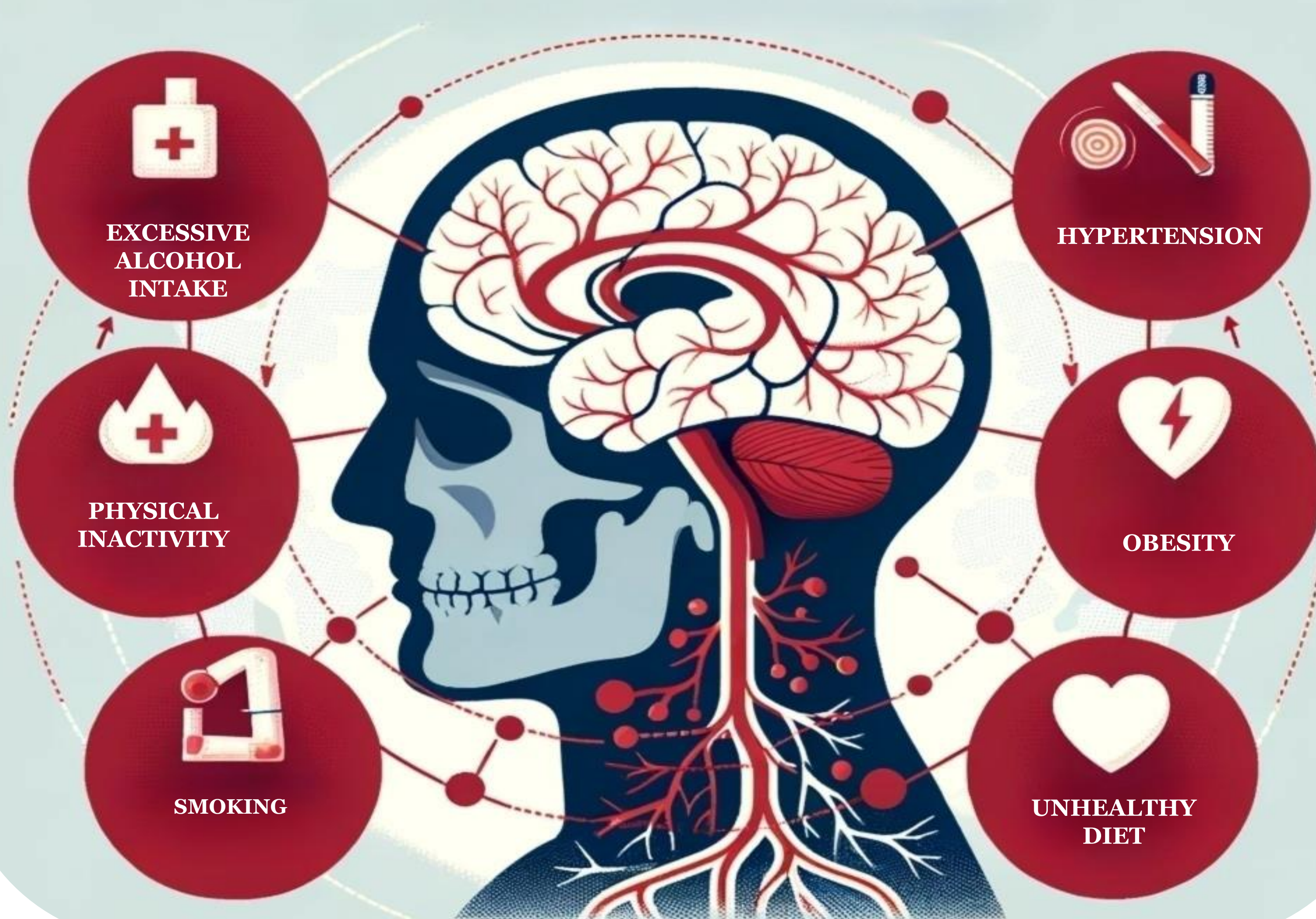
**Objectives:** This study aimed to explore primary prevention strategies for stroke by examining the implementation of pharmacological and non-pharmacological interventions. It sought to identify the risk factors associated with stroke and their variations across different stratifications. Additionally, the study aimed to evaluate current approaches to addressing stroke risk factors in European countries.

**Results:** Primary prevention of stroke involves two integral components: promoting a healthy lifestyle at the patient level and implementing measures to improve socioeconomic and educational status and reduce air pollution at the public health level. However, there are wide variations between European countries in the prevalence and control of risk factors. Some countries have well-established healthcare systems and comprehensive guidelines for primary prevention, while others lack clear allocation of responsibility. There is also a lack of generally accepted European guidelines regarding screening groups, risk factors, and appropriate ages.

**Methods:** The study analyzed existing literature to identify key risk factors for stroke, including hypertension, smoking, dyslipidemia, unhealthy diet, physical inactivity, obesity, diabetes mellitus, heart disease, excessive alcohol intake, and psychosocial factors. Variations in these risk factors across different territories, age groups, sexes, and ethnicities were considered. Furthermore, the study investigated the prevalence and control of risk factors in European countries, as well as the awareness and guidelines for primary prevention.



### Primary prevention for stroke



**Conclusions:** Primary prevention of stroke requires a multilevel approach encompassing individual-level interventions and public health policies. Addressing risk factors such as hypertension, smoking, dyslipidemia, obesity, unhealthy diet, physical inactivity, diabetes mellitus, excessive alcohol intake, and psychosocial factors is crucial. However, variations in the prevalence, control, and awareness of these risk factors among European countries highlight the need for consistent guidelines and coordinated efforts. By implementing effective primary prevention strategies, it is possible to reduce the burden of stroke and improve public health outcomes.