# ABSTRACT

Diabetes mellitus is a serious chronic disease, ranking as one of the most leading causes of death in the world. This condition causes a substantial increase in the total cost of healthcare and decreases the quality of life of hundreds of millions of people around the world. Despite all preventive measures and the rise of healthcare quality, the total number of patients with diabetes is increasing. There are several types of diabetes distinguished, however, most cases (90 %) are diagnosed as type 2 diabetes mellitus. Although diabetes is genetically predisposed, we are able to modify the risk and treatment with our lifestyle. It turns out that the diet plays a crucial role in therapy, even in possible remission of type 2 diabetes. The aim of this bachelor thesis is to objectively and critically compare dietary approaches which are used in type 2 diabetes therapy. On the basis of 10 RCT studies analysis, which were published between 2011–2021, it emerges that there are several dietary approaches showing effectivness in terms of their ability to reduce levels of glycated hemoglobin, lower medication intake, reduce weight and even to induce complete or partial remission in patients with type 2 diabetes. Results of this work show that the effective dietary approaches are low-carb diet, low-fat diet, mediterranean diet, DASH and vegetarian diet. Although some of these dietary approaches initially show superior effects (e.g. in their ability to lower levels of $HbA_{1c}$), over the course of time the differences between particular approaches are diminishing. It transpires that these diet approaches have many attributes in common (e.g. restriction of ultra-processed food, higher total fruit and vegetable intake, sufficient amount of fiber etc.). A choice of a particular dietary approach for the therapy of type 2 diabetes should therefore, be based on individual patient's preferences and after the consideration of risks and benefits in order to be sustainable long term and thereby, effective.



## Keywords:

Type 2 diabetes, effective dietary approaches, diabetes therapy, glycated hemoglobin