Background
Cardiovascular disease is the most common cause of death in the world. Blood pressure and blood lipids are two important factors for cardiovascular health that can be altered by diet. Research has shown that fruit, vegetables and whole grain reduce the risk of cardiovascular disease. A high intake of dairy products, especially low fat, has also shown a positive effect on the risk factors. A comparison between low fat dairy products and carbohydrate rich foods and their positive effects on blood pressure and blood lipids has not been compiled previously.

Objective
The aim of this systematic review is to investigate the current evidence that supports low fat dairy products versus carbohydrate rich foods on blood pressure and blood lipids in an adult population with increased risk for cardiovascular disease.

Search strategy
Searches for original articles were performed in the databases PubMed and Scopus with the keywords blood pressure, hypertension, dairy products, milk, low fat, non fat, blood lipids and cholesterol.

Selection criteria
Randomized controlled human studies, adult men and women, in the risk zone for cardiovascular disease, written in Swedish or English, comparison between low fat dairy products and carbohydrate rich foods, no enriched or whole fat dairy products, no other diet-or lifestyle intervention were selected.

Data collection and analysis
In total, four original articles were included and critically reviewed with SBU:s quality reviewing guide for randomized studies. The results were weighted together with University of Gothenburg’s guide for grading evidence according to GRADE.

Main results
Out of the four included studies a significant reduction of systolic blood pressure was observed in two studies. One study showed significant lower HDL after the dairy intervention. No significant results were observed for diastolic blood pressure and LDL.

Conclusions
A high intake of low fat dairy products compared to carbohydrate rich foods have moderate (+++) evidence for the lowering effect on systolic blood pressure and moderate (+++) evidence that there is no effect on diastolic blood pressure, HDL or LDL.

Keywords
Dairy products, milk products, cardiovascular disease, hypertension, blood pressure, blood lipids, lipoproteins, RCT, crossover.