Background: Every year 30,000 people in Sweden suffer from stroke. This costs society about twelve billion SEK. Many stroke survivors experience functional impairment which may lead to difficulties for them to meet their nutritional needs. Nutritional treatment is important in the recovery process after stroke as malnutrition increases the risk of complications.

Objective: To investigate the possible effect of nutritional treatment on functional recovery after stroke.

Search strategy: The search was conducted in the databases PubMed, Scopus and Cochrane by using the English keywords stroke, nutrition, rehabilitation, functional outcome, recovery, acute stroke, ischemic stroke, ischemic acute stroke, nutrition therapy, brain hemorrhage, functional recovery and nutritional rehabilitation.

Selection criteria: Studies published before 2001 conducted on human subjects who suffer from stroke where they measured functional capacity and did a nutritional intervention, written in English, Swedish or Norwegian, and did not have to be requested from the library.

Data collection and analysis: A systematic search was performed in PubMed. Studies which had an interesting heading were examined and abstract read. Five studies were chosen which then were analysed by using an audit template from the Swedish Council on Health Technology Assessment (SBU) and two were excluded. The relevant endpoints from the three remaining studies were scanned by using Grading of Recommendations Assessment Development and Evaluation (GRADE).

Main results: According to the studies available at this date, there is moderate evidence that energy- and protein rich nutritional supplements improves Functional Independent Measure (FIM)-score and gait and also that an individualized nutritional treatment could improve hand strength, but not quality of life. There is low evidence that neither antioxidants and/or ω-3 fatty acids affects Barthel Index (BI) or Rivermead Mobility Index (RMI).

Conclusions: There is low to moderate evidence that nutrition has an impact on function, but it is still unclear to what extent. More research in the subject is desirable to establish the effect.