Data synthesis: There were 27 randomized trials in surgical patients that compared the use of TPN to standard care (usual oral diet plus intravenous dextrose). Studies published in 1988 or earlier and studies with a lower methods score were associated with a significant reduction in complication rates and a trend to a reduction in death rate when compared with studies published after 1988 and studies with a higher methods score. Studies that initiated TPN preoperatively demonstrated a trend to a reduction in complication rates but no difference in death rate when compared with studies that initiated TPN postoperatively