Effects of omega-3 fatty acids on lipids and glycemic control in type II diabetes and the metabolic syndrome and on inflammatory bowel disease, rheumatoid arthritis, renal disease, systemic lupus erythematosus, and osteoporosis


Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
To assess the effect of omega-3 fatty acids on 1) total cholesterol, LDL cholesterol, HDL cholesterol, triglycerides, and insulin resistance in type-II diabetes and the metabolic syndrome, 2) clinical score, sigmoidoscopic score, histologic score and requirement for immunosuppressive therapy in inflammatory bowel disease (IBD), 3) pain, swollen and tender joint counts, acute phase reactants, patient global assessment, and requirement for anti-inflammatory or immunosuppressive therapy in rheumatoid arthritis, 4) renal function, progression to end-stage renal disease, hemodialysis graft patency, mortality, and requirement for immunosuppressive therapy in renal disease, 5) disease activity, damage, patient's perception of disease activity, and requirement for immunosuppressive therapy in systemic lupus erythematosus (SLE) and 6) bone mineral density and fracture rates.

Authors' conclusions
The evidence for effects of omega-3 fatty acids on outcomes in the conditions assessed varies greatly. Omega-3 fatty acids appear to reduce serum triglycerides among type II diabetics, but have no effect on total cholesterol, HDL cholesterol, and LDL cholesterol. There appears to be no effect on most clinical outcomes in rheumatoid arthritis, although tender joint count may be reduced. There are insufficient data to draw conclusions about IBD, renal disease, SLE, bone density or fractures, requirement for anti-inflammatory or immunosuppressive drugs, or insulin resistance among type II diabetics.

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http://www.ahrq.gov/clinic/tp/o3lipidtp.htm

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