

Fish Oil and the Immune System

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Abstract

Fish Oil contains uniquely high amounts of *n*-3 (or Omega-3) polyunsaturated fatty acids (PUFA). *N*-3 PUFA- rich diets are associated with suppression of the immune system and populations which have high dietary intakes of fish, such as Greenland Eskimos, have low incidence of inflammatory and autoimmune disorders. These observations have led to a growing interest in the potential use of *n*-3 PUFA's as a nutritionally-based approach to the treatment of rheumatoid arthritis, psoriasis and other inflammatory disorders. Although fish oils may not be as effective as either steroidal or non-steroidal anti-inflammatory medications, they may prove useful in reducing the dosage (and associated side-effects) of these medications required to bring about clinical benefit. A greater understanding of the mechanisms by which fish oil affects immune function should aid in improving its efficacy in the treatment of over-reactive immune disorders.