

Development of a Metabolic Assessment Tool for Chronic Kidney Disease

Immunoglobulin A nephropathy (IgAN) is the most common chronic inflammatory disease of the kidney glomerulus. IgAN progresses to end stage renal disease in over 30% of patients. The development of IgAN is not understood and there are no proven treatments. Recent studies suggest that there is a potential role for essential fatty acids, known as eicosanoids, on renal function. It has been suggested that omega three fatty acid metabolism is abnormal in IgAN patients and that this may play a role in the development of the disease. Animal studies have shown that fish oil, an excellent source of omega three fatty acids, improve renal function and reverse IgAN, but the success of these fatty acids in human trials have been inconsistent. Dr. Hammock's research group is studying the omega three fatty acid and eicosanoid status of IgAN patients compared with controls before and after supplementation with fish oil. It is anticipated that results from this study will contribute to the understanding of the mechanisms of action leading to IgAN progression and reversal.