## **Rheumatoid Arthritis:**

Colostrum contains a components called PRPs (Proline-rich Polypeptides) which have been shown to regulate immune response. PRPs are able to inhibit the over-production of T-cells and lymphocytes stimulate by antigens and mitogens. Colostral PRPs and cytokines can help modulate the body's overly aggressive inflammatory responses and help lessen inflammation.

Colostrum has been shown to modulate the body's natural inflammatory responses (Interleukin-2) to help lessen inflammation. Colostrum has the ability to inhibit the proinflammatory biological elements within the body, while at the same time, helps to promote the production of anti-inflammatory agents.

A clinical study conducted on Rheumatoid Arthritis (RA) patients taking between one and five therapeutic drugs per day found positive results with a daily intake of bovine colostrumderived infopeptides. Twelve patients, with an average age of 52.5 years, entered the trial. The average time of RA duration was 12.4 years. Patients were given a daily oral dose of 5mL prepared infopeptide solution. If no clinical response was observed after four weeks, the dose was doubled to 5mL two times a day. After a minimum three-month followup, the results were outstanding. Clinical and subjective improvements (i.e. subjective and objective reduction or disappearance of pain, edema and inflammation, improvement in joint mobility and better tolerance of physical activity) was documented after two to six weeks of treatment in 10 out of 12 RA patients (2 patents were lost to follow-up). An objective reduction of inflammation and local joint edema, usually preceding reduction or disappearance of pain was observed between 7 and 35 days. The average response time was 21.3 days. The results of this clinical trial are very significant, not only because of the high level of clinical response of the patients, but also because of the sustained benefit and improvement on prolonged therapy. Its oral administration, its low cost when compared with other experimental biological response modifiers, and the absence of side effects are remarkable, along with its profound effect on pain relief (Nitsch A. & Nitsch F, (1998).

Nitsch, A. and F. Nitsch (1998) The clinical use of bovine colostrum. *Journal of Orthomolecular Medicine* (1998) Vol. 13 No. 2, 110-118.

(Overview of cytokines & autoimmune disorders)

http://www.ncbi.nlm.nih.gov/pubmed?cmd=Retrieve&db=PubMed&list\_uids=9914949&dopt= Citation

(Study on colostrum & intestinal inflammation) <a href="http://www.ncbi.nlm.nih.gov/pubmed/19410980">http://www.ncbi.nlm.nih.gov/pubmed/19410980</a>

(Study on the immunosuppression factors in colostrum) http://www.ncbi.nlm.nih.gov/pubmed/8960365