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KollaGen II xs

Kollagen Type 11 xs is a Mucopolysaccharide compound and amino acids which basically are the building blocks of a joint cartilage. The process preserved all nutrients and capable acids in order for the Kollagen Type 11 xs to be effective after enzyme digestion in the human digestive tract. Theoretically as per the compositional make up of Kollagen Type 11 xs produced extraordinary clinical therapeutic value for connective tissue disorders, improve the mobility and activity for participants with joint cartilage conditions/disease reducing inflammatory. It contains 60 – 70% Collagen Type II and naturally contains 60 – 40% mucopolysaccharides which we know is the foremost constituent of joint cartilage. For this clinical study we chose 15 participants with confirmed joint damage. The test group contained 50% of participants on glucosamine and chondroitin and 50% of participants not on any therapeutic medication

Eligibility:

Ages Eligible for Study: 17 Years to 81 Years

Genders Eligible for Study: Both Accepts Healthy Volunteers: Yes

- Participants Involved in study: 15 (8 males / 7 females) Added 5 Participants for 60 Day trial- 3 Female/2 Male
- Patient Profile: Cartilage injuries diagnosed and not yet diagnosed participants with arthralgia
- Participants in trial must be free from other medications during the clinical trial
- Only Participants that were fully compliant to medication participated in order to achieve a good response snapshot
- Past history of medications such as NSAID's and other analgesics were allowed in the trial but must have been clear of all medication for 14 days prior to the start of the trial
- No past history of TNF agents
- Past history of joint surgery allowed but must be over 6 months in order to start trial

General Inclusion Criteria:

- In good general health with no history of a chronic illness
- Normal liver function tests (ALT, AST, bilirubin)
- Normal renal function tests (creatinine, BUN, urinalysis)
- Serum alpha-fetoprotein negative

General Exclusion Criteria:

- Personal history of cancer, except for non-melanoma skin cancer
- Use of prescribed medications
- · Hepatomegaly diagnosis
- Unwillingness to avoid cruciferous vegetable consumption for the duration of the study
- Women only a positive pregnancy test or possibility of pregnancy disallowed

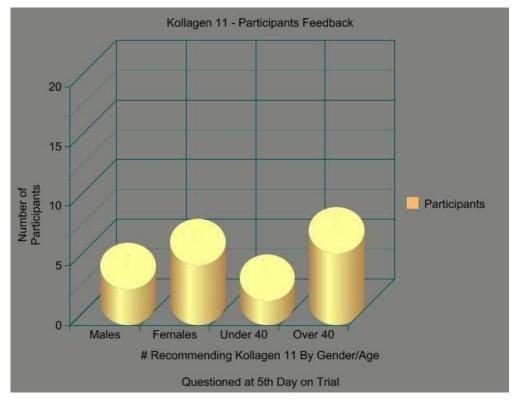
Profiles:

- Participants Involved in study: 15 7 males / 8 females
- Patient Profile: History of confirmed diagnosis of cartilage injuries confirmed with imaging/scoping with low to high pain scales.
- Participants in trial must be free from other medications during the clinical trial
- Age Group: 17-81 years
- 2 participants had been offered knee replacement surgery but not clear if they would accept drastic surgical intervention.
- Only Participants that were fully compliant to medication participated in order to achieve a good response snapshot
- Past history of medications such as NSAID's and other analgesics were allowed in the trial but must have been clear of medication for 14 days prior to the start of the trial.
- No past history of Anti-TNF agents.
- Past history of joint surgery allowed but must be over 6 months in order to participate in trial.

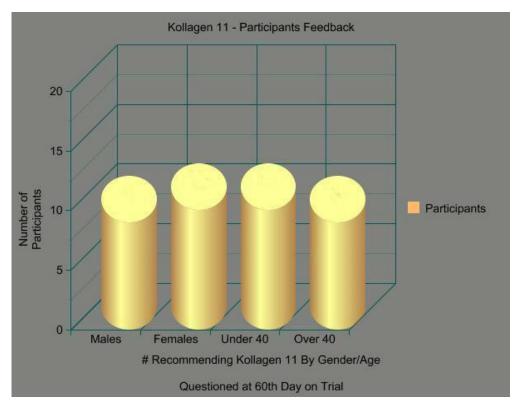
Note: All participants, during difficult flaring and inflammatory phases, utilized rest, ice packs applied locally to area with pain and heat (both moist and regular) employed by either heating pad or microwavable/boiled gel packets.

Optimal Dosage:

As a supplement, the starting/maintenance dosage of 1500 mg – 2500 mg daily PO q 60 minutes before meals with citrus juice on an empty stomach. Level can be adjusted to suit individuals target response amount required.



The above graph shows the number of participants broken down by age and gender that would actively and openly recommend Kollagen 11 xs to family, friends, associates and colleagues. It is quite difficult for participants to recommend a substance in a trial so early on. Here we see almost 50% of participants (over the age of forty) with multi-symptoms recommending this oral agent.



This graph above when compared to the 5 day graph is quite extraordinary. This indicates that the number of participants broken down by age and gender that would actively and openly recommend Kollagen 11 xs to family, friends, associates and colleagues. It is quite difficult for participants to recommend a substance in a trial so early on. Here we see almost 50% of participants (over the age of forty) with multi-symptoms recommending this oral agent.

Significant Findings of Positive Clinical Responses from Study - Respondents Input:

- All participants could not walk/jog 600 metres without pain occurring in some form.
- 10 participants had swelling and inflammation that followed any extra activity beyond daily living.
- 12 participants had joint pain present consistently at all times in the low pain scale category. 7 participants from from this group had moderate pain > 2 times per week.
- 3 participants reported some improvement in arthritic joint pain in the hands.
- 3 senior participants (> 65 years of age) reported that their joint stiffness in the waking hour had decreased by 90%.
- 2 participants with severe clinically diagnosed organic joint disease saw an increase in general well-being over pain and mobility by over 65%.
- 1 participants with internal burning knee pain symptoms noted after 2 weeks that symptoms had improved by
- 70% Note: subject refrains from all/any form of OTC PO pain medications
- 1 participants with a fractured pelvis due to an MVA (12 years ago) noted that the symptoms similar to arthritis localized to that area saw a 50% reduction in pain associated symptoms
- 1 senior subject with AMD (Age-related macular degeneration) noted an improvement in symptoms by approximately 40-50% discontinued lutein in vitamin preparation supplement due to stomach upset related to vitamin digestion.
- 2 participants with severe clinically diagnosed organic joint disease saw an increase in general well-being over pain/mobility by over 65%.
- 1 participants with internal burning knee pain symptoms noted after 2 weeks that symptoms had improved by
- 70% Note: subject refrains from all/any form of OTC PO pain medications
- 1 participant with a fractured pelvis due to an MVA (12 years ago) noted that the symptoms similar to arthritis localized to that area saw a 50% reduction in pain associated symptoms
- 2 participants had been diagnosed with osteoarthritis and had been symptomatic for < 5 years in more than one area of the body.
- 1 female (44 years of age) with single total knee replacement surgery <2 years noted that pain still present in operative site due to inflammation improved by over 80%. Participants other knee, not yet operated on.
- decreased both inflammation and pain by >60%
- 1 senior post hip fracture repair (trochanteric femur fracture) > 6 months had delayed improvment with healing and convalescing, still attending physiotherapy at 3 days per week. Within 30 days this participant had cut her physiotherapy down to once per week. Her pain and mobility increased by 50% at 30 days o0n the trial and by 60 days she had an overall systemic improvement by over 75 % prior to treatment (pain, inflammation, swelling, mobility, etc.).
- 2 participants with mild to moderate Rheumatoid Arthritis, both were > 5 years post diagnosis noted a symptom decrease in pain and inflammation by 49.6% at 60 days (we currently are continuing treatment with Kollagen 11 xs at the participant's request). We are continuing to follow these 2 participants.
- All participants on Glucosamine and Chondroitin found AC Type 11 performed better than that of the G&C supplementation.
- Noted no difference in participants on any oral medication, supplement (glucosamine and chondroitin) or vitamins compared to participants on none of these preparations.

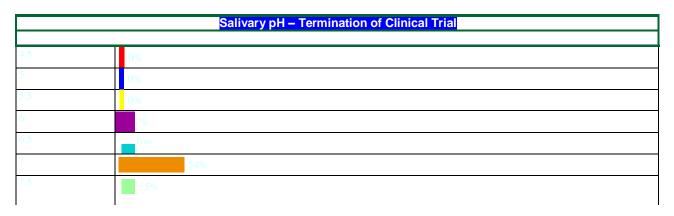
Optimal Health and pH:

When the body is alkaline, it converts free radicals to harmless water and oxygen, which helps to maintain energy and vitality. The acid / alkaline balance relates to the chemistry of the body's fluids and tissues as measured by pH. The cells of the body must have a slightly alkaline environment to survive. With a blood pH of 7.365, the cells are in homeostasis and they receive nourishment and release waste with ease. Therefore the entire inflammatory process is suppressed. The body is designed to operate within a very narrow pH range. Optimally the pH should be on the alkaline side, with a blood pH of around 7.365, with a range of 7.34 to 7.45. Even some minor pH fluctuations in either direction creates distress signals in the body, causing various symptoms that start out small and then ramp up as the imbalance continues. Included in these of course is skin eruptions, eczema, inflammation, arthritis, chronic fatigue, weakened immunity, etc. Below (Table: A) we see the base salivary level (acidic) followed by the end of trial salivary pH (alkaline – optimal). This testing ties in nicely showing a poor clinical picture at the start of the trial and a reduction of signs and symptoms at the end of the trial (an upward pH climb).

A) Start of Clinical Trial

Salivary pH – Commencement of Clinical Trial	
4.5	91%
5	2%
5.5	5%
6	
6.5	1%
7	0%
7.5	0%

B) End of Clinical Trial



Targeted Clinical Response Results:

Supplementation with Kollagen Type 11 xs produced a significant treatment response at seven days for flexibility (33.3% increase; P = 0.035) and at 60 days for general pain (91.6% reduction; P = 0.005), flexibility (68.5% increase; P = 0.004) and range of motion associated pain (76.1% reduction; P = 0.011). The substantial treatment response continued through 60 days for pain (78.8% reduction; P = 0.001). There were no adverse events reported during the study and the treatment was reported to be well tolerated by study participants.

Conclusion:

Kollagen Type 11 xs is a safe novel preparation when taken at a dosage of 500mg 4 times per day. The benefits are clearly defined as a treatment for joint inflammation, secondary mobility and other tertiary effects. It clearly benefited arthritic participants (rheumatoid and osteoarthritis alike) and clearly demonstrates a non-toxic approach to the treatment of arthritic diseases. Kollagen Type 11 xs, has extremely viable crucial amino acids and mucopolysaccarides containing cartilage matrix glycoprotein (CMGP). Cartilage matrix glycoprotein enhances the antioxidant protection within joints by carrying a crucial component to the chondrocytes. Chondrocytes are small cells interspersed within the cartilage matrix of joints. The chondrocytes produce new collagen and mucopolysaccharides creating a cushion effect providing lubrication. The composition of this substance utilizes water extraction in manufacturing to maintain the integrity of sensitive molecules without utilizing harsh chemicals. Kollagen Type 11 xs participants found in particular better overall healing after minor injuries. The study noted that some forms of facial skin softening was reported in 13 participants post questionnaire (more in the >40 age of participants). This study demonstrates that Kollagen Type 11 xs is a likely viable treatment option for the management of joint and connective tissue disorders. The affects of this study are clearly life altering for the better. Therefore at a dosage of 1500- 2400 mg daily, significantly reduced pain and inflammatory response at a rapid onset continuously from initialization of trial to 60 days.

Laboratory Analysis and Tested Specifications Origen - USA / Food for Human Consumption

Typical Analysis:

Purity: 100%

Solubility: 100% cold water

Total Mucopolysaccharides: 60-40 +/- 4.5% Total Collagen Type II Protein 60 - 70% +/- 2.0%

Nitrogen 12.9% Lipids 0.95 – 2.05%

Microbiological: Salmonella, E. Coli Other Pathogenic Germs: Not Detected / No Positive Recovery – ND/g,

Total Plate Count Max: 5000 cfu/g, Yeast and Mould: <1000 cfu/g

Physical Appearance: White/Off White Powder

Odor: Neutral

Storage: cool, dry place with lid closed tightly upon opening

Signed,

S. G.

Dr. S. Gupta (Laboratory Manager)

Mortec Scientific Group Mortec Scientific Group

Dr. S. Morton (President) Mortec Scientific Group