Nutrition for Tendon and Ligament Health

Assessing Risk

- Female athletes participating in cutting and jumping sports are 4-6 times more likely to tear their ACL than male counterparts.
- Knee laxity in women varies according to menstrual cycle:
  - Days 10-14: greatest laxity (highest estrogen levels)
- Strength, power, and speed are dependent on stiff tendons and ligaments.
  - This is better for performance but makes these tissues more prone to injury.
- Meeting adequate protein and copper needs during times of increased laxity may prove beneficial in injury prevention.

Collagen Boosting Juice Recipe:

- 2-5 g gelatin (powder or as jello)
- 6-8 fl oz apple or grape juice (aim for 100% Daily Value of Vitamin C)
- Mix or shake together.
- Drink 30-60 minutes before training. (Baar 2015)

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<th>Nutrients of Concern</th>
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| Protein              | Will not increase tendon collagen synthesis, but is important for maintenance of muscle mass. | 20g Protein/meal:  
  - 3oz Chicken
  - 1c Greek yogurt
  - 3 Large eggs |
| Copper               | Could prevent developed laxity. | 900mcg/day:  
  - 1oz Cashews
  - 1c Kale |
| Collagen + Vitamin C | Collagen is the primary protein type in tendons and ligaments. Vitamin C plays a vital role in collagen synthesis. | 2-5g Gelatin/day:  
  - consumed with-  
  - At least 75-90mg/day of Vitamin C:  
    - 1 Kiwi
    - ½c Strawberries
  - 6-8 fl apple or grape juice |

Christina Weidman RDN, LDN  
Katie Knappenberger MS, RD, CSSD, ATC  
Charlotte Vance MS, RD, CSCS  
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