

Nutrition for Tendon and Ligament Health

PERFORMANCE NUTRITION

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)

Nutrients of Concern	Health Benefits	How to Meet Your Goal
Protein	Will not increase tendon collagen synthesis, but is important for maintenance of muscle mass.	20g Protein/meal: <ul style="list-style-type: none"> • 3oz Chicken -or- • 1c Greek yogurt -or- • 3 Large eggs
Copper	Could prevent developed laxity.	900mcg/day: <ul style="list-style-type: none"> • 1oz Cashews -and- • 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: <ul style="list-style-type: none"> -consumed with- At least 75-90mg/day of Vitamin C: <ul style="list-style-type: none"> • 1 Kiwi -and- • ½c Strawberries -or- 6-8 fl apple or grape juice

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