RECOVERY

First and foremost, arm care/recovery is 100% mandatory for every pitcher at every level!!

Ice? Or No Ice?

Several years back a "trend" started in which some high profile MLB pitchers confessed to never using ice....or "only using it in a cocktail." It started a minor debate, but was credible enough that studies were performed on the topic. What we now know, based on these studies, is that ice is detrimental to a pitcher's recovery. The following link is to a short article that lays it out pretty well:

http://www.stack.com/a/should-pitchers-ice

Essentially, ice inhibits the body's healing process. So, does that mean our athletes should just sit around and let their bodies heal all by themselves? Nope....

Exercise for Recovery

If you read the article above, you may have seen that they suggest exercise as a way to speed up recovery. It is my opinion (as well as that of many people much smarter than me) that this is the absolute most important thing a pitcher can do to not only recover in the short term, but also to build season-long health and to maintain or build arm strength.

Throughout their off-season training, the players have implemented a multitude of decelerator-strengthening and mobility-increasing exercises at the end of their throwing program each day. These exercises should be staples to their recovery during the season and can be done using bands, light dumbbells, weighted plyo balls, or nothing but their bodies. The focus of these exercises should primarily be the muscle groups between the two shoulder blades and between the shoulder blades and ribcage. This is different than the old school concept of working the rotator cuff group to death. As someone who was diligent with rotator cuff exercises and still destroyed my labrum, I can assure you that my 38-year-old surgically repaired shoulder is healthier now more than ever due to the scap progam that I have incorporated.

There are numerous exercises that can be found online. A few that I have learned and love are:

- 1. 6-backs If they don't know this by name, it's the one where they lay on their stomach. These can be done using very light weights (2lb or less) or no weight. Six sets of 10 second holds at each arm position is a great post-game routine.
- 2. Reverse Throws Just what it sounds like. These can be performed using a band (2-3 sets to failure) or a heavy plyo ball (3 sets of 10).
- 3. Revers Flyes These can be performed standing with a band or bent at the hips with various weights depending on the strength of the athlete. Younger players, especially, should be very

focused on their core position (no rounded backs) when doing the weighted version (3 sets to failure). They can vary their hand positions between neutral (thumbs up for banded work; palms down for weighted) and supinated (palms up for band work and thumbs up for weighted).

That leads us to running. Running is good, but there are ok ways to do it and much better ways to do it. Slow distance running (poles) is becoming a bit of a thing of the past due to its limitations on hip range of motion. Hip extension is a major part of creating velocity and protecting the arm. Jogging, much like sitting, can tighten the muscles on the front side of the hip, ultimately restricting this crucial movement. A good alternative would be something like burpie pyramids or some variation of them. This is essentially a combination of burpies (lots of hip movement, core stability, coordination) and sprints. Based on how difficult the session needs to be, the athlete/coach/trainer can adjust things like rest time, volume, intensity level/etc. Much like the previous section, there is a wealth of information and ideas on the web. Feel free to find new movements and combinations for the athletes to keep it from getting monotonous. The main thing is that they are working. Sometimes a competitive game of ultimate frisbee is perfect for conditioning!

Additional Thoughts

Diet can be a huge factor in both athletic performance and recovery. Specifics can vary widely based on goals, but there are some pretty easy adjustments that can result in significant increases in recovery. Here is an article that give a short list of foods to either avoid or add that will help decrease inflammation:

https://www.health.harvard.edu/staying-healthy/foods-that-fight-inflammation

Here are a few of the adjustments I've made throughout my career that have lead to solid results:

- No fast food
- No pop or other high sugar beverages (although sports drinks DURING COMPETITION are acceptable)
- Reduce and attempt to eliminate refined sugars. If you have a sweet tooth, at a minimum try to time them well (immediately following a workout I will grab a handful of Sour Patch Kids).
- DO eat healthy sources of fat!! This can come from fish, nuts, oils, etc. The word 'fat' gets a bad rap because it gets associated with body fat. But dietary fat is a must for joint health and has many other benefits. Ironically, I've also read numerous training articles that say these healthy fats can actually help to reduce body fat. A great option for supplementation is a simple fish oil pill. They are all pretty similar, but pay attention to the amount of EPA and DHA. These are the "important" ingredients and we should aim for around 500 mgs per day of the two. It is suggested that a higher dosage can have even more benefits.
- DO eat greens. In my opinion this is the hardest one. So, I just suck it up and do it...because it's worth it. I like throwing a fastball by a hitter more than I don't like spinach. It's an easy equation to solve.
- DO eat protein. The suggested amount varies by person and by which article you are reading. But, a general guideline that seems to be somewhat universal is to consume no

less than 1 gram of protein per pound of bodyweight per day for athletes. Without getting too technical, it is necessary to space protein consumption throughout the day but very important to focus 25-45 grams immediately after a workout.

Warm up is a MUST! It has been shown in many studies that the more prepared a muscle is, the better it performs AND recovers! We have worked very hard throughout the off season get these guys locked into a routine of preparation. However, warming up can be viewed as boring and meaningless by a lot of youth athletes. If we want them to stay healthy over the course of the season and their careers, then we have to make sure that they are continuing to implement these practices. For more information, check out the Warm Up/Preparation section.