

Nutrition

Giving consideration to what you eat & drink is an essential part of game preparation but it's also important not to overemphasize it. Reality is, your energy or fuel needs won't be dissimilar game day relative to a heavy training day during the week. Game preparation shouldn't be seen as an excuse for gorging yourself on food! Rather, you should be following a meal plan that boosts fuel & fluid reserves but stays within your own energy needs i.e. daily calorie needs. Fuel & fluid reserves are a reflection of diet & training over the last few days so start your game preparation 1-2 days before the game.

TO BOOST FUEL RESERVES:

- Moderate your intake of foods rich in protein &/or fat, ensuring you have space for more fuel foods while also ensuring you don't blow your calorie budget
- Allocate more of your plate real estate to nutritious carb rich foods like pasta, noodles, rice, breakfast cereals, fruit in all its forms, dairy snacks, starchy veggies, bread & other flour based products. At main meals aim for...
 - Deck of card size serve of meat, chicken or seafood
 - 2 fists of carbs
 - 1-2 fists of veggies
- Stick with your 3 main meals but continue to take mid meal snacks, focusing on carb rich choices

TO BOOST FLUID RESERVES:

- Increase your total fluid intake over the day, especially the day before the game
- Focus on drinking with meals, the salt in food helps retain the fluid, boosting hydration
- With the hard yards done, allow your fluid intake to moderate in the 1-2 hrs pre-game, ensuring you start the game feeling comfortable. Smashing heaps of water before the game can just leave you feeling bloated and needing to go to the toilet all the time
- Use your urine colour to monitor your hydration status using the chart below...



Use the checklist below to help identify areas you can improve on to help enhance your pre-game nutrition strategies.

Checklist Questions

Yes

No

1. The day before the game & game-day, I cut back on the size of my meat serves to nothing more than the size of a deck of cards to free up some of my plate real estate & energy budget for additional carbs like rice, couscous, pasta, noodles etc. Yes No
2. The day before the game & game-day, I eat really clean, keeping my fat intake low. This frees up more of my energy budget for additional fuel foods, ensuring I can boost energy levels without impacting on my body fat levels. Yes No
3. Rather than protein focused mid meal snacks I'll concentrate on carb rich choices the day before the game & game-day. If I'm also trying to enhance my hydration status I'll take advantage of salt rich snacks like bread, pretzels, breakfast cereals etc. Yes No
4. To help enhance my hydration status, I'll drink 1-2 glasses of fluid with each meal & snack over the day before the game, ensuring I wake up well hydrated game day. Yes No
5. I'll wake at a reasonable hour game day to ensure my food intake doesn't back off too much from sleeping in. If I'm still keen to nap, I'll go back to bed after breakfast. Yes No
6. If I get nervous in the buildup to a game where my food intake backs off, I'll make use of liquids to help maintain energy levels. Liquids like powdered shakes & flavoured milks contribute to both energy levels & hydration status but leave the stomach faster than solids, leaving me feel light & ready to play. Yes No
7. I'll take a 400-500 ml 'primer' of fluid in the 20-30 min before exercise. This primes the stomach to maximise fluid uptake during exercise, getting it into the blood where it can be most effective. Yes No
8. My decision to use water or sports drink is based on how long I'm likely to play for. For games I start or get plenty of minutes, I'll make use a combination of water & sports drink. The saltiness of a sports drink keeps me thirsty so I'll usually drink more. Yes No
9. If I just can't stomach a full bottle of sports drink at half-time, I'll make use of other high carbohydrate choices like gels, bars of fresh fruit etc at half-time. Yes No
10. For any performance enhancing supplements I've been considering use of during a game, I make a concerted effort to trial the supplement in training to confirm I tolerate it & have a sense of its performance boosting effects. Yes No
11. I'll often weigh myself before & after games to work out how much fluid I need to drink in the first 2-3 hrs of recovery. Whatever I lose during a game, I'll consume 150% of this. For eg: if I lose 1 kg during training, I'll aim to drink 1.5 L of fluid over the next few hrs. Yes No
12. To fast track rehydration when recovery time is short, I look to replace both lost fluid & electrolytes. While commercial electrolyte supplements can be of value in this situation, I'll often make use of common foods are also excellent sources of sodium plus other nutrients important to recovery like carbohydrate. High sodium foods include bread, most breakfast cereals, cheese, rice crackers, stir fries with sauces and many tinned foods. Yes No
13. To help with recovery or energy reserves, muscle repair and building, I always pack a recovery snack into my training bag with valuable amounts of both carbs and protein. Yes No

Recovery

Recovery must form part of your overall performance and training program. It is important that you take responsibility for your own recovery outside of any designated pool, field and stretch recovery sessions to ensure you are ready for the next training or game.

Some key points to remember:

- Endeavour to get at least 8 hours sleep each night
- Wear compression garments (eg Skins) to sleep and after training or games (rather than during training)
- Carry your water bottle with you at all times and at all meals and ensure you rehydrate adequately during and after each training session and game
- Minimise the time on your feet during down time including when there are opportunities for shopping or sightseeing.
- Avoid walking in thongs as much as possible (not good for your feet or calves)
- Take time to stretch
- Bring things from home to help you relax and switch off from rugby during down times eg music, books, playing cards, games



Recovery Toolbox

In order to maximise your gains from training it is important that you are doing all that you can to allow your body to recover during, after and between training and playing. The following provides different recovery options for you to try to incorporate into your training week on top of the **NON-NEGOTIABLE** recovery tools listed below.

RECOVERY NON-NEGOTIABLES

1. Balanced Diet

- 6+ smaller meals per day

2. Post Training Snack

- Good Options Include: Low-Fat Yoghurt, Banana, Up & Go, Protein Shake/Bar,

3. Hydration

- Consume 500mL in first hour of waking and continue to sip water all day
- Urine colour should be pale with plenty of flow



RECOVERY TOOLS

Diet/Hydration

- Pre and post training snacks
- Weigh in pre and post training – drink 1.5x body weight lost in fluid over the next hour or so
- Maintain eating/hydration plan on weekends or holidays when out of normal routine.



Compression Tights/Socks

- Wear after training (rather than during) for at least 2 hours
- Wear to bed if possible
- Wear during any travel greater than 2 hours in duration



Contrast or Cold Shower Options

- 1 min Hot / 1 min Cold x 5-7
- 30s Hot / 30s Cold x 7-10
- 2 min Hot / 2 min Cold x 3
- 3 min Cold / 1 min Warm / 3 min Cold
- 5 min Cold



Recovery Toolbox

Ice Bath Options

- a) 10 mins Full Body Immersion
- b) 1 min Ice Bath / 1 min Warm Shower x 8-10
- c) 1 min Warm Shower / 3 min Ice Bath x 3-4
- d) 2 min Ice Bath / 2 min Warm Shower / 5 min Ice Bath x 2
- e) 2 min Warm Shower / 2 min Cold Shower / 2 min Ice Bath x 3



Water Recovery Sessions

- 15-20 mins light aerobic activity (water running or swimming) plus dynamic and static flexibility.

Static Stretching

- 15-20 mins of static stretches with emphasis on problem areas. Hold stretches for at least 45 sec each side.

Daily Monitoring of Training

- Keep note of each session completed and your general well-being/injury status for each (complete a Weekly Monitoring and Recovery Sheet)

Sleep

- Aim for 8 hours+ sleep per night. Power naps only if sleeping during the day (max 30 mins). Try to maintain common wake time each day, even on weekends

Alcohol

- Avoid consumption of alcohol. Even a couple of standard drinks can affect recovery for the next 1-2 days. Heavy consumption affects food intake, hydration status, sleep quality, hormone status (reduces testosterone = muscle building/repairing hormone) and cancels out a lot of the good work put in during the training week. Women are smaller, have higher body fat and lower body water content so an alcoholic drink will produce a higher blood alcohol concentration

Water Recovery

Water recovery sessions are often performed in a 25m or 50m pool. The session should be conducted over 15-25 minutes and will include light aerobic activity (water running or swimming) and dynamic and static flexibility activities.

Session Outline:

- 4 laps of the pool - freestyle out, backstroke back
- Running forward X 2 laps (out & back)
- Running backward X 2 laps
- Side shuffle X 2 laps leading with right leg first then leading with left leg
- Hanging onto side kicking - 5 X 15 sec kicking with 15 sec recovery
- Running forward with shoulders under the water X 2 laps
- 5 max effort squat jumps - squat down until shoulders under the water then explode up as high as you can - complete 2 X 5 jumps with 20 sec recovery between blocks of five
- 4 laps of the pool - freestyle out, backstroke back
- Washing machines - squat down so shoulders under the water. Cross arms across chest. Rotate explosively for 15 sec then have 15 sec recovery.
Complete 5 X 15 sec on:15 sec off



Putting It All Together

Post Training and Competition

- 0-10 min Post: Light exercise(i.e. warm-down) and rehydration
- 10-20 min Post: Light stretching
- 20-30 min Post: Water immersion (e.g. showers, ice baths, pool) and also nutrition snack/supplement.
- 30 min Post: Weigh in to determine fluid loss (and determine fluid intake for rest of the day)
- Wear compression garments following shower
- 1-2 hrs Post: Appropriate meal
- No alcohol
- Ensure appropriate sleep is achieved

Day after the Game

- Body weight measurement (for hydration status)
- Light exercise (e.g. jog, water based activity, cycle, etc)
- Stretching and mobility exercises
- Massage/self massage
- Nutrition throughout day
- Compression garments
- Another good nights sleep



SMARTPLAY

FIX UP

Fix Up Your guide to injury management

Nobody likes being on the sidelines as a result of injury. The best way to recover from any soft tissue injury is by using the RICER and NO HARM injury management approach. They help to prevent further damage and will mean less time away from your sport or activity.

- The first 48-72 hours are vital in the effective management of any soft tissue injury.
- Soft tissue injuries refer to all ligament sprains, muscle strains and muscle bruises (porks etc) and most bumps and bruises which occur in sport.
- The immediate treatment is RICER.
- RICER should be initiated immediately after injury and continued for 48-72 hours.
- To ensure a successful recovery, NO HARM factors should also be followed in conjunction with RICER.

R



Rest

Place yourself in a comfortable position. Keep the injured area supported. Avoid using the injured area for at least 48-72 hours as continued activity will increase bleeding and damage.

I



Ice

Apply ice to the injured area for 20 minutes, every two hours for the first 48-72 hours after injury. Ice reduces swelling, pain and bleeding. Ice can be used in the following ways:

- crushed or cubed ice in a wet towel or plastic bag.
- frozen pea packet in wet towel.
- cold pack wrapped in wet towel.

Ice or cold water is better than nothing. Caution: Do not apply ice directly to skin.

C



Compression

Apply a firm wide elastic bandage over the injured area, as well as above and below. Where possible hold ice in place with the bandage. Between ice treatments maintain bandage compression. Applying a bandage will reduce bleeding and swelling and also provide support for the injured area. Caution: Ensure the bandage is not too tight. Some signs of the bandage being too tight may include numbness, tingling or skin becoming pale or blue. If these symptoms and/or signs develop remove the bandage and rewrap again firmly but not as tightly.

E



Elevation

Raise the injured area above the level of the heart at all times. A pillow can be used to provide support and comfort. Elevating the injured area reduces bleeding, swelling and pain.

R



Referral

As soon as possible after injury arrange to see a qualified health care professional such as a doctor or physiotherapist. This will determine the extent of your injury and provide advice on treatment and rehabilitation required.



NO HEAT

Applying heat to an injury increases bleeding. Avoid hot showers or baths, saunas, spas, hot water bottles, hot flannel or heat packs.

NO ALCOHOL

Alcohol increases bleeding and swelling which delays healing. It can also mask pain and severity.

NO RUNNING

Running or exercise increases blood flow to the injured site. This can make the injury worse and delay healing.

NO MASSAGE

Massage or the use of hot rubs increases swelling and bleeding.

Early and correct use of RICER and NO HARM factors is essential for the initial management of a soft tissue injury. RICER and NO HARM should be continued for 48-72 hours.



The Smartplay program is supported by VicHealth and the Department of Planning and Community Development Sport and Recreation Victoria.

For further information, please contact Sports Medicine Australia - Victorian Branch
Sports House, 221 Alfred Road, South Melbourne, Victoria 3207
Phone 03 9524 8777 Fax 03 9524 8788 Email smartplay@spma.org.au

www.smartplay.com.au