Recovery Protocol

Recovery is often overlooked, or worse taken for granted. Time alone may provide recovery, but most of the time tennis athletes do not have enough time to recover sufficiently.

Training alone does not result in improved performance. It is only achieved when matched with proper recovery.
Average Match

45 minutes to 2 hours

20–25 seconds rest between points and 60–90 seconds every change of ends

An average point encompasses 2–5 strokes with an average of 4 directional changes.

Tennis players run an average of 2 meters per shot, with 8–12 meters per point

300–500 high-intensity efforts per “best of 3 set” match

Point duration typically last less than 10 seconds

Aspects of Recovery

- Nutrition
- Mental
- Physiological
- Hydration

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Physiotherapist
Hydration

Post-training or match hydration has three major purposes:

- Replace fluid volume to an equal or slightly greater extent than the volume lost while sweating
- Drink liquid carbohydrates to aid in glucose uptake to the muscles
- Replace electrolytes lost during sweating

## HYDRATION

<table>
<thead>
<tr>
<th>Before Match</th>
<th>During and After Match</th>
<th>After Tournament</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make sure urine colour is at 1 – 2.</td>
<td>Aim to drink ~1 bottle (700ml) of a sodium-containing fluid for each kg of body mass lost during a match.</td>
<td>Check urine colour and make sure it is 1, 2 or 3.</td>
</tr>
<tr>
<td>Measure and record body weight prior to play.</td>
<td>The ingestion of sodium with a fluid replacement beverage helps stimulate more complete rehydration.</td>
<td>Body Mass test to make sure &lt; 2% body weight has been lost during the day.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continue to replenish fluid throughout day post tournament.</td>
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</tbody>
</table>
To improve recovery aspects, hydration strategies should seek to optimise hydration status continuously, and not solely around competition schedules.
Nutrition

The major goals of nutritional recovery include:
- Replenish glycogen (muscle and liver energy) stores
- Restore appropriate fluid and electrolyte levels
- Create new muscle proteins
- Restoration of the immune system

### NUTRITION

<table>
<thead>
<tr>
<th>Before Match</th>
<th>Make sure you eat a good breakfast 2–3 hours prior to your first match. Good sources of this are eggs, toast, weetbix, fruit/fruit juice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>During and After Match</td>
<td>Consume approximately 200–400 calories of a carbohydrate:protein drink or snack with an approximate 4:1 carbohydrate to protein ratio. Good sources of this are chocolate milk, a recovery shake, or a 6-inch sandwich with meat/fish.</td>
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<tr>
<td>After Tournament</td>
<td>Consume a good dinner with a high carbohydrate, medium protein, low-medium fat meal. Some good examples include pasta with chicken/fish and vegetables, steak/chicken/fish and potatoes, rice, beans and salad, eggs and potatoes.</td>
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</tbody>
</table>

Timing is Important

Start your nutritional recovery within 45 minutes of finishing your training session or tournament match.
Sleep

Sleep is the most important form of recovery. A good night sleep between 7–9 hours provides invaluable adaptation time to adjust the physical, neurological, immunological and emotional stressors that are experienced during the day. Some athletes, especially during major growth spurts, may need 10 hours or more of sleep.

Short naps during the day of 15–30 minutes are beneficial and can improve alertness, perception and performance.
### SELF MONITORING / MANAGEMENT

<table>
<thead>
<tr>
<th>Daily</th>
<th>Weekly</th>
<th>Weekly Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat a balanced diet and plan appropriate meals and post training snacks</td>
<td>Have at least one rest day a week</td>
<td>Prioritise all weekly commitments in advance (e.g. school, work, training, social events etc.)</td>
</tr>
<tr>
<td>Stretch and foam roll before bed</td>
<td>Plan some active rest (e.g. yoga)</td>
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<tr>
<td>Practice some relaxation strategies before bed and learn to “switch off” from the day</td>
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</tbody>
</table>

### Rest Days

Athletes require a rest day at least once – twice weekly. A rest day should not include sitting for the majority of the day. It is important for the athlete to be mobile during the day. It could be a good time to socialise with friends, go to the shops, play another sport.