

INDIVIDUAL FLUID BALANCE ASSESSMENT

Conducting your own fluid balance assessment during an upcoming training session is a great way to determine your individual sweat rates and total fluid losses during different sessions and conditions.

Try this activity in training first, however you might like to repeat it during a practice game too. This might be especially important if your training session is an afternoon evening and your games are during the day. The change in environmental conditions will likely affect your sweat rate.

All you will need is a set of scales, your water bottles and a training session or game!

INSTRUCTIONS:

1. Weigh yourself before training in minimal clothing no shoes (initial weight)
2. Using kitchen scales – weigh your drink bottle before training. *Or you can estimate the weight of these if you know the total volume they hold. E.g. If it is a 1L water bottle (filled to the top) then you know its 1kg*
3. Train and drink as you normally would throughout the session
4. Weigh self after training in minimal clothing, no shoes (final weight)
5. Subtract your final weight after training from your initial weight pre training.
6. Add together the weight lost (kg) and the volume consumed (L). This gives you your total fluid turnover for the session.
7. Now divide this number by the number of hours in your session and this will give you your hourly sweat rate.



You can also use this data to determine the percentage of fluid lost in the session, to see if it stays under the 2% threshold.

Here is the formula again;

$$(\text{Initial weight [kg]} - \text{Final weight [kg]}) + \text{Fluid consumed (L)} / \text{Time (hours)} = \text{Sweat rate (L/hr)}$$



Performance Nutrition Pathway Program

HYDRATION ASSESSMENT - EXAMPLE

Session description	Conditioning & skills with some match play at the end.
Temperature	28°C
Humidity	78%
Session start time	6:00pm
Session finish time	7:30pm
Total time of session	1.5hrs

Initial weight	60.0 kg
Final weight	58.0kg
Change in weight <i>(initial weight (kg) - final weight (kg))</i>	-2.0kg
Percentage lost <i>(weight lost kg/starting weight (kg) x 100)</i>	2kg / 60kg = 3.3%
Volume of fluid consumed in session	1.2 L
Total Sweat volume <i>Change in weight + volume of fluid consumed</i>	2.0kg + 1.2L consumed = 3.2L sweat volume
Session duration	1.5hrs
Sweat Rate	3.2L / 1.5hrs = 1.4L/hr
Rehydration amount required <i>Change in weight x 150% over next ~4hrs</i> <i>Note: Rehydration calculation is only required if you experienced a reduction in weight over the course of the session. If weight is stable, or has increased over the course of the session, you do not need to drink additionally, just drink to your needs.</i>	



Performance Nutrition Pathway Program

MY HYDRATION ASSESSMENT

Session description	
Temperature	
Humidity	
Session start time	
Session finish time	
Total time of session	

Initial weight	
Final weight	
Change in weight <i>(initial weight (kg) - final weight (kg))</i>	
Percentage lost <i>(weight lost kg/starting weight (kg) x 100)</i>	
Volume of fluid consumed in session	
Total Sweat volume <i>Change in weight + volume of fluid consumed</i>	
Session duration	
Sweat rate	
Rehydration amount required <i>Change in weight x 150% over next ~4hrs</i> <i>Note: Rehydration calculation is only required if you experienced a reduction in weight over the course of the session. If weight is stable, or has increased over the course of the session, you do not need to drink additionally, just drink to your needs.</i>	

List here any things you learned while doing this activity that you think will assist you with your hydration practices in the future.....
