Committee Name: USMS Sports Medicine and Science  
Committee Chair: Christopher Rieder  
Minutes recorded by: Christopher Rieder  
Session #: August, 11th, 2020  
Date/time of meeting: 8/11/2020 8:00pm ET

Actions Taken:
1. Approved: Minutes July 2020 meeting

<table>
<thead>
<tr>
<th>Number of committee members present: 10</th>
<th>Absent: 3</th>
<th>Guests: 0</th>
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<tbody>
<tr>
<td>Committee members present (list all, including chair and vice chair):</td>
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</table>
| Aaron Schneider  
| Arlette Godges  
| Chris Campbell  
| Christopher Rieder  
| Daniel Pauling  
| Jane Moore, MD  
| Jessica Seaton  
| Melodee Liegl  
| Rich Williams  
| Robin Tracey  
| Kris Goodrich  

Not present:  
Clare Kubiak  
Jim Miller  
Kris Goodrich  

Guests:

Minutes
The meeting was called to order at 8:05 pm ET.

1. Minutes were approved with a unanimous vote. Moved By Aaron Schneider and seconded by Melodee Nubent.

2. Current Subcommittee Projects:
   - Sports Medicine Communication
     - The new communication method will be using the National Offices communication device “StreamLines.” The first article, a kickoff, focused on swimming over the age of 60. The article was authored by Dr. Miller with great feedback and interest. The next article will cover nutrition over 60 and in particular hydration. This will be authored by Jennifer Thayer
a registered dietician and a member of our Peer review committee. A draft was shared for committee review and suggestions. (See Appendix A).
  o Additional articles will be requested by both committee members and peer review members in order to have a “bank” of available article to publish both as needed and on demand.

  • Convention Presentation
    o Further communication will be forthcoming.

  • Nationals Booth staffing
    o The Topic is pending further guidance from the Board of Directors and National office regarding National meets.

  • Committee – charter
    o Attached was submitted to Christopher Campbell for board approval. (Appendix B). Discussion ensued regarding the “Living” document and how this committee can add and delete as needed to the overall direction.

3. Research study requests

  • Terms and Conditions
    o Moving forward all new requests will have a standard Terms and Conditions that will be approved by this committee and the board prior to access to the membership. Some of the Terms and Conditions will be: the Study Thesis, the Survey methods, and review of the resultant abstract. This is a sample list and is not all encompassing. The final Terms and Conditions will be discussed at a subsequent board meeting. The committee agreed to work with past members on a document that will be used as a template moving forward.

4. New Business

  • COVID-19 (SARS-CoV-2)
    o Committee member Aaron Schneider will take the lead on preparing a study using the swimming membership and a correlation of COVID-19 (SARS-CoV-2) traceability within swimming practices. Aaron will be following the new Terms and Conditions process moving this forward. (A. the Study Thesis, B. the Survey methods, and C. review of the resultant abstract)

  • Background statement from each Committee member and Peer Review member
    o The committee agreed to self-prepare a 3-5 sentence listing of education and work/ research related interests. The chair will work with the Peer Review committee members to produce the same. This is for internal Committee and board dissemination only.

5. Questions/Comments from new and current members
  • There were no additional items for questions or comments.
Next meeting date September 2nd, 8 pm EST Zoom call

Join Zoom Meeting

https://us02web.zoom.us/j/4914893955

Meeting ID: 491 489 3955
One tap mobile
+13017158592,,4914893955# US (Germantown)
+13126266799,,4914893955# US (Chicago)

The meeting was adjourned at 9:00 pm ET.
Swimming at 60: What Athletes Should Know About Hydration

Proper hydration can improve athletic performance and your health

Jennifer Thayer and Mark R. Yoder

You lose fluids during workouts primarily in the form of sweat and respiratory water vapor losses, but you can’t tell you’re sweating because you’re in the water. Your first sign of dehydration might be a muscle cramp in the middle of a set.

Improving your swimming and health requires balanced consumption of fluids and electrolytes such as sodium and potassium. It’s critical for athletes, including those over 60, to understand how certain age-associated physiological and lifestyle changes affect proper hydration and to develop—and follow—a plan to deal with those challenges.

Major Factors in Your Hydration Needs

Many general and age-related factors can affect how much fluid is lost before, during, and after athletic activity.

**Workout parameters.** Increasing the frequency, intensity, or duration of your workouts can increase how much fluid and electrolytes you need to consume.

**Location.** Where you’re training can also have an impact. You require more fluids and electrolytes if you train in a hot, excessively dry or humid environment or at altitude, and you need to keep in mind that training in cold conditions has been associated with a lower sensation of thirst.

**Medications and diet.** Both aging-associated chronic conditions and the natural aging process can result in reduced kidney function, which can affect fluid balance and electrolyte needs and increase recovery time. Medications and specialized medical diets commonly prescribed to older people can also affect fluid and electrolyte needs. For example, diets high in fiber may require active increases in fluid and electrolyte consumption, and certain blood pressure medications and diets lower in sodium and potassium may require adjustments to recommended fluid and electrolyte intake under different environmental and training conditions.

Assessing if you’re under hydrated or overhydrated, understanding what, when, and how much to drink to ensure adequate hydration, and knowing when to consult a health care professional to assist you are all key to achieving and maintaining proper hydration, which can help optimize overall health and athletic performance.

Hydration Status: You Can’t Manage it if You Don’t Measure It

Weight changes can be used to help assess hydration status.

- Day-to-day, first-thing-in-the-morning weight changes less than 1 percent of your total body mass can indicate adequate hydration.
- Pre- to post-activity weight loss should be kept to less than 2 percent of body mass to minimize performance deficits and health risks.
- Pre- to post-activity weight gain can indicate over hydration, which can also lead to serious health risks.

A simple hydration strategy is to look at your urine by midday. A common rule of thumb is that clear urine, with little or no yellow tint, can indicate that you are properly hydrated. This method, however, is inexact and, without additional considerations, can still leave you over- or under hydrated. Diet, some medications, supplements, vitamins, body compensations for training, and other factors can
impart color to your urine, which can affect a simple color test. For example, B vitamin supplements can give urine a bright yellow or orange color, which can make it harder to use urine color to assess hydration.

To increase measurement accuracy, over-the-counter tests are available to measure urine specific gravity and osmolality. General guidelines by the American College of Sports Medicine suggest that first-morning urine specific gravity less than 1.020 or urine osmolality less than 700 mOsmol/kg generally indicate adequate hydration. It is important, however, that these tests be used properly—in careful compliance with the manufacturer’s instructions and consistent with your healthcare professional’s guidance. For example, changing the time of day your test is performed can significantly affect measurements. Moreover, these tests constitute a limited proxy of overall hydration, particularly as it applies to athletic performance, so there is not one absolute measured value that necessarily indicates optimal hydration for every person under all conditions and circumstances.

Nonetheless, in consultation with your healthcare provider, these assessment tools can be very helpful to establish personalized baselines for proper fluid and electrolyte intake and develop an individualized hydration management plan that optimizes both health and athletic performance.

**What to Drink and When**

Fluid needs are specific to each individual. However, there are a number of general recommendations that might help. Reminder: Consult your health care provider before using any specific recommendations to adjust your fluid and electrolyte intake, especially if you have health conditions.

- **Consume 5-10 ml/kg of fluids two to four hours before a workout or competition.** For a 150 lb. person, this is approximately 11.5-16 fl. oz., which is 7.5-15 fl. oz. per 100 lb. body weight. These fluids can be consumed throughout the pre-workout time period.

- **Consume drinks and foods containing carbohydrates and electrolytes before and during your workout to ensure adequate energy, fluid, sodium, and potassium intake, especially if your physical activity will last 60-90 minutes or longer.** You can do this by drinking something with balanced electrolytes and a carbohydrate content of 6–8 percent or consuming carbohydrate-, sodium-, and potassium-containing snacks with water.

- **After a workout, consume foods and beverages containing sodium and other electrolytes and carbohydrates to help you rehydrate and aid in overall recovery.** You can also consider adding protein, especially proteins which contain a high amount of the amino acid leucine, to help with muscle growth.

- **Maintain proper fluid and electrolyte intake throughout the day by consuming flavored drinks in addition to water (within the parameters of a healthy diet), drinking small amounts of fluid throughout the day, salting food to taste to encourage additional fluid and electrolyte consumption (as appropriate to individual sodium requirements), and having a drink available during meals and snacks.**

Adequate hydration depends on many individual factors. Knowing what’s right for you given your personal training objectives and medical history is critical to making—and following—a plan that’ll contribute to both a healthy lifestyle and optimized athletic performance. Personalization is key to optimal hydration.
# Medical Review committee volunteers

<table>
<thead>
<tr>
<th>Name First</th>
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<th>Contact information</th>
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<tbody>
<tr>
<td>Lori</td>
<td>Srobl PT,DPT,PRC</td>
<td></td>
<td>Physical Therapist and Rhab Manager</td>
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<tr>
<td>Christina</td>
<td>Sheridan</td>
<td></td>
<td>Pediatric Cardiologist and Department chair</td>
</tr>
<tr>
<td>Thomas</td>
<td>Chew DC</td>
<td></td>
<td>Chiropractic Care</td>
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<tr>
<td>Scott</td>
<td>Ispirescu MD</td>
<td></td>
<td>Psychiatrist</td>
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<tr>
<td>Jennifer</td>
<td>Thayer</td>
<td></td>
<td>Registered dietician</td>
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<tr>
<td>Caren</td>
<td>Stringe</td>
<td></td>
<td>CRNP primary care / geriatric</td>
</tr>
<tr>
<td>Terri</td>
<td>Postma MD</td>
<td></td>
<td>Clinical neurology, neuropsychopharmacological</td>
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<tr>
<td>Sean</td>
<td>Uiterwyk MD</td>
<td></td>
<td>Family practice / geisel school of medicine</td>
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<tr>
<td>Kristen</td>
<td>Hamilton</td>
<td></td>
<td>Critical care flight paramedic</td>
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<tr>
<td>Janie</td>
<td>Cole</td>
<td></td>
<td>Nurse anesthetist</td>
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<tr>
<td>Omar</td>
<td>Awad</td>
<td></td>
<td>Ophthalmologist</td>
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<tr>
<td>Greg</td>
<td>Sanchez RN</td>
<td></td>
<td>RN</td>
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<tr>
<td>Cheryl</td>
<td>Wicker RN</td>
<td></td>
<td>Professor at UNC-G teaching adult and geriatric NPs</td>
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<tr>
<td>Pogos</td>
<td>Ter-Stepanyan</td>
<td></td>
<td>Board-certified geriatric pharmacist</td>
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<tr>
<td>Jane</td>
<td>Lombard</td>
<td></td>
<td>Sports Cardiologist</td>
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<tr>
<td>Larry “Chip”</td>
<td>Bankston</td>
<td></td>
<td>Orthopedic Surgeon/Sports Medicine</td>
</tr>
<tr>
<td>Julio</td>
<td>Aponte</td>
<td></td>
<td>Arthritis and rheumatology</td>
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**Mission:**
Create and enhance membership value through expanded sports medicine and science based USMS products, services and delivery. The Sports Medicine and Science Committee shall educate members and the public on topics of swimming related sports medicine and science. The committee shall stimulate and encourage research pertaining to Masters swimming.

**Vision:**
1. Manage the US Masters Swimming Health Network
   a. Maintain a database of members, areas of expertise, and contact information
      i. Distribute questions to members with appropriate expertise
      ii. Review responses and return to swimmer who submitted the question
   b. Develop web-based version of the network
      i. Interested professionals can enter their information with areas of expertise
      ii. US Masters Swimming members can search for professional with expertise in area of member’s concern; member can contact professional directly for information

2. Work with Swimming Saves Lives Foundation to provide health-related screening services and educational displays at national championship meets.

3. Educate members on topics of sports medicine and science using peer review as a mechanism for validation.
   a. Arrange for and host a sports medicine presentation at convention on a topic of interest to swimmers.
   b. Create articles of interest for Masters Swimmers (e.g. over 65 training guides, dryland training etc.)
   c. Respond to requests from US Masters Swimming Editor-in-Chief
      i. Review health-related articles prior to publication
      ii. Respond to questions submitted by swimmers – or refer to appropriate expert for response
      iii. Write articles
   d. Produce and respond to requests from other US Masters Swimming Committees for health-related information or opinions

4. Review sports medicine and science-related research projects requesting grant funding from US Masters Swimming.

Work with Swimming Saves Lives Foundation to create educational displays and arrange health-screening services for national championship meets.