Committee Name: USMS Sports Medicine and Science	**Session #:** October 14th, 2020
Committee Chair: Christopher Rieder	
Minutes recorded by: Christopher Rieder	**Date/time of meeting:** 10/14/2020 9:00pm ET

Actions Taken:

1. No actions taken – there was not a quorum

Number of committee members present: 3 **Absent: 8** **Guests: 0**

Committee members present (list all, including chair and vice chair):

Chris Campbell
Jane Moore, MD
Daniel Pauling
Christopher Rieder, Chair
Robin Tracey

Not present:

Arlette Godges
Kris Goodrich
Clare Kubiak
Melodee Liegl
Jim Miller, MD Vice Chair
Aaron Schneider
Jessica Seaton
Rich Williams

Guests:

Minutes

The meeting was unable to be called to order as there was not a quorum.

1. Current Subcommittee Projects:

   - Sports Medicine Communication
     - The new communication will be using the National Offices communication device "StreamLines." The second article, (See appendix A) focused on hydration as a part of swimming over the age of 60. The article has received greater than 1,700 views. The next article will cover mental health in swimmers potentially over 60. This will be authored by a colleague of Arlette Godges who is a practicing MD in Psychiatry.

     - 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.

- Background statement from each Committee member and Peer Review member

    - 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.

- Convention Presentation
    - Further communication will be forthcoming.

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

- Committee – charter
    - 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
    - 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)

5. Questions/Comments from new and current members
    - There were no additional items for questions or comments.

Next meeting date November 11th, 8 pm EST Zoom call

Join Zoom Meeting

https://us02web.zoom.us/j/4914893955
pw: 09022020

Meeting ID: 491 489 3955

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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

Name First	Name Last	Contact information	Specialty
Lori	Srobl PT,DPT,PRC		Physical Therapist and Rhab Manager
Christina	Sheridan		Pediatric Cardiologist and Department chair
Thomas	Chew DC		Chiropractic Care
Scott	Ispirescu MD		Psychiatrist
Jennifer	Thayer		Registered dietician
Caren	Stringe		CRNP primary care / geriatric
Terri	Postma MD		Clinical neurology, neuropsychopharmacological
Sean	Uiterwyk MD		Family practice / geisel school of medicine
Kristen	Hamilton		Critical care flight paramedic
Janie	Cole		Nurse anesthetist
Omar	Awad		Opthalmologist
Greg	Sanchez RN		RN
Cheryl	Wicker RN		Professor at UNC-G teaching adult and geriatric NPs
Pogos	Ter-Stepanyan		Board-certified geriatric pharmacist
Jane	Lombard		Sports Cardiologist
Larry “Chip”	Bankston		Orthopedic Surgeon/Sports Medicine
Julio	Aponte		Arthritis and rheumatology

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.