INSTRUCTIONS FOR CONDUCTING WRESTLING HYDRATION ASSESSMENT USING THE IHSAA URINE COLOR CHART

**THIS IS THE PRIMARY METHOD OF HYDRATION ASSESSMENT.**

**HYDRATION ASSESSMENT MUST BE PERFORMED IMMEDIATELY BEFORE THE BODY COMPOSITION ASSESSMENT.**

♦ **IDENTIFY THE PERSON RESPONSIBLE FOR CONDUCTING THE HYDRATION ASSESSMENT.** This could be a school administrator or another person designated by the school administrator (school nurse, science teacher, PE teacher, etc.), or the assessor conducting the body composition tests. **It is NOT required that registered body composition assessors perform the hydration assessments. (WRESTLING COACHES MAY NOT BE INVOLVED IN THE HYDRATION, OR BODY COMPOSITION, ASSESSMENT PROCESS.)**

♦ Use only **CLEAR, PLASTIC CUPS** when collecting urine samples.

♦ Have each wrestler provide an adequate urine sample so there is approximately 1-2 inches of urine in the cup.

♦ **WHILE IT IS NOT NECESSARY TO OBSERVE THE WRESTLER ACTUALLY GIVING THE URINE SAMPLE, IT IS NECESSARY TO VERIFY THAT EACH WRESTLER IS PROVIDING HIS/HER OWN URINE SAMPLE.** These suggestions may be helpful:
  - Closely monitor the area where wrestlers are providing the urine sample
  - Allow only one wrestler to give a sample at a time
  - Place blue sanitizer tablets in all stools and urinals
  - Turn off water to sinks near collection area
Have only the athlete giving the sample handle the cup containing their urine sample, if at all possible. The person responsible for hydration assessment should always wear protective gloves in the rare event he or she will be touching cups containing another person’s urine.

Have the athlete place the cup containing their urine sample on a WHITE sheet of paper and place the IHSAA Urine Color Chart next to the cup to compare colors. If the color of the urine is in the “WELL HYDRATED” range of 1-5 on the chart the wrestler passes the hydration assessment. If not, he/she fails the hydration assessment using this method.

**GOOD LIGHTING IS ESSENTIAL TO GETTING ACCURATE RESULTS.**

If a wrestler fails the hydration assessment using the urine color chart, his/her urine sample may be assessed using a reagent (litmus) strip. If the wrestler fails the hydration assessment using a litmus strip, or it is not available, his/her urine sample may be assessed using a refractometer or he/she must wait a minimum of 24 hours before he can be reassessed. If the wrestler fails the hydration assessment using a refractometer, or it is not available, he/she has failed the hydration assessment and must wait a minimum of 24 hours before he/she can be reassessed.

Have the wrestler discard his/her urine sample in a urinal, or toilet, NOT in the same location where other wrestlers are giving urine samples.

Have the wrestler discard his/her collection cup in a trash bag that can be disposed of immediately after all assessments are concluded.

Wrestlers who fail the hydration assessment should not be allowed into the area where body composition assessment is taking place. It may be a good idea to place a check mark on the back of the right hand of those passing the hydration assessment.
INSTRUCTIONS FOR PERFORMING WRESTLING HYDRATION ASSESSMENT USING REAGENT STRIPS FOR URINALYSIS (LITMUS STRIPS)

THIS IS A SECONDARY METHOD OF HYDRATION ASSESSMENT. IT SHOULD ONLY BE USED IF A WRESTLER FAILS THE ASSESSMENT USING THE URINE COLOR CHART.

HYDRATION ASSESSMENT MUST BE PERFORMED IMMEDIATELY BEFORE BODY COMPOSITION ASSESSMENT.

♦ IDENTIFY THE PERSON RESPONSIBLE FOR CONDUCTING THE HYDRATION ASSESSMENTS. This could be a school administrator or another person designated by the school administrator (school nurse, science teacher, PE teacher, etc.), or the assessor conducting the body composition tests. It is NOT required that registered body composition assessors perform the hydration assessments. (WRESTLING COACHES MAY NOT BE INVOLVED IN THE HYDRATION, OR BODY COMPOSITION, ASSESSMENT PROCESS.)

♦ Use only CLEAR, PLASTIC CUPS when collecting urine samples.

♦ Have each wrestler give an adequate urine sample so there is approximately 1-2 inches of urine in the cup.
WHILE IT IS NOT NECESSARY TO OBSERVE THE WRESTLER ACTUALLY GIVING THE URINE SAMPLE, IT IS NECESSARY TO VERIFY THAT EACH WRESTLER IS PROVIDING HIS OWN URINE SAMPLE FOR TESTING. These suggestions may be helpful:

- Closely monitor the area where wrestlers are providing the urine sample
- Allow only one wrestler to give a sample at a time
- Place blue sanitizer tablets in all stools and urinals
- Turn off water to sinks near collection area

The person responsible for hydration assessment should always wear protective gloves when touching cups containing another person’s urine.

Have the person conducting the hydration assessment **dip the reagent (litmus) strip into the urine sample for 1-2 seconds**. When removing strips from urine, run the entire length of the strip against the rim of the collection cup to remove excess urine.

**Hold the strip in a horizontal position for 40 seconds and “read” the strip at 45 seconds.** To “read” the strip, hold it close to, **BUT NOT TOUCHING**, the color blocks on the bottle and match the colors carefully. **A urine specific gravity of 1.025, or less, is a passing hydration level.**

**GOOD LIGHTING IS ESSENTIAL TO GETTING ACCURATE RESULTS.**

If the wrestler fails the hydration assessment using a litmus strip, or if it is not available, his urine sample may be assessed using a refractometer. **If the wrestler fails the hydration assessment using a refractometer, or it is not available**, he has failed the hydration assessment and must wait a minimum of 24 hours before he can be reassessed.

Have the wrestler discard his urine sample in a urinal, or toilet, NOT in the same location where other wrestlers are giving urine samples.

Have the wrestler discard his collection cup in a trash bag that can be disposed of immediately after all assessments are concluded.

Wrestlers who fail the hydration assessment should not be allowed into the area where body composition assessment is taking place. **It may be a good idea to place a check mark on the back of the right hand of those passing the hydration assessment.**
INSTRUCTIONS FOR PERFORMING WRESTLING HYDRATION ASSESSMENT USING A REFRACTOMETER

THIS IS A SECONDARY METHOD OF HYDRATION ASSESSMENT. IT SHOULD ONLY BE USED IF A WRESTLER FAILS THE ASSESSMENT USING THE URINE COLOR CHART AND LITMUS STRIP.

HYDRATION ASSESSMENT MUST BE PERFORMED IMMEDIATELY BEFORE BODY COMPOSITION ASSESSMENT.

♦ IDENTIFY THE PERSON RESPONSIBLE FOR CONDUCTING THE HYDRATION ASSESSMENT. This could be a school administrator or another person designated by the school administrator (school nurse, science teacher, PE teacher, etc.), or the assessor conducting the body composition tests. It is NOT required that registered body composition assessors perform the hydration assessments. (WRESTLING COACHES MAY NOT BE INVOLVED IN THE HYDRATION, OR BODY COMPOSITION, ASSESSMENT PROCESS.)

♦ Use only CLEAR, PLASTIC CUPS when collecting urine samples.

♦ Have each wrestler give an adequate urine sample so there is approximately 1-2 inches of urine in the cup.

♦ Always wear protective gloves when touching cups containing another person’s urine.
WHILE IT IS NOT NECESSARY TO OBSERVE THE WRESTLER ACTUALLY GIVING THE URINE SAMPLE, IT IS NECESSARY TO VERIFY THAT EACH WRESTLER IS PROVIDING HIS OWN URINE SAMPLE FOR TESTING. These suggestions may be helpful:

- Closely monitor the area where wrestlers are providing the urine sample
- Allow only one wrestler to give a sample at a time
- Place blue sanitizer tablets in all stools and urinals
- Turn off water to sinks near collection area

Have only the athlete giving the sample handle the cup containing their urine sample, if at all possible. The person responsible for hydration assessment should always wear protective gloves in the rare event he or she will be touching cups containing another person’s urine.

Have the person conducting the hydration assessments perform them according the instructions received with the refractometer.

If the wrestler fails the hydration assessment using a refractometer, or it is not available AFTER failing the assessment using a litmus strip, he has failed the hydration assessment and must wait a minimum of 24 hours before he can be reassessed.

Have the wrestler discard his urine sample in a urinal, or toilet, NOT in the same location where other wrestlers are giving urine samples.

Have the wrestler discard his collection cup in a trash bag that can be disposed of immediately after all assessments are concluded.

Wrestlers who fail the hydration assessment should not be allowed into the area where body composition assessment is taking place. It may be a good idea to place a check mark on the back of the right hand of those passing the hydration assessment.
SCHOOL RESPONSIBILITIES FOR THE HYDRATION ASSESSMENT PROCESS

- Plastic urine collection cups
- IHSAA Urine Color Chart - IHSAA provides this chart to each school and body composition assessor
- **White** paper to set urine collection cups on while verifying hydration status
- Personnel for assessing each wrestler’s hydration status
- Personnel to verify each wrestler is providing a valid urine sample (*Wrestling coaches may **NOT** be involved in any part of the hydration, or body composition assessment, process.*)

The body composition assessor **may be the person designated as responsible for determining hydration status, and providing the supplies needed for assessing, but it should **NOT** automatically be assumed they will do so. **It is reasonable for the body composition assessor to charge a fee for providing the supplies needed for hydration assessment.**

The following information is provided for those schools, or assessors, wishing to use the litmus test as a secondary hydration assessment method.

- Reagent strips for urinalysis (*litmus strips to assess urine specific gravity / hydration status*) - (i.e. Multistix 8SG, 10SG, Reagent Strips for Urinalysis *(or similar litmus strips for assessing urine specific gravity / hydration status)* or UriDynamics, Inc. HydraTrend Test Strips for Specific Gravity and pH in Urine *(or equivalent)*)

**Contact information:**

*HydraTrend Test Strips for Specific Gravity and pH in Urine* are available from UriDynamics, Inc.; 6786 Hawthron Park Drive; Indianapolis, IN 46220. (866) 748-7463  <www.uridynamics.com> The cost is approximately $30 for 50 strips.

*Multistix Reagent Strips for Urinalysis* *(or similar litmus strips for assessing urine specific gravity / hydration status)* are available at most drug stores. The cost is approximately $90 for 100 strips.