## OREGON WRESTLING WEIGHT MONITORING PROGRAM

Assessment Station and Protocol Information

Welcome to the Oregon Wrestling Weight Monitoring Program. The purpose of the program is to establish a safe wrestling weight and season long weight loss plan for all wrestlers in Oregon.

All Athletic Administrators and wrestling coaches should take time to review the adopted Regulation and supporting forms related to this program.

The National Federation of High Schools (NFHS) has mandated that no wrestler be allowed to participate at a body fat percentage less than 7% for males and 12% for females unless cleared by a physician. A Body Composition Analyzer will be used to access the body fat percentage for each wrestler. The assessment will be conducted by a Certified OSAA BIA Assessor either at your school or regional sites.

Included within this packet is an outline of the protocol that will be used to assess the body fat percentage of wrestlers in your program. If the assessment is performed at your school, it is essential for you to review the following materials prior to the assessment of your team. All testing protocols will be followed as outlined in this material – no exceptions. Therefore, those assigned to assist with the assessments should become familiar with them as well.

Please pay particular attention to the hydration information provided. It is essential that you stress to your wrestlers the importance of hydrating prior to your scheduled assessment date. Those athletes failing the hydration component of the assessment must wait at least 48 hours in order to be retested. This will add additional time, expense, and frustration if not emphasized.

Your assessor can be used as a resource if you have questions about the protocols or procedures once they arrive at your site. If you have other program questions, please feel free to contact Kelly Foster, OSAA Asst. Executive Director at 503-682-6722, ext. 233 or kellyf@osaa.org.

# **BIOELECTRICAL IMPEDANCE ASSESSMENT INFORMATION**

# STANDARD INSTRUMENTATIONS

The Tanita TBF-300WA, Tanita TBF-300WAplus, Tanita TBF-400WA, and InBody 120 or 570 Body Composition Analyzers are the only approved instrumentation for the Oregon Wrestling Weight Monitoring Program.

## PROTOCOL FOR STANDARDIZED ASSESSMENT

In an attempt to insure valid and reliable bioelectrical impedance assessment, the following general assessment protocol should be employed by the assessor and athletes:

- Athletes will avoid eating and drinking (especially coffee, tea, and colas) 4 hours before the
  assessment.
- Athletes will avoid intense exercise 12 hours before the assessment.
- Athletes will empty bladder 30 minutes before assessment
- Athletes will pass hydration assessment (SG < 1.025) prior to impedance assessment.</li>
   Those failing hydration component must wait a minimum of 48 hours to be reassessed.
- Measure athletes in bare feet (for height measurement and impedance assessment)
- Athletes will be in "legal competition uniform" for the assessment

#### Notes:

Use of alcohol and/or diuretics can adversely affect assessment results.

There is no scientific evidence that bioelectrical impedance is safe on the fetus during pregnancy. This is particularly questionable during the very early stage of pregnancy where damage occurs so easily to the developing fetus.

Similarly, for those people that have implanted defibrillators, it is strongly recommended by National Institutes of Health never to be tested by bioelectrical impedance. Moreover, there are some researchers that question testing people that have heart pacemakers with bioelectrical impedance.

Girls should not to be tested during their menstrual cycle. Testing should be delayed for a period of 3-7 days following the end of their cycle.

## HYDRATION ASSESSMENT INFORMATION

Specific gravity assessment of the urine will determine whether a candidate may participate in the bioelectrical impedance assessment. If the wrestler has a specific gravity above the predetermined level, they may NOT be assessed for body composition. This is simply a pass/fail assessment based on a specific gravity less than 1.025g/ml. The school will provide individuals to conduct the specimen collection and assessment utilizing current dated reagent strips.

- Make certain that each wrestler is tested individually to prevent urine exchange (this is an
  area where the right to privacy must be respected).
- The wrestler must partially fill the cup with urine.
- A reagent strip will be immersed in the urine and pulled out and read horizontally to determine the specific gravity for the specimen.

If the wrestler passes the specific gravity test they may continue for the body composition assessment.

If the wrestler fails the specific gravity test they cannot be assessed for 48 hours and must meet the hydration requirement before the bioelectrical impedance assessment takes place.

### PROTOCOL FOR REAGENT STRIP METHOD

- Evaluator shall use rubber gloves for these procedures.
- Athlete handles ALL urine sampling.
- Athlete handles all urine disposal
- Procedure designed for Reagent Strips
  - 1. Subject collects sample in mid-stream in privacy of urinal or restroom stall
    - Provide marked cup (with name) immediately before sampling occurs
    - Limit access to one subject at a time
    - Practice/Enforce secure procedures by immediately testing specific gravity after urine draw.
  - 2. ONE Reagent Strip is pulled from concurrently opened container
  - 3. Subject completely immerses strip in fresh urine sample
  - 4. Make certain all reagent patches are moistened (trim those not needed)
  - 5. The strip should be removed immediately running edge of strip along container to remove excess urine (caution not to "whip" or "snap" urine residue from free end of strip)
  - 6. Allow strip to air 45 seconds in horizontal position
  - 7. Hold strip next to color chart on bottle or supplied card
  - 8. If equal to or greater than 1.025, the subject may NOT stand for body composition assessment
  - 9. Subject discards reagent strip in acceptable waste receptacle

### **COMPARISON CHART**

Immerse strip in urine, remove immediately - read test after 45 seconds.

	PASS		FAIL
Specific Gravity 1.000	1.005 1.010	1.020	1.025 1.030

## ASSESSMENT STATION INFORMATION

Assessments will be conducted in close proximity to restroom facilities for both male and female participants. An organized area that follows the outline below will expedite the testing process. Make sure to provide trash cans for disposal of hydration assessment materials.

It is essential that we protect the privacy of each participant during the hydration assessment portion but have the ability to supervise activity. Therefore, please take time to think through the protocol provided prior to your certified assessor arrival at the site.

Note: Wrestlers will be assessed wearing a legal competition uniform – no exceptions.

#### STATION #1 - BIA DATA FORM



School assistant will review each wrestler's BIA Data Form for correct information. Participants receive and are required to place name on urine specimen container for hydration testing component.

#### STATION #2 - HYDRATION TESTING



School assistant will supervise and evaluate hydration test. It is essential that hydration assessment protocol outlined in this material be followed. OSAA certified assessor will review this protocol as well as proper procedures for reading results with school assistant. Assessor shall review any decision to exclude a wrestler from body fat testing based on hydration test result

School assistant provides signature and a Pass or Fail result must be recorded on BIA Data Form

Note: Athletes who fail the hydration assessment must wait at least 48 hours in order to be re-tested.

#### STATION #3 - HEIGHT MEASUREMENT



School assistant will measure height (no shoes or socks) of each wrestler.

School assistant provides signature and records feet and inches on BIA Data Form.

Note: Scale will automatically round height to the nearest 1/2"

### STATION #4 - BIOELECTRICAL IMPEDANCE ASSESSMENT



OSAA Certified BIA Assessor conducts testing as per the outlined protocol. Assessor is responsible to enter data into the NWCA OPC powered by TrackWrestling within 48 hours.