

WVSSAC

WEIGHT MANAGEMENT ASSESSOR TRAINING PROGRAM

Assessor Training Workshop

This in-service training determines what the expected outcomes are and the acceptable selection criteria for approved assessors. The approved assessors must demonstrate standardized techniques properly performed. All assessors must be recertified every three years.

The following are the Standard Assessment Procedures (SAP) to be taught to all potential WVSSAC Assessors:

- 1) Palpate the sites to familiarize both assessor and subject with the area to be measured.
- 2) Elevate the double fold of skin and the subcutaneous fat with the thumb and index finger of the left hand 1 cm above or adjacent to the measurement site.
- 3) Become familiar with the width of the thumb and index finger as well as the perpendicular approach to site assessment prior to the elevation of each specific skinfold site.
- 4) The fold should be lifted in such a manner as to have two parallel sides.
- 5) The long axis should be parallel to the natural cleavage lines of the skin.
- 6) Measure with caliper in right hand with scale in a position to avoid parallax error.
- 7) Measure midway between the body surface and the bulbous crest of the skinfold.
- 8) Caliper jaws are placed to measure the thickness of the skinfold perpendicular to its long axis.
- 9) Caliper pad measurement surface should be in contact with the skinfold for 2 to 4 seconds.
- 10) Record to the nearest .5 mm and obtain (through rotation of sites) three measures with no more than a .5 mm difference.
- 11) Record three measures for each site for males (3 sites) and females (2 sites).
- 12) Record all wrestler raw data on the computer program "Alpha Master List" to determine NWCA Optimal Performance or lowest weight class at which each wrestler can compete. Note, only assessors will have the authority to record the raw data in the computer program. Coaches can view the results, but will not have access to change any results.

Site Measurement Procedure

The subject should be standing in an anatomical position with the skin for potential skinfold sites exposed. All measurements are obtained on the right side of the body. Triceps, Subscapular, Abdominals will be measured for males. Triceps and Subscapular for females. The definitions are as follows:

Triceps – Measured vertically in the midline of the posterior aspect of the upper arm, over the triceps muscle, midway between the lateral acromion process of the scapula and the inferior margin of the olecranon process of the ulna. Elbow is flexed to identify the landmarks but extended and relaxed to elevate skinfold.

Subscapular – Measured on a diagonal axis, left shoulder to right hip, one centimeter below the inferior angle of the scapula. The site is angled infero-laterally about 45-degrees in the natural cleavage line of the skin. It may be necessary to have the subject place their arm behind the back to

make the anatomical features more prominent. The arm is returned to the relaxed anatomical position for the measurement procedure.

Abdominals – Measured vertically, the site is located 3 centimeters lateral to the midpoint of the umbilicus and 1 cm inferior to the umbilicus. The subject must stand erect with weight on both feet, relax the abdominal wall musculature and breathe normally during the assessment procedure.

Instructor Candidates (ICs)

The ICs work in groups of approximately five with five subjects. They then do the following:

- 1) The ICs measure all sites on the five subjects following SAPs.
- 2) The ICs record all values for each site.
- 3) The ICs measure and record isolated values (Do not access prior data or data from others on the subjects.)
- 4) The ICs determine and record TBW.
- 5) The ICs calculate BD.
- 6) The ICs %BF.
- 7) The ICs calculate FW.
- 8) The ICs calculate LBM.
- 9) The ICs calculate MWW at 7% for males and 12% for females.

Note: There should be a cross validation and reliability check.

Further Appendixes

Appendix D: WVSSAC Assessor Candidate Application Form

Appendix E: Assessor Instructions for the NWCA Optimal Performance Calculator Program

Appendix F: Optimal Performance Calculator Instructions for Coaches in State Mandated Programs

SPECIFIC GRAVITY ASSESSMENT PROCEDURE Any Medically Approved Reagent Strip Method is Allowed

Specific Gravity of the urine is an indication of the relative proportions of dissolved solid components to the total volume of the specimen. It is an indication of the relative degree of concentration or dilution of the sample. Specific gravity is elevated whenever there has been excessive loss of water through sweating, vomiting, diarrhea, or elevated body temperature. Expected values for specific gravity range from 1.003 g/ml to 1.030 g/ml, but are typically between 1.010 g/ml and 1.025 g/ml. Specific gravity is typically higher in the first morning sample and will be different in random samples throughout the day.

Procedure for Multistix Method

During the reagent strip procedure, the evaluator will wear gloves. The subject will be the only one to handle the urine sample and dispose of it when the test is completed.

Procedure Steps

1. The subject collects sample in the privacy of a urinal.
 - a. Limit access to one subject per sample.
 - b. Provide marked cup immediately before sampling occurs.
 - c. Practice and enforce secure procedures.
2. Follow the manufacturer's guidelines for performing the test.
3. If equal to or greater than 1.025 g/ml, the subject may NOT be assessed for body fat composition
4. The subject discards the reagent strip in acceptable waste receptacle.

Comparison Chart

Specific Gravity

Pass: 1.000 g/ml___ 1.005 g/ml___ 1.010 g/ml___ 1.015 g/ml___ 1.020 g/ml___

Fail: 1.025 g/ml___ or Above

WVSSAC ASSESSOR SELECTION PROCESS

Components

- Validity check vs. in-service experts
- Reliability check vs. other in-service participants
- Observation during practical assessment experience
- Determination of validity and reliability or measurements obtained during practical assessment
- Specific Gravity assessment
- Documentation and verification of experience
- Verbal feedback from observers
- Location verification
- Evaluation of participants
- Final selection
- Evaluation of in-service
- In-service quality survey

WVSSAC ASSESSOR IN-SERVICE WORKSHOP

1. Registration with the WVSSAC.
2. Register to attend Regional Site In-service.
 - a. First-time candidates complete "Skinfold Assessor Application."
 - b. Any candidates with lapsed registration complete "Skinfold Assessor Application."
 - c. Challenger candidates complete "Skinfold Assessor Application."

- 3. Manual and Workshop Organization.**
 - a. The Program.**
 - b. Components.**

- 4. Prediction of Body Fat Composition.**
 - a. The Assessor.**
 - b. Skinfold Assessment for WVSSAC Program.**
 - c. Review of related research.**

- 5. WVSSAC Procedures.**
 - a. Hydration / Specific Gravity Monitoring.**
 - b. Skinfold Assessment.**
 - c. Forms.**

Note: Certified Assessors must record assessment data within 48 hours after performing the assessment for each team and retain individual raw data records for two years.

WVSSAC Assessor Candidate Application Form

Name: _____

Address: _____

Affiliation (School) _____

Phone Numbers: Home: _____

Business: _____

Cell: _____

E-Mail: _____

Educational Level / Degree: _____

Present Position: _____

Note: To be eligible you must be a Registered Nurse, License Practical Nurse, MD, DO, DC, Advanced Registered Nurse Practitioner, Physical Therapists, Physicians Assistant, NATA/State Certified Athletic Trainer, EMT, Paramedic, Exercise Physiologist, and Certified Dietician. Assessors cannot be a paid or volunteer wrestling coach at any WVSSAC participating school.