HAWAII WRESTLING WEIGHT MONITORING PROGRAM

RULES AND REFERENCE GUIDE

Hawaii Interscholastic Athletic Directors Association

and

Hawaii High School Athletic Association

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Prepared by

Hawaii Athletic Trainers' Association
and HHSAA Wrestling Committee

HAWAII WRESTLING WEIGHT MONITORING RULES

I. PROGRAM FUNCTION: The program is designed to assist wrestlers in avoiding potentially harmful, rapid weight reduction practices utilized by wrestlers to achieve participation in a specific weight class. The rules are to comply with the NFHS Wrestling Rule 1 Competition, Section 3 Weight-Control Program.

II. WRESTLING WEIGHT CONTROL PROGRAM

A. Once the testing cycle has begun, no changes in the Weight Monitoring Program rules or procedures will be permitted until the state championships are completed.

B. No wrestler may compete, pre-season or in-season, until he/she has successfully completed the required hydration test and body fat assessment

C. Wrestling weight monitoring program definitions

a. **Base Weight** – The actual body weight of a wrestler at his/her first successful weight monitoring session.

b. **Lowest Allowable Weight** – The lowest weight a wrestler is eligible to reach during the season based on the body fat test.

c. **Low Weight Class** – The lowest weight class a wrestler is eligible for based on the body fat test and the wrestler's individual Weight Descent Plan.

d. **Eligible Low-Weight Class** – The weight class, and the next higher weight class, for which a wrestler is eligible to wrestle that week based on the wrestler's individual weight descent plan that week.

e. **Certified Low-Weight Class** – The low weight class for which a wrestler has weighed in at the scratch weight or below scratch weight, and is eligible based on his/her body fat test and his/her individual weight descent plan.

f. **Body Fat Test** – The measurement of the body fat percentage of the overall body mass. Each wrestler will be measured for his/her body fat percentage according to established protocols utilizing skinfold calipers.

g. **Weight Descent Plan** – An individual wrestler's season long plan for weight loss. The amount of weight loss per week is an average of 1.5% of wrestler's base weight. The weight descent plan only establishes two weight classes for which the wrestler may compete in during any particular week.

h. **Weigh In Report Form** – The form downloaded from the National Wrestling Coaches Association Optimal Performance Calculator that must be brought to each weigh-in.

i. **Team Form** - The form downloaded from the National Wrestling Coaches Association Optimal Performance Calculator that depicts the weigh-in history and weigh-in projections of each wrestler on a given team.

j. **Hydration Test** – The measurement of a wrestler's hydration level by testing the specific gravity of the wrestler's urine.

D. Establishing **Lowest Allowable Weight**

a. **Body Fat Testing**: Each league will provide a minimum of two opportunities for hydration and body fat testing. Individual leagues shall determine their test dates due to the peculiarities of each league. Each wrestler will have a maximum of three testing opportunities. Skinfold assessment may begin on the Monday following the last regular season football game. All tests must be completed prior to January 15th, unless a wrestler falls into one of the exemptions listed below.

b. Results of measurements should be distributed to the coaches on the day of the test and sent to the HHSAA Office within seven (7) days of the test date.

c. Results of the measurement should be available on the NWCA website within 24 hours of the body fat testing.

d. Unusual situations must be arranged with the HHSAA in writing before deadline or due dates.

e. No wrestler may compete until the wrestler's **lowest allowable weight** is determined.

f. The **lowest allowable weight** for a male wrestler can not be a weight in which his body fat is less than 7%, unless a wrestler falls into one of the exemptions listed below. The **lowest allowable weight** for a female wrestler can not be a weight in which her body fat is less than 12%, unless a wrestler falls into one of the exemptions listed below.

g. During the body-fat testing, wrestlers will be allowed a 1 pound error variance when determining the low-weight class (e.g. if a male wrestler's body-fat test indicates a low-weight of 113.0 pounds, he will be able to meet the low-weight class of 112 pounds).

h. Wrestlers below Minimum Body Fat Percentage

1. Any male wrestler whose body fat percentage at the time of measurement is below 7% must obtain before competing, in writing, a licensed physician's (MD or DO) clearance (Appendix J) stating that the athlete is naturally at this sub-7% body fat level.
2. Any female wrestler whose body fat percentage at the time of measurement is below 12% must obtain before competing, in writing, a licensed physician's (MD or DO) clearance (Appendix J) stating that the athlete is naturally at this sub-12% body fat level.
3. A physician's clearance is for one season and expires April 1 of each year. The wrestler must use the HHSAA physician clearance form (Appendix J) when submitting this information.
4. A Parental permission form may not be used to affect the determination of **lowest allowable weight**.

E. Testing Protocols

a. All wrestlers must pass the **Hydration Test** prior to being allowed to proceed to the **Body Fat** test. In order to pass the hydration test a wrestler

specific gravity assessment of his or her urine must **NOT** be greater than 1.025 grams per milliliter.

b. Upon passing the **hydration test** the wrestlers will be weighed to the nearest tenth of a pound.

c. After weighing-in wrestlers will be proceed to the **body fat test**. The body fat test will be conducted by certified athletic trainers educated in the use of skin fold calipers. Each wrestler will be analyzed three times by three different assessors. Males will be analyzed at the triceps, the subscapula and the abdominals. Females will be analyzed at the triceps, the abdominals, the suprailiac, and the thigh.

F. Establishing **Certified Low-Weight Class**

a. Certified low-weight classes are determined by:

1. The league weight monitoring sessions (hydration and body fat testing sessions) to establish the **lowest allowable weight;**
2. The **weight descent plan; and**
3. The wrestler weighing in at scratch weight on or below a given weight class. The **certified low-weight class** may be above the **lowest allowable weight**.

b. No wrestler may compete below his or her **certified low-weight class**.

c. All wrestlers must establish his or her **certified low-weight class** by the first day of their league championship tournament.

d. There shall be no two-pound growth allowance.

G. Functions of the **Weight Descent Plan**

a. The **weight descent** plan only establishes the two weight classes for which the wrestler may compete in during any particular week.

b. The **weight descent plan** does not preclude a wrestler from competing if he/she loses more than 1.5% of the wrestler's body weight in a given week, providing, the wrestler does not lose weight beyond that of the **eligible low-weight class**. He/she can compete at that **eligible low-weight class** and the next higher weight class.

c. If a wrestler loses weight beyond the **eligible low-weight** classes, he/she can only wrestle at the next highest weight class (e.g. according to a wrestler's **weight descent plan**, the two eligible weight classes are 125 and 130 pounds. The wrestler weighs in at or below 119.0 pounds, and higher than 112.1, he would be eligible for only the 125 pound weight class).

d. If a wrestler weighs in above the highest eligible weight class according to his/her descent plan, that wrestler's weight descent plan will be recalculated by the OPC.

e. No wrestler may compete below his or her eligible low-weight class, which may change from week to week based on the **weight descent plan**.

H. **Weigh In Report Form** Rules

a. Each coach is required to have his/her team's **Weigh In Report Form** (Appendix N) at each match for the opponent's coach to inspect. Failure to comply will result in the head coach being ineligible to coach that day.
b. Failure to turn in **Weigh In Report Form** (Appendix N) to league coordinator will result in the head coach being ineligible to coach at the next week's matches.
c. The **Team Form** (Appendix M) will be managed by the league coordinators.

I. Out of State Transfers
a. Wrestlers who transfer to Hawaii from out of state during the season and have certified at their previous state will use the previous state's certification.
b. Wrestlers who transfer to Hawaii from out of state during the season without a low-weight class certification and arrive prior to January 1 must certify by January 15 (Reminder, no wrestler may compete, pre-season or in-season, until he/she has completed the required hydration and body fat assessment).
c. Wrestlers who transfer to Hawaii from out of state during the season without a low-weight class certification after January 1 must certify at least one week prior to the league championship tournament (Reminder, no wrestler may compete, pre-season or in-season, until he/she has completed the required hydration and body fat assessment). Leagues may set up special weight monitoring sessions for late transfer students. Late transfer students shall have only one opportunity to establish their certified low-weight class after January 15.

J. Retesting Procedures
a. Any wrestler may retest his/her initial measurement at the next league specified test date.
b. If the wrestler's weight at the time of retesting is below his/her weight descent plan for that week, he/she will not be allowed to retest and must follow his/her previous weight descent plan. If the wrestler's weight at the time of retesting is equal to or greater than his/her weight descent plan for that week, he/she will be allowed to retest.
c. The Bod Pod shall not be used as a measurement tool for determining percent body fat for HHSAA wrestling (June, 2005).

K. Weight Monitoring Data Plan
a. The HHSAA will utilize the National Wrestling Coaches Association, Optimal Performance Calculator (OPC) as the mechanism to calculate the weight descent plan for each wrestler and as the data reporting and retrieval tool for all member schools.
b. The OPC can be assessed from www.nwcaonline.com. Move cursor to "Weight Management" at the top of the screen and click on "Optimal

Performance Calculator". Click "Login". Enter Login ID and password for coach, or student-athlete.

c. Wrestlers will be able to design and individualize nutritional programs using the OPC as well as obtain their weight loss plan for the season.

d. Coaches will be able to print both their **Team Form** and **Weigh-in Report Form** from the OPC website.

L. Nutrition Education Program

a. Training the coach

1. A Coach's Education video and fact sheet is available at the NWCA OPC website.

b. Educating the athletes and parents

1. Annually, wrestlers and parents will be provided nutrition education.

2. The importance of maintaining a weight control program will be a major component of the education program.

HHSAA WRESTLING WEIGHT MONITORING PROGRAM GUIDE

I. LEAGUE RESPONSIBILITIES FOR THE MEASUREMENT PROCESS

A. It is the leagues responsibility to coordinate dates and personnel for skinfold assessment.

B. The league executive director or appointee will designate the site director.

C. The league will provide the materials to conduct the urine specific gravity test.

(1) Refractometer
(2) Collection cups
(3) Plastic stir straws
(4) Distilled water
(5) Latex gloves
(6) Gauze

D. The league will provide the materials to conduct the skinfold assessment.

(1) Lange or Harpenden Skinfold Calipers

E. The league must have available at the time of the measurement:

(1) A certified scale (certified after the start of school in the fall and before October 31)
(2) Skinfold data forms
(3) Two league referees or designated personnel (coach, teacher, etc.) who will:
(a) Assist with obtaining the weight of each wrestler.
(b) Assist with the recording of data.

II. MATERIAL COSTS (Approximate Cost)

A.	Refractometer	$350
B.	Skinfold Calipers	
(1)	Lange Skinfold Calipers	$217.95
(2)	Harpenden Skinfold Calipers	$220.00

III. PROGRAM IMPLEMENTATION PROCEDURES

A. Body Composition Testing Goals and Procedures:

(1) Site Director - (Unbiased party)
(a) Responsible for obtaining and organizing all materials needed for testing.
(b) Obtaining, organizing and assigning all testers for the testing.
(c) Resolve any problems which arise during the test.

(2) Materials required for testing protocols (Quantity may vary depending on site requirements)
(a) Registration forms (HHSAA Data form)
(b) Refractometer
(c) Plastic stir straws
(d) Latex gloves
(e) Distilled water
(f) Cups - plastic 3 oz

(g) Skinfold Calipers
(h) Clipboards
(i) Pens
(j) Scales - Digital

B. Testing Protocols

(1) Registration Station
(a) List of all athletes to be tested is requested two weeks in advance.
(b) Registration forms should be prepared prior to test date.
(c) Athletes will be allowed to register on the day of the test.
(d) Computer data should be prepared prior to the test date.

(2) Station #1 - Specific Gravity - Estimated time to complete test - 5 Minutes (There is no time limit to complete the test if athlete is having difficulty producing specimen) - Bath Room or Locker Room
(a) One to two ATCs
(b) Follow OSHA Standards
(c) Student-athlete gives data form to ATC
(d) ATC gives the athlete a cup.
(f) Student collects urine sample and empties bladder.
(g) Sample is placed on the refractometer using the plastic stir straw.
(h) ATC reads refractometer. Specific gravity must be equal to or below l.025 g/ml.
(j) Student must empty and discard plastic cup.
(k) If a pass is recorded, the data form is given to student-athlete and proceeds to Station #2.
(l) All data must be entered in black or blue ink. All mistakes must be double initialed.
(m) If a fail is recorded, the data form is retained by the ATC and the student-athlete is sent to Station #4

(2) Station #2 - Weight Station - Estimated time to complete test - 3 minutes
(a) Two league officials, coaches, ATC - A male and female required as determined by league.
(b) Student-athlete gives data form to ATC or coach
(c) Nude or undergarment weight is taken and recorded on individual's data form.
(d) All data must be entered in black or blue ink. All mistakes must be double initialed.
(e) Student-athlete goes to Station #3.

(3) Station #3 - Skinfold measurements -Estimated time to complete test - 10 minutes See Appendix D for exact protocol
(a) A minimum of 3 ATCs - Optimal is 12 trained ATCs.
(b) One recorder for each ATC- may be students or coaches.
(c) One ATC to mark skinfold sites on each wrestler.
(d) ATC (A) will take 3 rotating skinfold readings at 3 sites. Recorder enters data on form.

(e) ATC (B) will take 3 rotating skinfold readings at 3 sites. Recorder enters data on form.
(f) ATC (C) will take 3 rotating skinfold readings at 3 sites. Recorder enters data on form.
(g) All data must be entered in black or blue ink. All mistakes must be double initialed.
(h) Data form collected at this station and sent to Data Analysis
(i) Student-athlete moves to Station #4.

(4) Station #4 -Holding Area
Student-athlete reports to the holding area when testing is completed to await departure.

(5) Data Analysis - Computer Room
(a) Minimum of One computer and printer - 1 computer literate person in charge.
(b) Data forms collected from Station #3.
(c) Preliminary information is prerecorded in the computer.
(d) Data inputed into computer.
(e) Results saved and reports (team and individual) printed out the same day if possible.
(f) Data will be uploaded to NWCA, OPC website.
(g) Hardcopies given to HHSAA, League, Coach and School's ATC.
(h) Printout of results for entire team is given to HHSAA, League, Coach and School's ATC, including failed results.
(i) Print outs of all results will be distributed to all schools.

(6) If the student-athlete fails the specific gravity test, instructions for retest will be included with report and the student-athlete will be instructed to review the handbook. Specific date for retest must be established by each league.

(7) If the student-athlete or coach wishes to appeal the results, they must follow the procedures as noted in the handbook.

IV. TRAINING THE SKINFOLD ASSESSOR

A. Training the Assessor

(1) Persons eligible to be trained as HHSAA approved assessors include Physicians (MD or DO), certified athletic trainer, registered nurses, licensed practical nurses, physical therapist, physician's assistant, nutritionist, health educator or an exercise physiologist.

(2) To be eligible to become an HHSAA approved skinfold assessor, an individual must have demonstrated training and experience in skinfold measurement.

(3) The assessor will participate in an initial training session and annual update education. The assessor will provide his/her own measuring device which meets the standard required by the HHSAA wrestling minimum weight program.

(4) The assessor training will consist of both classroom education and practical training.
(5) Training sessions will be conducted in conjunction with the Hawaii Athletic Trainer's Association and the University Of Hawaii Department Of Kinesiology under guidelines provided by HHSAA.

B. Recertification
(1) Recertification will require a minimum of one hour training.
(2) Recertification training will be conducted in several locations throughout the state annually.
(3) Trainers and assessor trainers will conduct all recertification training programs.

C. Data Collection
(1) The HHSAA will provide the forms for each school.
(2) The assessor will conduct all body fat measurements.
(3) The league will provide the supplies to conduct the specific gravity test.
(4) The site director will be responsible for submitting the measurement results to the HHSAA within one working day after the testing date.

APPENDIX A

A. HYDRATION REQUIREMENT

Specific gravity assessment of the urine will determine whether a candidate may participate in the skinfold measurement process on any date. If the wrestler has a specific gravity above the predetermined level, they may NOT be assessed for body composition. A specific gravity level greater than l.025 g/ml will result in failure.

Monitoring this process is a part of the Assessor's responsibility. 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 fill the cup with urine. A drop of urine will be placed on the refractometer to determine the specific gravity for the specimen. If the wrestler passes the specific gravity test he may continue for the body composition assessment. If the wrestler fails the specific gravity test he cannot be assessed for 48 hours and must meet the hydration requirement before the skinfold assessment takes place.

B. BODY COMPOSITION

The human body can be represented as composed of at least two components.

1. Lean Body Mass (LBM)= the muscle and bone mass predicted to be in the body.

2. Body Fat (BF)= essential and non-essential fat storage that is predicted to be in the body. To some, this is an over simplification. The actual composition of an individual's body is probably not truly known, nor can it actually be determined. All current methods of assessing body composition are indirect methods or predictions of the actual values. While underwater (hydrostatic) weighing has long been considered the "GOLD STANDARD" (the method to which all other methods of body composition determination have been related) it too has been critically reviewed as having the possibility for error. Population specificity, maturation, and sub-component validity have all been cited as having potential negative impact on hydrostatic body composition assessment. Current technology and its improvement will continue to lead researchers to develop new methods and refine those which currently exist. This will require that those of us assessing body composition through various field techniques must continue to update our knowledge and remain current relative to adjustments in assessment procedures.

C. PREDICTION OF BODY COMPOSITION

There are a number of field techniques available to attempt to assess body composition. Following is a brief description of some common techniques.

1. Bioelectric Impedance analysis (BIA). A fairly modern technique, still in the developmental stage. It utilizes electrode attachment to the extremities and a small (safe) electrical current to determine the conductivity of lean tissue verses fat tissue. It is programmed to calculate lean

body mass and percent body fat. The instrument costs about $3000 to $6000, is subject to hydration level of each subject.

2. Skeletal Anthropometic Widths(SAW). This method was developed by Tipton et.al. specifically for the wrestling population in Iowa. It utilizes diameter assessment with two types of anthropometric calipers on the chest, hip, and ankle joint areas along with height and weight. A prediction equation includes these various measurements to calculate minimal wrestling weight.

3. Near Infra-Red technology (NIR): This is a method that was developed to determine the legal fat content of packaged meats for human consumption. It utilizes the theory of the passage of light waves through lean muscle tissue verses fat tissue. The cost of the units ranges from $1000 to $2000 and purport rapid and non-invasive assessment. Ultrasound technology has also been used in a similar manner to determine fat deposition.

4. Computed Tomography (CT): This is an example of new technology being adapted to the study of body composition. It was developed for the detection of normal verses pathological internal body components. Although few CT scan units are used strictly for determination of body composition, it may be the most valid potential assessment device currently available. As such it may define a new "GOLD STANDARD" for body composition assessment.

5. Hydrostatic Weighing (HSW). This is an ancient method (Archimedes' principle) adapted to the body composition assessment problem in recent times. It involves the submersion of an individual to determine the subject's under water weight which is used along with the weight on land to calculate the body density. It utilizes the concept that muscle mass and fat mass have specific know densities relative to water. The assessment of residual volume of the lungs is an important feature of this assessment. The availability of a proper space and equipment is a problem with this method, but it can be very accurate if all the conditions of assessment are met. Currently this method is not available in Hawaii at this time.

6. Skinfold Assessment (SFA): This is a current method which has gained popularity with the exercise and fitness community. It is based on the relationship between subcutaneous fat and total body fat and its inverse relationship to body density number of sites to determine the thickness of the skin. Skinfold thicknesses are used in a regression equation equations have been derived for specific populations. The cost of accurate calipers range from $175 to $ 250.

7. BOD POD: - an air-displacement plethysmograph for measuring human body composition, utilizes the inverse relationship between pressure and volume (Boyle's law) to measure body volumne directly. The BOD POD utilizes computerized sensors to determine the amount of air displaced by the person's body within a confined area (the BOD POD). The whole-body measurement principle is the same as underwater weighing and the overall body density can be used to determine the percentage of fat and lean tissue. Developed in conjunction with the US National Institutes of Health, the test can be completed in less than 5 minutes.

D. METHOD COMPARISON

The Program calls for the assessment of all the wrestlers in the State of Hawaii within a two week period prior to the beginning of the season. Given the methods reviewed above to accomplish this task the appropriate choice is skinfold assessment. There has been more work done to establish population specific methods, procedures, and calculations with the skinfold method than with any other method. The cost of the methods is a factor to consider in the selection of a program. Standardization of procedures is a major factor in the control of validity and reliability. This can be best accomplished to insure accurate reproducible and fair results in an economically controlled environment through the skinfold assessment procedures.

As hydrostatic weighing is currently unavailable in Hawaii, the BOD POD is a reliable and valid alternative to hydrostatic weighing which is recommended to be used for the appeal process. (The BOD POD is no longer an accepted measurement device as there is limited access. June, 2005)

APPENDIX B

SKINFOLD ASSESSMENT TERMINOLOGY

The use of skinfold assessment in the process of determination of body composition requires some standardization of terminology used in this field. The following is an attempt to accomplish this standardization:

1. Total Body Weight (TBW)=weight of the body on a certified, calibrated scale.

2. Body Density(BD)=the mass of the body per unit of volume. (The fat free component is assumed to have a density of 1.100 gm/cm3. The mass of fat is considered to be about .90 gm/cm3.)

3. Percent Body Fat(%BF)=the proportion of total body weight that is fat weight and expressed as a percentage. %BF = (TBW-LBM) / (TBW) x 100

4. Lean Body Mass(LBM)=the weight of the lean tissue of the body such as muscle, bone, and blood. The weight of the body without the fat weight. LBM = TBW-FW

5. Fat Weigh(FW)=the weight of the fat tissue of the body. Includes both essential and stored fat tissue. FW = TBW x %BF

6. Lowest Allowable Weight (LAW)=the lowest weight at which a wrestler may compete, determined to be 7 % body fat for males and 12% (12% 2005) for females in the Hawaii Wrestling Monitoring Program

7. Ideal Body Weight=a body weight selected for a specific individual or group based on both empirical and scientific evidence that provides an optimum level of performance.

8. Minimum Weight = a body weight selected for a specific individual or group based on a specific percent body fat. A minimal, but not necessarily ideal or optimum, body weight.

9. Regression equations=equations which express the relationship (based on correlation) between the criterion measure (GOLD STANDARD) and the prediction measure. In skinfold assessment these are determined for specific combinations of sites, and specific populations.

10. Population Specificity=the attempt to make prediction calculation (equations) on representative subjects from specific groups of individuals, the results of which are intended to be applied to a similar, larger population. In skinfold assessment for body composition the important specific factors are sex, age, national origin, maturation and hydration.

11. Biological Variability =variation which will contribute to error due to such factors as hydration and deposition sites.

12. Technical Variability =variability which will contribute to error due to such factors as lack of standardization of procedures among assessors.

13. Reliability = reproducibility, the consistency and dependability of a measure, >.9 with experienced assessors. Increases with fewer sites and monitored practice.

14. Validity = degree to which an assessor obtains an accurate measure. How well the group being assessed matches the group from which the regression equation was obtained. Dependent upon: age, activity level, population specific, body composition status.

APPENDIX C

SKIN FOLD SITE SELECTION AND IDENTIFICATION

The sites and regression equation selected for the Program are those described by Lohman specifically for use with young wrestlers. The techniques for site identification are adopted from "Anthropometric Standardization Reference Manual", Lohman, Roche, and Martorell, Human Kinetics Books, Box 5076, Champaign, IL 61820, (800-DIAL-HKP).

1. subject should be in standing anatomical position with the skin for potential skinfold sites exposed.

2. all measurements are taken on the dominant side of the body

3. identify the sites for Males = TRICEPS, SUB SCAPULAR, ABDOMEN

4. identify the sites for Females = TRICEPS, ABDOMEN, SUPRAILIAC, THIGH

ABDOMINAL=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.

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.

SUPRAILIAC=a diagonal fold above the crest of the ilium at the spot where an imaginary line would come down from the mid-axillary line. The person being measured should stand erect with feet together. The arms should hang by the sides, but can be moved slightly to improve access to the site. A diagonal fold should be grasped just to the rear of the midaxillary line, following the natural cleavage lines of the skin. The skinfold caliper jaws should be applied about one-half inch from the fingers.

THIGH=a vertical fold on the front of the thigh, midway between the hip (inguinal crease) and the nearest border of the patella or knee cap. The person being tested should first flex his hip to make it easier to locate the inguinal crease. Be sure to pick a spot on the hip crease that is exactly above the midpoint of the front of the thigh. The closest border of the knee cap should be located while the knee is extended. When measuring the thigh skinfold, the body weight should be shifted to the other foot, while the leg on the side of the measurement is relaxed with the knee slightly flexed and the foot flat on the floor.

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 the skinfold.

STANDARDIZED ASSESSMENT PROCEDURE

In an attempt to insure valid and reliable assessment of skinfold widths the following general measurement techniques should be employed. These techniques are general in that they are applied to all skinfold site assessments. The subjects skin should be dry. Measurements should not be taken immediately after a workout or when the subject is overheated. This may be an ever present problem because some of the wrestlers may be attempting to take part in rapid weight reduction through exercise just prior to the assessment-this should not be allowed. In addition the process requires that each wrestler pass a urine specific gravity test to determine adequate hydration level for the skinfold assessment procedure.

There is no substitute for practice and experience as an assessor. Quality in-service participation, in-depth knowledge about the all aspects of the body composition assessment, careful site identification, and practice will assist in the accuracy and value of this Program.

1. palpate the site to familiarize both you and the 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 error due to parallax.

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.

APPENDIX D

BODY COMPOSITION FORMULAS

MALES

LOHMAN EQUATION-CALCULATION OF BODY DENSITY

BD=[1.0973-(∑ SF x .000815)]+[(∑ SF)2 x .00000084]

sum of SF = Triceps SF + SubscapuIar SF + Abdominal SF

BROZEK EQUATION-CALCULATION OF % BODY FAT FROM BODY DENSITY

% BF = (4.57/BD)-(4.142)

CALCULATION OF MINiMUM WEIGHT AT 7% BODY FAT

LAW=([1-% BF] x TBW) /.93

FEMALES

JACKSON-POLLOCK EQUATION FOR CALCULATION OF BODY DENSITY

D = 1.0961 - 0.000695 (∑ 4 SF) +0.0000011(∑ 4 SK)2 - 0.0000714 (age, years)

sum of SF = Triceps, Abdomen, Suprailiac, Thigh

BROZEK EQUATION-CALCULATION OF % BODY FAT FROM BODY DENSITY

% BF = (4.57/BD)-(4.142)

CALCULATION OF MINIMUM WEIGHT AT 12% (12% 2005) BODY FAT

LAW = ([1-% BF] x TBW) /.86 (.88, 2005)

APPENDIX E

TESTING GUIDELINES FOR WRESTLERS

It is important that wrestlers having their body composition tested follow the guidelines listed below. Certain factors can adversely affect the accuracy of body composition testing on any given day. In order to control as many of those factors as possible each wrestler to be tested should be provided with the following information.

1. Do not eat 4-5 hours before the test.
2. Avoid strenuous exercise for 10-12 hours before the test.
3. Avoid caffeinated beverages for 10-12 hours before the test.
4. Avoid any beverages or medications that may contain alcohol for 24 hours before the test.
5. Avoid the use of any diuretic drugs (fluid pills).
6. Consume water, juices, and non-caffeinated beverages as normal the 24 hours prior to the test.
7. DO NOT COME TO THE TEST DEHYDRATED.
8. Wear a t-shirt and shorts to the test.

ACCURATE RESULTS CANNOT BE OBTAINED IF THE TESTING IS PERFORMED IMMEDIATELY FOLLOWING A WORKOUT.

WEIGHTS MUST BE ACCURATELY OBTAINED IMMEDIATELY PRIOR TO THE TESTS BEING PERFORMED

APPENDIX F

Equipment requirements for Wrestling body fat testing (Estimated)

The equipment requirements for body fat testing must be determined on the estimated number of athletes participating in wrestling in each league. The following is an estimate only and is probably on the conservative side. Exact data from each league secretary will provide a more complete picture, but for preliminary planning purposes, we can use the following numbers

Estimated distribution of athletes

Big Island Interscholastic Federation (BIF)	200
Maui Interscholastic League (MIL)	200
Oahu Interscholastic Association (OIA)	700
Interscholastic League of Honolulu (ILH)	250

The HHSAA will need to provide the appropriate forms for collection of data. This will not only mean development of the forms, but printing and distribution to all sites.

A majority of the equipment required to conduct the testing can be provided by the league or schools at minimal or no cost. The Site Manager will be responsible for arranging with the host school for a majority of the equipment needed to conduct the test, but will need cooperation from other schools in order to have all of the required equipment. Quantity will depend on the number of athletes scheduled for the testing protocol.

Scales (Digital preferred)
Clip Boards
Pens
Paper Towels
Paper cups
Tables
Chairs

Computers - Lap top preferred
Printer
Internet connection

Equipment to be Purchased for testing (Estimate)

	Cost @
Skin Fold Calipers	$ 217.95
Refractometer	$ 350.00
Production of Nutrition Video 5 copies	$ 1000
Form Production & Duplication	$ 400

APPENDIX G

Optimal Performance Calculator Instructions for Coaches in Hawaii

How to log into the program

1. Go to the NWCA home page at www.nwcaonline.com
2. On NWCA home page, go to top menu bar under ***Weight Certification*** click on the ***Optimal Performance Calculator***.
3. You will now be directed to the Optimal Performance Calculator Program (www.nwcaonline.com/nwcaonline/default.aspx).
4. Once at the OPC home page click on the ***login*** tab on the menu bar.
5. On the login page, the coach will enter his/her NWCA user ID and password. (The password is the coach's assigned login id for the initial login; the coach will be prompted to change his/her password to a permanent password)
6. You will now be logged into the program at the scholastic homepage of the Optimal Performance Calculator
   Program (www.nwcaonline.com/nwcaonline/peformance/scholastic.aspx)

How to enter the test assessment data: (please know that you will not be able to save the assessments online)

The calculations on your test assessment form will mirror the calculations on your official state assessment form

1. Once the coach is at the scholastic homepage of the OPC, the coach will put his cursor over the ***Coaches*** tab. A drop down menu will appear and the Assessor/Coach will select ***Test Assessment***.
2. After clicking ***Test Assessment*** a blank assessment form will appear. If you are entering test assessment data for a female please click on the "add female wrestler link". This will take you to a special test assessment form for females.
3. Begin entering the data onto your initial assessment screen. Be sure to use the "TAB BUTTON" on your keyboard to navigate through the form. Failure to do so will result in the inability for the calculator to function correctly.
4. **Please note:** If you are using Bio-Impedance, Underwater weighing or Bod Pod to assess body fat, do not enter information into the skin fold area. You will manually enter the Body Fat percentage into the field provided at Step 3.
5. When you have successfully calculate the Minimum Wrestling Weight on the Initial Assessment form, please scroll to the bottom of the page and click on Print Test. You will be able to print the assessment form, but will not be able to save it.
6. **Make sure your margins are set to: .5 on top and bottom and .25 for the right and left side.**
7. To repeat the process for an additional wrestler, please use the same form and enter new test assessment data.

How to view and print the alpha master roster

1. On the scholastic OPC homepage menu bar, click on the *Alpha Master Report* under the *Coaches tab* on the menu bar.
2. The "Alpha master report" will appear with all of the team's wrestlers and their assessment data (this includes the wrestler's minimum weight class and the first date they may compete at that weight class)
3. Click on the print button at the bottom of the page to print the form. Please check with your state rules to see if this form should be brought to all matches and weigh-ins.

How to view wrestler's assessments

1. On the scholastic OPC homepage menu bar, click on *wrestlers on file* under the coaches tab on the menu bar.
2. After logging in, a list of wrestlers who have completed assessment will appear (this page is titled "wrestlers on file").
3. On the "wrestlers on file" page, click on the ***select link*** under the assessment column for the wrestler you would like to view the assessment data form

4. After clicking on the select button for the desired wrestler, that individual wrestler's initial assessment will populate the page.
5. To print the assessment form, scroll to the bottom and click on the print button.
6. To view another wrestler's assessment, you can scroll to the bottom of the current wrestler's assessment form and click on ***Retrieve Wrestler***. This will bring up the "wrestlers on file" page. You can click on the ***Back*** button on your computer tool bar to take you back to the "wrestlers on file" page.

How to view individual weight loss plan

1. On the Scholastic OPC homepage, click on ***Individual Weight Loss Plan*** on the drop down menu underneath the ***Coaches heading*** on the main tool bar.
2. You will now be on a page that lists all of the wrestlers on file.
3. Select the wrestler from the list for the weight loss plan you want to view
4. The wrestler's weight loss plan will now populate. The end date is the date selected by your state office.
5. Print from the file option from the tool bar.
6. Please note: You may also view a wrestler's weight loss plan from the "wrestler's on file" page.

How to retrieve login and password information for student-athletes so they can view their individual assessment data as well as access the integrated nutrition program (please note, the wrestlers can design their own customized diet that honors their weight loss/gain plan by using these codes).

1. In the Scholastic OPC homepage, click on ***Wrestlers on File*** on the drop down menu underneath the ***Coaches*** heading on the main tool bar.
2. You will now be on the 'wrestlers on file' page.
3. The program will automatically assign each wrestler a unique ***Login ID*** and ***Password for each wrestler.***
4. At the top of the page, click on the "export wrestlers name and password to excel." This will export the page to an excel document which you can download and print to your computer.
5. The coach should give each individual wrestler their unique ***Login ID*** and ***Password.*** The wrester and his/her parents have access to their individual assessment data and the nutrition program.

Once the coach/assessor is finished working on the Optimal Performance Calculator Program, he/she should make sure to logoff on the menu bar on the Scholastic OPC homepage.

Please remember to log off once you are finished on the OPC.

Contact to us

For more information, please visit the NWCA Optimal Performance Website at www.nwcaonline.com. For problems or questions please contact the NWCA office at 717-653-8009 or email at ptocci@nwca.cc.

APPENDIX H

Instructions for OPC for High School Students

How the student-athlete accesses the Optimal Performance Calculator Program

1. Go to the NWCA home page at www.nwcaonline.com
2. On NWCA home page, go to top menu bar under ***Weight Management*** click on the ***Optimal Performance Calculator***.
3. You will now be directed to the Optimal Performance Calculator Program (www.nwcaonline.com/nwcaonline/default.aspx).
4. Once at the OPC home page click on the ***login*** tab on the menu bar.
5. On the login page, the student will enter his/her NWCA user ID and password. (The student login information should be provided by the coach, assessor or teacher)
6. You will now be logged into the program at the Student homepage of the Optimal Performance Calculator Program

How the student-athlete views the nutrition program

1. Once the student is at the scholastic homepage of the OPC, the student will put his/her cursor over the ***Student*** tab. A drop down menu will appear and the student will select ***Nutrition Program***
2. The "Nutrition Program" will appear and student will begin to enter a profile.
3. Student will be asked to select if they want a low fat or moderate fat diet plan. The student should click on the link titled "click for description" to under the difference between low fat and moderate fat.
4. The student will then be asked if they want a weight loss, weight gain or weight maintenance plan. The student should click on the link titled "click for description" to understand the difference between the three selections.
5. The student will enter his/her age
6. The student will enter his/her email
7. The student will then select their activity level. A description of each activity level is on the page.
8. After completing step 3, the student should click on the continue button at the bottom of the page
9. The student will then be taken to a page that will show the daily caloric diet and the food exchanges for the nutrition plan.
10. After viewing the information, the student should click on the continue button
11. In step 7, the student will enter the name of the meal plan they are creating in the form field. After naming their plan, the student will click on the button "click to add new meal plan"
12. The student will now to go to step 8, and click on the "select to edit" icon next to the name of the meal plan they would like to create
13. The student will now begin to enter food choices
14. Click on the category for each food exchange you plan to eat.
15. In the form boxes, enter the number of selections you would like for each food exchange. After making a selection, click on the save selections button for each exchange. You must save your selections before going to another category.
16. Continue this process in all food exchanges until all food exchanges are fulfilled
17. After all selections are completed, click on return to meal plan link at the top of the page.
18. Go to the meal plan you have just completed and click on the view/print icon next to the meal plan name

APPENDIX I

Hawaii High School Athletic Association

• P.O. BOX 62029 • HONOLULU, HAWAII • PHONE: (808) 587-4495 • FAX: (808) 587-4496 • www.sportsHIgh.com •

HHSAA WRESTLING WEIGHT MONITORING PROGRAM

Parent and Student-Athlete Consent Form to Allow Specific Gravity Testing

About the test:

In order to determine a safe/healthy weight at which a wrestler can wrestle, the wrestler's specific gravity (hydration level) must be tested. To determine a wrestler's specific gravity, a urine sample from the wrestler must be tested. Only the wrestler's specific gravity will be measured from the urine sample and, upon the test's completion, the wrestler's urine sample will be promptly disposed. A certified tester (usually the wrestler's high school athletic trainer) will perform this specific gravity test, which takes less than five minutes to complete.

PARENT/GUARDIAN CONSENT

I hereby give my consent for _____(child's name) to participate in the Hawaii High School Athletic Association's (HHSAA) Wrestling Weight Monitoring Program ("Program"), including undergoing a urinalysis test to measure his/her specific gravity. I understand that the measurements will only be used to determine his/her safe wrestling weight. I agree to hold harmless the participating school, its member league, the HHSAA, and their respective officers, directors, employees (including coaches and athletic trainers), volunteers, independent contractors, agent, and assigns for anything arising out of the HHSAA's Wrestling Weight Monitoring Program, including the specific gravity testing procedure.

_____

Parent/Guardian Signature Date

STUDENT-ATHLETE CONSENT

I, _____(student-athlete's name), agree to participate in the Hawaii High School Athletic Association (HHSAA) Wrestling Weight Monitoring Program ("Program"), including undergoing a urinalysis test to measure my specific gravity. I understand that the measurements will only be used to determine my safe wrestling weight. Iagree to hold harmless the participating school, its member league, the HHSAA, and their respective officers, directors, employees (including coaches and athletic trainers), volunteers, independent contractors, agents, and assigns for anything arising out of the HHSAA's Wrestling Weight Monitoring Program, including the specific gravity testing procedure.

_____

Student-Athlete Signature Date

APPENDIX J

Hawaii High School Athletic Association

• P.O. BOX 62029 • HONOLULU, HAWAII 96839 •
PHONE: (808) 587-4495 • FAX: (808) 587-4496
• www.sportsHIgh.com •

HHSAA WRESTLING WEIGHT MONITORING PROGRAM
PHYSICIAN'S STATEMENT

Name of Wrestler:_____ Gender: Male Female

High School: _____Measurement Date: _____

Actual Weight: _____lbs. Body Fat Percentage: _____ %

Dear Physician:

In order to prevent high school wrestlers from being in a state of dehydration and/or starvation at the time they are officially weighed prior to the start of their competitive season, each wrestler is given a specific gravity test and a body fat assessment. The Hawaii High School Athletic Association's Wrestling Weight Monitoring Program recommends the minimum body fat percentage at 7% for a healthy high school male and 12% for a healthy high school female. A state of dehydration and/or starvation may occur when a wrestler's weight drops below these recommendations. The above-named high school wrestler was measured at a body fat percentage below the allowable 7% (males)/12% (females).

TO BE COMPLETED BY THE PHYSICIAN

In my judgment, the above named wrestler is neither dehydrated nor in a state of starvation at this time. Rather, his/her body fat is naturally at the above-listed percentage. Therefore, it is my judgment that the above-named wrestler may compete safely at the above listed weight for the entire wrestling season.

Accordingly, I hereby accept full responsibility and assume any and all liability for any injury sustained by the above-named wrestler as a result of my signing this Physician's Statement, and agree to indemnify, release, discharge, and otherwise hold harmless the HHSAA, its member leagues, its member schools, and their respective officers, directors, employees (including coaches and athletic trainers), volunteers, independent contractors, agents, and assigns from any and all claims or actions arising from my signing this Physician's Statement.

_____

Physician's Signature Date

_____

Physician's Name (please print) Phone Number

APPENDIX K
PHYSICIAN RELEASE FOR ATHLETE TO PARTICIPATE WITH SKIN LESION(S)

Student's Name:_____

Release of Medical Information (To be filled out by Parent/Guardian)

The above named student and parent(s)/guardian(s) hereby consent to the release of medical information by Dr(s) _____ to _____ high school to obtain information regarding
(Physician's Name) (Name of School)
the medical history, records of the below injury or surgery, serious illness and rehabilitation results of the student from his/her physician(s). We understand that the purpose of this request for medical information is to assist the school in the management or rehabilitation of the student's injury/illness. This information is confidential and except as provided in this release will not be otherwise released by the parties in charge of the information. This release remains valid until revoked by the adult student or parent/guardian in writing.

Signature of Parent/Guardian or Adult Student: _____ Date: _____

(Below to be filled out by physician)

Diagnosis: _____ Date of Exam: _____

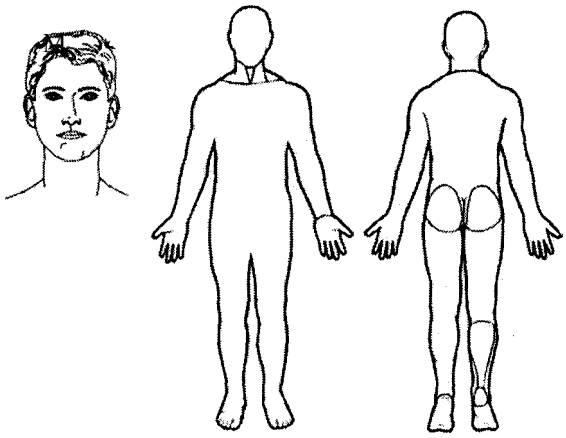
Location of Lesion(s): _____
(Mark Location of Lesion(s) on diagram below)

Medication(s) used to treat lesion(s):
_____

_____

Date Treatment Started: _____

This Form Expires on: _____
(Date)
Earliest date may return to participation: _____
Physician's Name: _____
(M.D. or D.O.)



Front Back

Office Address: _____ Office Phone:_____

Physician's Signature: _____ Date: _____

Note to Providers: Non-contagious lesions do not require treatment prior to return to participation (e.g. eczema, psoriasis, etc.). Please familiarize yourself with NFHS Rules 4-2-3 and 4-2-4 which states:

> *"ART.* 3 *… If a participant* is *suspected by the referee or coach of having a communicable skin disease or any other condition that makes participation appear inadvisable, the coach shall provide current written documentation from a physician stating that the suspected disease or condition* is *not communicable and that the athlete's participation would not be harmful to any opponent. This document shall be furnished at the weigh-in or prior to competition in the dual meet or tournament. Covering a communicable condition shall not be considered acceptable and does not make the wrestler eligible to participate. "*

> *"ART.* 4 *… If an on-site meet physician is present, he/she may overrule the diagnosis of the physician signing the physician's release form for a wrestler to participate with a particular skin condition. "*

APPENDIX L

Hawaii Weight Management Program
WEIGHT LOSS PLAN

This form designates the wrestler's eligible weight classes for each week and the first date for participation at the assigned minimum wrestling weight class. There is no evidence, scientific or otherwise, that the minimal wrestling weight is the optimal weight for wrestling performance.

Wrestler, School: DEmo-Two fifty-two - Hawaii Test School

Alpha Body Weight (initial assessment): BW= 153.8 Maximum Weight loss per week 2.307

Date		PROJECTED	Eligible Weight Class	Actual/Projected
11/26/2007	Initial Assessment	-		
11/26/2007	Week 1	153.80	160, 171	Date:_____Weight:_____ Date:_____Weight:_____
12/3/2007	Week 2	151.49	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
12/10/2007	Week 3	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
12/17/2007	Week 4	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
12/24/2007	Week 5	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
12/31/2007	Week 6	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
1/7/2008	Week 7	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
1/21/2008	Week 9	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
1/28/2008	Week 10	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
2/4/2008	Week 11	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
2/11/2008	Week 12	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
2/18/2008	Week 13	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____
2/25/2008	Week 14	149.43	152, 160	Date:_____Weight:_____ Date:_____Weight:_____

APPENDIX M

Hawaii State Interscholastic Athletic Association

MINIMUM WEIGHT CERTIFICATION - team form

Hawaii Test School

2007/2008 Season

Please type and REVIEW - INCOMPLETE FORMS WILL BE RETURNED. THe following atheltes will compter on our wrestling team:

Team / Name	% Body Fat	Alpha Date	Min Wt Class	12/7/2007	Actual Wt.	12/14/2007	Actual Wt.	12/21/2007	Actual Wt.	12/28/2007	Actual Wt.	1/4/2008	Actual Wt.	1/11/2008	Actual Wt.	1/18/2008	Actual Wt.	1/25/2008	Actual Wt.	2/1/2008	Actual Wt.	2/8/2008	Actual Wt.	2/15/2008	Actual Wt.	2/22/2008	Actual Wt.	3/1/2008	Actual Wt.
Matt Oneothree (Hawaii Test School)	13.88581	11/1/2007	103	102.78	0	105.62		105.62		104.02	0	102.78	0	102.78	0	102.78		102.78		102.78		102.78		102.78		102.78		102.78	
Bob Onetwelve (Hawaii Test School)	12	11/1/2007	112	111.66	0	111.66		111.66		111.66	0	111.66	0	111.66	0	111.66		111.66		111.66		111.66		111.66		111.66		111.66	
Pat Onenineteen (Hawaii Test School)	18.07746	11/12/2007	119	126.75		124.72		122.69		120.66	0	118.63	0	118.04	0	118.04		118.04		118.04		118.04		118.04		118.04		118.04	
Jason Onetwentyfive (Hawaii Test School)	8	11/2/2007	125	124.80		124.80		124.80		124.80		124.80	0	124.80	0	124.80		124.80		124.80		124.80		124.80		124.80		124.80	
Nico Onethirty (Hawaii Test School)	12.98105	11/1/2007	130	129.12		129.12		129.12		129.12	0	129.12	0	129.12	0	129.12		129.12		129.12		129.12		129.12		129.12		129.12	
Jay Onethirtyfive (Hawaii Test School)	11.46826	11/1/2007	135	131.37		131.37		131.37		131.37	0	131.37	0	131.37	0	131.37		131.37		131.37		131.37		131.37		131.37		131.37	
Larry Oneforty (Hawaii Test School)	11.16499	11/1/2007	140	137.55		137.55		137.55		137.55	0	137.55	0	137.55	0	137.55		137.55		137.55		137.55		137.55		137.55		137.55	
Marco Onefortyfive (Hawaii Test School)	13.28288	11/1/2007	145	142.66		142.66		142.66		142.66	0	142.66	0	142.66	0	142.66		142.66		142.66		142.66		142.66		142.66		142.66	
Angelo Onefiftytwo (Hawaii Test School)	16.88516	11/1/2007	152	152.40		149.95		147.50		147.46	0	147.46	0	147.46	0	147.46		147.46		147.46		147.46		147.46		147.46		147.46	
Vincenzo Onesixty (Hawaii Test School)	14.48774	11/1/2007	160	157.68		157.23		157.23		157.23	0	157.23	0	157.23	0	157.23		157.23		157.23		157.23		157.23		157.23		157.23	
Stefano Oneseventyone (Hawaii Test School)	12.07409	11/1/2007	171	171.12		171.12		171.12		171.12	0	171.12	0	171.12	0	171.12		171.12		171.12		171.12		171.12		171.12		171.12	
Jay Oneeightynine (Hawaii Test School)	11.46826	11/1/2007	189	186.58		186.58		186.58		186.58	0	186.58	0	186.58	0	186.58		186.58		186.58		186.58		186.58		186.58		186.58	
Casey Twofifteen (Hawaii Test School)	18.67195	11/1/2007	215	212.36		208.93		205.50		202.07	0	201.13	0	201.13	0	201.13		201.13		201.13		201.13		201.13		201.13		201.13	
Jeff Twoeightyfive (Hawaii Test School)	20.44862	11/1/2007	285	239.84		235.92		232.00		228.08	0	224.16	0	222.40	0	222.40		222.40		222.40		222.40		222.40		222.40		222.40	
Amy Female (Hawaii Test School)	20.79199	11/1/2007	103	104.36		102.68		101.71		101.71	102	101.71	0	101.71	0	101.71		101.71		101.71		101.71		101.71		101.71		101.71	
Tammy Subfemal (Hawaii Test School)	11.072	11/1/2007	112	111.00		111.00		111.00		111.00	0	111.00	0	111.00	0	111.00		111.00		111.00		111.00		111.00		111.00		111.00	
Michael Moyer (Hawaii Test	12.67897	11/1/2007	140	138.96		138.96		138.96		138.96	0	138.96	0	138.96	0	138.96		138.96		138.96		138.96		138.96		138.96		138.96	
Joe Hawaii (Hawaii Test School)	12.37665	8/31/2007	189	174.68		174.68		174.68		174.68	0	174.68	0	174.68	0	174.68		174.68		174.68		174.68		174.68		174.68		174.68	
Rocky Surfa (Hawaii Test School)	15.36873	11/26/2007	119	125.08		123.19		121.30		119.41		117.52	0	116.50		116.50		116.50		116.50		116.50		116.50		116.50		116.50	
Nathan Demo (Hawaii Test School)	9.34056	11/26/2007	135	134.90		134.72		134.72		134.72		134.72	0	134.72		134.72		134.72		134.72		134.72		134.72		134.72		134.72	
Roger rabbit (Hawaii Test School)	12.37665	12/3/2007	135	141.96		139.79		137.62		135.45		134.92	0	134.92		134.92		134.92		134.92		134.92		134.92		134.92		134.92	
Alika Sample (Hawaii Test School)	13.28288	11/26/2007	130	132.41		130.38		128.35		126.44		126.44	0	126.44		126.44		126.44		126.44		126.44		126.44		126.44		126.44	
Hawaii one-twenty-five (Hawaii Test School)	14.48774	11/26/2007	119	125.03	123	125.37		123.47		121.58	119.6	119.69	0	117.80		117.69		117.69		117.69		117.69		117.69		117.69		117.69	
Demo-one thirty-four (Hawaii Test School)	11.6198	11/26/2007	130	131.01	125	128.98		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53	
DEmo-Two fifty-two (Hawaii Test School)	9.6452	11/26/2007	152	150.17	146	149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43	
demo-three two-15 (Hawaii Test School)	30.5879	11/26/2007	215	248.95	205	245.10		241.25		237.40		233.55		229.70		225.85		222.00		218.15		214.30		210.45		206.60		202.75	
demo-4 forty (Hawaii Test School)	15.08866	11/26/2007	130	136.70	127	134.60		132.50		130.40		128.30		127.82		127.82		127.82		127.82		127.82		127.82		127.82		127.82	
Marco Tocci (Hawaii Test School)	14.5	11/1/2007	103	104.16		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70	
Female A (Hawaii Test School)	8	11/30/2007	98	95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00	

APPEDIX N

2007-08 Weigh In Report

10/10/2007

School: Hawaii Test school **Opponent:** **Weigh In Date:** 12/01/2007

Weight Class	Wrestler	Eligible Wt. Class	Wt. Loss Plan	Actual Weight	Last Official WeighIn Date	Last Official Weighin
112	Amy Female	112, 119	105.80			0.00
112	Matt Oneothree	112, 119	103.80			0.00
112	Bob Onetwelve	112, 119	111.66			0.00
112	Tammy Subfemal	112, 119	111.00			0.00
112	Marco Tocci	112, 119	105.60			0.00
125	Jason Onetwentyfive	125, 130	124.80			0.00
130	Pat Onenineteen	130, 135	128.49			0.00
130	Nico Onethirty	130, 135	129.12			0.00
130	Hawaii one-twenty-five	130, 135	126.65			0.00
130	Rocky Surfa	130, 135	126.70			0.00
135	Jay Onethirtyfive	135, 140	131.37			0.00
135	Alika Sample	135, 140	134.15			0.00
135	Demo-one thirty-four	135, 140	132.75			0.00
140	Nathan Demo	140, 145	136.70			0.00
140	demo-4 forty	140, 145	138.50			0.00
140	Michael Moyer	140, 145	138.96			0.00
140	Larry Oneforty	140, 145	137.55			0.00
145	Marco Onefortyfive	145, 152	143.10			0.00
145	Roger rabbit	145, 152	143.82			0.00
160	DEmo-Two fifty-two	160, 171	152.15			0.00
160	Angelo Onefiftytwo	160, 171	154.50			0.00
160	Vincenzo Onesixty	160, 171	159.90			0.00
189	Joe Hawaii	189, 215	174.68			0.00
189	Jay Oneeightynine	189, 215	186.58			0.00
189	Stefano Oneseventyone	189, 215	171.12			0.00
285	demo-three two-15	HWT	252.25			0.00
285	Jeff Twoeightyfive	HWT	243.20			0.00

Coach Name (Printed): _____

Coach Signature: _____

Head Official (Printed): _____

Opposing Coach or Tournament DIrector Name (Printed): _____

Opposing Coach or Tournament DIrector Signature: _____

Head Official Signature: _____

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