

# **The MMA Training Bible's Guide to Performance Testing in MMA:**



**By. Dr. Jason Gillis**

## **DATA COLLECTION BOOK**

## Health Screening

*All pages of this questionnaire should be completed. This information allows the coach/leader/supervisor to determine if it is safe for the volunteer to participate, or whether medical advice is required before proceeding. The information provided also gives a suitable history should a medical examination be required for particular health interventions. If required, the additional medical examination report is completed by an Independent Medical Officer and stapled to this document. It is very important that all volunteers answer all of the questions fully, and to the best of their knowledge.*

**Volunteers are not to participate until the details in this completed form have been checked and countersigned by the coach/leader/supervisor. All information provided is treated as medical -in-confidence.** If you have a particularly sensitive response to any of the questions that you would rather not divulge in this record please mark the questions appropriately, and we may be able to arrange for you to discuss this directly, and in confidence, with an appropriately qualified person.

### Participant's Details

Full Name..... Telephone Number.....

Date of Birth ..... Age..... Email..... Date .....

Q1 How would you describe your current physical fitness status?

Very unfit (sedentary) / Unfit / Moderately Fit / Very Fit (e.g. competitive sportsperson)\*

Q2 Do you undertake regular physical exercise? Yes / No\* If Yes Please tell us what type of exercise?

**Light activities:** heart beats slightly faster than usual, you can talk/sing while you are active (walking leisurely, stretching, vacuuming or light gardening)

**Moderate activities:** your heart beats faster than normal, you can talk while you are active (fast walking, aerobics, strength training, swimming gently)

**Vigorous activities:** your heart rate increases a lot, you cannot talk or your talking is broken up by large breaths while you are active (stair machine, jogging or running, tennis, squash, badminton, basketball, cycling)

Q3 How frequently do you exercise?

Q4 How often do you undertake exercise of a maximal nature? Never / Sometimes

/Often\* Q5 How would you consider your present body weight?

Underweight / Ideal weight / Slightly overweight / Very overweight\*

Q6 Are you a regular smoker? Yes / No\* – if yes number per day.....

Q7 Are you an occasional smoker? Yes / No\* – if yes average per week.....

Q8 Are you a previous smoker? Yes / No\* – if yes how long since stopping ..... years

Q9 Do you drink alcoholic drinks? Yes / No\*

If yes do you: have the occasional drink? Yes / No\*

Have a drink every day? Yes / No\*

Q10 Have you had to consult your doctor within the last 6 months? Yes / No\* – if yes give details

Q11 Do you have any allergies? Yes / No\* If Yes, please give details.

Q12 Are you currently taking any form of medication including both prescribed and over

the counter preparations? Yes / No\* – if yes give details

Q13 Have you routinely taken any medication in the past 2 years? Yes / No\* – if yes give details

Q14 Have you ever been told to give up sports because of health problems? Yes / No\* – if yes give details

Q15 Do you get tired more quickly than your friends do during exercise? Yes / No\* – if yes give details

Q 16	Have you ever been told you have a heart murmur? Yes / No* – if yes give details
Q17	<p>Have you ever suffered from any of the following?</p> <p>Asthma Yes / No*</p> <p>Diabetes Yes / No*</p> <p>Hypertension (high blood pressure) Yes / No* Any form of heart disorder Yes / No*</p> <p>High blood cholesterol Yes / No*</p> <p>Epilepsy Yes / No*</p> <p>Have you ever had a seizure Yes / No* Fainting Yes / No*</p> <p>If yes to any of the above, please give full details of the condition / episode so that we can determine whether it is safe for you to participate in the activity, or if we need to seek medical advice: If you reported "yes" to asthma, have you been prescribed any medication for this in the past 4 years, and if so, what have you been prescribed specifically, and how often/when do you use the medication?</p>
Q18	Have you ever been told you have a heart arrhythmia? Yes / No* – if yes give details
Q19	Do you have any other history of heart problems? Yes / No* – if yes give details
Q20	Have you had a severe viral infection (e.g. myocarditis or mononucleosis) within the last month? Yes / No* – if yes give details
Q21	Have you ever been told you had rheumatic fever? Yes / No* – if yes give details
Q22	<p>Have you ever suffered from the following?</p> <p>Heat stroke, heat exhaustion or sunstroke Yes / No*</p> <p>Cold Illness or injury (non-freezing cold injury or frostbite) Yes / No*</p> <p>Poor Circulation (including Raynauds phenomenon) Yes / No*</p> <p>Peripheral neuropathy Yes / No*</p> <p>If yes, please give details</p>
Q23	Please give details of any overnight hospital admissions you have had
Q24	Have you any other past medical history we have not asked you about? Yes / No* – if yes give details
Q25	Do you have any muscle, joint or back injury at present? Yes / No* – if yes give details
Q26	Have you had to suspend any normal activity due to ill health or injury in the last month? Yes / No* – if yes give details
Q27	Is there a history of heart disease or sudden cardiac death in your family? Yes/No* if so give details
Q28	Are both parents still alive? Yes / No* If No, please give cause of death and age.
Q29	Does any of your parents or brother/sister suffer from a serious medical condition? If so give details
Q30	<p>Do you suffer from, or have you ever suffered from the following</p> <p>Chest pain Yes / No*</p> <p>Chest pain on exercising Yes / No*</p> <p>Unexpected breathlessness on exertion Yes / No* Undue dizziness on exertion Yes / No*</p> <p>Collapse whilst exercising Yes / No*</p> <p>Palpitations (irregular heart beat) Yes / No*</p>

If you have answered yes to any of the above questions, please give details.

---

Q31 Has anyone in your immediate family (parent, child or brother/sister) less than 50 years of age: Died suddenly and unexpectedly? Yes / No\*

- Been treated for recurrent fainting? Yes / No\*
- Had unexplained seizure problems? Yes / No\*
- Had unexplained drowning while swimming? Yes / No\*
- Had unexplained car accident? Yes / No\*
- Had heart transplant? Yes / No\*
- Had pacemaker or defibrillator implanted? Yes / No\*
- Been treated for irregular heart beat? Yes / No\*
- Had heart surgery? Yes / No\*

If you have answered yes to any of the above questions, please give details.

---

Q32 Are you a blood donor? Yes / No\*  
If yes, have you donated blood in the last week? Yes / No\*

---

Q33 For females (only required for studies involving thermal stress, hypoxia and arduous exercise). Please state here whether you may be pregnant:  
Not pregnant                      Unsure                      Pregnant\*

---

Q34 To the best of your knowledge are there any other reason(s) that may prevent you from successfully completing the tasks that have been explained to you by the leader/coach or supervisor? Yes / No\* If yes, please give details

---

**Emergency Contact Details:** Please supply the name, address and telephone number of an emergency contact: (please print)

Name ..... Relationship ..... Telephone number(s) .....  
Address.....

**DECLARATION**

I understand that it is my responsibility to fully disclose information about my health in this questionnaire and that knowingly failing to do so may place me at risk. I also understand that if anything changes in my health circumstances between this screening questionnaire and / or medical examination and the date of my participation, it is my responsibility to fully inform the supervisor / coach / leader, the and that failure to do so, whether knowingly or unknowingly may place me at risk during tests or interventions.

Signature of Participant ..... Date .....

**VOLUNTEERS ARE NOT TO PARTICIPATE UNTIL THE DETAILS COMPLETED ABOVE HAVE BEEN CHECKED AND COUNTERSIGNED BY THE LEADER / COACH / SUPERVISOR BELOW.**

Note to checker: Please check that the details above do not show any contra-indications that might jeopardise the volunteer’s health or safety. If in any doubt whatsoever, please seek the advice of colleagues, and ultimately an independent medical officer. If there are any contra-indications, or remaining doubt please thank the volunteer for their time BUT ADVISE THEM THAT THEY CANNOT PARTICIPATE AT THE MOMENT UNTIL FURTHER MEDICAL ADVICE IS SOUGHT.

Name of coach / supervisor / leader ..... Date .....

Signature of coach / supervisor / leader ..... Date .....

### **Participant information sheet for testing**

Date: \_\_\_\_\_ Tester: \_\_\_\_\_ Co-workers: \_\_\_\_\_

You are requested to read this form carefully. If you consent to take part, as a participant, in the testing then you should sign the consent form. If you have any query, or are unsure or uncertain about anything, then you should not sign until your problem has been resolved and you are completely happy to volunteer.

The purpose of these tests is to quantify various psychological skills using questionnaires, and to measure muscle endurance, strength, power, anaerobic endurance, aerobic endurance, agility, body size and composition and flexibility using a series of field testing protocols outlined in the accompanying documentation. All potential volunteers must currently be engaging in regular physical activity - please ask if unsure. Individuals with any form of musculoskeletal injury which may be exacerbated by the field tests will be excluded.

You may at any time withdraw from participating in the tests. You do not have to give any reason, and no one can attempt to dissuade you. If you ever require any further explanation, please do not hesitate to ask. Any information obtained during this testing session will remain confidential as to your identity, unless otherwise specified.

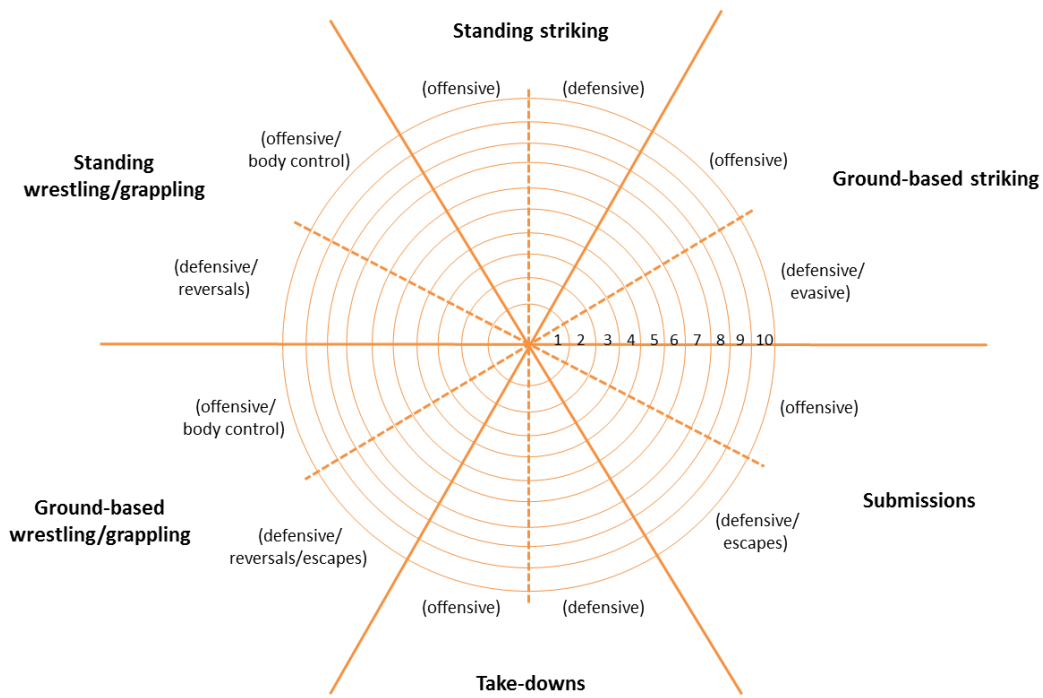
**CONSENT FORM**

1. I confirm that I have read and understood the attached information sheet for the above testing session. I confirm that I have had the opportunity to consider the information, ask questions and that these have been answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason without my legal rights being affected.
3. I agree to take part in this testing session.

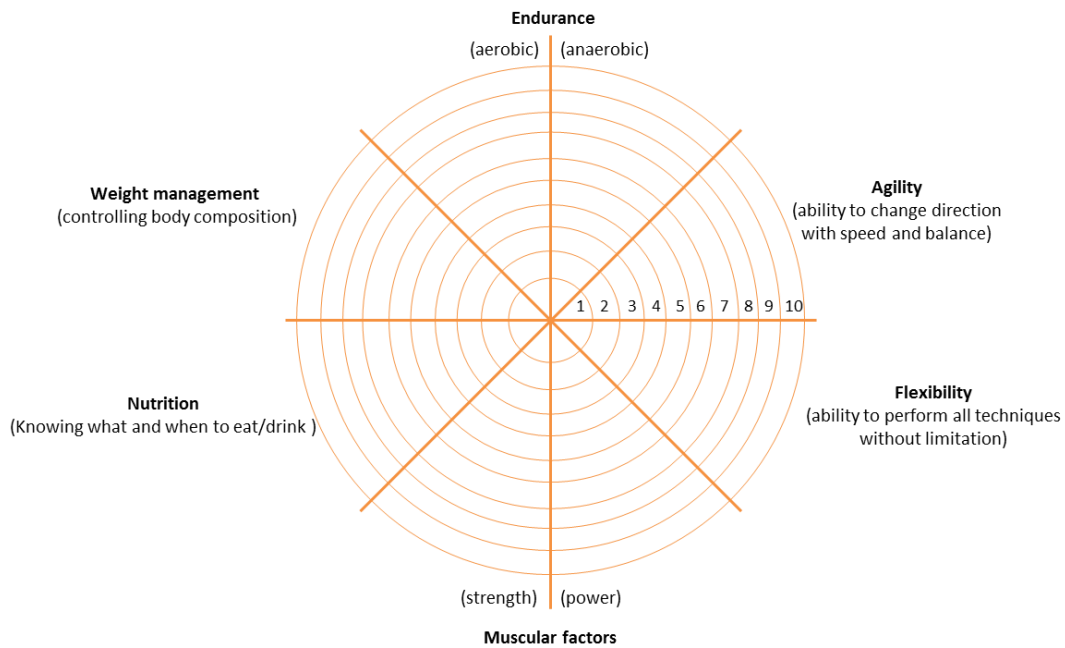
**Name of Participant:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Name of Person taking consent** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

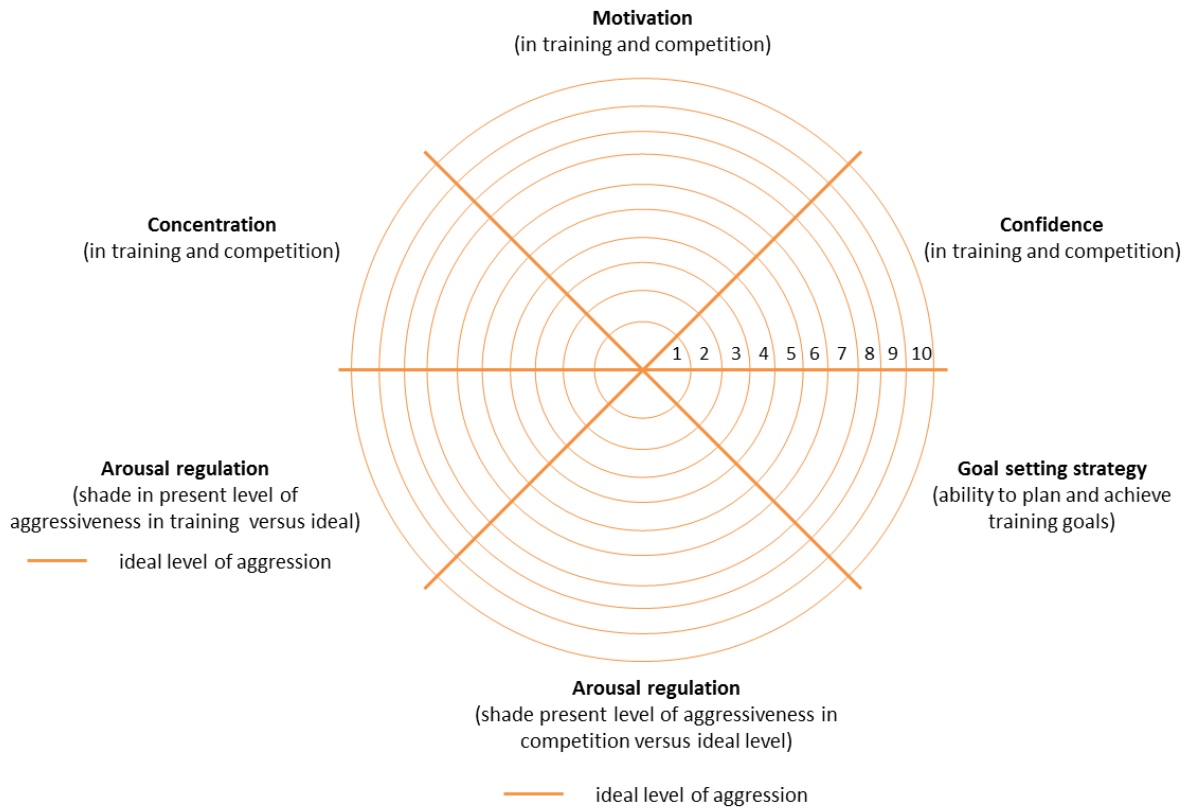
### Performance profile for technical development



### Performance profile for physical conditioning



### Performance profile for psychological skills



### The Brunel Mood Scale Questionnaire

Below is a list of words that describe feelings people have. Please read each one carefully and then circle the answer that best describes **HOW YOU FEEL RIGHT NOW**. Make sure you respond to every word.

	Not at all	A little	Moderately	Quite a bit	Extremely	SCORING FOR THE BRUMS-32 (Add the responses for the responses to each of the subscales)		
1. Active	0	1	2	3	4	<b>Subscale</b>	<b>Scores</b>	<b>Total</b>
2. Alert	0	1	2	3	4			
3. Angry	0	1	2	3	4	<b>Anger</b>	ANGRY (3) ___ + ANNOYED (4) ___ + BAD TEMPERED (6) ___ + BITTER (7) ___	
4. Annoyed	0	1	2	3	4			
5. Anxious	0	1	2	3	4			
6. Bad tempered	0	1	2	3	4	<b>Tension</b>	ANXIOUS (5) ___ + NERVOUS (20) ___ + PANICKY (21) ___ + WORRIED (30) ___	
7. Bitter	0	1	2	3	4			
8. Calm	0	1	2	3	4			
9. Cheerful	0	1	2	3	4	<b>Depression</b>	DEPRESSION (13) ___ + DOWNHEARTED (14) ___ + MISERABLE (19) ___ + UNHAPPY (28) ___	
10. Composed	0	1	2	3	4			
11. Confused	0	1	2	3	4			
12. Contented	0	1	2	3	4			
13. Depressed	0	1	2	3	4	<b>Vigour</b>	ACTIVE (1) ___ + ALERT (2) ___ + ENERGETIC (15) ___ + LIVELY (18) ___	
14. Downhearted	0	1	2	3	4			
15. Energetic	0	1	2	3	4			
16. Exhausted	0	1	2	3	4			
17. Happy	0	1	2	3	4	<b>Fatigue</b>	EXHAUSTED (16) ___ + SLEEPY (25) ___ + TIRED (26) ___ + WORN-OUT (29) ___	
18. Lively	0	1	2	3	4			
19. Miserable	0	1	2	3	4			
20. Nervous	0	1	2	3	4	<b>Confusion</b>	CONFUSED (11) ___ + UNCERTAIN (27) ___ + MIXED-UP (31) ___ + MUDDLED (32) ___	
21. Panicky	0	1	2	3	4			
22. Relaxed	0	1	2	3	4			
23. Restful	0	1	2	3	4			
24. Satisfied	0	1	2	3	4	<b>Happy</b>	CHEERFUL (9) ___ + CONTENT (12) ___ + HAPPY (17) ___ + SATISFIED (24) ___	
25. Sleepy	0	1	2	3	4			
26. Tired	0	1	2	3	4			
27. Uncertain	0	1	2	3	4	<b>Calmness</b>	CALM (8) ___ + COMPOSED (10) ___ + RELAXED (22) ___ + RESTFUL (23) ___	
28. Unhappy	0	1	2	3	4			
29. Worn-out	0	1	2	3	4			
30. Worried	0	1	2	3	4			
31. Mixed-up	0	1	2	3	4			
32. Muddled	0	1	2	3	4			

Total your scores here:

Sub-scales of the BRUMS	Current score	Goal
Anger		Maintain
Tension		
Depression		
Vigour		
Fatigue		
Confusion		
Happy		
Calmness		



### Sit and Reach Test

Attempt	Sit-and-reach score
Trial 1	
Trial 2	
Best score:	
Comments	

### Body Size and Composition

Date of Birth

Measure no.	1	2	3	Average
Body mass (kg)				
Stretch stature (cm)				
BMI	-	-	-	
<i>Triceps skin fold</i>				
<i>Subscapular skin fold</i>				
<i>Biceps skin fold</i>				
<i>Iliac Crest skin fold</i>				
<i>Supraspinale skin fold</i>				
<i>Abdominal skin fold</i>				
<i>Front Thigh skin fold</i>				
<i>Medial Calf skin fold</i>				
<b>SUM OF 8 SKINFOLDS</b>				
Chest girth (cm)				
Arm girth relaxed (cm)				
Arm girth flexed and tensed (cm)				
Waist girth (cm)				
Gluteal girth (cm)				
Calf girth (cm)				

## Body Size and Composition Measurement sites

---

### Chest



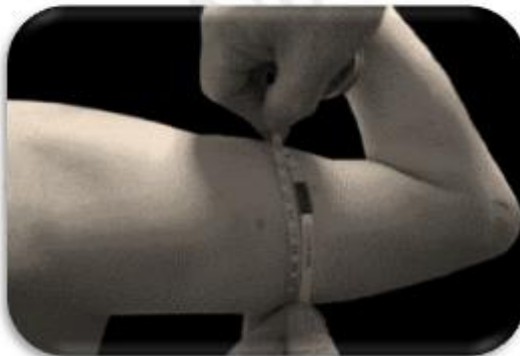
Participant stand with arms raised to sides. Measure at the mid-level of the sternum after the participant lowers their arms by their side and at the end of an exhale.

### Arm Girth (Relaxed)



Participant stands relaxed with arms hanging at sides. Measure right arm at a marked spot that is half way up the upper arm.

### Arm Girth (Flexed)



Participant stands with right arm raised such that it is horizontal with the ground and the palm is facing inwards. Ask the participant to flex and measure at the peak of the bicep.

**(ISAK, 2001)**

### Waist Girth



Participant stands with arm folded. Take measurement at the narrowest point between the lowest rib and the hip bone, after the participant relaxed and lowers their hands by their sides, and at the end of an exhale.

### Gluteal Girth



Participant stands with arm folded and feet together. Take the measurement at the largest point, which may correspond to the level of the pubic bone.

### Calf Girth



Participant stands with arms relaxed hanging by sides. Take the measurement at the biggest part of the calf

**(ISAK, 2001)**

---

## TRICEPS SKINFOLD



### Landmark

The most posterior part of the triceps when viewed from the side at the marked mid-acromiale-radiale level.



### Pinch

The arm should be relaxed with the palm of the hand facing forwards. A vertical pinch is made.

**Other information.** If you are unsure if you have pinched only skin and no underlying muscle tissue, ask the subject to flex the muscle while you have a pinch (ISAK, 2001).

**(ISAK, 2001)**

## ILIAC CREST SKINFOLD



### Landmark

Immediately above the iliac crest (top of hip bone), on the most lateral aspect (side).



### Pinch

The fold is directed anteriorly and downward in line with the natural fold of the skin. The right arm should be held across the body to keep it away from the measurement area.

**Other information** see (ISAK, 2001).

**(ISAK, 2001)**

## ABDOMINAL SKINFOLD



### Landmark

5 cm to the right of the mid-point of the navel.

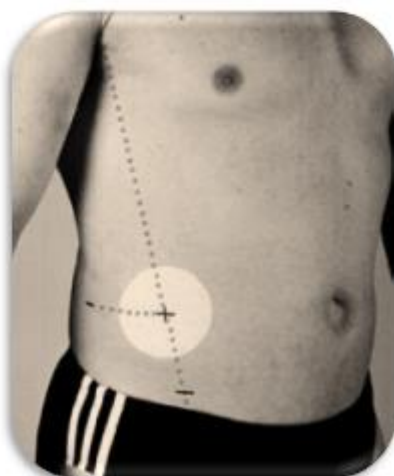


### Pinch

Vertical pinch

(ISAK, 2001)

## SUPRASPINALE SKINFOLD



### Landmark

The site is at the intersection of the two lines

**Step 1:** Landmark iliospinale. The underside of the front of the hip bone

**Step 2:** Draw line straight from the top of the hip

**Step 3:** Draw line from armpit to Step1 line. Take measure at intersection of lines.



### Pinch

The fold is directed anteriorly and downward in line with the natural fold of the skin. The right arm should be held across the body to keep it away from the measurement area.

**Other information** see ISAK (2001).

**(ISAK, 2001)**

---

## FRONT THIGH SKINFOLD



### Landmark

At the mid-point of the distance between the inguinal fold and the anterior surface of the patella on the mid-line of the thigh



### Pinch

Vertical pinch.



**Other information:** If the fold is difficult to raise, ask the participant to lift the underside of the thigh with both hands (ISAK 2001).

**(ISAK, 2001)**



## SUBSCAPULAR SKINFOLD



### Landmark

The site is 2 cm along a line running laterally and obliquely downward from the Subscapular landmark (which is the undermost tip of the inferior angle of the scapula) at a 45° angle.



### Pinch

The pinch is made following the natural fold of the skin. On a line running laterally (away from the body) and downwards (at about 45 degrees).

**Other information.** see ISAK (2001)

**(ISAK, 2001)**

### MEDIAL CALF SKINFOLD



#### Landmark

The most medial aspect of the calf at the level of the maximal girth.



#### Pinch

Vertical pinch when knee is bent at 90° and the foot rests on a box.

**Other information.** If the fold is difficult to raise, ask the participant to lift the underside of the thigh with both hands (ISAK 2001).

**(ISAK, 2001)**

## BICEPS SKINFOLD



### Landmark

At the most anterior part, mid-acromiale-radiale level.



### Pinch

The arm should be relaxed with the palm of the hand facing forwards, shoulder externally rotated. A vertical pinch, parallel to the long axis of the arm, is made at the landmark.

**Other information.** If you are unsure if you have pinched only skin and no underlying muscle tissue, ask the subject to flex the muscle while you have a pinch (ISAK, 2001).

**(ISAK, 2001)**

### Vertical jump test

	Attempt			
	1	2	3	Average
Jump height (cm)				

### Seated medicine ball throw

	Attempt			
	1	2	3	Average
Throw distance (cm)				

### Bench press

	5 RM	3 RM	Technique (1; beginner to 3; excellent)
Weight (kg)			
No. of repetitions			

5 and 3 RM Squat

### Squat

	5 RM	3 RM	Technique (1; beginner to 3; excellent)
Weight (kg)			
No. of repetitions			

### Curl-up test

	# Reps to failure	Technique (1; beginner to 3; excellent)
Curl-ups		

### Push-up test

	# Reps to failure	Technique (1; beginner to 3; excellent)
Push-ups		

### Running-based Anaerobic Sprint Test

Starting HR (beats.min <sup>-1</sup> )	
--	--

	Sprint					
	1	2	3	4	5	6
Time (s) to complete 35 m sprint						

Ending HR (beats.min <sup>-1</sup> )	
+5 min HR (beats.min <sup>-1</sup> )	

### The Balke 15 min track run

Starting HR (beats.min <sup>-1</sup> )	
--	--

Lap number	Distance (m)	Time (s)
1	400	
2	800	
3	1200	
4	1600	
5	2000	
6	2400	
7	2800	
8	3200	
9	3600	
10	4000	
11	4400	
12	4800	
13	5200	

Total Distance achieved in 15 minutes: \_\_\_\_\_

Ending HR (beats.min <sup>-1</sup> )	
+5 min HR (beats.min <sup>-1</sup> )	

### The Fighter's Drill

	Round 1	Round 2	Round 3	TOTALS/avg
Number drills completed				
Heart rate at end of round (beats/min)				