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Appendix A

INFORMED CONSENT FORM

AUTHORISATION TO PARTICIPATE IN A RESEARCH PROJECT

TITLE OF STUDY: Prospective study of causative factors in early injuries sustained during Basic Training in the SANDF

THE NATURE AND PURPOSE OF THIS STUDY

A high incidence of shin splints and stress fractures are observed in female recruits during Basic Training. It can result in a great number of training days lost (an average of 21.64 days per stress fracture), loss of manpower, expense of medical care and discharge of affected soldiers. It is therefore of great importance to clearly identify risk factors leading to stress fractures to enable prevention.

Most studies about stress fractures in the military were done overseas, especially first world countries. It is therefore important to investigate which risk factors are the most relevant in our population in South Africa. This study will examine the influence of the following risk factors in South African military recruits:

- a. General health, exercise routine and sports participation.
- b. Nutrition /calcium intake
- c. Body size, composition, skeletal alignment, flexibility and average step length.
- d. Muscle strength and fitness.
- e. Electrocardiogram (ECG)
- f. Additionally the study will examine the bone mineral density in the South African female military recruit.

EXPLANATION OF PROCEDURES TO BE FOLLOWED.

Once the informed consent had been obtained, participants will complete questionnaires on their diet, fitness level, history of sport participation, menstrual history, medication and general health.

Appendix A: Informed Consent

A 15-minute ECG will follow: participants will lie down on their backs and relax while their heartbeat will be registered with the aid of electrodes placed on the chest. This registration of the heartbeat is non-invasive and participants will feel no inconvenience. During the 15 minutes the participants will be asked to stand upright for the last 5 minutes.

This will be followed by assessment of bone density (DEXA scan) and body size (similar to normal x-rays).

A Biokinetic assessment, which will include body size, composition, skeletal alignment, flexibility, muscle strength and standard SANDF fitness will conclude the evaluation.

The ECG and biokinetic assessment will be repeated at the end of the Basic Training.

RISK AND DISCOMFORT INVOLVED.

The risk and discomfort of the examination is minimal. Please take note that the DEXA scan emits a small dose of radiation (10% of a standard chest x-ray). Please do not participate in this study if you are pregnant.

POSSIBLE BENEFITS OF THIS STUDY.

You will be informed of the results of this battery of tests free of charge.

CONFIDENTIALITY.

All records obtained during this study will be regarded as confidential. Results will be published or presented in such a fashion that participants remain unidentifiable.

In order to ensure that the participants' confidentiality and identification remains anonymous each participant of the study will be allocated a number. Each participant will then complete all forms, biokinetic assessments and bone density scans utilising his/her allocated number and not his/her name and force number. Only the principal investigator of the study, namely myself, Maj P.S. Wood will have a list of the participant with the allocated number.

The Participant:

I understand that if I do not want to participate in this study, I will still receive standard treatment and complete my Basic Training.

I may at any time withdraw from this study.

CONSENT TO PARTICIPATE IN THIS STUDY.

I have read or had read to me in a language that I understand the above information before signing this consent form. The content and meaning of this information have been explained to me. I have been given opportunity to ask questions and am satisfied that they have been answered satisfactorily. I hereby volunteer to take part in this study.

Participant

Force Number _____ Rank _____ Initials _____ Surname _____

Participant s signature

Date

Investigator

Force Number _____ Rank _____ Initials _____ Surname _____

Investigators's signature

Date

Witness

Force Number _____ Rank _____ Initials _____ Surname _____

Witness's signature

Date

RESTRICTED

Medical Confidential when Completed

Appendix B: Informed Consent

Appendix B

GENERAL ACTIVITY AND HEALTH INFORMATION QUESTIONNAIRE

Thank you for taking part in this study. In order to accurately evaluate your activity and health status, you are kindly request you to answer all the questions in the questionnaire honestly and in as much detail as possible.

PERSONAL DETAILS				
Project Number				
Date of Birth				
Age				
Gender				
Height				
Weight				
Weight history: Did you loose / gain weight recently? Why?				
MEDICAL HISTORY				
Please indicate whether you have ever suffered from:				
CONDITION	YES	SPECIFY		MEDICATION IF ANY
Diabetes Mellitus		Type 1	Type 2	
Cholesterol				
Anaemia				
Allergy / Intolerance				
High Blood Pressure				
Gout				
Muscle Cramps				
Fatigue		When do you feel fatigued?		

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B-1

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Appendix B: Informed Consent

Injuries			
Other			
Other Prescription Medication			
Over-the-counter Medication	Laxatives		
	Anti-inflammatory drugs		
	Diet tablets		
	Other		
Do you smoke?		How many per day?	
NUTRITION RELATED SYMPTOMS			
Please indicate whether you have any of the following nutrition related conditions.			
CONDITION		FREQUENCY	
Constipation			
Diarrhoea			
Vomiting			
Heartburn			
Nausea			
Dizziness			
Headache			
Dehydration			
No appetite			
Other			

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B-2

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Appendix B: Informed Consent

ACTIVITY					
Do you participate in any sport?			Kind of Sport?		
Level	Social	Competitive	Club Level	Provincial	National
CURRENT TRAINING DETAILS					
	Activity	Duration	Intensity		
	What?	How long?	How hard?		
	e.g. Running; Gym, Swimming	Hr/ min per week?	Low/med/high? Heart rate (if known)		
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					
Competition frequency	_____ / week / month		Duration: _____		

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Appendix C: Informed Consent

Appendix C

MENSTRUAL HISTORY QUESTIONNAIRE

Demographic Information

1. Participant No: _____
2. Force No: _____
3. Race (check one): African _____; Asian _____; Caucasian _____; Coloured _____; Other _____.
4. Primary sport you participate in: _____.
5. Year of participation in this sport: _____.
6. Primary source of nutrition information/education (check only one).

Magazines: _____; Textbooks _____; Peers _____; Dietician _____; Coach _____;

Physician _____; Other Medical Profession _____; Health Food Store _____; Other (describe) _____.

Musculoskeletal Health History

1. Is there a history of osteoporosis in your family: Yes: _____ No: _____
2. Have you ever been diagnosed with or treated for any of the following (check ? apply)
 - a. Low bone density: _____ Scoliosis: _____ Anorexia Nervosa _____
Bulimia nervosa _____
3. Have you ever suffered a stress fracture as a result of training or competition? Yes: _____ No: _____.
4. Have you ever suffered a soft tissue (e.g. muscle, tendon or ligament injury as a result of training of no competition? Yes _____; No _____.
5. If you answered Yes, how many soft tissues injuries have you had? _____

Menstrual History

1. Have you ever had a menstrual period? Yes: _____ No: _____
2. How old were you when you had your first menstrual period? _____
3. When was your last menstrual period? _____ / _____ (year)
4. How many menstrual periods have you had in the last 12 months? _____
5. How many menstrual periods have you had in the last 5 months? _____
6. Please describe the regularity of your cycle? (check one).
7. I am very regular (within 3 day) _____
8. I am somewhat irregular (14-10 day variation) _____
9. I am very irregular (variation greater than 10 days) _____

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C-1

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