

Chief Investigator**Tim Ackland****Professor**

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Email: tim.ackland@uwa.edu.au**Establishment of body composition norms using dual-energy
x-ray absorptiometry (DEXA)**

You are invited to participate in an on-going research study determining body composition norms from a DEXA scan. You are asked to take part in this project because the analysis of your specific body composition will provide a basis for future research using DEXA scans.

PURPOSE

The primary focus of this research will be to establish body composition norms in a wide range of adults. This information is currently lacking and is needed to compare individuals to population averages across a range of age and sex sub-groups. We especially need these data to assess the composition of those people with chronic medical conditions such as diabetes and coronary heart disease.

PROCEDURES

You will be invited to attend one session at the UWA Exercise Performance Centre for approximately 30 minutes. During this session we will ask you your age, and request you to fill out a basic health questionnaire, then measure your standing and inseam height, body weight, three girths (chest, waist, and hip), heart rate and blood pressure. We will then determine your body composition using Dual-Energy X-Ray Absorptiometry (DEXA). This procedure will require that you lie quietly on a bed for ~8 minutes while the machine scans your body to determine your lean (muscle) mass, fat mass, and bone density. This process will determine your free fat mass (muscle and bone mass combined) and your total fat mass. Prior to performing the DEXA test, you will be asked to declare if you are pregnant, or if there is any likelihood that you might be pregnant. If the answer to either question is YES, then you will not be scanned.

With your consent, we will also capture six photographs (3 x Front and 3 x Side). These photographs will be used to measure your body shape using a digital scanner. These photographic images will not be used for any other purpose, and will be stored in a secure location. Your consent of the six photographs will allow you to receive your DEXA results.

RISKS

The body composition scan (DEXA) involves the use of a low dose x-ray - about equal to one thousandth of the background radiation you would receive from living in Perth for one year. The total background radiation in Western Australia is about 2.0 mSv per year. The radiation dose from cosmic rays from flying in a jet from Perth to London is approximately 0.1 mSv.

INCONVENIENCES

We do not foresee any inconveniences by participating in this study. However, you may choose to withdraw from testing at any stage.

TIME REQUIREMENTS

You will be required to attend the lab on one occasion for approximately 30 minutes. You may choose to return for subsequent testing sessions, but on no more than three occasions per year. These subsequent sessions will be identical to your initial testing session.

DISCOMFORTS

We do not foresee any discomforts by participating in this study. However, you may choose to withdraw from testing at any stage.

BENEFITS

You will receive a free body composition analysis that will determine your lean, fat and bone tissue composition including the amount of fat free mass (muscle and bone) and the amount of fat mass. This information may help to support determination of your health status. In addition, you may use this information for sports performance purposes.

CONFIDENTIALITY

The confidentiality regarding your details will be strictly maintained at all times. Data will be kept and viewed only by authorised personnel. Only de-identified, group data will be published from this research.

PARTICIPANT RIGHTS

You may withdraw from the study at any time without prejudice. If you withdraw, we may wish to retain the data that we have recorded from you, but only if you agree, otherwise your records will be destroyed. If you have any questions concerning the research, please feel free to contact one of the researchers (contact details listed above).

If you have any queries about the tests, please contact Mr Marc Smith on 0413 913 061 or by email: marc.smith@uwa.edu.au

Yours sincerely,

Timothy R Ackland PhD



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Approval to conduct this research has been provided by the University of Western Australia, in accordance with its ethics review and approval procedures. Any person considering participation in this research project, or agreeing to participate, may raise any questions or issues with the researchers at any time.

In addition, any person not satisfied with the response of researchers may raise ethics issues or concerns, and may make any complaints about this research project by contacting the Human Ethics Office at the University of Western Australia on (08) 6488 3703 or by emailing to humanethics@uwa.edu.au

All research participants are entitled to retain a copy of any Participant Information Form and/or Participant Consent Form relating to this research project.
