

DXA INFORMED CONSENT FORM

The

is providing testing services to you.

The welfare of athletes is important to the

and we only seek to undertake activities that minimises any potential harm to participants and respects their rights and integrity.

Your participation in this activity is voluntary and you may withdraw your consent freely at any time before, or during the assessment. If you become uncomfortable with any aspect of the assessment, please advise our staff who will cease all activities.

The

will respect your rights to restrict your information and provide you with the opportunity to ask questions and be fully informed about all aspects of the assessment.

If you are happy to continue, please read and sign the form below.

What is a DXA assessment?

DXA is a medical imaging technology that is the preferred method for assessing bone health, and more recently we've learned of its value in measuring body composition. That is the amount of lean tissue, including muscle but also internal organs, as well as bone mass and fat mass that make up your body. You may have been referred for an assessment of body composition, bone health, or both.

Trained DXA Technicians, in conjunction with radiographers and/or trained medical doctors, can use bone mineral density (BMD) scans acquired on an athlete to provide information on their bone health. BMD scans usually require a scan of an athlete's spine and one femur (hip), however in some scenarios a dual femur scan (both hips) or a forearm scan may be useful.

Among athletic populations, DXA for the assessment of body composition is best used when an estimate of absolute body composition is required, either at the whole-body level, or a specific body region. This helps monitor changes following injury and the subsequent rehab period, or to assist in assessing energy status of the body. This information can also assist in categorising athletes in weight category sports, into the most appropriate weight class to support their health and performance.

Monitoring body composition may be undertaken as it can influence your health but also performance in some sports. The impact on performance varies between sports, and it's important to recognise it's just one factor to be considered. Overemphasizing the impact of body composition on performance is inappropriate, detracting attention from far more important priorities.

What to expect?

The scan itself will only take several minutes, depending on whether you are having an assessment of bone health, body composition, or both. The DXA Technician will take their time in positioning you correctly on the scanner, helping to ensure the capture of high-quality data. To do this, they will ensure you are lying centred on the DXA scanner and will use positioning aids to ensure you are positioned the same time at every visit. There are a couple of techniques they may use to ensure your hips and spine are straight – please let your DXA Technician know if you have any current injuries.

You will be asked for your consent prior to the scan, given the sensitivities that may be associated with measurements related to your body. Females will be asked to confirm they are not pregnant prior to scanning.

How to prepare?

In order to achieve an accurate and reliable DXA scan, you will be asked to consider your diet, hydration, and exercise in the 24 hours prior to your scan. You will also be asked to undertake the DXA scan in minimal clothing and to remove jewellery. Your referring Practitioner will provide you with all necessary information in advance of your assessment.

Is a DXA scan safe?

A DXA scan does expose you to a very small amount of radiation. Everyone is exposed to naturally occurring background radiation in their everyday life. The amount of background radiation present depends on many factors, like the type of soil and rock present, altitude, latitude and an individual's diet. While this can make exposure highly variable, on average, Australians are exposed to 1700 millisievert (μSv) each year (4.7 μSv daily) from natural sources. The effective dose to an adult from a DXA scan will vary slightly depending on the manufacturer, model and scan mode used, plus type of scan, but the following provide general guidance:

- Bone mineral density DXA scan - **4.4 μSv**
- Total body composition DXA scan - **1 μSv**

At this dose, no harmful effects of radiation have been demonstrated as any effect is too small to measure. Thus, the risk is believed to be minimal.

All testing is undertaken in accordance with the radiation safety plan that has been approved under the confines of state-based radiation health guidelines which provide specific recommendations on accepted referral sources and scan frequency. DXA imaging comes under the regulation of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). Your Technician has specialist training in the use of DXA. However, if this raises concerns for you, please discuss this with your referring Practitioner or the DXA Technician in advance of your scan.

A DXA scan should NOT be undertaken if...

Under certain circumstances, it may be inappropriate or unsafe to undergo a DXA assessment. Please check if any of the below relate to you and be sure to inform your referring Practitioner or Technician in advance of your DXA scan, preferably prior to scheduling a scan.

A clear rationale for testing has not been provided. Data gained from the scan should be used to assess or inform training and/or nutrition interventions, and associated performance and/or wellbeing outcomes.

You (or your guardian if you are <18 yrs) are unable to provide informed consent.

You are unable to lie still on your back for 5-10 minutes.

You are pregnant or suspect that you may be pregnant, or are breast feeding.

You have not been provided with, or are unable to comply with guidelines on appropriate preparation the day prior to, and morning of, a scheduled scan.

You have had exposure to nuclear medicine examinations or radiographic agents in the previous 48 48 hours (IV agents) to two weeks (oral agents).

A scan will result in an annual ionising radiation exposure that is in excess of annual limits (>1000 μSv). Your referring Practitioner will assess this with your feedback in advance of scheduling a scan.

You are unable to schedule individual feedback in confidence on the interpretation of DXA results with an appropriate member of your performance support team. Typically, this would be your referring Practitioner.

If there is a risk that undertaking a DXA scan may exacerbate body image concerns or your eating behaviours.

Your body mass exceeds the maximum capacity of the scanner. The weight capacity of most DXA models range between 160 and 204 kg.

When will I get the results?

Unless explicitly instructed otherwise by your referring Practitioner, the DXA Technician will not provide you with your results. Instead, follow up with your referring Practitioner for detailed feedback on your scan results and what it means for you. Results will be stored securely on the Athlete Management System (AMS). It may be appropriate to share some, or all of the results from your test with relevant members of your Performance Support Team, including your coach. However, your consent will be sought separately from your referring Practitioner before any data is shared with others. Unless explicitly specified otherwise, your data will only be made available to your referring Practitioner.

Retention of records

The

is required to apply the Archives Act 1983 (Cth) to maintain the security and retention of its records over time. This legally

requires the

to keep athlete health records (including DXA scans) and to manage them appropriately for periods up to 100 years.

Your rights

You have a right to physical privacy and respect. Please advise the DXA Technician conducting the testing of any considerations concerning bodily integrity, gender or the presence of other persons in the testing environment.

If you have questions or concerns, please feel free to reach out to your referring Practitioner to seek clarification. Remember, no testing is compulsory. If you are uncomfortable or encounter a negative experience before, during, or after your assessment, please raise this with someone you feel comfortable with. This may be the DXA Technician, your referring Practitioner, or another person in your Performance Support team. There are also independent avenues for you to seek support such as [AIS Be Heard](#) and the [AIS Mental Health Referral Network](#).

If you are not satisfied that your rights have been upheld, you may make a confidential complaint to the Australian Sports Commission Complaints Team (complaints@ausport.gov.au) or through the complaints page of the ASC website.

[Watch our brief video](#)

Statement of Consent

1. I acknowledge and agree that:
 - b. I have been provided with information relating to the use of DXA as a tool for assessing bone health and/ or body composition, which clearly describes what is involved, the potential benefits but also associated risks associated with a DXA scan. I have read and understood the contents of that document ± associated video;
 - c. Relevant staff have explained to me in detail the nature, safety procedures, risks and discomforts associated with a DXA scan, and I understood their explanation; and
 - d. I have been given an opportunity to ask questions, and have received a satisfactory response, about the nature, safety procedures and associated risks and discomforts of a scan, including pre- and post-scan procedures.
2. I agree that I will:
 - a. present myself for the DXA scan in an appropriate condition, having abided by pre-test requirements, including diet and physical activity guidance, plus appropriate clothing clearly described to me for me by relevant staff; and
 - b. advise relevant staff conducting the scan of any reasons why I should NOT undertake a DXA scan [see checkboxes under '**A DXA scan should NOT be undertaken if...**']
3. I understand that my participation in the DXA scan is voluntary and that I may withdraw my consent freely and without prejudice (e.g. without limiting future assessment opportunities) at any time before or during the scan.
4. I understand that the information obtained during the DXA scan will be treated confidentially, respecting my rights of privacy. If it is deemed appropriate that the DXA scan results be shared with specific members of my broader performance health support team, my specific and separate consent must be sought before the data can be shared.
5. The may use broad themes, learnings and insights from DXA scans in research, education and publication to enhance our programs and practices and to improve athlete health and performance both internally and within Australian sport. Any insights created or released from DXA scans will not contain the personal information of any individual participants.

Signature of Athlete:	Date:
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Parent/Guardian name [required if Athlete aged under 18]:
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Parent/Guardian signature:	Date:
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I, the undersigned explained to the athlete the nature of the DXA scan and to my best knowledge and belief they understood the safety procedures, risks and discomforts associated with the procedure.

Technician name:

Technician signature:	Date:
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Referring Practitioner or Technician to complete

Use the table below to estimate radiation exposure from imaging sources in the last 12 months. **Total exposure should NOT exceed 1000 μ Sv.** Furthermore, the number of DXA scans permitted in the radiation safety plan of the group in which scans are undertaken should not be exceeded, irrespective of the total annual exposure. Typically, this is 3-4 scans per annum.

RADIATION SOURCE	RADIATION EXPOSURE (μ Sv)	NUMBER (12 MTHS)	TOTAL EXPOSURE
DXA [total body]	1		
DXA [bone density]	4.4		
Dental x-ray	10		
Chest x-ray	20		
CT Scan	8000		
Total Exposure			

*DXA radiation exposure is based on iDXA standard scan mode. Bone density radiation exposure is based on spine + [1x] femur. Please see table below for radiation exposure from specific GE machines and different scan modes.

Indicative radiation dose to adult patients from common medical imaging procedures

REGION	PRODIGY (USV)			iDXA (USV)		
	Thin	Standard	Thick	Thin	Standard	Thick
AP Spine	0.1	0.3	0.6	0.3	1.0	2.3
Femur	0.2	0.9	1.9	0.9	3.4	7.6
Dual Femur	0.4	1.7	3.8	1.7	6.7	15.1
Forearm		0.002			0.01	
Total Body	0.1	0.1	0.3	1.0	1.0	2.0
BMD [Spine + Dual Femur]	0.5	1.8	4.1	2.7	7.7	17.1