



# A CLOSER LOOK

WANT A BETTER IDEA OF YOUR BODY COMPOSITION?  
TRY A DEXA SCAN

BY ALISON TURNER

**W**hen you're looking to strip body fat and pack on lean muscle, there's only so much the bathroom scales can tell you. Sure, you might be cutting fat, but are you losing muscle too? The best way to accurately track your results and your body composition is with a DEXA scan.

A DEXA – dual-energy x-ray absorptiometry – scan is a very low energy X-ray that specifically measures muscle, bone and fat – right down to one-tenth of a gram.

“It’s not the sort of X-ray that produces a diagnostic image. It’s a measurement tool,” says Dr Jarrod Meerkin, an exercise physiologist from MeasureUp, who offer scans around the country. “The DEXA works by passing two different energies of X-ray through your body – one looks at hard tissue or bone and the other looks at soft tissue. It determines the different types of tissue by its density and gives that a unit in mass. First and foremost it’s a tool to diagnose osteoporosis; its secondary use is as a total body scan.”

## TRACK YOUR PROGRESS

Whether you’re just starting out on your muscle-building journey, are preparing for a competition or just want to tweak your results, a regular DEXA scan can show you where you’re getting it wrong – and where you’re getting it right.

“DEXA is best used as a means by which you make sure that your dietary program and exercise regime are doing what they’re meant to be doing – that you’re reaching your goals,” Dr Meerkin says. “For a regular, fit guy, ideally you would come in once a year – that would mean that you’ve reached your goal, you’re satisfied with your health and fitness and the way you look, and you’re essentially just making sure you’re on track year after year and you’re comfortable where you are.”

For a regular fit bloke, Dr Meerkin estimates a body fat percentage of around eight to 10 per cent. But for someone who competes or wants to try competing, you need to get that figure a little lower.

“We recently had Calum von Moger (Mr Universe) come in for

a scan,” Dr Meerkin says. “He’s in his off season, but keeps in constant good shape. He was around the seven per cent range. Those guys who are coming in for their diet phase or just prior to competition are usually hitting around six to seven per cent.” The lowest body fat recording MeasureUp have seen had in a pro body builder is 5.6 per cent.

## CRUNCHING THE NUMBERS

Your scan results will show you your body fat and lean muscle mass percentages and where they’re distributed throughout your body. The best part is that you can look at regional areas. “Particularly for men, you want to make sure the fat loss is coming from those areas where you’re at greatest risk of diabetes and heart disease, which is the trunk,” Dr Meerkin says. A DEXA can also provide an estimation of visceral fat – the hidden, dangerous fat around your organs.

The recommended body fat percentage for a regular bloke is between about 10 and 20 per cent.

“The advisable range is eight to 20 per cent for men under 40; 11 to 20 for men over 40,” Dr Meerkin says.

“Unfortunately, there has been a shift up the far end since I started practising in 2006 – those numbers have definitely pushed north. People are getting fatter.”

According to the Australian Institute of Health and Welfare, almost two out of three Aussie adults are overweight or obese. That’s 10 per cent more than in 1995. Pretty scary stuff, when you consider that obesity is the second highest contributor to burden of disease, after dietary risks. (Smoking

is the third highest.) But your body does need some fat. It’s what’s kept us humans alive for millennia.

“Fat is a very important organ,” Dr Meerkin says. “It’s an evolutionary organ, which your body will utilise in times of starvation. In those times it will do almost anything to prevent fat loss, hence why you lose five kilos of muscle tissue while recovering from an operation in hospital.”

### HIT YOUR GOALS

If you’re competing, you’re likely to be on a constant round of building and cutting cycles. A DEXA can help you ensure that you’re hitting your goals.

“For someone who’s competing, a scan around once every three months is ideal,” says Dr Meerkin. Not just for body fat percentages, but to make sure there are no muscle imbalances. “The scan can also help if you’re seeking greater symmetry. That’s quite important, as it’s one of the judging criteria.”

If you’re embarking on a new program, a scan before and after can give you a fantastic idea of whether the program has worked.

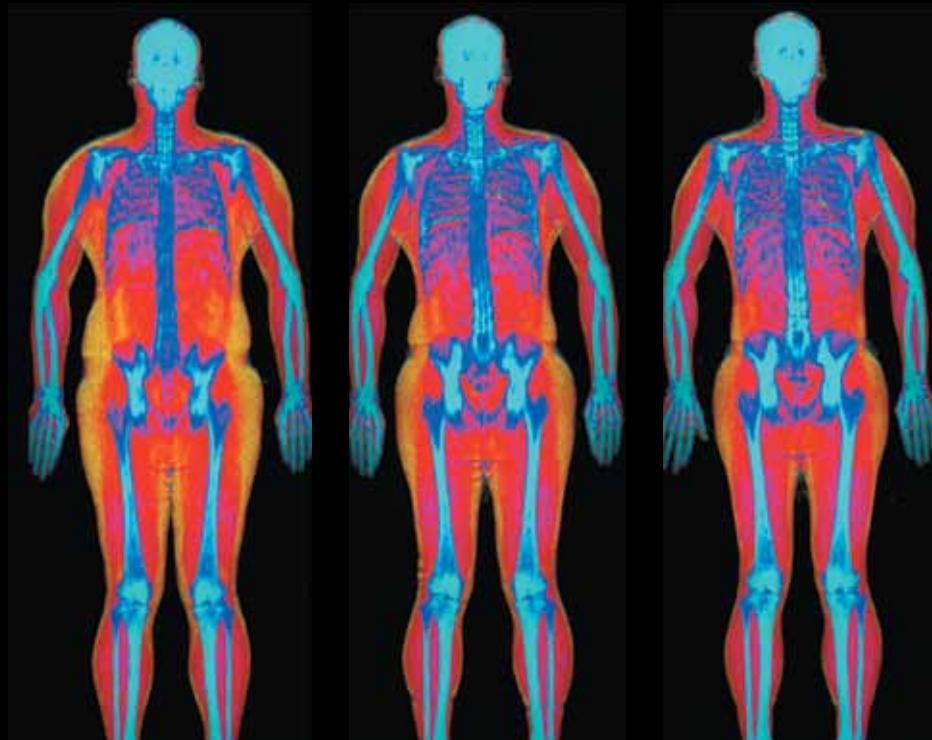
“Some hypertrophy programs might be less than others, 10, 12, 14 weeks. It depends. But a DEXA is a very useful tool for tracking



The future is here: now you can get an accurate snapshot of your body composition, no giant camera required

### HOW DO I GET A DEXA SCAN?

MeasureUp offer scans around Australia through their mobile scanning fleet, and they have a head office in Sydney’s Pitt Street for Sydneysiders looking for a quick lunchtime DEXA date. An initial scan costs \$90 – follow-up scans cost less. Head to [measureup.com.au](http://measureup.com.au) to find out more, or follow them on Facebook ([facebook.com/measureup](https://facebook.com/measureup)) to find out where they’ll be scanning next.



Scan results: same person, from before, during and after a weight-loss program (orange is fat)

progress. If your diet's spot on and the program doesn't work, you don't want to keep repeating that program for the sake of it. You want to try something different."

Sometimes it's not the program that's the problem, but your diet. Tony Temple, 36, decided to embark upon a strict diet and exercise regimen to lose body fat and gain muscle.

"As I was getting more serious about my training, the unreliable bathroom scales just didn't cut it anymore," he says. "I wanted to know exactly how much fat and muscle I was carrying. I wanted an exact starting point to set myself a measurable goal.

At his first scan, Tony was at 18.3 per cent body fat. "I was surprised," he says. "I didn't feel I was that high."

He started a three-month program that saw him doing bootcamp in the morning and gym at lunchtime on Mondays, Wednesdays and Fridays. His diet was a very carb restricted and high in protein, and he was eating every two to three hours.

After three months, Tony's DEXA

revealed that he was down to 11 per cent body fat, but he had failed to increase his lean muscle mass.

"I was delighted with my body fat loss," he says, "but I was really disappointed with my lack of muscle growth. I think the lack of carbs really let my muscle growth down."

Tony's second DEXA scan showed him how difficult it can be to lose fat and gain muscle at the same time.

"I now have scans every three months to give me an idea of where I'm at and what I need to focus more on," he says.

### A SCAN FOR ALL AGES

From an individual's perspective a DEXA provides really valuable data on how you're progressing over time with your program, but it's not just for young fit blokes. "One of the useful things about DEXA as you age, is this whole thing of sarcopenia or loss of muscle tissue," Dr Meerkin says. "The DEXA is a useful tool for older men, to monitor their muscle mass so they know they're – at the very least – maintaining muscle mass."

It's not just muscle mass that's crucial for older men. Bone density – while typically thought of as an old lady's problem – is also of concern for men. Dr Meerkin reveals that – while one in two women will be affected by osteoporosis – one in three men are also at risk. "There is definitely a relationship between bone strength and muscle mass," he says. "For those males who have less than 50kg of lean tissue, we're finding quite a high incidence of low bone density and osteoporosis. In fact, Osteoporosis Australia is about to start focusing on men."

So whether you're concerned about your health, want to compete or just shake a few kilos, a DEXA scan can give you an accurate idea of where you're at, and where you want to be.

"I think a DEXA is important for anyone who wants to strip fat and gain muscle," Tony says. "It gives an accurate starting point, but it's also a great way to track your progress and enables you to alter your diet and training accordingly." **M&F**