



# A MEASURE OF SUCCESS

You're training like a beast and eating like a caveman, but are you getting results? A DEXA scan can tell you. By Alison Turner

**■** What is it? A DEXA scan – a Dual-Energy X-ray Absorptiometry scan – is a very low energy X-ray that specifically measures muscle, bone and fat down to one-tenth of a gram.

## HOW DOES A DEXA SCAN WORK?

A DEXA scan gives you a highly accurate look at your body composition. "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 Measure Up, who offers 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."

## WHAT ARE THE BENEFITS OF A DEXA?

"DEXA is best utilised 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. "Ideally you would come in once a year – that would mean that you have reached your goal, you're satisfied with your health and fitness and the way you look, and you are essentially just making sure that you're on track year after year and you're comfortable where you are. From an individual's perspective it 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 really useful things about DEXA as you age, in my opinion, 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."

## WHAT WILL MY RESULTS SHOW ME?

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 males, you want to make sure the fat loss is coming from those areas where you're at greatest risk of type 2 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.

## WHAT'S THE DIFFERENCE BETWEEN FAT CELLS AND MUSCLE CELLS?

"Fat and muscle are two completely separate tissues, and those tissues have a different density," Dr Meerkin says. "Fat is a very important organ – 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."

## WHAT BODY FAT PERCENTAGE SHOULD I BE AIMING FOR?

The average body fat percentage for a regular bloke is between about 10% and 20%. "The advisable range is eight to 20% 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."

## ISN'T BONE DENSITY ONLY AN OLD LADY'S HEALTH ISSUE?

Surprisingly no. 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 about 50kg of lean tissue, we are finding quite a high incidence of low bone density and osteoporosis. In fact, Osteoporosis Australia is about to start focusing on men."

## HOW DO I GET A DEXA SCAN?

Measure Up offer scans around Australia through their mobile scanning fleet, and they have a head office in Sydney's Pitt Street. An initial scan costs \$85 – 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://www.facebook.com/MeasureUp)) to find out where they'll be scanning next. "DEXA is something that helps you measure your success," Dr Meerkin says. "You've got this amazing tool available, which I think is incredibly under-utilised."