

Patient-led approach to fitness for amputees

Regular physical exercise is an essential part of the rehabilitation process for patients recovering from an amputation following an illness or accident, but when routine hospital physiotherapy is concluded many people do not feel ready to step straight into a gym on their own.

A patient-led fitness group in the north west now offers an ideal solution. The Manchester Amputee Fitness Initiative – Manfit – gives members the opportunity to workout in a state-of-the-art fitness suite with the added support and encouragement from others in the group.

It is thought to be the only scheme of its kind in the UK formed exclusively for amputees and the weekly gym sessions at Manchester College of Art and Technology are proving to be very popular with the members who appreciate being able to train together in a supportive, stress-free environment.

Manfit's founder and evaluator, Dr Margaret Tyson, a researcher on obesity, is a keen amputee fitness fan and regular gym user. She has a right proximal focal femoral deficiency. After undergoing one of the first Van Ness Rotationplasties, a prosthesis was fitted which now has an ischeal containment socket. She has no right hip joint and a Trendelenburg gait but she has been doing aerobic and body conditioning classes five times a week for more than 30 years. She also maintains a daily exercise and stretching regime which she says has enabled

her to be optimally mobile with her type of prosthesis.

Dr Tyson, who lives in Charlesworth near Glossop, said: "I go to a gym at a local leisure centre. I always have done. But for many people who have had an amputation it is quite traumatic and they may not be ready to, or wanting to go straight into a local leisure centre with other people and start working out there.

"They need to know they will find suitable equipment that they can manage, with adaptations in some instances, so they can operate it with one hand if necessary and they need to feel they are among friends."

Physical training can improve strength, flexibility and balance, as well as being good for general health and well-being through the release of endorphins and the opportunity to interact with other people. For amputees who need to rebuild their stamina and often also their self confidence, a regular exercise programme is even more important.

Dr Tyson explained that Manfit got underway after she was asked by Manchester Prosthetic User Group if she could set up a scheme independently of the NHS when a regular physiotherapy-led fitness initiative at the Disablement Services Centre, at Withington Hospital was forced to close because the staff were needed at another hospital.

For Dr Tyson, who has a PhD in biology, the success of Manfit is also the realisation of a personal ambition she'd wanted to fulfil for a long time.

She said: "I actually first tried to set up a group for amputees about 15 years ago but I didn't really know how to go about it at that time. I had quite a few enquiries but there was no prosthetic user group then. Now there's a lot more support so when the manager of the centre approached me I was keen to go for it."

When the physiotherapy group at Withington closed, 11 people had continued meeting in a pub and they wanted to continue exercising. To raise awareness a flyer was sent out in the prosthetic user group newsletter, Goal, and posters were distributed to the DSC. As well as the original 11 this attracted interest from a further 27 amputees.

Dr Tyson also consulted with Darren Birch at the English Federation for Disability Sport and Natalie Teniola, Manchester Cultural Learning Officer, Spaces for Sports and the Arts to design the scheme. The plan was then presented to the Manchester Prosthetic User Group for discussion.

Dr Tyson said: "The newsletter goes out to about 3,000 people in the Greater Manchester area so this is a good catchment area. There are about 200 new amputees a year, the majority are older people aged over 60, but it is about raising awareness about Manfit and giving people the confidence to come along and give it a try. Quite a few people have enquired since we started but only a percentage turn up. Though others have also contacted me from our website which is good and we are hoping to get more." ➔

By SHIRLEY
CHISNALL



➔ On talking to some of those who got in touch Dr Tyson said: "I felt one or two were too poorly to be able to benefit and that they would be better in a hospital setting but we had enough interest to set up an introductory meeting and invite physiotherapists, clinicians, the Manchester Prosthetic User Group, the DSC staff and all those who'd contacted me and expressed an interest. More than 20 people came to the inaugural meeting in October 2006 and I distributed questionnaires to ask them what they'd like from the group."

Manfit was initiated independly of the NHS but approved by staff at the DSC and the launch was reported in the Associate Parliamentary Limb Loss Group newsletter. It was welcomed by Withington MP John Leech who said: "This clearly demonstrates how 'real' patient involvement in the long term fulfilment of patient needs can facilitate a total solution to the long term mobility of patients."

A quick decision to apply for support from the Manchester Impact Fund, which supports small groups in the City of Manchester with one off awards to a maximum of £3,000, meant that finances were soon available for the pilot project and a venue then had to be finalised. A mainstream gym and other facilities at a school were considered but Dr Tyson said: "Managing to set up an arrangement with MANCAT to use their gym has been excellent because Manfit benefits from the excellent fitness suite, trained staff, refreshments, publicity and a dining area."

She said: "Manfit represents an important step

forward in creating opportunities for individuals to improve and possibly maximise their mobility. Initially we when we first set out we did talk about having 'buddies' so while they were all getting some exercise they could help each other along which is what they do.

"Atia Hokoko in her twenties is our youngest member. She is unusual in that she's lost a finger but as an amputee she received the prosthetic user group newsletter which is distributed to all amputees in the area and she rang me up after reading about Manfit and asked if she could come along. She's now been a regular since Manfit started. Our newest member Naim is a below knee amputee and he's interested in losing weight.

"We have 20 members on the books which includes people who have lost limbs due to diabetes and smoking. They don't all manage to attend each week because sometimes they may be unwell, or they might have a hospital appointment.

"I believe we're the only patient led group in the country because if there were others I think they would have got in touch with me by now through our website and they haven't. I know there are some smaller amputee swimming groups with a few members, though some of these groups haven't been able to get off the ground properly. But I think we're the only amputee exercise group in a gym anyway."

After an hour in the fitness suite the group can then enjoy a lunch together in the college which is another opportunity to socialise as well as ➔

Dr Margaret Tyson, the founder of the Manchester Amputee Fitness Initiative, Manfit, trains regularly to maintain peak performance with her type of prosthesis

→ integrating within the college campus.

There is quite a lot of work involved for Dr Tyson in her role with Manfit including keeping the website up to date, responding to e-mails and taking calls from people interested in joining the group, or those who want like to find out a bit more about the sessions. She also exercises with the group each week.

Dr Tyson has an electrical contracting business and also runs her own DVD production business. Preventative Healthcare Data Services was established in 2002 producing health related programmes for GPs and leisure centres.

She is studying for a masters degree in population health and is now working on a dissertation exploring the relationship between obesity and certain cancers worldwide with a supervisor who is based at Christie Hospital in Manchester, one of the largest cancer treatment centres in Europe.

"We're looking at different cancers and doing a meta analysis on that, so, yes, all my time is taken up," said Dr Tyson.

Since the group was launched Dr Tyson has also had to take the lead in applying for funding to ensure a long term future for the group.

She said: "When we had the Impact funding MANCAT would invoice us for the session and money was also available to buy some exercise equipment, for advertising and food and to help with transport costs for some of the members who needed to use taxis.

"We also bought the logo t-shirts for cohesion to give the group an identity initially. When this funding ran out we had support from the city council. This covered only the costs of the MANCAT side of it for the use of the facility but we have just heard we've been successful in our application to Awards for All which is excellent news and will provide us with funding for a year."

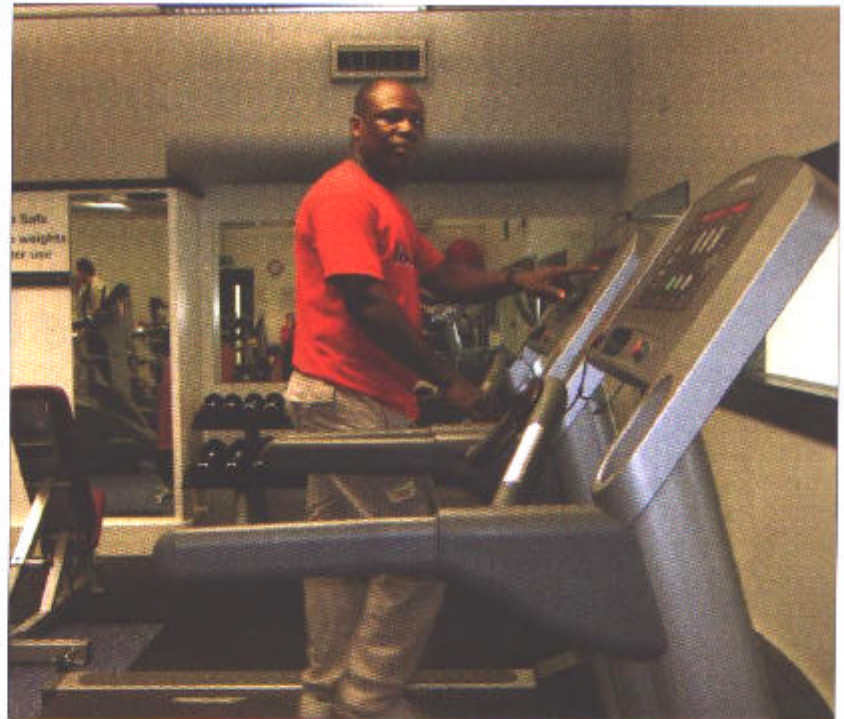
Awards for All England, a Lottery grants scheme for local communities, is supported by the Arts Council England, the Big Lottery Fund, the Heritage Lottery Fund and Sport England.

It provides grants of between £300 and £10,000 for people to take part in art, sport, heritage and community activities, and projects that promote education, the environment and health in the local community.

Manfit is not a registered charity and is not involved in generating its own revenue and Dr Tyson is also hoping Manfit will be approved under the exercise referral scheme.

She said: "It would mean GPs who felt a patient would benefit from regular exercise would be able to refer amputees to Manfit. If we can show it's worthwhile over a 12 month period the council will put us onto that scheme and then we'll be automatically funded through that which will be brilliant. Before then I've got to evaluate it and make sure the numbers stay up and we've got to show it's worthwhile over a year.

"So it's a case of keep going with the website and keep going with everything as it is at the moment. Some members of the group have



Manfit member Fred Gyamfi is able to work out at his own pace during the group session

“We understand that an essential part of coming here for the Manfit members is being able to support and encourage each other”

expressed an interest in wanting to swim and I've also applied for separate funding for this so our plans for the future could include possibly setting up an exclusive swimming group for amputees and even a walking group. I am trying to work towards others sports and other ways of integration because that was the plan and the idea is to help people become integrated into the general community."

Manfit's ultimate aim is to give the participants confidence to get fit and keep fit and ultimately to integrate into sports centres thus removing some of the barriers. When the members become more confident they could progress to a general gym sessions, however, as some may wish to stay in an exclusive group an intermediate group may be formed at this stage. This would enable new people to join the first group.

The fitness suite at MANCAT's Openshaw Campus, is ideal. Most of the equipment is adaptable and the sessions are carefully tailored to meet the individual needs of the post-physiotherapy amputees in the group who are aged up to 70.

Lower limb amputees can improve their walking distance, speed and balance and upper limb amputees can similarly boost their core fitness levels and limb operation by working out in a gym and Manfit is geared up to welcome any amputee/prosthesis user, over 18, who has been discharged from physiotherapy in the Manchester area.

Neil McMillan, the facilities and operations manger at MANCAT and the manager of the fitness suite said: "No-one in this group is under any pressure. They each have a fitness programme prepared for them by one of our →

→ fitness instructors which is tailored to their individual needs and they can work through this in their own time and pace as they feel ready.

“We understand that an essential part of coming here for the Manfit members is being able to support and encourage each other. They are all very friendly and they’re able to socialise while they exercise and chat to each other in a relaxed and informal setting.”

Before they start to use the gym they each have a demonstration of the exercise machines and how they can be converted for any disability, as well as a general fitness assessment which involves blood pressure, BMI and a flexibility test.

Neil said: “Our fitness testing lab is to university standards but the Manfit members aren’t put on a strict regime it is all very relaxed and as well as exercising it is very much a time for them to socialise with those who may feel vulnerable and then gradually build up their general fitness levels.”

Neil explained certain pieces of equipment can benefit people who are rehabilitating from low limb disorders. The ergometer exercises just the upper body, chest, arms and shoulders and offers support for the lower back.

The lat pulldown can be adapted for use with one hand. Resistance bands can be used in a variety of ways to assist people recovering from surgery. The bands can be secured to various pieces of equipment and used for workouts. There are dumb-bells for an arm or leg and weight training which can be built up slowly.

There is also a stability ball which sits within its own chair to make it easier to use and a bit more stable until people are confident enough to move on and use the ball on its own.

Neil said: “This build up what is know as core stability it is very important for this group because it can be a problem for people if they have been sedentary for a long time while recovering from an accident or illness.”

The size of the fitness suite at MANCAT is perfect for the Manfit group. Not too large to be intimidating in any way but very well equipped and with a very cheerful atmosphere. Among the seven sports staff at MANCAT there two dedicated trainers for each Manfit session who are expert in helping people with disabilities and understand their needs.

At certain times the equipment in the suite is used by the college and also for school taster days for pupils with special needs. These visits are arranged through the Skills for Living at the college.

Manfit members include prosthesis wearers and wheelchair users who expressed their enjoyment and determination to carry on exercising.

Steve Woodward, 57, has been coming since the group started. He enjoys the health benefits of keeping active and says it is particularly good to be able to take part with others who have similar disabilities. Steve has a prosthetic leg after developing an ulcer on his foot due to diabetes



Neil McMillan, the manager of fitness suite at MANCAT, says the adaptable and well equipped gym is ideal for the amputees

four years ago. At first his foot was amputated but then he also lost the lower part of his right leg. He uses various apparatus including the treadmill and stamina building equipment to improve his overall fitness levels.

He said: “When I am using the treadmill I have a sense of normality and the support of the group is very important.”

Fellow Manfit member Yvonne Perkins, who is a high level leg amputee, said: “There’s no embarrassment at all. Everyone here is really friendly and welcoming and I would recommend it to others to give it a go. I had never been to a gym before but there’s no pressure at all and we all get on really well and help each other.”

Brian Johnson, 52, who lost a leg due to cancer, and heard about the sessions via word of mouth, said: “There’s a real sense of achievement and coming here it is very motivating. It helps to raise self esteem which can take a severe knock following an amputation. I think it’s an opportunity to inspire and to be inspired. Everyone’s at different levels but for anyone rehabilitating from illness or an accident physical activity is very important and combined with the social aspect of being able to come along and make new friends it is an uplifting opportunity.”

Fred Gyamfi from Manchester is a double below knee amputee due to developing septicaemia last year after contracting meningitis. He like many in the group says the benefits extend beyond an opportunity to improve physical fitness though he enjoys using the treadmill. He said: “For me coming to the group has helped me overcome the mental side and we all help each other.”



Steve Woodward welcomes the opportunity to exercise in a supportive group