

A HEALTH KICK FOR WOMEN

The world's best female footballers will soon be showing off their skills at the FIFA Women's World Cup 2011™, but it is not just elite players who are benefiting from rising interest in the sport. A series of recent medical studies has shown that football offers one of the best ways for women to get healthy – and stay healthy.



The long-term medical benefits for women playing football were not always apparent. Just a few decades ago, when many football associations were still banning clubs from sharing their facilities with female players, the perceived “unsuitability” of the game for the “fairer sex” was often put forward as the reason for keeping football as a male preserve.

Fast forward to the 21st century and, thankfully, such arguments are rarely heard. Not only have women footballers overcome those former prejudices, but they can also point to medical evidence which proves the sport they love is also extremely good for them.

“Being physically active has been recognised as the main determining factor in the prevention of today’s major worldwide health threats – the so-called non-communicable or chronic diseases, resulting from modern life, such as heart disease, diabetes, strokes and high blood pressure,” explains Prof. Jiri Dvorak, FIFA Chief Medical Officer and chairman of the FIFA Medical Assessment and Research Centre (F-MARC).

In 2009, a milestone study – published in the British Journal of Sports Medicine – identified sedentary lifestyles as the main cause of chronic disease. In the same year, a report by the World Health Organization (WHO), entitled “Women and Health”, concluded that physical inactivity was



Women's football is gaining a healthy following all over the world.

a major problem in women and that “establishing healthy habits at younger ages can help women to live active and healthy lives until well into old age.”

The report also pointed out that because women tend to live longer than men, they represent a growing proportion of elderly people and chronic disease sufferers. Tackling the main causes of chronic disease in women should therefore be an important goal for society in general, the WHO argued, as well as an important aim for women individually.

A matter of motivation

The obvious question for the health experts is how best to establish such healthy habits. With a lack of long-term adherence to exercise programmes having proven a stumbling block to many campaigns, F-MARC wondered whether football in particular might offer women more motivation compared to less social activities such as jogging or working out at a gym. To test this hypothesis, a team of researchers from seven countries set

up a project involving women who were asked to play small-sided games of football two to three times a week. The changes in their health were then compared with one group of women who took part in running training and another group who remained inactive.

After just three months, the women playing recreational football showed marked improvements in their physical fitness, muscle strength, bone mass and sugar metabolism – all strong weapons in the fight against chronic disease – with many of these improvements outperforming those witnessed in the jogging group.

In order to target the women who might most benefit from healthier lifestyles, the studies deliberately looked at untrained middle-aged women without any previous experience of playing football. As well as the improvements mentioned above, the researchers also observed a significant increase in heart function, performance and exercise capacity, with other parameters such as maximal oxygen consumption also

improving. The footballers also benefited from a decrease in known risk factors for cardiovascular disease, including a lowering of their blood pressure readings and a reduction in the stiffness of blood vessel walls. The women's blood lipid profiles – a further determinant of heart disease – were also positively influenced, and notably more so than with the runners.

Weight issues

While many women wish to get fit simply for the sake of their general health, there are many others who exercise specifically to lose weight, or at least maintain their existing weight. In this particular regard, the studies found that playing football led to higher fat loss than either interval or strength training – two forms of exercise which are currently recommended as the most efficient methods to burn body fat. When devising such training programmes, personal trainers often stress the need to avoid repetition and monotony, which may explain football's suitability for controlling weight, since the F-MARC researchers →

discovered a permanently changing flow of short high-intensity actions (up to 100 sprints in a game) and low-intensity recovery periods during the recreational football matches.

An important related aspect is that football does not seem to promote any particular fixation on slimness or distort the image that girls or women have of their bodies. The phenomenon of the “Female Athlete Triad” – a combination of eating disorders, menstrual cycle disturbances and osteoporosis (a reduction in the strength of bones found more commonly in women than in men) caused by excessive exercising, dieting or both – has been well documented in sports such as gymnastics, figure skating, swimming and long-distance running, but is seen much less often in football.

Specifically when it comes to osteoporosis, it is thought that proper exercise may in fact stimulate the formation of new bone mass, while also increasing muscle strength and improving balance to help prevent the falls that can cause fractures, particularly in later life. Again, the recreational footballers in the F-MARC study displayed a more pronounced increase in leg bone density and leg and hip muscles than the women who took part in running training, most probably due to the higher mechanical impact on the bones of the footballers due to repeated jumping, accelerations and stops.

Mind games

Beyond merely measuring the physical fitness levels of the women taking part in the F-MARC studies, however, the researchers were keen to also examine the psychological, social and motivational effects of playing football. This is of particular interest when it comes to finding a sport that is not just good for a woman’s health but also likely to maintain her interest.

The findings were again positive, with women in both the football and running groups experiencing overall high levels of “flow” – a term used in psychology to describe a feeling of total immersion, involvement and success within a particular activity. Football then seemed



to outperform running when it came to social bonding among the participants, measured by the researchers’ monitoring of how the women interacted with each other. The runners were seen to be more focused on themselves as individuals while the football players told more “we” stories, suggesting a greater sense of belonging to a team.

Perhaps most significant was the long-term effect that playing football had on the women in the study. When the research began, most of the women, both football players and runners, believed that running would be the easier exercise to stick to afterwards. In fact, though, many of the football players were still playing one year on from the study and some had even joined a football club, while many of the women in the running group had stopped training.

While nearly all sports bring health benefits, and the choice of which sport

to play remains a clearly individual one, the study’s findings certainly reinforce the feeling that football is a more than worthwhile option for women to explore – particularly if they have yet to take up sport, or have struggled to maintain interest in another sporting discipline.

“In the end, it is the psychological and social factors we examined that fuel our enthusiasm for a sport or exercise programme, and not the biological ones,” concludes Prof. Dvorak.

With women’s football now considered one of the fastest-growing sports on the planet, it is clear that millions of female footballers are already enjoying the game’s health benefits, whether they are fully aware of them or not. Still, the scientific evidence offers a useful and emphatic response to anyone still labouring under the old misconception that women’s bodies were not meant for football. ■