

Volunteers needed to take part in ageing study

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Researchers at the University of Birmingham's School of Medicine are looking for 120 volunteers to take part in a study examining the causes of age-related muscle loss - a contributory factor in falls and fractures.

The study aims to increase understanding of the ageing process and to help in developing possible treatments that will reverse or halt age-related muscle loss.

Previous studies show striking similarities between patients who have too much of the steroid hormone cortisol in their body and the changes in the body that occur with age, namely increased fat tissue, decreased muscle, and thinning of the bones.

The changes which occur within the muscle with increasing age are known as 'sarcopaenia' and lead to weakness, poor mobility and a number of problems, including increased falls in elderly people.

As we age, cortisol levels in our blood stay the same but within muscle, fat and bone tissue there is an enzyme that continues to produce the steroid, therefore increasing the level of cortisol in cells without increasing levels in the blood.

Dr Zaki Hassan-Smith, Clinical Research Fellow and Honorary Specialist Registrar, said: 'We are interested in the effects of this increase in cortisol levels specifically in fat, muscle and bone. This increase in activity may be caused by the reduction in growth hormone, or the increase in chronic inflammation, that occur as we get older.

'At present there is no effective treatment but drugs are being developed that can help to reduce cortisol levels, which could lead to a decrease in the obesity, osteoporosis and muscle wasting which occurs with age. Hopefully, this will result in an improvement in the health and perhaps the life expectancy of the elderly population.'

Volunteers will be asked to complete a series of muscle function tests under the supervision of trained NHS staff. The sessions will last between six and eight hours and will take place at the Wellcome Trust Clinical Research Facility.

Participant must be aged between 20 and 80 and must not have a medical history of diabetes mellitus, hypertension, ischaemic heart disease, cerebrovascular disease, significant respiratory disease requiring medication, epilepsy.

Anyone wanting to take part or to find out more should contact Dr. Zaki Hassan-Smith on 0121 697 8457 email: z.hassansmith@bham.ac.uk, or Research Nurse Pamela Jones on 0121 697 8457 at the Queen Elizabeth Hospital.

Ends

Further media information:

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