

TechLINK

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Increase The Life Of Kingsley SACH Feet When Used With Modular Prosthetic Components

Kingsley manufacturing company recommend placing a 3 - 5 mm sheet of rigid plastic such as polypropylene between the SACH foot adaptor and the foot when using modular prosthetic components with Kingsley SACH feet. The plastic should be cut to match the profile of the top surface of the foot. This allows a more even load distribution between the foot and the rest of the prosthesis and will minimise the chance of the wooden keel delaminating from the rubber foot, greatly increasing the life of these feet when used in a modular prosthesis. Preliminary testing with

this arrangement was conducted by Jody Van Ryan while testing the fatigue properties at **REHABTech** of two common types of SACH feet used in Australia. This confirmed the feet do last better with the extra plate. A potential problem with this configuration is the increased chance of the foot rotating in use. Using the correct torque settings and regular inspection should alleviate this possibility. **REHABTech** is looking further for more specific instructions.

CLOSING DATE FOR Senior Orthotist Prosthetist Research position is Monday February 16 1998 -

Please forward your application with a brief project proposal to **REHABTech** - Senior Orthotist Prosthetist Research position or contact us for a position description and selection criteria.

Farewell Seymone Doyle.

Seymone is finishing her work experience at **REHABTech** and the International Diabetes Institute. For the past year she has been working a nicotine study and force vector visualisation software as part of her Medical Biophysics and Instrumentation degree at Swinburne University of Technology. Seymone's position has been part of a ongoing stream of work experience students from the Medical Biophysics and Instrumentation degree and again will be

filled in 1998. We hope the rest of Seymone's study goes well in the future.



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INTERNET - <http://www.monash.edu.au/rehabtech/>

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ISPO'98 Homepage

Information on the upcoming ISPO world congress is available on the internet at <http://www.congrex.com/ispo98/>. Updated monthly it has the latest news from the organising committee and also includes post congress events.

The proceedings of ISPO97, the Annual Scientific Meeting of ISPO Australia have been published in full on the ISPO Australia Home Page: <http://www.latrobe.edu.au/www/ncpo/ispo/>

THE EFFECTS OF NICOTINE ON BODY REGULATION

Professor R. Westerman¹, Dr C. Delaney¹, T. Nicolaou¹, S. Doyle²

The study aimed to determine whether there is a direct link between the administration of nicotine (by the use of patches) for a short period of time and a decrease in leptin levels.

In general, it has been found that there is a high level of leptin protein in different types of obese animals and human subjects. By proving that nicotine does effect leptin levels, it could lead to a therapy for obesity.

Leptin is a hormone expressed by the gene and is believed to serve as an endocrine function to regulate body fat stores and is mediated via the hypothalamus, a brain region known to control body weight. Special leptin receptors have been found in the hypothalamus.

Human obesity is likely to be associated with the insensitivity to leptin. However some obese human subjects have low levels of leptin, suggesting that there may a special group, where obesity results from a subnormal secretion rate of leptin from fat.

Elevated levels of leptin is known to occur with an increase in body fat mass. These levels of leptin are

partly dependant on the sensitivities of appetite/weight/activity regulation in the hypothalamus. Confirming the importance of leptin as a regulating hormone.

In most cases, the levels of leptin in the blood and body weight seem to be lower in smokers than in non-smokers.

The subjects for the study consisted of 21 non-smoking males between the ages of 18 and 60 years. Each subject was tested for leptin levels prior to the study, after 14 days of wearing nicotine patches and 14 days after stopping to wear the patches.

At this stage, the test have been completed with the analysis of results to be finished.

¹ International Diabetes Institute

² **REHABTech** and Swinburne University of Technology - Student Researcher (Medical Biophysics and Instrumentation)

COMING EVENTS

2-4 February, 1998	ISPO Asian Prosthetics & Orthotics Workshop, Japan & South East Asia. Contact c/o ASATSU INC., Medical Convention Division, Ph +81-03 3547 2533. Fax +81 03 3547 2590
16 th February, 1998	Closing date for Senior Orthotist Prosthetist Research position at REHABTech., Ph 03 95281960, Email rehabtech@eng.monash.edu.au
20th February, 1998	P&O Golf Day, Heidelberg Private Golf Course, Approx \$50.00 including lunch. Contact Anton Karak Ph:0417539128, Email: bkarak@orthoticaust.com.au
23 - 27 February, 1998	Lower Limb Prosthetic and Amputee Rehabilitation. North West Hospital Melbourne. Registration information, contact: Jenny Gough Ph: 03 93897169 Fax 03 93874030
February 1998	Winter Olympics , Nagano Japan
26-28 February 98	International Medical Society of Paraplegia Hampstead Centre; Adelaide Phone 08 8222 1641 FAX 08 8222 1651
28 June-3 July, 1998	9th.Triennial ISPO World Congress, Amsterdam! Contact -CONGREX Holland :- Ph: Int+31 20 626 1372. Fax:+31 20 625 9574. E-mail: ispo@congrex.nl
25 - 27 October 1998	Access Expo '98, Royal Agricultural Society Exhibition Halls Olympic Sports Complex, Sydney. For more details: (03) 9415 1200

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