

Pre-exercise stretching – just don't do it?



Jay Blahnik

Jay has taught sold-out exercise classes and seminars in over 30 countries across the globe. He was chosen as one of the Top 5 Instructors in the world by Shape magazine, and Men's Health listed him as having one of the top ten workouts of all time. He consults for some of the biggest exercise, sports and fitness companies in the world, including Nike, Nautilus, Bowflex, Schwinn and Stairmaster. Jay's recent book, entitled Full Body Flexibility, has been a critically acclaimed best-seller.



If you look at the research on the benefits of pre-exercise stretching, you begin to wonder why you have spent so much time holding stretches instead of using that time to work out. The benefit of warming up the body is in no doubt, preparing the body for the coming exercise and minimising the risk of injury to the muscles, tendons, ligaments and other connective tissue, but the physiological rationale for stretching before exercise is a little, shall we say, stretched? When researchers have compared groups of people who stretch or don't stretch before activity, they have found little difference between the groups in rates of injury, types of injury or muscle soreness.

This may seem puzzling, but at closer investigation, the reasons become clear. Although stretching on a regular basis can provide a host of wonderful benefits (including increased flexibility), the actual act of stretching can be quite stressful on the muscles and joints on a cellular level. When we stretch a muscle, we are causing microscopic damage to soft tissue that ultimately repairs itself and leads to greater mobility. However, in the minutes immediately following stretching, the soft tissue is in a state of 'stress,' that makes it more difficult for the muscle to produce the power and force usually required in a workout activity or sport. For example, if you stretch before you go for a run, you may very well be making it *more*

difficult for your muscles to generate the power and force required of your body *during* the run. And the normal stress of the run *combined* with the stress from the pre-exercise stretches can put the body at greater risk than if you did not stretch at all prior to the run.

In 2001, Behm et al. reported the effects of performing 20 minutes of static stretching on quadriceps strength. In the study, 12 university students began with a five minute warm up, then performed three maximum voluntary leg extensions. This was followed by static stretching (for the quadriceps and hip flexors) for 20 minutes. They then repeated the maximal leg extensions as before. The results showed that, on average, stretching induced a significant 12 per cent decrease in maximum leg strength (with no change in the control group), leading the researcher to question the benefit of stretching on performance.

In 2000, Pope et al. published their findings after testing 1,538 male army recruits during their 12-week training. The recruits were allocated into two groups - both groups warmed up for five minutes before exercise, but one group followed their warm-up with a lower body stretch routine that comprised a 20 second stretch for the quadriceps, hamstrings, hip flexors, adductors, and calves. The findings show that the injury rate

Cont'd on page 70



among the stretching group was not significantly different from that of the other group. They concluded that stretching before exercise does not reduce the risk of exercise-related injury.

Interestingly, however, the research also seems to indicate that a good warm-up can in fact help reduce the risk of injury prior to a workout as long as the warm up is designed appropriately for the workout that will follow. For example, a runner could do a five to eight minute power walk or easy jog before actually hitting their normal running pace, and it would likely reduce the risk of injury during their normal running pace workout. Or a soccer player might do knee lift hugs, small kicks, light running, small jumps, shoulder rolls and side steps to warm up for a soccer game.

In a study by Young and Behm in 2002, the interaction between running, stretching and practice jumps during a warm up for jumping tests was investigated. The subjects took part in five different warm ups prior to the performance of two jump tests. The warm ups were run for four minutes. The five different warm ups were:

1. Just stretch
2. Run then stretch
3. Run, then stretch, then practise jumps
4. Just run
5. Do nothing (control group).

Generally, the stretching only warm up produced the lowest values, and the run only produced the highest values. It seems that running to warm up the muscles was a positive action, and stretching was a negative action. Behm recommends athletes warm up their muscles with a dynamic activity that increases muscle and core temperatures and then follow with activities specific to the sport.

Based on the research, the best time to stretch is either *after* a workout, when the soft tissues are

warm and more pliable, or as a standalone workout that won't be followed by anything powerful or intense. For example, you can stretch at your desk for as little as five minutes, or stretch at the end of the day for as much as 30 minutes, or even stretch after a vigorous weight training workout or soccer game. But you shouldn't stretch *before* doing a weight lifting workout or playing in a soccer game. Instead you should just warm up, and save the stretching until after the vigorous activity is over.

I know that many of you reading this have been stretching before your workout for years, and what I am saying may be a bit of a shock. It is my experience that people who do stretch before they work out are very emotionally attached to doing it that way, and would find it impossible (or really uncomfortable) to give up. In fact, many of my clients and athletes will say they absolutely *do* find that pre-exercise stretching helps with their performance, range of motion and power when they work out or play a sport.

Well, it is hard to argue with what feels right for any particular person. So, take what I am saying to heart, but remember that if you do pre-exercise stretching, it does not mean you are automatically going to get injured. In fact, it may not harm your performance at all. You should just remember that there is no indication that it will help your performance or reduce your risk of injury if you do it before you work out or play a sport.

So, if you choose to have your clients/participants stretch before their main training activity, just be mindful that it is probably not a good idea to be really aggressive with the stretches if they are planning to workout or play a sport immediately afterwards. Teach your clients and participants to listen to their body, and do what feels right for them. ♦



21 to 23 April 2006
Sydney Convention & Exhibition Centre



Experience the phenomenon that is Jay Blahnik at FILEX 2006. Choose from:

- Every Step Counts – SU3H
- BOSU Team Circuit – SA4D
- Full Body Flexibility – FR3M
- Schwinn® Cycling: Coaching Mastery – FRIN
- Schwinn® Cycling: High Performance Training – SA2P
- Schwinn® Cycling: The Athlete's Competition Workout – SUIG

For session information see pages 14, 15, 19, 22 and 23 in the FILEX 2006 brochure, or visit www.fitnessnetwork.com.au/FILEX where you can also register online.

www.fitnessnetwork.com.au/FILEX

Platypus Software EZeMember Fitness Membership Software

EZeMember

Software made EZe

"Finally I have the control I have been looking for and at the right price"

- Diary bookings: class, swim school, **Personal Trainer** etc
- Track marketing campaigns
- Full transaction & membership history
- Member frequency *usage graph*
- Controls rolling memberships
- Design your own fitness programs
- Manage direct debits or outsource
- Email to members
- Produce bank deposit listing including merchant summary
- Prospect tracking
- POS (optional module)

See us at the
Australian Fitness Expo
April 2006 in **Sydney**
stand F37

☒ Subscription based
☒ Rent-to-Buy
☒ Purchase outright

enables you to spend more time in your business

new **PREMIER** version

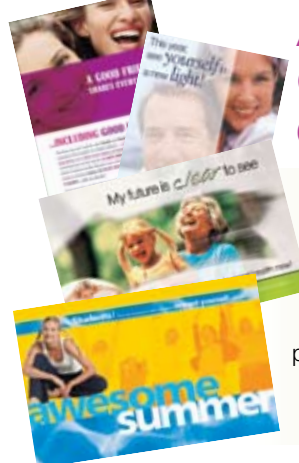
For more information:
Platypus Software™ Pty Ltd
Tel: 07 37 200 700
Fax: 07 37 200 866
Email: sales@platypusau.com
Web site www.ezemember.info



attention interest results

Does your club marketing **get** all this for you?

postcards brochures printads posters



Attract **attention**.
Generate **interest**.
GET RESULTS!

It's like having your own **new marketing department** at your fingertips! We offer a smart and effective marketing plan, creative design and the option of fast, quality printing. View over 5000 templates on our website. Mix and match to create the perfect marketing piece for you!

For details visit www.activemgmt.com.au

or email Justin jt@activemgmt.com.au

97a Malton Rd. Beecroft NSW

02 9980 9089 • 0438 015 677



Subscribe to our FREE monthly eNews by visiting
www.activemgmt.com.au/newsletter/

new product
product

new opportunity
opportunity

new markets
markets



+ iKi Magic is a group fitness program overcoming a worldwide epidemic of inactivity, obesity and general fitness apathy.

+ The program opens exciting new market opportunities to fitness professionals everywhere.

+ iKi is great fun and easy to participate in. Deconditioned or fit kids aged 6 - 13 are the main focus - but adults love iKi too, particularly seniors.

you'll love it | Kids love it




The Magic Opportunity
iKi Instructor training provides 10 CEC's and is accredited by Fitness Australia and endorsed by the MAIA. Register your interest for an instructor weekend via www.ikimagic.com and you can attend **risk free***. If the program doesn't meet your requirements, your fee will be refunded*.

iKi www.ikimagic.com
phone: 0411 251 922

A new fitness opportunity to access new markets

* Terms and conditions apply. Visit www.ikimagic.com for full details.



SYDNEY • MELBOURNE • BRISBANE • ADELAIDE • PERTH

Do you want to teach Boxing?

Earn **5 CECs** in our one day **boxing for fitness** accreditation course



1300 558 285

www.thumpboxing.com

Proudly Sponsored by



instructor
[.com.au](http://www.instructor.com.au)



www.asics.com.au



www.zoes.com.au