The upcoming change of season brings a variation in sport participation and unfortunately a new wave of sporting injuries.

**Physiotherapy led programmes ensure relevance to the sport and its particular risk profile**

Sports medicine provides ample evidence that physical conditioning programs reduce the number of sporting injuries seen during competition. Much of this research centres on contact and ball sports, but a recent article by Hadala and Barrios (2009) demonstrated the same effectiveness for reducing injuries in an America’s Cup yachting crew. This is fantastic news for those who live a life on the ocean waves. But how does research for the yachting fraternity help everyone else?

Well this study is interesting, because it combines the effect of exercise and physiotherapy modalities.

In brief, an America’s Cup crew were studied over 4 years of competition:

**Year 1:** No preventative intervention

**Year 2:** Stretching exercises and preventative taping

**Year 3:** As above, with physiotherapy joint mobilisations, and post-competition ice baths and kinesiotaping aimed at preventing muscle shortening.

**Year 4:** As above with added balance exercises, core stability work and compression clothing.

The list of exercises and physiotherapy mobilisations was expansive but all inclusions were commonly used in rehabilitation. The results were excellent, with injury rates reducing from 2.1 acute injuries per day in year 1 to 0.05 in year 4. The same trend was seen in chronic injuries. The effect was most marked for the neck and shoulder regions, areas that are most at risk during sailing, demonstrating the particular relevance of this preventative program. Furthermore injury rates reduced with each consecutive year, illustrating the benefit of each successive addition to the program.

**Prevent & Recover from Sports Injuries**

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**In this issue**

- **Stress is the silent killer**
  We can help you keep your stress under control.

- **Back to school advice**
  Is your child’s school bag weighing them down?

- **Do as you’re told**
  Some friendly advice to help you get the most out of your treatment.

- **Healthy eating programmes**
  It’s time to Shape Up and balance the impact of our lifestyles with good nutrition and exercise.
back to school advice

Does your child get shoulder, back or neck pain? Are you concerned about the effects of carrying their heavy school bag? The problem of postural strains associated with carrying heavy school bags and laptops is growing in prevalence in New Zealand school children. As physios we are often asked for guidance regarding children carrying heavy school bags.

The bad news is that research to date cannot give us definitive answers about exact bag weight, duration of use or design of the bag. However it can provide some common sense guidelines, which can reduce the aggravating effects of school bag carriage on back and neck pain in adolescents.

1. Try to minimise the weight of the bag whenever possible – it is not always necessary to have a full bag.

2. Choose bags that do not significantly change back posture. Carrying a bag on the back, across both shoulders may be better than carrying it over one shoulder.

3. Choosing an active mode of transport to get to school can offset the deleterious effects of carrying a heavy bag. Children who walk or cycle to school generally have less pain than those who get driven to school.

4. Ensure your child takes part in regular exercise – it is recommended to do at least 30 minutes of activity that raises the heart rate per day.

5. Those children who perceive their bag to be heavy suffer more pain than others. The perception of load is related to muscular endurance and fitness as well as the actual weight of the bag.

If your child complains of pain in the shoulders and neck that does not resolve completely overnight then it’s likely they will need to be seen by us for some manual therapy and postural strengthening exercises. Remember the postural strains in childhood can lead to enduring pain in the adult. Children usually mend quickly with one or two treatments. And generally listen more carefully to a physio telling them to stand up straight!

Reference

stress is the silent killer

Recent evidence suggests that chronic stress can lead to cancer and increased tumour growth. The research was conducted on a mouse model but has direct implications to human health. It is essential therefore to put into practice strategies that counter the physical impact of stress.

Our Empower Health Management Plan is a 12 week programme that teaches breathing and relaxation strategies and visualisation exercises to counter the physical toll that stress has on the body. There is no one immune to stress. Make an investment in your health and happiness – call today.

Reference
www.nature.com

EMPOWER YOURSELF

STRAIGHT-UP ADVICE
three reasons to do as you’re told

Many physiotherapy treatments involve the patient contracting a muscle. It may be with the aim of strengthening a healthy muscle, activating an injured muscle, or encouraging muscle lengthening. Generally these goals require the muscle in question to be contracted by a specific amount, for a certain length of time and through varying angles. With regard to the force, your physio will describe this as a ‘percentage of maximum contraction’. For example, they might say “Push against my hand, using 50% of your strength”. But what does this mean? How do you know your estimate of 50% is correct? Are you doing as you’re told?

In the first study of its kind, Sheard, Smith and Paine (2009) looked at athletes’ ability to follow instructions regarding contraction intensities of 20, 50 and 100% of maximum voluntary contraction, using shoulder and hip movements. With a strain gauge attached to the pulley system used by the athlete, they found that broadly speaking, they were able to demonstrate appropriate contraction intensities for the ‘easy- 20%’, ‘moderate-50%’ and ‘hard-100%’ instructions, in that all 3 intensities were shown to be significantly different from each other.

However athletes tended to push too hard with the ‘easy’ instruction yet not enough for the ‘hard’ instruction. So here are your 3 reasons to do as you are told:

1. GO EASY
If you are working an injured muscle and your therapist says ‘go easy’, then GO EASY. Remember our tendency to overshoot with the easy stuff, this can put you at risk of re-injury.

2. PUSH HARD
If your physio tells you to push hard, PUSH AS HARD AS YOU CAN! Your physio will be looking for either a strengthening contraction, or a reflex relaxation in the opposing muscle group. Don’t waste time being half hearted.

3. TRUST US
Your physio always knows best!

Reference

GET WELL, KEEP WELL
WWW.PHYSIO.CO.NZ

continued from healthy eating programmes. back page

continued from attention all athletes and coaches! front page

TAKE HOME MESSAGE
• A program of sport specific conditioning exercises will reduce injury rates during competition.
• The inclusion of physiotherapy mobilisations and taping is a beneficial addition.
• Physiotherapy led programs ensure specificity to the sport and its particular risk profile.
• Ask your local Active Physio for information regarding personalised sport specific care.
healthy eating programmes

We are all aware of the impact and issue of our fine living... we are both blessed and cursed by the wonderful food and wine of our kiwi cuisine!

As we grow older, the weight we carry accumulates slowly and it becomes much harder to lose. Suddenly we are middle aged and overweight! The effects of carrying too much weight is well documented with devastating effects on our heart and joints; leading to disease and disability such as diabetes, arthritis and stroke.

HELP IS AT HAND!

Active Physio, in association with EatFit (www.eatfit.co.nz), have recently undergone post graduate training in Nutrition through the Open Polytechnic and are now certified to deliver nutritional advice and healthy eating plans. Evidence would suggest that in order to lose weight and maintain a successful weight loss that a strong mentoring,

You don’t need a GP referral for any injury covered by ACC.

AUCKLAND
AIRPORT OAKS (RTP Physiotherapy Ltd.)
38 Richard Pearse Dr ph 275 0360
ALBANY (WAM Ltd.)
100 Don McKinnon Dr ph 444 1925
DOMINION RD (Gillian Webb Ltd.)
718 Dominion Rd ph 631 0010
ELLERSLIE (Kare Cobert Ltd.)
85 Main Highway ph 579 0004
EPSON (Brigit Holford Ltd.)
264 Manukau Rd ph 524 0624
HIGHBROOK (ERH Physio Ltd.)
35 Allens Rd ph 273 7414
HOWICK (ERH Physio Ltd.)
16 Selwyn Rd ph 535 9160
MT ROSKILL (Prentice Physio Ltd.)
211 White Swan Rd ph 626 6467
PAPAKURA (Active Ltd.)
79–85 Ct South Rd ph 296 1026
ROYAL OAK (Anduril Enterprises Ltd.)
641 Manukau Rd ph 625 2703
TAKANINI (H J Walker Physiotherapy Ltd.)
88 Great South Rd ph 299 7690

NORTH ISLAND
KAIKOHE (Active Ltd.)
59 Broadway ph 09 401 0750
KERIKERI (Fizzio Ltd.)
2/7 Homestead Rd. ph 09 407 4288
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3 Young St ph 06 769 9992

NOW AVAILABLE ON A PER SESSION BASIS – BOOK YOUR SHAPE UP ASSESSMENT TODAY

active physio opens at airport oaks

Active Physio has opened its newest branch at Airport Oaks. New Franchisee, Renata TePaa, is an experienced physiotherapist who has had a long association with Active Physio – starting as a recent graduate at our Takanini branch several years ago. Renata graduated in 2001 and has completed post graduate studies in acupuncture and Pilates. The new branch shares the same entrance as the Don Oliver’s Gym in Richard Pearse Drive.

Renata is looking forward to delivering services such as workplace and risk assessments to the local businesses as well as manual therapy, acupuncture and clinical Pilates to the community.

Active Physio Airport Oaks
38 Richard Pearse Drive, Airport Oaks, Auckland
ph 275 0360, 8am – 6pm weekdays