

Fitness & Rehab Newsletter



A Collection of Exercise and Injury Topics
for Fitness Professionals
Module #1

Rick Kaselj, MS
ExercisesForInjuries.com

Exercises For Injuries

The Fitness Professionals Source for Exercises and Injuries.

FITNESS & REHAB NEWSLETTER Distance Education Course – Module 1

If you have a passion for health, fitness, rehabilitation and sport, this course is for you. Designed to keep health and fitness professionals up to date on the latest in health, fitness, rehabilitation and sport, this course summarizes information from the Healing Through Movement [FITNESS & REHAB] Newsletter, Year 1.

What you will learn in this course:

- Improving your client's knowledge of health & fitness with a Daily Health Handout.
- Guidelines for an Athlete's to Return to Activity following injury
- Important research tools that will help you find accurate information to share with your clients and help them reach their goals
- Tips on how to evaluate the quality of a research article
- What your clients need to know before purchasing exercise equipment
- A new way of helping your clients understand pain
- And much more...



CONTINUING EDUCATION CREDITS: 3.0 BCRPA / 3.0 BCAF / 3.0 CMTBC / CSEP 3 PDC

LOCATION: Distance Education

COURSE VALUE: \$60^{plus HST}

TO REGISTER OR FOR MORE INFORMATION:

- Visit www.ExercisesForInjuries.com
- Call **Rick Kaselj** at (888) 291-2430



Rick Kaselj, MS, BSc, PK, CEP, CPT, CES

Rick Kaselj specializes in exercise rehabilitation, post-rehab, active rehabilitation, exercise therapy, and corrective exercise. He works in one-on-one and group rehabilitation settings training people who have been injured at work, in car accidents, and during sport activities. His clients and group exercise participants include a wide variety of individuals from healthy and special populations. Rick has given over 295 presentations to 5,531 fitness professionals and consumers across North America while continuing to work in rehabilitation centers, physiotherapy clinics, fitness clubs, and personal training studios. Rick recently completed his Masters of Science degree focusing on corrective exercise and therapeutic exercise for the rotator cuff. To reach Rick or learn about his exercise rehabilitation courses please visit www.ExercisesForInjuries.com.

Sign Up for the [FITNESS & REHAB] Monthly Newsletter by visiting www.ExercisesForInjuries.com

How This Distance Education Course Works

1. Register for Course.

One can register for the course on-line at www.ExercisesForInjuries.com , over the phone at (888) 291-2430 or via fax at (604) 532-5248.

2. Confirmation of Registration

After ExercisesForInjuries.com has received your registration and confirmed your payment, course workbook, course exam and receipt will be e-mailed to you.

3. Getting Started

Print off the course workbook and start reading. To get the most out of the course, read all the articles once and then read them a second time with the course exam in mind.

4. Complete Course Exam

Send the completed exam to ExercisesForInjuries.com via e-mail, fax or mail. You have one month from the date of purchase the course to complete and submit the course exam.

5. Exam Marking

Exam Will Be Marked by ExercisesForInjuries.com . One must have a minimum of 80% in order to pass the distance education course.

6. Certificate

Certificate of completion will be e-mailed to you.

If you have any questions feel free to contact Rick Kaselj at support@ExercisesForInjuries.com or call (888) 291-2430.

******IMPORTANT – You have 1 Month to Complete the Course after Receiving it, In order to Earn Continuing Education Credits******

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Article Review: "TV Exercise Devices: 6-Pack Abs In 14 Days?"

From Healing Through Movement Fitness & Rehab September 2004 Newsletter

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

Ever been asked, "What do you think about those ab machines you can buy on TV?" It's tough for me to answer this question nicely. As a kinesiologist it is a discouraging question to hear because it shows just how much marketing and misinformation affect people.

Consumer Report did a great job of answering consumers' questions about TV exercise devices in their January 2004 issue. The agency reviewed 12 TV abdominal machines which ranged in price from \$80 US to \$2000 US. Everything from "bun & thigh" and abdominal devices, to aerobic devices and strength trainers were reviewed. Consumer Report investigated the truth in each product's claims, outlined the effectiveness of the machines and offered suggestions for other free alternatives that could be used instead.

Consumer Report summed up its findings with the statement that **"few, if any, infomercial exercise machines live up to all their hype."** The ones that came close to meeting the expectations of consumers were the more expensive options; the inexpensive options were all ineffective. Of the abdominal strengthening and "bun & thigh" devices reviewed, the report did not recommend a single one. In reality, all **the claims made for cardiovascular and strength conditioning could be effectively accomplished with an exercise ball or weights.** Consumer Report did, however, recommend the TreadClimber and Vision Fitness treadmill for cardiovascular conditioning, and CrossBow and The Body Solid home gym for strength conditioning.

Interestingly, Consumer Report followed up with three people who endorsed various exercise products on TV to see if they still use the product they endorsed. All confirmed that they don't.

I would recommend having a copy of the January 2004 Consumer Report to lend to your clients if they ask about exercise devices they see on TV, and make the following recommendations on choosing commercial exercise products:

What to Look for in a TV Exercise Device

- **Ignore the hype** - Infomercial exercise machines generally don't live up to their hype: many of the claims are overblown, those endorsing the product may not actually use the product, and some machines are simply not effective.
- **Consider the workout or activity you prefer** - A machine will not motivate you to exercise. You have to enjoy an activity to do it regularly and to ultimately get the results you want.
- **Add up the total cost** - Add up the costs of the machine, taxes, shipping, interest, plus any other hidden or additional costs.

- **Ask about guarantees and return policies** - Most machines will have a 30 day or 60 day money back guarantee if the machine does not work for you or meet your standards.
- **Look for disclaimers** - Lots of machines make many claims, and it is important to read the disclaimers. Many claims are made based on other, simultaneous lifestyle changes in diet, or additional strength training or cardiovascular exercise.
- **Don't "cheap out"** – In general, quality and effectiveness decrease with the price.
- **Take your time** - Companies always want you to “act now”, but prices generally hold over time with TV exercise devices.

For full details please refer to Consumer Report: January 2004, pages 17-20.

A Guide To The Daily Health Handout

From Healing Through Movement Fitness & Rehab September 2004 Newsletter

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

One of my favourite things to do is provide a daily health handout to my clients. Many of my clients look forward to them and ask if I have others. My handouts are on topics like hydration, recovering from injury, abdominal exercise and how to do a bike check. With all the misinformation bombarding people today when it comes to fitness, rehabilitation and nutrition, it is tough for most clients to decipher fact from fiction, or understand the fine print. I compile my handouts from newspaper articles, trade magazines, books, and websites that are either peer reviewed or otherwise credible, to give my clients the truth about health-related topics. Sometimes I will summarize the information I find from these sources and write my own article as a daily health handout.

Guidelines for a Daily Health Handout:

One page - Preferably no more than one page in length, double sided.

No jargon - Information should be written to the level of your client.

Creditable source – The source of the article needs to be credible and the information within the article needs to be correct and non-biased.

A topic of interest – Select articles that relate to your clientele and that will help them be better informed.

Better decisions – Select articles that help your clients make better decisions when it comes to health and fitness.

Article Review: “Treadmills: More For The Money”

From Healing Through Movement Fitness & Rehab October 2004 Newsletter

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

Over 11 million people in the U.S. walk or run on a treadmill at least once a week. For some, treadmills have become a permanent fixture in their modern lives. It has been shown that treadmills burn more calories than an exercise bike and are easier to use than a stair climber. Many of my clients ask me about treadmills for their home. In response I often ask, “Why don't you walk or run outside?” Many respond by saying that they feel a treadmill at home will motivate them, allow them to exercise during bad weather, help avoid barking dogs and be more convenient for them to use. In order to help my clients select a treadmill for their home, I refer them to the February 2004 article in Consumer Reports. In this article, Consumer Reports reviews 12 treadmills and offers tips on buying a treadmill for home use.

The latest treadmills on the market offer more variety, special features and a more “user-friendly” design than previously. Newer treadmills have a wide variety of programs that control speed, elevation and allow you to add your own program; and added features like water bottle holders, reading shelves, cooling fans and cubby-holes for TV remote controls. These user-friendly designs also have the added bonus of being safer than older models.

Consumer Reports reviewed 12 treadmills based on price, belt size, controls, exercise flexibility (range of incline and speed, stability, how flat the deck lies, heart rate monitor effectiveness), ergonomics, added features, and construction. Treadmills were divided into three categories: basic, midrange and high-end. A basic treadmill cost between \$300 to \$700 US, and it was concluded that these models were best for walkers on a budget. Of the basic treadmills, Consumer Reports recommended the “Image”, priced at \$400 US. Midrange treadmills ranged in price from \$800 to \$1800 US, and recommended for walkers and the occasional runner; of these Consumer Reports recommended “Life Fitness Sport” (\$1800 US), “Schwinn” (\$1300 US) and “Vision Fitness” (\$1350 US). Of the high end treadmills, designed for frequent and dedicated runners, Consumer Reports recommended “Landice” (\$2900 US), “True” (\$2200 US) and “Life Fitness” (\$2800 US).

Consumer Reports gave the following tips to consumers before buying:

Use – Ask yourself whether you plan to use the treadmill for walking or running. If you are looking for a treadmill for walking you will require a less bulky treadmill and a lower maximum speed. This will make your treadmill choice more affordable.

Programs – Ask yourself whether the treadmill has the programs you need to keep you interested in using the machine. If you desire less strenuous activities, then you may not need a treadmill that inclines 15 percent, or as has a top speed of 12 mph.

Safety - Look for wide enough foot rails to stand on, a belt wide and long enough for your speed and stride, and a treadmill that can hold your weight.

Horsepower - A lower-stressed by higher horsepower belt is better for the long term wear of the treadmill. If you plan to use the treadmill for running, look for a treadmill with a minimum of two continuous horsepower belt.

Extended Warranty - Purchasing an extended warranty (longer than one year) is a good idea if you want to avoid the hassle of repairs, especially if in-house service is available.

Features that Count: Easy-to-use controls, safeguard keys and switches, strap chest heart rate monitors, power incline, a larger belt, higher top speed, ample foot rails, a variety of exercise programs, bottle holders, reading shelves, cubby-holes, handrails on the side or handrails in front, folding deck and a generous warranty.

For full details on this article, refer to Consumer Reports: February 2004, Page 33-35.

The 5 Best Fitness & Rehabilitation E-newsletters

From Healing Through Movement Fitness & Rehab October 2004 Newsletter

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

Most fitness and rehabilitation web sites offer a free newsletter. After you go through the subscription process often one of five things happens. The first option is: nothing. You never receive your newsletter. The second possibility is that your in-box begins to receive an enormous amount of spam. The third option is that you receive a newsletter very sporadically with sparse, poorly written content. The fourth is you only receive a small taste of the newsletter that paid members receive. And finally, the odd time you receive a jewel of a newsletter in your in-box. This is the rarest of all newsletter experiences. When you do find a newsletter that is useful, interesting and well written, you look forward to it arriving in your in-box and often read them straight through, and become a better professional for having read them.

Below is a list of the 5 Best Free Online Fitness & Rehabilitation eNewsletters:

American Council on Exercise - <http://www.acefitness.org/>

If you are involved in the fitness industry or prescribe exercise, you need to have this site bookmarked or join their e-newsletter.

The American Council on Exercise (ACE), America's Authority on Fitness, is a non-profit organization dedicated to promoting the benefits of physical activity and protecting consumers against unsafe and ineffective fitness products and instruction. ACE has a great website. The two best features are their e-newsletter and Fit Facts.

The ACE e-newsletter comes out every month and has a great article relating to fitness, a top ten list and an exercise of the month. Every fitness professional should have this e-newsletter e-mailed to them

The second great feature is The ACE Fact Sheets. These are great for clients. The ACE Fact Sheet is a one-page hand-out that covers a common topic in fitness. It is great to give to clients and help educate them on fitness.

SportMedBC – <http://www.sportmedbc.com/>

SportMedBC focuses on the sport medicine and science within the provincial sport system. With a recently updated website, this association helps identify, develop and promote Best Practices in Sport Health, Sport Safety and Sport Training in British Columbia, Canada. SportMedBC posts their quarterly newsletter and back issues on their website. The newsletter is full of sports training information and is a “must read”.

NSCA's Performance Training Journal - <http://www.nsca-lift.org/>

The National Strength and Conditioning Association produces an amazing quarterly newsletter to anyone interested in strength and conditioning. Each issue has a theme and focuses on the mental, nutrition, physical and training side of sport. Highly recommended for you and your clients.

Well: Newsletter for Wellness - <http://www.speakwell.com/>

Written by Dr. Martin Collis, a former University of Victoria professor of Human Kinetics who was a favourite amongst his students, Well is a great quarterly newsletter with a strong - and fun - focus on wellness.

Quote of the Day - <http://www.briantracy.com/>

Brian Tracy's website, although not specifically fitness and rehabilitation oriented, it offers focused and powerful words to help get your day started and inspiring quotes to share with your clients.

If you have any newsletters you've found to be helpful, please e-mail them to support@ExercisesForInjuries.com

Course Review: “How I Demystify Research”

From Healing Through Movement Fitness & Rehab November 2004 Newsletter

Presented by Bahram Jam

Article written by Rick Kaselj - support@ExercisesForInjuries.com

On Friday, October 1st, 2004, the University of British Columbia (UBC) - Continuing Studies and the Physiotherapy Association of British Columbia (BCPA) sponsored a course for rehabilitation professionals. The course was taught by Bahram Jam. Bahram is a highly energetic presenter and a well respected physical therapist from Toronto, Ontario, Canada who is known for his Post-Graduate Physical Therapy Courses and his Advanced Physical Therapy Education Institute (APTEI) newsletter. The APTEI newsletter is a quarterly newsletter that summaries recent research related to all aspects of physical therapy. Bahram shared his secrets on how he finds the time to read articles, and how he selects good ones.

Many therapists have good intentions on keeping current with the latest research, but often have many good reasons on why they don't. Common reasons given are:

“I don't have enough time to read articles.”;

“It takes too long to read a lot of articles.”;

“Why read articles when most won't help me when I go to work on Monday?”

“The articles are written for researchers, not clinicians.”

“I assume I learned what I needed to know in university”

“I want to spend my spare time with my family.”

Bahram follows the "Why? What? So What?" line of thinking with regard to reading research articles.

Why?

Why read research articles? Most of us subscribe to journals and often times they just end up littering our desks. We feel guilty not throwing out the journals or not reading the whole journal. Bahram advises that before you read an article, you need to find your purpose for reading it. An example of purpose is the instantaneous response a person has when they are diagnosed with cancer; they are driven to learn all they can to overcome the disease.

Bahram's advice on finding your purpose:

Your Situation - If you suffer from a specific injury like lower back pain, learn all you can about this injury and become an expert in this area.

Helping Clients – It is important to provide the best care to all of our clients but there are always a few that stand out. It may be due to their injury, situation, or personality. The next time a client stands out or their injury stumps you, learn all you can about their situation so you know more than their family doctor, physical therapist, massage therapist, chiropractor and the entire health care team.

Teach - Plan to teach an in-service, professional development event or course. Write an outline and let everyone know about it. The drive to do research for your presentation will be high - you will feel very embarrassed if you find yourself standing in front of a group of people and have nothing to say.

Write - Commit to a monthly article with your local paper, professional association, or work. The deadline of having to get the article done will act like a tax deadline and motivate you to finish it.

What?

How to select an article that matches your purpose? Find a journal and scan the table of contents. Look at the title of the articles. Highlight or mark the ones that satisfy your purpose. Flip to the article that you highlighted or marked and read the abstract. The abstract will take 2 to 3 minutes to read. After reading a few lines or the whole abstract you need to decide if it matches your purpose. If no, move to the next article. After reading the next abstract, if it satisfies your purpose, read the whole article.

So What?

After reading the article you need to decide what you are going to do with this new knowledge. The best way of committing the new information to memory is to share it. Share it with your clients. Share it with your fellow therapists. Share it with your fellow health care professionals.

The next time you plan to hit the journals for more knowledge, find your purpose before you begin. When you start scanning the titles, throw out the ones that don't match your purpose, free of guilt. If you find any that match your purpose, read the abstracts first. After reading the abstracts, throw out the ones that don't match your purpose and read the ones that do. Lastly, after you finish reading, decide what you are going to do with this information. The best way of committing information to memory is to share it.

Links:

University of British Columbia (UBC) - Continuing Studies -

<http://www.cstudies.ubc.ca/physio/>

Physiotherapy Association of British Columbia (PABC) - <http://www.bcphysio.org/>

Bahram Jam and the Advanced Physical Therapy Education Institute (APTEI) newsletter - <http://www.aptei.com/>

Workshop Review: "The Pharmaceutical Approach To Managing Pain"

From Healing Through Movement Fitness & Rehab December 2004 Newsletter

Presented by Dr. Shakeel Bhatti

Article written by Rick Kaselj - support@ExercisesForInjuries.com

On Saturday, October 23, 2004, Dr. Shakeel Bhatti, in association with UBC Continuing Studies and the Physiotherapy Association of British Columbia (PABC), held a workshop called "The Pharmaceutical Approach to Managing Pain" at the University of British Columbia (UBC) - Point Grey campus. Dr. Bhatti discussed how common prescription, non-prescription, anti-inflammatories and muscle relaxants work; their applications, effects, limitations, differences, side effects, contraindications; and patient adherence in the pain management process.

Describing Pain

Dr. Bhatti described pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage." In fact, he added that pain is subjective, and the success of treatment is complicated by issues of a patient's biological and psychological beliefs. In addition he described the three types of acute pain: somatic, visceral, and neuropathic.

NSAIDs

Medications commonly prescribed for somatic and visceral acute pain are NSAIDs and Opioids. NSAIDs (Nonsteroidal Anti-Inflammatory drug) are the most widely used pain medication and play a vital role in injury recovery. NSAIDs work by inhibiting proatogladin production, which inhibits the release of inflammatory mediators which then affects the patient's pain perception. NSAIDs work quickly and can be taken safely over a long period of time, but need to be taken for 3 to 5 days to maximize their effects. These drugs have a ceiling – that is, a point where if taken in excess, the drug becomes ineffective. As for side effects, the most common side effect associated with the use of NSAIDs are gastrointestinal in nature. The first of these drugs on the market was Aspirin; other examples of NSAIDs are Ibuprofen, Naproxen, Diclofenac, Indomethacin, and Ketoralac.

Opioids

The second set of pain medications prescribed by physicians are Opioids. Opioids affect the opioid receptors in the central nervous system and are highly effective for acute and chronic pain. Side effects of these drugs, which have no ceiling, are constipation and vomiting. Examples of Opioids are Tylenol #3, Oxycontin, Percocet and Emtec. While these drugs are good for severe acute pain and post-surgery pain, the client needs to be weaned off the drug. Unfortunately, fearsome opinions and personal beliefs about the dangers of using Opioids often affect a client's compliance in using them when prescribed by a doctor. Dr. Bhatti discussed the difference between habitual drug use (Requiring

increasing quantities for satisfaction.) and drug addiction (Compulsive use of an addictive substance, regardless of the potentially negative social, psychological, and physical consequences.).

Rehabilitation & Fitness Professional's Role

How might Dr. Bhatti's information be useful to a rehabilitation & fitness professional?

While physicians guide the drug therapy of the client by prescribing and educating the client about the medication, and informing the client about any side effects, and pharmacists dispense the medication and educate the client to take their medication as prescribed, the rehabilitation & fitness professional can follow up with the client to ensure they are taking the medication as prescribed by their physician and reinforce the importance of taking their prescriptions until they are completed. In addition, rehabilitation & fitness professional can encourage clients to follow up with their physicians if they experience side effects, when they have completed their rounds of medication and if they have any concerns about the medication they are taking.

Dr. Shakeel Bhatti was an excellent presenter. He was very knowledgeable and reinforced the treatment role that all team members play in client drug therapy. If you ever have the opportunity to hear Dr. Shakeel Bhatti speak, I highly recommend that it.

On-line Resources

RxFiles

Dr. Bhatti recommended an on-line resource which he uses on a frequent basis, RxFiles. RxFiles was created by the Saskatoon Health Region to provide physician, pharmacist and other health care professionals with the best information on drug therapy.

<http://www.rxfiles.ca/>

Bandolier

Bandolier, an independent journal about evidence-based healthcare, is written by Oxford scientists. It appears monthly and has become the premier source of evidence-based healthcare information in the UK and worldwide for both healthcare professionals and consumers.

<http://www.jr2.ox.ac.uk/bandolier/index.html>

Dr. Shakeel Bhatti - Murrayville Pharmacy – Langley, BC, Canada

<http://www.pharmacist.bc.ca/>

University of British Columbia (UBC) - Continuing Studies

<http://www.cstudies.ubc.ca/physio/>

Physiotherapy Association of British Columbia (PABC)

<http://www.bcphysio.org>

Workshop Review: Hot Tips For Research Tools

From Healing Through Movement Fitness & Rehab March 2005 Newsletter

Presented by Charlotte Beck

Article written by Rick Kaselj - support@ExercisesForInjuries.com

On Saturday, October 2nd, 2004, the University of British Columbia (UBC)-Continuing Studies and the Physiotherapy Association of British Columbia (PABC) sponsored a course for rehabilitation professionals. The focus of the course was “**Accessing and Using Research in Everyday Practice.**” One of the sessions covered how the clinician can seek out information that will help in their practice. Helpful databases discussed in the session include PubMed, Cochrane Library, Cinahl, and Embase. The most easily accessible database is PubMed, and it is also free to use. PubMed has 14 million citations and indexes approximately 5000 medical journals dating from 1951 to today. The most effective way of learning how to use PubMed is to take advantage of its on-line tutorial, which takes about an hour to complete.

During the session, Charlotte discussed how to use the keywords "OR", "AND", and "NOT" to help with your search. She showed how to identify which articles have abstracts, which citations have free on-line text available, how clicking "RELATED ARTICLES" can help deepen your search, how MeSH-H (Medical Subject Heading) can help you with your search and how the "DETAILS" tab can allow you to filter your search.

Charlotte Beck is a Reference Librarian for Rehabilitation Sciences at Woodward Library at University of British Columbia (UBC) – Point Grey. She works extensively with physiotherapists and occupational therapists to assist them in accessing quality, evidence-based information.

Resources

Centre for Evidence Based Medicine at the University of Toronto

<http://www.cebm.utoronto.ca/resources/websites.htm>

UBC Library - Subject Resources for Human Kinetics

<http://toby.library.ubc.ca/subjects/subjpage1.cfm?id=194>

UBC Library - Subjective Resources for Physical Therapy

<http://toby.library.ubc.ca/subjects/subjpage1.cfm?id=44>

UBC Library - Subjective Resources for Occupational Therapists

<http://toby.library.ubc.ca/subjects/subjpage1.cfm?id=43>

Workshop Review: "So I've Read The Article, But Is It Any Good? - How To Evaluate The Quality Of A Journal Article"

From Healing Through Movement Fitness & Rehab March 2005 Newsletter

Presented by Alison Hoens

Article written by Rick Kaselj - support@ExercisesForInjuries.com

On Saturday, October 2nd, 2004, the University of British Columbia (UBC)-Continuing Studies and the Physiotherapy Association of British Columbia (PABC) sponsored a course for rehabilitation professionals. The focus of the course was "**Accessing and Using Research in Everyday Practice**". One of the sessions was taught by Alison Hoens, a clinical Assistant Professor at UBC in the Physiotherapy department.

Alison spent an hour and a half educating the group on what quantitative analysis of research is, and on her process of searching for articles. Alison uses five databases in the following order:

Research Steps:

- 1) PubMed - Search PubMed and determine the MeSH terms.
- 2) MeSH-H terms - Use MeSH terms in the other databases.
- 3) Databases to Search - Cochrane Library, PEDro, DARE, SUMSearch

PubMed

PubMed, a service of the National Library of Medicine (NLM), allows you access to MEDLINE. MEDLINE is the NLM's premier bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the American health care and the pre-clinical sciences. MEDLINE contains bibliographic citations and author abstracts from more than 4,800 biomedical journals published in the United States and 70 other countries. The database contains over 12 million citations dating back to the mid-1960's. Coverage is worldwide, but most records are from English-language sources, or have English abstracts.

PubMed provides access to bibliographic information that includes MEDLINE, OLDMEDLINE, the out-of-scope citations (e.g., articles on plate tectonics or astrophysics), citations that precede the date that a journal was selected for MEDLINE indexing, and some additional life science journals that submit full text to PubMedCentral.

At the bottom of a PubMed abstract you will see MeSH words. MeSH is the National Library of Medicine's controlled vocabulary, used for indexing articles for MEDLINE/PubMed. MeSH terminology provides a consistent way to retrieve information that may use different terminology for the same concepts.

Access - PubMed abstracts are free. A few of the full text articles are free, and most are downloadable from the publisher for a fee.

Link: <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

The Cochrane Library

The Cochrane Library reviews are based on the best available information about healthcare interventions. They explore the evidence for and against the effectiveness and appropriateness of treatments (medications, surgery, education, etc) in specific circumstances.

The complete reviews are published by The Cochrane Library, which is available by subscription, either on CDROM or via the Internet. The Cochrane Library is written by The Cochrane Collaboration, an international, non-profit and independent organization, dedicated to making up-to-date, accurate information about the effects of healthcare readily available worldwide. The Cochrane Collaboration was founded in 1993 and named for the British epidemiologist, Archie Cochrane.

Access - The abstracts are free, and full reviews can be ordered for a small fee.

Link - <http://www.cochrane.org/>

PEDro

PEDro is the Physiotherapy Evidence Database. It provides bibliographic details and abstracts of randomized controlled trials, and systematic reviews of randomized controlled trials in physiotherapy. This database also rates the quality of each article, and indicates those that are valid and interpretable and those that are not.

Access - Free access to all databases, and the abstracts are free. With some of the results, a link is provided to full text reviews either for free or for a small fee.

Link – <http://www.pedro.fhs.usyd.edu.au/>

DARE

DARE is the Database of Abstracts of Reviews of Effects. DARE was created in 1994 to provide research-based information about the effects of interventions used in health and social care. DARE contains summaries of systematic reviews which have met strict quality criteria. Each summary provides a critical commentary on the quality of the review. The database covers a broad range of health and social care topics and can be used for answering questions about the effects of interventions, as well as for developing guidelines and policy making.

Access – Access to the database is free.

Link - <http://www.crd.york.ac.uk/crdweb/>

SUMSearch

SUMSearch is a database that combines meta-searching (searches multiple internet sites) and contingency searching (if there are too many hits, the search is narrowed).

SUMSearch searches Merck Manual, Medline, AHCPR (National Guideline Clearinghouse from the Agency for Health Care Policy and Research), and DARE for original research.

Access – Free access to databases and the abstracts are free.

Link – <http://sumsearch.uthscsa.edu/>

Next time you have a topic you need to find information on, try Allison's approach. First try PubMed and get the MeSH terms. After getting the MeSh-H terms, enter them into the following databases: The Cochrane Library, PEDro, DARE and SUMSearch, to find quality information quickly.

Course Review: Return To Activity – Helping Athletes Make Informed Decisions

From Healing Through Movement Fitness & Rehab April & May 2005 Newsletter

Presented by Wendy Epp

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

On Saturday, October 23, 2004, Wendy Epp, in association with UBC Continuing Studies and the Physiotherapy Association of British Columbia (PABC), held a course called “**Return to Activity – Helping Athletes Make Informed Decisions**” at the University of British Columbia (UBC) – Point Grey campus. Wendy Epp is a Vancouver-based Sports Physiotherapist who spends the majority of her practice working with the full spectrum of athletes; she was also part of the 2002 Salt Lake Winter Olympics Canadian Medical Team. Wendy provided a jam-packed three hour presentation, drawing upon extensive clinical experience and real life examples. While some view rest as an effective form of treatment for a sustainable return to activity plan, this is not an option for an athlete. Wendy discussed the process she uses to make decisions when it comes to an athlete returning to sport after an injury.

The Seven Step Process of Returning to Activity:

1. What do you know?
2. Working Diagnosis
3. History Taking
4. Objective Evaluation
5. Goals
6. Treatment Plan
7. Facilitation Return to Play

What do you know?

Before training or rehabilitating someone, a health professional needs to ask him or herself three questions:

What sports are you familiar with?

What sports do you have little working knowledge of?

Are you comfortable with sport “lingo”?

If you are not comfortable or familiar with the sport that your client is involved in, you should go out and learn as much as you can, or refer your client to someone who has the level of experience and familiarity needed to help the athlete.

Working Diagnosis

What diagnosis has been given for the athlete’s injury by the physicians that they have seen, or the clinical impression from the treatment team (Physician, Physiologist, Psychologist, Physical therapist, Coach, Kinesiologist, Chiropractor, Athletic Therapist, Strength & Conditioning Coach, Massage Therapist, and Fitness Professional).

History Taking

Most of the answers to the question of what to do for your client will come out of the history taking part of the assessment. Questions to ask the athlete should include the following:

Onset of Symptoms – Is the injury acute, traumatic, or a result of overuse?

Mechanism of Injury – How did the injury occur - acute, traumatic, or insidious?

Symptoms – Location, intensity, onset, aggravating factors, relieving factors.

Demographics – Past medical history/injury history, occupation, sport, home/family.

Diagnostics – Pending medical tests (X-ray, MRI, CT Scan, Bone Scan, Specialist Consultation, etc.).

Surgical/Medical Follow-Up – Does the client have an appointment with a specialist or family physician in the near future?

Training – Frequency, duration, intensity, program design (training cycles, competitive season, cross-training).

Special Questions – Equipment, terrain/surface.

Objective Evaluation

An objective evaluation of the injured area needs to be done by one of the treatment team members to determine the severity of the injury, identify the tissue that is injured, determine a baseline to measure progress, determine the direction of treatment, and to highlight a clinical impression.

Upper and Lower Body Scan – To identify weakness, muscle imbalances, contributing factors, compensatory movements.

Postural Scan - To identify weakness, muscle imbalances, contributing factors, compensatory movements.

Local assessment of injury – Range of motion, muscle strength, special tests, neurological testing, sensory testing, reflex testing, and functional testing.

Tissue(s) Injured – Neurological, muscular, body, ligamentous, other connective tissue

Degree/Severity of Injury – Grade 1, 2, 3

Surgical – Has the athlete had surgery and is there is a protocol and timeline that the surgeon would like the treatment team to follow?

Goals

Identify the athlete's goals and determine what is realistic and plausible based on the injury and sport.

Athletes – What are the individual goals of the athlete?

Team – If the athlete is involved with a team, what is the team's goal and how can the athlete affect that goal positively or negatively with their injury?

Coach – What is the coach's goal for the athlete?

Short Term Goals – Event, season.

Long Term Goals – Recreational, professional, lifestyle.

Treatment Plan

The treatment team must create a treatment plan in consultation with the athlete. Some of the treatment will involve direct treatment to the injured area through various means: maintaining cardiovascular fitness, maintaining strength in non-injured areas and correcting compensatory movements within day-to-day activity and sport.

Local Treatment of Injured Area – Drug therapy, modalities, exercise rehabilitation, pool therapy.

Management of Compensations and/or Secondary Effects of Injury – Change in technique due to injury.

Maximize Fitness – Focus on cardiovascular fitness and strengthening non-injured areas of the body.

Black & White Cases of No Return to Activity – Neurological signs and symptoms (undiagnosed or pending), Frank fracture (requiring surgery or immobilization), complete tear (with loss of power and stability).

Facilitate Return to Play

When the treatment team is determining whether the athlete is ready to return to activity, numerous devices can be used to assist in a safe return to activity.

Bracing – Over the counter or custom.

Taping – To provide support and stability of the injured area.

Injections – As performed by a qualified physician.

Modifying – Modifying how involved the athlete is in the sport (practice intensity, drills, full practice, warm-up, offence only, defence only, etc.)

Functional Testing – Having the athlete perform tasks that relate to the sport they are returning to and determining whether they can accomplish them.

Communicate – Communicating with the athlete, the entire treatment team, coach and family.

This was the second time I have seen Wendy present. She is an energetic presenter that focuses on clinical experience and skills that are functional. If you do get a chance to see her present, do.

Resources Recommended by Wendy Epp

David C. Reid. Sports Injury Assessment and Rehabilitation. 1992. Churchill Livingstone.

Saul Miller. Performing Under Pressure. 1992. McGraw-Hill Ryerson.

Wendy Epp – Form Physiotherapy – Vancouver, BC, Canada

University of British Columbia (UBC) - Continuing Studies
<http://www.cstudies.ubc.ca/physio/>

Physiotherapy Association of British Columbia (PABC)
<http://www.bcphysio.org>

Book Review: Fit To Play Tennis

From Healing Through Movement Fitness & Rehab September 2005 Newsletter

Written by Carl Petersen & Nina Nittinger

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

This book is an easy read with small pages, large print, a picture on each page, many diagrams, numerous lists and summary tables. It is a great reference book for athletes, coaches and trainers. And while the book is targeted at tennis players, the majority of information in the book would be applicable to all sports and levels of athletes.

This book succinctly outlines all the factors an athlete must consider in order to maximize performance. It briefly covers a long list of crucial factors such as warm-up, stretching, cool-down, nutrition, training concerns, mental training, overtraining, and recovery, outsmarting your injuries, tapering and peaking.

In particular, I found the chapter on nutritional concern written by Patricia Chuey extremely helpful. Very readable, this chapter concentrated on just what an athlete needs to know about nutrition, and provided helpful examples. As with the other chapters, much of the material covered would be applicable to other sports and varying levels of athletes. The chapter relayed interesting information, such as the fact that decreased water intake may cause fat deposits to increase, and that alcohol should be avoided 6 hours before strength or anaerobic training as it can cause hormonal changes that inhibit the adaptive process, risking the positive effects of the training session.

Chuey also had a great quote for all those who enjoy junk food;

"Remember the 80-20 rule: Eat well at least 80 percent of the time but leave some room for soul nourishment and pure pleasure. If you're going to ingest foods or drinks that offer little nutritional value such as coffee, beer, jelly beans, pop, sugary cakes and so on, make the indulgence worthwhile. If the food offers no nutritional value, at least aim to get maximum psychological pleasure out of it."

Another very useful section of the book is the "Outsmarting Your Injuries" chapter. An athlete screen is included, with seven short tests that help the athlete identify areas of discomfort, stiffness or tension. If the athlete fails a test, a list of exercises is recommended to focus on the problem area to quickly and effectively correct the situation. The rest of the chapter focuses on key considerations for the lower back, core stability and pelvic malalignment.

The book is an excellent reference book, and I would highly recommend it. It covers a large range of topics, concentrating solely on what you need to know. If you are an athlete, work with athletes, or are a coach or parent this would be great reference book to find the answer to any question you have related to athletic performance.

Fit to Play Tennis Book Review

Title - Fit to Play Tennis

Authors - Carl Petersen & Nina Nittinger

Edition - 1st (2003)

ISBN 0-9734314-0-7

Published by - Fit to Play, Vancouver, BC, Canada

Book Review Rating - 3/5

Pages - 209

Cost - \$23.95 CAN. + Applicable Taxes + S & H.

Article Review: Does Curves Workout Work?

From Healing Through Movement Fitness & Rehab October 2005 Newsletter

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

About Curves

Those working in the fitness and rehabilitation field are often entertained by new fads. Many in the industry initially believed that the Curves franchise would be one of those passing fads, but the franchise continues to expand. Since 1992, Curves has grown to 8,500 locations worldwide to become the world's largest fitness center franchise and fastest-growing franchise in any industry in US history. To date more than four million women have joined Curves' 30-minute circuit-training gyms.

How Curves Works

Curves has designed a no-frills centre (no change rooms, no showers, limited hours) attracting previously inactive, primarily middle-aged women, largely because there is no "intimidation factor". Curves' 30-minute workout includes a 25-minute circuit composed of 30 second intervals on 12 hydraulic resistance machines with alternation of 30 seconds active recovery (stationary jogging, marching or walking) followed by 5 minutes of stretching and cool down. The centre has upbeat music, commands station changes, and offers a supportive, positive group environment.

The Curves Circuit

- (1) Abdominal Curl / Back Extension
- (2) Hip Adduction / Hip Abduction
- (3) Biceps Curl / Triceps Extension
- (4) Chest Press / Seated Row
- (5) Triceps Pushdown / Upright Row
- (6) Leg Extension / Leg Curl
- (7) Chest fly / Shoulder Retraction
- (8) Shoulder Press / Pull-up
- (9) Leg Press
- (10) Squat
- (11) Trunk Rotation
- (12) Hip Extension

The Study

The American Council on Exercise (ACE) recently commissioned a study at the University of Wisconsin, La Crosse on the efficacy of the Curves for Women workout. They studied 15 women ranging in age from 26 to 56 from two local Curves locations.

Results

The Curves workout burns an average of 183 calories with the resistance circuit, accounting for 163 calories at a moderate intensity. This workout compares to walking on a treadmill at four mph for 30 minutes.

- The resistance training makes the workout a whole body workout.
- Heart rate was above 75% of maximum heart rate during the workout.

Comments

- The Curves workout is not the best choice for active individuals but excellent for sedentary individuals.
- Hydraulic resistance training machines are not adjustable for great comfort for petite participants.
- There is no way of quantifying the effort put into the resistance machines. One could just go through the motions.
- Workouts could become social sessions and affect the effort put into the workout.
- The knowledge in personal training or exercise science in Curves' staff is limited in many locations.

References

Anders, M. (2005). ACE puts curves to the test: millions of women love it, but does it really work? ACE Fitness Matters, vol 11, issue 2.

Schnirring, L (2002). What's behind the women-only fitness center boom? Physician & Sportsmedicine, vol. 30, issue 11.

Tuffs University Health & Nutrition Letter. (2004). A gym for the non-lycra crowd? vol 21, issue 12, p 1-2.

Course Review: Explain Pain & A Neuromatrix Approach To Chronic Pain

From Healing Through Movement Fitness & Rehab November 2005 Newsletter

Presented by Lorimer Moseley PhD, B.App.Sc.(Phy)(Hons)

Article written by Rick Kaselj - support@ExercisesForInjuries.com

About Lorimer Moseley

On Wednesday, April 6, 2005, Dr. Lorimer Moseley presented a lecture called “Explain Pain and the Neuromatrix Approach to Chronic Pain” at the GF Strong Lecture Theatre in Vancouver, BC to an audience of Physical Therapists, Occupational Therapists, Psychologists and Kinesiologists. Dr. Moseley is a clinical and research physiotherapist with a special interest in pain and brain sciences from the University of Sydney in Australia.

Dr. Moseley was a great speaker, with a keen understanding of the research he presented. His extensive clinical experience working with patients who suffer from chronic pain made for a heavily research-based, but practical course. The majority of his clinical work takes place in a group setting where he spends three hours teaching his patients about pain. In this article, I will highlight some of the insights Dr. Moseley shared during his four hour presentation.

Neuron Stimulation

There are thousands of neurons in the body, and each is sensitive to different stimuli. For example, the neurons in the eyes are stimulated by light, while the neurons in the ears are stimulated by sound. Pain-specific neurons called nociceptors are stimulated by tissue at risk to danger.

Nociceptor Activity Does Not Equal Tissue Damage

Currently the most common understanding of pain dates back four hundred years, when it was believed that dedicated nerves existed as mechanisms for tissue damage and pain. More recent evidence demonstrates that this is not the case. We now know that nociceptors are the neurons that transmit pain signals to the brain, and that the frequency of their transmission of signals is not proportional to the amount of tissue damage that has occurred.

Defining Pain

Dr. Moseley defined chronic pain as "part of a multi-system output that motivates and assists the individual to get out of a situation that the brain perceives to be threatening body tissue."

Educating Your Client on Pain

Dr. Moseley stressed the importance of educating your clients about pain, to help shift incorrect paradigms that are unhelpful in dealing with pain. While many clients do understand what is causing their pain and common chronic pain strategies such as "move despite your pain" and "hurt vs. harm", the paradigm that pain is a reliable indicator of tissue damage can hinder the healing process. Educating chronic pain clients that "pain protects them via a sensitized nervous system" will help them to believe and respond to the strategy to "move despite your pain" and "hurt vs. harm", thereby increasing function, decreasing disability and eventually decreasing reported pain levels.

Dr. Moseley demonstrated through his research that teaching chronic pain clients about pain reduces pain, subsequently decreasing disability, reducing catastrophic thinking, and eliminating the belief that pain is uncontrollable and that pain equals damage.

Pain is Like Thirst

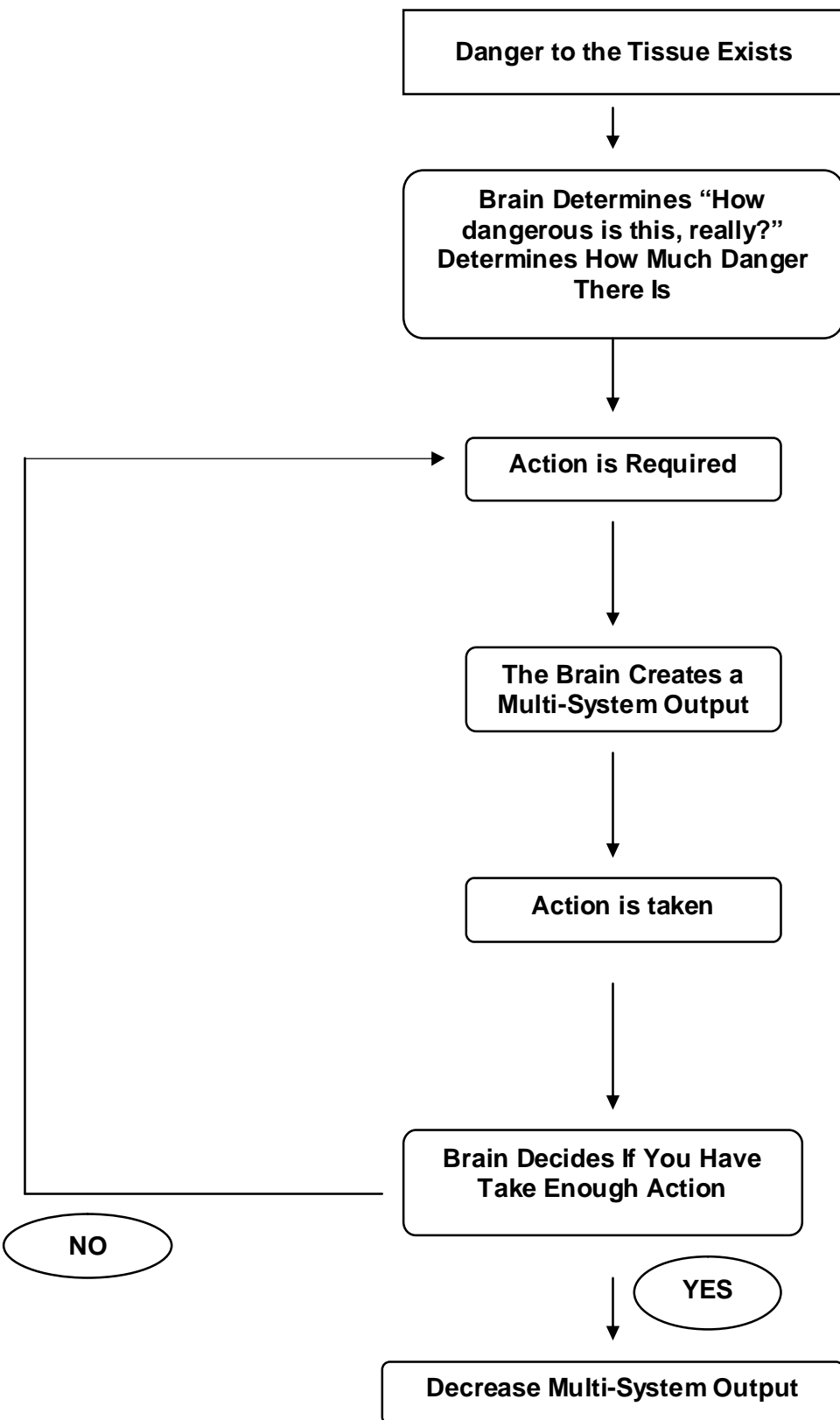
An analogy that Dr. Moseley uses to describe pain to his patients is that pain is like thirst. In the cardiovascular system, when blood volume gets low a message is sent to the brain that blood volume is low. After the brain gets this message it activates the thirst sensation so you will take action and drink in order to increase blood volume. The thirst sensation increases until you have a drink. If you drink a litre of water, it could take about 20 minutes for blood volume to increase and for the brain to receive the message and decrease firing on the thirst nerves.

With pain when tissue danger occurs, signals are sent to the brain telling it that tissues are at risk of danger. The brain uses a complex set of mechanisms to determine how dangerous the threat is. It uses various sensory input from the body such as previous experience, cultural factors, expectation about consequences of danger and/or pain, the social/work environment, as well as beliefs, knowledge and logic, to determine the level of the threat. The brain then produces a multi-system response after the level of threat is determined, and the motor, endocrine, pain production, immune, parasympathetic and sympathetic nervous systems respond to the threat. Once the multi-system response has occurred, the body prompts you to take action by removing the danger. After action is taken the brain will determine whether the action taken is sufficient, or if more action is needed, thereby increasing or decreasing the sensation of pain. This system is shown in Pain Flow Chart (see next page).

Final Remarks

I have done my best to interpret Dr. Moseley's four hour course, concentrating on the most useful information he presented. If you would like more information on chronic pain, I would recommend searching for "L. Moseley" on PubMed Line, or reading the article, "Explain Pain", co-authored by Dr. Moseley and Dr. David Butler.

PAIN FLOW CHART



Article Review: Is Trunk And Knee Strength Affected Lumbar Disc Herniations?

From Healing Through Movement Fitness & Rehab December 2005 Newsletter

Article written by **Rick Kaselj** - support@ExercisesForInjuries.com

In this cross-sectional study, normal subjects (41 males) were compared to patients with lumbar disc herniations (L4-L5 and/or L5-S1; 25 males) in trunk strength and knee strength. None of the subjects in both groups were involved in an exercise program six months prior to the study. Leg strength was determined with seated bilateral and unilateral knee joint flexion and extension at two speeds of movement (60 and 120 degrees per second). Trunk strength was determined with seated trunk flexion and extension at two speeds of movement (60 and 120 degrees per second).

It was discovered that patients with lumbar disc herniations had muscle strength of the trunk and knees which had decreased to a similar extent (30% vs. 29%), independent of speed of movement. A second finding was the control group (normal subjects) was significantly stronger in unilateral leg strength than the patients group (patients with lumbar disc herniations). A third finding was unilateral leg strength was similar in the patients group in the leg with sciatica and the leg without sciatica, independent of lumbar disc herniation location. Thus lower level disc (L4-L5 and/or L5-S1) herniation with nerve root compression or sciatica did not have an effect on knee strength (L2-L4 nerve roots).

Researchers hypothesis that the decrease in muscle strength could be due to muscle atrophy and/or pain-related fear of movement.

So what? This study creates more questions than answers. It shows us that seated trunk flexion / extension and bilateral / unilateral knee flexion / extension strength are affected by lumbar disc herniations in in-active males ranging from 20 to 37. More research needs to be done on what can be done to return strength to normal levels and if doing so helps in the recovery of patients with lumbar disc herniations.

For full details of the study: Ho CW, Chen LC, Hsu HH, Chiang SL, Li MH, Jiang SH, Tsai KC. Isokinetic muscle strength of the trunk and bilateral knees in young subjects with lumbar disc herniation. Spine. 2005 Sep 15;30(18):E528-33.

Course Exam

Congratulations on completing the course workbook.

It is time to get to the exam.

The exam is open book.

In order to pass the course and get your continuing education credits, you must get a minimum of 80% on the exam.

Please note all of the questions are based on the articles in the course workbook.

1. What should a consumer consider before buying a treadmill?

- a. Use, programs, safety, horsepower, extended warranty, and features that count.
- b. Look, style, endorser and claims made.
- c. Use, programs, style, horsepower, extended warranty, and features that count.
- d. None of the above.

2. What are the five most common responses when you subscribe to a fitness & rehabilitation newsletter?

- a. Nothing and enormous amounts of spam.
- b. Sporadic newsletter and a small taste with the reminder being for subscribers.
- c. A jewel of a newsletter.
- d. All of the above.

3. How does Bahram advice finding purpose to read journals?

- a. Time and money you have.
- b. Your situation, helping clients, teach and write.
- c. Curiosity, passion, what your boss tells you and infomercials.
- d. None of the above.

4. What method does Bahram follow with regards to reading research articles?

- a. Why? What? So What?
- b. Who? What? Where?
- c. How? When? Why?
- d. None of the above.

-
- 5. What are the three types of acute pain?**
- Somatic, visceral, and neuropathic.
 - None of the above.
- 6. How did Dr. Bhatti describe pain?**
- “A bothersome annoying person.”
 - “An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.”
 - “A symptom of some physical hurt or disorder.”
 - None of the above.
- 7. What does NSAID stand for?**
- Nonsteroidal Anti-inflammatory drug.
 - None of the above.
- 8. What is the most common complaint of NSAID?**
- Smelly feet.
 - Light headedness.
 - Gastorintestinal problems
 - None of the above.
- 9. What is the role of the rehabilitation and fitness professional with regards to medication?**
- If the medication is ineffective, to recommend to the client different types of medication that they should take.
 - Follow up with the client to ensure they are taking their medication as prescribed by their physician, reinforce the importance of taking their prescriptions and encourage clients to follow up with their physicians if they experience side effects.
 - To go to the pharmacy and purchase other medication and supplements that might help with their condition.
 - None of the above.
- 10. What are five excellent databases that rehabilitation and fitness professionals can use to search for up to date information?**
- AUSPORT, SPORTDiscus, NASLIN, SportFocus, and Medline.
 - PubMed, The Cochrane Library, PEDro, DARE, and SUMSearch.
 - ABCD, RehabFit, Google, FitOne, and DHNOP.
 - None of the above.

11. What are the seven steps to returning to activity?

- a. What do you know? Working diagnosis, history taking, objective evaluation, goals, treatment plan, and facilitation return to play.
- b. What do you know? your diagnosis, history taking, assessment, goals, exercise program, and treatment plan.
- c. Cardiovascular, sets, reps, exercise, stretching, intensity, and movement patterns.
- d. None of the above.

12. What are three pieces of information you need to get during history taking with an athlete?

- a. Site of symptoms, training surface, and sleep pattern.
- b. Onset of symptoms, training, and symptoms.
- c. Diet, posture, functional screens, and body shape.
- d. None of the above.

13. Water has no effect on fat deposits?

- a. False
- b. True

14. Alcohol should be avoided 8 hours before stretching?

- a. False
- b. True

15. What neurons transmit pain?

- a. C Fibers
- b. Thermoreceptors
- c. Nociceptors
- d. None of the above.

16. How many exercises are in a Curves circuit?

- a. 6
- b. 8
- c. 12
- d. None of the above

17. A Curves workout is equal to walking on the treadmill for 30 minutes at 4 mph?

- a. False
- b. True

18. What population is a curves program best for?

- a. Active
- b. Sedentary
- c. Obese
- d. None of the above.

-
- 19. There was a decrease of 30% in muscular strength in the trunk and knees for patients with lumbar disc herniations?**
- False
 - True
- 20. Normal subjects had equal single leg strength compared to patients with lumbar disc herniations?**
- False
 - True
- 21. Leg strength was equal in both legs of a patient with lumbar disc herniations?**
- False
 - True
- 22. What is the possible explanation of a decrease in leg strength for patients with lumbar disc herniations?**
- Muscle atrophy
 - Pain related fear of movement
 - a and b
 - None of the above.
- 23. What was Consumer Reports findings about abdominal devices?**
- "They are great. Everyone should have one of them in their household."
 - "Few, if any, infomercial exercise machines live up to all their hype."
 - "Some are great. Most are no good. Be selective on what you purchase."
 - None of the above.
- 24. What other exercise devices did Consumer Report state could produce equal results as abdominal devices?**
- Barbells and bench.
 - Ball and free weights.
 - Medicine ball and tubing.
 - None of the above.
- 25. What should you look for in a TV exercise device?**
- Color, look, the results from the fitness models, and claims made by host.
 - Ignore the hype, consider the workout, locations I can buy it at, how long I need to use it to get results, and length of infomercial.
 - Ignore the hype, consider the workout or activity you prefer, add up the total cost, ask about guarantees and return policies, look for disclaimers, Don't "cheap out", and take your time.
 - None of the above.

26. What are the key things to a "Daily Health Handout"?

- a. One page in length, no jargon, creditable source, a topic of interest, articles that help your clients make better decisions.
- b. Nice picture, big words, very wordy, copy of a copy, and looks well used.
- c. One page in length, scientific in nature, attached to lots of research, and written by a guru in the topic.
- d. None of the above.

27. Using a bike burns more calories?

- a. False
- b. True

28. Why do people purchase treadmills?

- a. Motivate them.
- b. Allow them to exercise during bad weather.
- c. Help avoid barking dogs.
- d. All of the above.

29. What key items did Consumer Report base their review on treadmills on?

- a. Price, belt size, controls, exercise flexibility, ergonomics, added features, and construction.
- b. Price, belt size, controls, noise, wear and tare, and weight.
- c. Color, size, weight, shape, sleekness, and selection.
- d. None of the above.

ExercisesForInjuries.com Fitness & Rehab Newsletter – Module 1 Answer Sheet

Name _____ Date _____

Phone _____ Score (29 possible) _____

Email _____ (Please write very clearly.)

Use this sheet to answer the questions.

Circle the correct answer.

Question Number	Selection			
1	a	b	c	d
2	a	b	c	d
3	a	b	c	d
4	a	b	c	d
5	a	b		
6	a	b	c	d
7	a	b		
8	a	b	c	d
9	a	b	c	d
10	a	b	c	d
11	a	b	c	d
12	a	b	c	d
13	a	b		
14	a	b		
15	a	b	c	d
16	a	b	c	d
17	a	b		
18	a	b	c	d
19	a	b		
20	a	b		
21	a	b		
22	a	b	c	d
23	a	b	c	d
24	a	b	c	d
25	a	b	c	d
26	a	b	c	d
27	a	b		
28	a	b	c	d
29	a	b	c	d

COURSE EVALUATION

Thank you for completing this evaluation. Your responses will help us in our efforts to continuously improve this course. Please rate the following on a scale of 1–5 (circle one).

	Strongly agree			Strongly disagree	
The course content covers stated objectives.	1	2	3	4	5
The content is up-to-date and comprehensive.	1	2	3	4	5
It was clear how to use the course materials.	1	2	3	4	5
I am able to apply what I've learned.	1	2	3	4	5
This course met my expectations.	1	2	3	4	5
The customer service representative was knowledgeable of product.	1	2	3	4	5
The customer service representative was courteous and handled my call efficiently.	1	2	3	4	5

Would you recommend this course to a friend or colleague? Yes No

Describe how you will be able to apply the content in this course to your work.

What have you gained from this course?

Any recommendations or general comments?

Please share with us the name of a friend or colleague who would be interested in receiving information about Healing Through Movement courses.

Name _____

Address _____

Email _____

May we have your permission to use your comments and name in future publicity about our programs?

Yes No If yes, please sign here _____

Thank you for completing this evaluation.

***You must email, fax or mail these pages:
Answer Sheet, Course Evaluation, and Certificate Information.***

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- Legibly print your name as you would like it to appear on your Certificate of Achievement.
- Place a check mark next to each of the certification(s) you are renewing. This information is
- Necessary for you to receive a Certificate of Achievement.
- Return only the Exam Answer Sheet(s), Course Evaluation, and Certificate Information.
- Use black ink when faxing.
- Fax or mail to: ExercisesForInjuries.com, Attention: Rick Kaselj, #199 – 19567 Fraser Highway Surrey, BC V3S 9A4 / Fax: (604) 677-5425
- Keep a copy of your Certificate of Achievement for your records.

Name _____

Title/Occupation _____

Address _____

City _____ State/Prov _____ Zip _____ Country _____

Phone () _____ Email _____

Have you changed your address since you purchased this course? Yes / No

√	CECs	Certification	Association
	3	BCRPA	British Columbia Recreation & Parks Association
	3	BCAK	British Columbia Association of Kinesiologists
	3	BCCMT	British Columbia College of Massage Therapists
	3	CSEP	Canadian Society of Exercise Physiologists

If your association has not pre-approved this course, you may petition your association for the CECs. Please contact your association on how to complete that process.

About Rick Kaselj**Rick Kaselj, M.S. (Exercise Science), B.Sc. (Kinesiology), PK, CPT, CEP, CES**

Rick Kaselj specializes in active rehabilitation and fitness. He works in one-on-one and group rehabilitation settings, educating and training people who have been injured at work, in car accidents, and during sport activities.

Rick has combined his rehabilitation experience and passion for research to develop a variety of courses and presentations for fitness professionals, Kinesiologists, and healthcare providers. Rick has given over 260 presentations to more than 5000 fitness professionals across Canada and USA. These courses include:

- Core stability of the shoulder
- Exercise rehabilitation for the shoulder, lower back, hip, or knee
- Foam roller essentials
- Intro and advanced core stability
- Intro and advanced stability ball exercises
- Postural assessment and exercise prescription
- Injury-free running
- Save your shoulders
- Training for better golf

Rick strives to balance his work life with his personal fitness endeavours and travel. He has trained for and competed in the Manitoba Marathon, the 225 km Ironman Canada Triathlon, and the 160 km Sea2Summit Adventure Race in Whistler, BC.

He recently hiked 4,300 km along the *Pacific Crest Trail* from Mexico to Canada and mountain biked the 5,000 km *Great Divide Mountain Bike Route* over the Rocky Mountains from Mexico to Canada. An avid traveler, Rick has toured three continents and visited 17 countries.

In 1997 he graduated with his Bachelor of Science degree in Kinesiology from Simon Fraser University. Rick recently completed his Masters of Science degree focusing on corrective exercise and therapeutic exercise for the rotator cuff. Rick currently works as a lecturer, Kinesiologist, personal trainer, and exercise rehabilitation specialist in and around Vancouver, British Columbia, Canada.

To learn more about Rick Kaselj, please visit www.ExercisesForInjuries.com

About Healing Through Movement



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Healing Through Movement has been helping people reach their health, fitness, rehabilitation and sport goals since 1999.

How Healing Through Movement can help you:

Active Rehabilitation – This individualized program is designed to help you overcome injury by using flexibility, endurance, strength and cardiovascular exercises.

Adaptive Fitness – A personalized exercise program designed for youth and adults with special needs. The types of special needs may include cerebral palsy, multiple sclerosis, brain injury and/or developmental disability.

Adventure Travel Presentations – A full sensory experience including music, images, and storytelling on the experience and adventure of hiking the 4,300 km Pacific Crest Trail, cycling Cuba, and cycling the Rockies from Mexico to Canada.

Corrective Exercise – An exercise program designed to address your muscle imbalances and areas of tightness and pain.

Endurance Training – An individualized training program created to help you complete your desired running, cycling, duathlon, triathlon, or adventure race.

Exercise Rehabilitation – An exercise program designed to help you recover from your injury or medical condition in a safe and effective manner.

Exercise Rehabilitation Courses – Education and training for registered Kinesiologists, exercise therapists, and personal trainers on the use of exercise as a safe and effective tool to recover from back, shoulder, knee, hip, ankle, elbow and wrist injuries.

Expedition Training – Forming a complete plan including gear selection, route preparation, nutrition guidelines and a training program to help accomplish your hiking, biking or kayaking dream.

Personal Training – An exercise program to help you reach your weight loss, strength gain, and body shape improvement goals.

Post Rehabilitation – After you have completed physical therapy, chiropractic or massage therapy treatment, this is an exercise program designed to help you recover from your injury and return your body back to where it was before your injury.

Pool Therapy – Use the pool environment to decrease stress on joints and to help your body recover from injury by improving range of motion, strength, endurance and balance.

Where can Healing Through Movement meet me:

In Person – Healing Through Movement can meet you at your home, local community centre or fitness centre to help you achieve your health, fitness, training, sport, travel or rehabilitation goals.

Phone/Online Training – More clients are meeting with Healing Through Movement over the phone or through email to reach their health, fitness, training, sport, travel or rehabilitation goals.

Founder of Healing Through Movement - Rick Kaselj

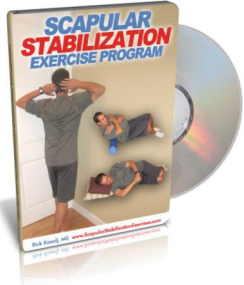
Rick Kaselj is a Registered Kinesiologist and Personal Trainer with a passion for exercise rehabilitation. Rick designs effective exercise programs that safely and rapidly help his clients recover from an injury, medical condition, and/or musculoskeletal pain, and reach their health, rehabilitation, and sport goals. Rick presents courses on exercise rehabilitation and adventure travel across Canada and USA. To reach Rick, call (888) 291-2430 or visit www.HealingThroughMovement.com .



Healing Through Movement

Fitness • Rehabilitation • Presentations • Publications

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Ready-to-Download Video Presentation from Rick Kaselj**Scapular Stabilization Exercise Program**

Shoulder injuries lead to pain, prevent people from doing the things they love and make life's simple tasks challenging. Many will learn strength exercises to help them recover from their shoulder injury, but too often these exercises will lead to slower recovery from a shoulder injury. What needs to be done before strengthening the shoulder is activating, building endurance and strengthening the scapular stabilization muscles. Adding this one step will speed up the recovery from a shoulder injury and prevent re-injury of the shoulder.

For more details visit - <http://ScapularStabilizationExercises.com/>

**Exercise and Plantar Fasciitis**

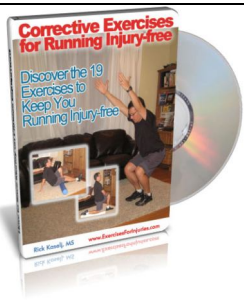
The role of exercise to treat plantar fasciitis is vital in helping shorten recovery time, decrease pain, and decrease the risk of reoccurrence. Creating an action plan on what to do if symptoms return is also important for the plantar fasciitis sufferer. The focus of the plantar fasciitis and exercise webinar will be exercise program design for clients who have plantar fasciitis.

For more details visit - <http://exerciseforinjuries.com/plantar-fasciitis-exercises/>

**The Most Effective Rotator Cuff Exercise Program**

After the back, the second most common injury a fitness professional will encounter is the shoulder. Most times shoulder injuries directly and indirectly involve the rotator cuff. When fitness professionals hear that their client has a rotator cuff issue, they end up focusing on strengthening. Strengthening is important for your rotator cuff clients but it is only one part of an effective rotator cuff conditioning program. The fitness professional must address all five areas of a rotator cuff conditioning program in order to fully rehabilitate the rotator cuff. If not, they will only band-aid the injury and not fully help their client overcome it. In this webinar, fitness professional will learn how to avoid common rotator cuff exercise mistakes, the 5 components of a rotator cuff conditioning program and exercises to help their client's rotator cuff injury.

For more details visit - <http://exerciseforinjuries.com/rotator-cuff-conditioning-exercises/>

**Corrective Exercises for Running Injury-Free**

Running is one of the most popular recreational activities among adults but most will have to stop due to an injury. Along with a solid running program that prevents over-training, there are a number of key exercises that must be included in a recreational runner's program in order to be injury-free. In the corrective exercises for running injury-free webinar, the fitness professional will learn a comprehensive list of assessment techniques and exercises to keep their clients running injury-free.

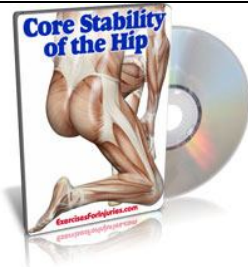
For more details visit - <http://exerciseforinjuries.com/running-corrective-exercises/>



Exercises for Prevention, Rehabilitation & Overcoming Knee Injuries

The knee is the focus of an exercise program when it is injured but often ignored any other time. More and more research has shown that the goal of the client should determine the knee exercise program compared to the presence or absence of injury. If your client's exercise goal is prevention of knee injuries, their exercise program should differ from that of a client recovering from a knee injury. If the client has had a knee injury and would like prevent a future knee injury, here is an exercise program that focuses on overcoming knee injuries. It is important that the fitness professional know which exercises and exercise programs are best for their client depending on the goal of the client. In this exercise and knee injury webinar, fitness professionals will learn three different knee exercise programs to help their clients who want to prevent a knee injury from occurring, to rehabilitate a knee injury and overcome knee injuries by preventing them in future.

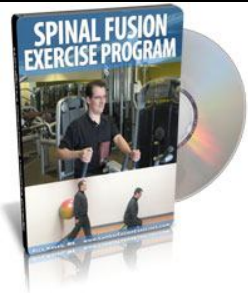
For more details visit - <http://exerciseforinjuries.com/acl-injury-exercises/>



Core Stability of the Hip

In this video presentation, fitness professionals will learn a progressive exercise program that they can use with their personal trainer and group fitness clients to improve core stability in the hip, and prevent and recover from back, hip and knee injuries.

For more details visit - <http://exerciseforinjuries.com/hip-injury-exercises/>



Lower Back Spinal Fusion & Exercise

In many situations, a lower back condition can lead to lower back spinal fusion surgery. It is estimated that 126,000 spinal fusion surgeries occur each year in the US and since 1996 the number of surgeries has increased 116%. The group that has had the greatest increase in lower back spinal fusion are adults over 60. Lumbar compression fractures, spinal deformities, spondylolisthesis, lumbar instability, disc herniation and degenerative disc disease are common conditions that can lead to lower back spinal fusion. A key component in the recovery from lower back spinal fusion surgery is exercise. The role of exercise after spinal fusion is important in speeding up recovery, strengthening the muscles supporting the vertebrae and improving the endurance of core stability muscles. The focus of the spinal fusion and exercise webinar will be exercise program design and exercises for a client who has had a lower back spinal fusion.

For more details visit - http://exerciseforinjuries.com/lumbar_fusion_exercises/

Interested in receiving a Shoulder Injury Guide?

Visit <http://ExercisesForInjuries.com>

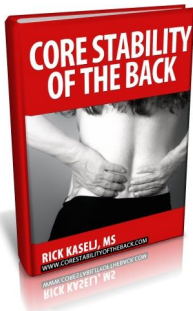
Products from Rick Kaselj

Muscle Imbalances Revealed

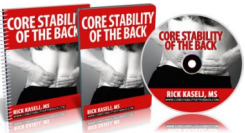
As a fitness professional we often just focus on strength, flexibility and cardiovascular techniques with our clients in order to help them reach their goals. By just focusing on these three exercise techniques you hamper your client's ability to overcome injuries, bust through fitness plateaus and stay injury-free. To get past this what you need in your toolbox is a full understanding of muscle imbalances.

Muscle Imbalances Revealed goes beyond stretching what is tight, strengthening what is weak or just performing corrective exercises. It assists the fitness professional in understanding the synergies that exist within the body and walks you through the intricacies of muscle imbalances. In Muscle Imbalances Revealed, the fitness professional will be guided by 6 experts from various professions on how to identify, address and perform the most effective exercises to address muscle imbalances and increase the speed of injury recovery, bust through fitness plateaus and prevent injuries.

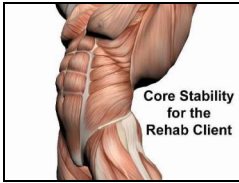
For more information visit - <http://MuscleImbalanceRevealed.com>

**Core Stability of the Back**

The Core Stability of the Back program is for the back pain sufferer who wants to get their back onto the road of being pain-free. Core stability muscles play an important role in all activities of daily living. They enable us to perform the simplest of activities and help us maintain good posture. When ignored, core stability muscles become weak and the risk of lower back pain and instability increases. In the Core Stability of the Back program you will get an easy to follow program that you can do anywhere and will help you on your way to a pain-free back. In the Core Stability of the Back book you will learn about the key muscles of the core, how to locate these muscles in the body, how to activate them and an effective program to create a strong and stable back.

Core Stability of the Back - Home Program -

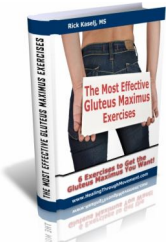
The complete Core Stability of the Back program is for the back pain sufferer who wants to get their back onto the road to being pain-free. Core stability muscles play an important role in all activities of daily living. They enable us to perform the simplest of activities and help us maintain good posture. When ignored, core stability muscles become weak and the risk of lower back pain and instability increases. In this home program you will get the Core Stability of the Back book plus a home DVD, audio workout and audio book. The Core Stability of the Back program provides you with an easy to follow program that you can do. In the Core Stability of the Back book you will learn about the key muscles of the core, how to locate these muscles in the body, how to activate them and an effective program to create a strong and stable back.



Core Stability for the Rehab Client DVDs *(Recorded Seminar)*

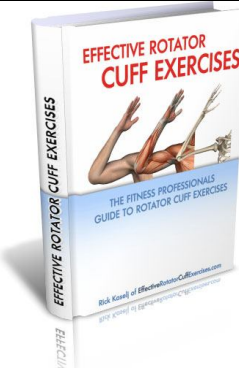
Core stability muscles assist in stabilizing the lower back and pelvis; when ignored they weaken, and the risk of lower back and pelvis related injuries increase. This course will cover anatomy of the core and introduce functional core exercises which focus on strengthening core muscles and stabilizing the lower back and pelvis. - \$89.00 for 3 DVD set

For more information visit - <http://exerciseforinjuries.com/core-stability-for-the-rehab-client/>



Most Effective Gluteus Maximus Exercises

A common area that people want to exercise is their gluteus. There are a number of common exercises people do but recent research has determined which gluteus exercises are the most effective. This guide will help you learn about the most common gluteus exercises and which ones are the most effective in working your gluteus maximus, hamstrings and gluteus medius.

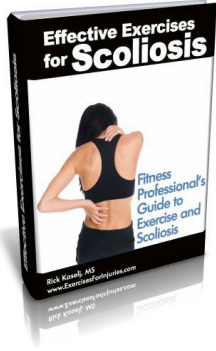


Effective Rotator Cuff Exercises

- Fitness Professional's Guide to Rotator Cuff Exercises -

Rotator cuff injuries are the most common shoulder injuries fitness professionals will face. Exercise is recommended by physicians for people with rotator cuff injuries and therefore it is vital for the fitness professional to be educated and prepared to work with these clients. Exercise can help safely alleviate pain, decrease stiffness, increase range of motion, and improve rotator cuff strength. Gain a comprehensive understanding of rotator cuff injuries, how to design an appropriate exercise program for your clients with a rotator cuff injury and discover the most effective exercises for the rotator cuff. If you are ready to increase your confidence working with clients with rotator cuff injuries, would like to understand how to safely train clients with rotator cuff injuries and empower yourself with the best exercises to help your clients with rotator cuff injuries, then Effective Exercises Rotator Cuff Exercises is a must for you.

For more details visit - <http://effectiverotatorcuffexercises.com/>



The Most Effective Exercises For Scoliosis

- Fitness Professional's Guide to Exercise and Scoliosis -

Exercise is recommended by physicians for people with scoliosis. With more people with scoliosis leaning towards exercise to help improve their condition, it is vital for the fitness professional to be educated and prepared to work with these clients. Exercise can help safely alleviate pain, stiffness, de-conditioning, and muscular weakness associated with scoliosis. Gain a comprehensive understanding of scoliosis, how to design an appropriate exercise program for your clients with scoliosis and discover the most effective exercises for scoliosis. If you are ready to increase your confidence working with clients with scoliosis, would like to understand how to safely train clients with scoliosis and empower yourself with the exercises to help your clients with scoliosis, then Effective Exercises for Scoliosis is a must for you.

For more details visit - <http://effectiveexerciseforscoliosis.com/>

**Interested in receiving over \$299 worth of
fitness education information?**

Visit <http://www.ExercisesForInjuries.com>