Having a Blast!

Fresh from the performance, “Blast” at the Hummingbird Centre, I marvel at the creative talents that abound in this world. With an overwhelmingly pleasing combination of music and movement, the experience left me pumped and wanting more. It is amazing how my life experiences affect my leadership in aquafitness.

While walking through the forest and along the garden pathways in a Toronto Park, fascinating movement combinations popped into my head and promptly took over my body. I am certain the creative juices were flowing as a result of a combination of factors. Put together warmth, brilliant sunshine, azaleas and rhododendrons in full bloom, and memories of a spectacular performance only 24 hours before and, voila! the ingredients for a creative power surge.

Now conference and workshop sessions are filling my mind, body and spirit and are begging to be offered! My participants will fill with delight as I share the power surge with them.

CONFERENCE 2003 UPDATE:
Conference dates were applied for in May 2002 and we are awaiting confirmation. If appropriate dates are available, we will return to the ETOBICOKE OLYMPIUM for 2003. The 2002 conference numbers were up by 25% over 2001. The conference surveys indicated the following: The Toronto location is central and accessible. The cost was affordable. The sessions were appealing and diverse. The constant supply of energy food was tops. The Trade Show complete with non-stop sponsorship draw prizes was a big bonus.


REGIONAL CONFERENCES:
There has been considerable interest expressed by members in Calgary-Lethbridge, Vancouver and Ottawa for a regional CALA Conference. I would love to oblige these requests and envision a 1 to 1.5 day event. This is what I need from the membership in order for it to happen:

1. one individual, in each region, who has access to an appropriate facility and wants to take charge, get a team of volunteers together and facilitate a regional convention. If you are that individual, email or call me at CALA headquarters. We will get the ball rolling!

2. support from the membership... if we offer a convention in your region... make a commitment to attend the event, to ensure it’s success.

* See p. 16, two regional conferences are already booked.

TRAINING FOR TRAINERS:
I know, I know... eager new trainers and motivated experienced trainers are awaiting a date for the 2002 “T for T”. All those who have expressed interest in attending this retreat will receive notification as soon as the date and location are confirmed. Thank you for your patience.

Take a look at the upcoming events listed on page 16 - Summer and Fall 2003 is busy. There are some events in process, awaiting confirmation. If you want to host a workshop, conference, specialty course or Basic Aquafitness course, please contact CALA.

Don’t forget to renew your membership, complete your certification or do your recertification. If you contact us, it lightens the load at headquarters.

Have a great summer!


MEMBERS AQUABELT PRICES:
- Medium $30.00 + S&H + Tx
- Large $32.00 + S&H + Tx
- X-Large $34.00 + S&H + Tx

NON-MEMBERS AQUABELT PRICES:
- All Sizes $38.00 + S&H + Tx
- Shipping and Handling $15.00 + $2.00 per belt
- We only take orders for 12 or more belts

AQUABELT SIZES:
- Size Width Lgth Waist
- Medium 4 5/8” 32” 26”-35”
- Large 4 5/8” 33” 36”-42”
- X-Large 4 1/4” 35” 38”-45”

REPLACEMENT STRAPS:
- All Sizes $5.00 + $1.50 per strap (S&H) + Tx.

All belts come with straps included. Belts are not approved for use as lifesaving personal flotation devices.

For more information about our Aquabelts and to place an order please contact the CALA office at 1-888-751-9823.
THE CALGARY WINTER CLUB 'ART' - AQUA RUN TRAINING

Carmelita, a CALA trained water running instructor at the Calgary Winter Club has dubbed her class the ‘ART’ - ‘Aqua Run Training’. Currently there are five ‘ART’ classes on offer. The classes attract regular aquafitness participants as well as other fitness enthusiasts who are totally new to water exercise.

The photos, courtesy of Marilyn Sawford (Aquafitness Coordinator at the Winter Club) tell a story about who the non-aquafit participants are in a very successful noon hour ‘ART’ class. Ken, a marathon runner looking for an anaerobic workout without injuring himself. Nigel, a marathon runner and competitive squash player looking for a way to continue to train while injured. Ted, an ironman triathlete who added vertical water workouts to his training mix. Marilyn, an ex-runner and ex-triathlete looking for an alternative to running on land.

All of these individuals have discovered the benefits of running in water. They enjoy the tethered or hitched stationary work where they can focus on technique and intensity rather than horizontal speed.

Why not add water running to your aquafitness schedule? While deep water is the preferred medium, this workout is also suitable in chest to shoulder depth water.

Call CALA to organize a one day Water Running and Aqua Jogging Specialty Course at your facility. Take a look at page 16... there is a Water Running course offered in early July in Dartmouth, Nova Scotia.

CALA GETS THE THUMBS UP FROM THE TORONTO REHAB CENTRE

Dear Charlene

I want to thank you. When I told my program supervisor at the Toronto Rehab Centre that I wanted to take Aquafitness, as a part of my rehabilitation from my heart attack and triple by-pass surgery, she told me that there is a great difference in the programs that are offered and that we would have to discuss the conditions that would have to be controlled.

As soon as I told her that you had trained the instructors of the aquafitness program that I would be attending, at the Willowdale Club - Fitness Institute, she immediately started to tell me about CALA and what an excellent program it is and how people trained through CALA present a well balanced program with a well modulated heart training session. She immediately gave me permission to start taking aquafitness twice a week in addition to my walking program.

Since I must wear a heart rate monitor while I exercise, I was surprised to discover that while I don’t feel that I am working as hard in the pool, as I feel that I am working in the gym, my heart rate is actually higher in the water. I think the motivation provided by the instructors gets me working.

Thank you. The excellent aquafitness program taught by CALA instructors at the club allows me to exercise all parts of my body with less strain on my painful back and hips and also improves the strength of my heart.

Sincerely,
Jacqueline Bennett
Bettina is an aquatic exercise specialist who has over 10 years experience as a national and international presenter. Bettina lectures at Victoria University of Technology on Aquatic Exercise and has a specific interest in "special populations". Bettina is also the Director of H2Oz, which is a national organization that specializes in aquatic exercise.

Introduction

We all appreciate the crucial role the abdominals, back and stabilizers play. Let’s review the anatomy, and look at additional effective ways to target this important area in an aquatic exercise class.

Abdominal Muscles

When referring to the abdominal muscles, the rectus abdominis, the transversus abdominis, the external obliques, and the internal obliques are the focus muscles.

The rectus abdominis is the most superficial of the four muscles. It forward and laterally flexes the spine. Examples of some exercises that activate this muscle to varying degrees during an aquatic exercise session are: abdominal curls, pelvic curls, double knee tuck crunches, rock n’ rolls, and curl downs.

The transverse abdominis is the deepest of the four muscles. Forced expiration pulls the abdominal wall inward, and activates this muscle. Examples of some exercises that activate this muscle during an aquatic exercise session are: standing, water walking, drawing contents of the torso to the spine, and most abdominal exercises that focus on breathing.

Strengthening the obliques is important because they create a supportive ‘corset’ or ‘girdle of strength’

The external obliques are located on the left and right sides of the abdomen. The external obliques flex the trunk, right side to left side, and left side to right side. Examples of some exercises that activate the external obliques during an aquatic exercise session are: anything that involves twisting, lunges, cross water pulls, cross kicks, ski bounces, pendulums and lateral rock n’ rolls.

The internal obliques are located on the lateral side of the abdomen, underneath the external obliques. The action of this muscle is to flex the trunk, right side to right side and left side to left side. Examples of some exercises that activate this muscle during an aquatic exercise session are: lateral reaches, lateral push downs, karate kicks and lateral scoops.
Abdominal Strengthening - Key Points

1. Include more abdominal compression exercises. These exercises are important because compression is used in standing, sitting, and while lifting to help stabilize the lower back.

2. Emphasize oblique work in aquatic exercise sessions, this includes lateral bending and twisting. Too much emphasis is placed on working the rectus abdominis in classes in general. It is important to remember that the rectus abdominis tends to be a very overworked muscle, as it already gets a lot of work during daily activities.

3. Remind participants to maintain good posture throughout all exercise sessions.

4. Engage the pelvic tilt position and when finished an abdominal exercise, return to a natural lower back curve to be used with other activities. This isometric contraction aids trunk stability greatly as buoyancy is always trying to offset this position. The pelvic tilt also aids the correct concentric contraction, and will make it more difficult for clients to perform hip flexion.

5. Focus on ‘breath’, exhale on the effort or curling action.

Pelvic Floor Muscles

Even though the pelvic floor is not part of the abdominal muscle region, it is a very important area, which recently has received a lot of research focus. Researchers estimate that 8% of adults, including between 10% and 30% of women, aged 15 to 64 years of age, suffer from incontinence. Women are mainly affected by incontinence, but incontinence can affect older men.

The pelvic floor is a thin band of muscle that runs in a horizontal plane from the edge of the spine, underneath the bladder, womb and bowel. It is a like a trampoline, ‘bounced upon’ by everything above it. The pelvic floor can lose its elasticity and is prone to collapse.

Pelvic floor muscles can be damaged by heavy lifting, high impact activities, being overweight, pregnancy, “holding on” (not going to the toilet often enough), chronic coughing and strenuous abdominal exercises.

A recent study, by Norwegian researchers, concluded that pelvic floor exercises are the best treatment for incontinence. Specialists acknowledge that any muscle you exercise regularly is going to be stronger than one you do not exercise. When performing a pelvic floor contraction in class, cue participants to contract the gluteal muscles at the same time. This seems to help some participants perform the muscle action more effectively. Remember the internal elevator. Visualize the pelvic floor area as the entrance to an elevator, then visualize the elevator car going up inside the body, as the muscles are activated. This also helps clients get in touch with the muscles in this area, and increases the strength of the contraction.

A useful tip for any client that suffers from incontinence is to remind them to tighten their pelvic floor muscles before lifting anything, and if possible before coughing, sneezing or laughing.

Abdominal Muscles

Spinal Column Muscles

There is a significant difference between the thoracic and the lumbar spine. The thoracic spine is primarily involved with the scapular area. The lumbar region relates to everything from L1 (the first lumbar vertebrae) and down the spine. A well-balanced exercise program can help clients build strength and stability in this area. When discussing the back and torso in this article, the area of focus is primarily the lumbar spine/lower back region.

A few large muscles and numerous smaller muscles are found in the lower back area. The largest muscle is the erector spinae (sacrospinalis), which extends on each side of the spinal column from the pelvic region to the cranium (skull).

continued on page 6
The erector spinae is divided into three muscles: spinalis, longissimus and illocostalis.

From the medial to the lateral side it has attachments in the lumbar, thoracic and cervical regions. Therefore, it is said that the erector spinae is made up of nine major muscles.

The action of the erector spinae is to extend the spine and incline the head backward. It also laterally flexes the spine, assisting the abdominals.

Back extension and pelvic tilts also activate the erector spinae muscle.

The quadratus lumborum is another important muscle.

It extends between the inner lip of the iliac crest and the upper two lumbar (L1 and L2) vertebrae.

The action is lateral flexion, but importantly it stabilizes the pelvis and lumbar spine.

Trunk twisting and lateral flexion activate this muscle.

There are numerous other small muscles found in the spinal column region. Many of them have their origin on one vertebra and insertion on the next vertebra. These are important muscles, but the knowledge of these muscles is of limited value to most individuals.

So why is it important to strengthen the back and abdominal muscles if I am not going to lose my belly?

Back problems are a huge Australian, American and Canadian problem. It is estimated that 80% to 85% of the population, (approximately eight out of ten people), will experience lower back pain at some time during their lives. Of these, 30% of back injuries happen to those under 30 years of age. It has been identified in Australia and America, that back pain is actually the most frequent cause of limited activity in those under 45 years of age.

There is a direct correlation between back health and abdominal fitness. Strong rectus abdominis muscles counteract short or tight hip flexors, which may be responsible for an exaggerated anterior pelvic tilt (excessive arch of the back or lordosis). Strong oblique muscles reinforce the erector spinae fascia, and pull it laterally resulting in less strain on the back extensor muscles and spinous ligaments.

What is trunk stabilization and why is it important?

Trunk stabilization is all about ensuring muscle balance, trunk stability and strength. The torso muscles work as a team to control movement within the torso, and give more power for other activities.

These activities include sitting up in bed, sitting in a chair, swimming, playing tennis, lifting or chasing a dog (activities of daily living, ‘ADL’).

Strengthening the rectus abdominis and the back extensors will reinforce correct posture. This is achieved by reduced stress on ligaments, intervertebral discs, and joint structures. Also space is provided inside the torso for the internal movements required for breathing, digestion, and organ function. Strengthening the obliques is important because they create a supportive ‘corset’ or ‘girdle of strength’.

How do I achieve trunk stabilization?

Trunk stabilization can be achieved by addressing four components in an aquatic exercise session including:

1. Strength
   - Address trunk extensor, flexor and lateral structures, as well as the pelvic floor.
   - Cue correct posture at all time.
   - Include isometric exercises and compound exercises. Determine when, how and where to include these exercises. Consider speed of motion, which and how much equipment is appropriate, water depth, body position, buoyancy and what exercises are appropriate for the attending population group.

2. Stretching
   - Keep the lumbar region both strong and flexible to encourage lumbar stabilization. Muscle length tension is one of the keys of muscle balance.
   - Include stretches for the hamstrings, abdominals and lower back.
   - Use buoyancy to aid stretching – for example put a flotation belt under the thigh when performing a standing hamstring stretch.

3. Alignment and Posture
   - Adapt the stretch according to the needs of the attending group. Due to the magical properties of water (turbulence, viscosity and buoyancy), alignment and posture can be difficult to maintain with dynamic exercises. This may be an advantage for stronger, more advanced groups or difficult for weaker, more inexperienced groups.

4. Aerobic Conditioning
   - Research regards aerobic exercise as being very beneficial for trunk stabilization.
Focus on the aerobic component of aquatic exercise to achieve improvements in cardiovascular and muscular endurance, strength and posture.

**Torso Strengthening Key Points**

Water walking and running is excellent for strengthening and stabilizing the abdominals and lower back. If the client stands up straight, the abdominal muscles work isometrically and co-contract with the back muscles. If the client leans forward, stress is put on the back muscles, and the abdominal muscles work minimally, if at all.

- **STAND UP STRAIGHT**
- **AVOID LEANING FORWARD**
- **MAINTAIN NEUTRAL PELVIS**

The double concentric contraction facilitated by the resistance of water allows the lower back to generally receive strengthening in the abdominal component of a class.

- **MAINTAIN CORRECT POSTURE THROUGHOUT**

**Hip Flexor Paradox**

The hip flexors are the iliopsoas muscles, a group of muscles originating on the inner surface of the ilium, base of the sacrum and sides of the bodies of the last thoracic, and all the lumbar vertebrae. The action is to flex the hip and outwardly rotate the femur.

Be aware of what activates the hip flexors when performing abdominal exercises. If focusing on strengthening abdominals, place the hip flexors into a position that will limit activation. Here are some points that will decrease the hip flexor involvement when working the abdominal muscles.

- Avoid going beyond 35° to 40° of hip flexion.
- Avoid more than 20° to 30° of trunk flexion.
- Avoid more than 9° to 10° of a pelvic tilt.

---

**Spinal Extensors**
(Erector Spinae)

**Quadratus Lumborum**
(Anterior View)
The Presenter Team
Pia Francis ..............................................(Derby, UK)
Elizabeth Fox ...........................................(London)
Dylan Harries...........................................(Ottawa)
Marie-France Hebert..............................(Montreal)
Connie Jasinskas ...................................(Cambridge)
Charlene Kopansky .........................(Toronto)
Jodie Kottick ...........................................(Sudbury)
Line Marr ................................................(Hull)
Jennie Queen ...........................................(Ottawa)
Pat Richards ...........................................(Guelph)
Donna Reeves .................................(Mont Tremblant)

The Volunteer Team
Wendy Andruski ...........................................(Thunder Bay)
Ali Bassir ................................................(Toronto)
Maryvonne Berthault ............................(Mont Tremblant)
Lisa Bixel ................................................(Toronto)
Jocelyn Bornstein .........................(Toronto)
Karen Cook (Kopansky) ............................(Oakville)
Rosey Cowan .................................(Qualicum Beach, B.C.)
Lisa Fleischman ........................................(Toronto)
Leesa Forsey (Kopansky) .........................(Toronto)
Marie-France Hebert .........................(Montreal)
Stacey Heldman .................................(Vancouver, B.C.)
Adele Hickey ...........................................(Toronto)
Matt Kopansky ........................................(Bancroft)
Sylvia Kopansky .....................................(Bancroft)
Donna Lopez ...........................................(Hamilton)
Antonia McGuire ...................................(Ottawa)
Shelagh Noonan ...................................(Sunshine Coast, B.C.)
Nancy Sawler ...........................................(Toronto)
Jennifer Steele-Allen .........................(Kingston)
Nancy Wilson (Kopansky) ......................(Oakville)
Christina Wolske .................................(Toronto)
Erit Zajdfudem ......................................(Richmond Hill)

Line Marr finds the groove while Creating Waves.

Are you an elephant?
Are you an ostrich?
Are you an baboon?
Feel the rhythm of Africa!

The Deep Water - not an inch of space remaining in the Olympic Size Pool.

GALA delegates taking it all in - on deck!
The Sponsor and Trade Show Team
360° of Health
AVON Canada
Bodywise
Burntrax Music
CanFitPro
City CPR
Dominion - Bayview/Eglinton
Fitness Institute - Willowdale Club
Fitness Marketing Group - Dynamix Music
Future Shop - Leaside
Healthwinds SPA
Kreations Active Wear
Loblaws - Yonge & East Mall Stores
Toronto Truck Theatre
No Frills - Etobicoke
Omni Swim
Power Music
Pure and Simple
Relax to the Max
SOCAN
Splashables
Sports & Fitness Insurance Co.
Tea Council of Canada
Usana Cellular Nutrition
Wallmart

Marie-France, 1st time presenter 'rocks' the pool

Activate those abs, feel the power. Charlene Kopansky.

Charlene and Dylan share some laughs.

Practicing “on-deck” teaching, Michelle Valentino (front)
• Avoid including the legs in exercises designed to target the abdominal region. This is strengthening an already strong muscle, the iliopsoas.

• Too large a ‘range of motion’ when performing abdominal exercises increases hip flexion and pulls the sacrum forward, causing the pelvis to tilt excessively forward.

Examples of Standing Aquatic Exercises for Torso Strengthening and Stabilization

a) curling combination
• woggle/noodle placed on abdomen and cross arms to hold in place
• use the abdominals to push the woggle/noodle down, not the arms
• curl down x 1, curl up x 1 and combine x 2
• focus: rectus abdominis, erector spinae, pelvic floor (on curl up) and stabilization
• CALA alternative included without the use of a woggle/noodle - stand in chest deep water, stay anchored, place flat hands side by side in front of the abdomen, palms facing pool floor for maximum surface area – perform exercise as described above (CALA ‘tai chi arms’ with or without narrow swivel)

d) tumble weed
• place woggle/noodle around the back
• sit, kick both legs forward and stand up, pushing the woggle behind the body
• focus: transverse abdominis and stabilization
• CALA alternative - stand in chest deep water or deep water, using a flotation belt, preform a unison narrow quad kick/ narrow tuck combo, with arms doing a unison tricep kick back on the kick and a unison hammer hands on the tuck. Take your time, counts as follows:

  Count #1: narrow tuck with unison hammer hands
  Count #2: return to vertical position (standing) And: get into sitting position
  Count #3: sitting unison narrow quad kick with unison tricep kickback arms And: into tuck position
  Count #4: return to vertical position (standing)

Diagrams courtesy of J. Jasinskas from The CALA Basics About Aquafitness Leadership Training Manual.

References
AA MMuusstt ffoorr aallll aaqquuaaffiittnneessss lleeaaddeerrrrs!!

Details about the mat: It’s a cellular urethane pool deck mat that comes in two sizes: 1.0 metre and 1.7 metres, easily portable, non-slip surface, ultra violet, chemical resistant & odourless, no maintenance required, immediate return to original thickness following rapid & repetitious impact.

Why buy it? Aqua Matt protects your most valuable asset - “you” - from damage to your joints and loss of earnings. Designed for the safety of the pool deck Aqua instructor, Aqua Matt provides maximum shock absorption for cushioning and protecting against impact and vibration and a non-slip surface to guarantee sure footing even when wet.

Price change effective immediately. Note: the price of the Aqua Mat has remained the same for members, but has increased for non members. Another advantage of membership with CALA.

This price increase was inevitable, due to the high cost of shipping from the USA.

CANADIAN PRICES: For CALA members
1.0 metre mat: $152.50 + $30.00 (S & H) + tax
1.7 metre mat: $225.00 + $30.00 (S & H) + tax

CANADIAN PRICES: For non members
1.0 metre mat: $194.00 + $30.00 (S & H) + tax
1.7 metre mat: $255.00 + $30.00 (S & H) + tax

Q - Aqua weights
Hi, I am a personal trainer that has a client looking for the foam aqua weights, any idea where they can be purchased? We live in the Belleville/Trenton Ontario area and can access Toronto to Kingston to Ottawa. Your assistance would be greatly appreciated.

A - Dear Personal Trainer:
Unless you are doing very slow and controlled movements for therapy, CALA is not recommending the use of floating aqua weights. We have found through exercise analysis that the ‘risk to benefit/effectiveness ratio’ of this product does not warrant buying it. If your client is extremely athletic, very advanced and very strong, then the gloves are safe and can be an effective means to increase surface area and thus the amount of resistance. Otherwise, the effective use of water - using a flat hand, through a full range of motion at an appropriate tempo will provide an excellent workout. Teach the client to ‘push and pull the water’, using a strong mental and physical focus while exercising. Usually people have not learned to use the water effectively and rely on products to create work. If the client cannot make the commitment to learning how to use the water as the training tool, they could contact “Splashables” to buy the floating weights... with risk to the following joints: wrist; radio-ulnar; elbow; shoulder....

If it is flotation, in deep water that the client is looking for, an aquafitness flotation belt is more appropriate, those we do recommend, and can be purchased through CALA.

I trust you will embrace this information and share it with your client.

If you would like more information about our training courses or workshops, please provide your complete address details and we will send you a package.

Sincerely,
Charlene
### AQUAFITNESS FOR OLDER ADULTS?
YOU BET!

*Submitted by Elizabeth Fox, P.T., Aquatic Therapist, CALA Certified, CALA Presenter – CALA Conference 2002.*

Age-related changes in physical function affecting older water exercisers.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Changes with Aging</th>
<th>Effects of Water Exercise</th>
</tr>
</thead>
</table>
| **Muscular Strength** | • Declines by ~1.5% per decade after age 60  
• Number of motor units and muscle fibres decrease  
• Type II (fast twitch) fibre size decreases  
• Total muscle CSA decreases by ~10% after age 50 | • Isometric and isokinetic strength gains  
• Functional ability improves |
| **Muscular Endurance** | • Muscular endurance capacity similar to young adults  
• Ability to carry absolute load over time decreased  
• Post-exercise recovery time increased | • Improved capacity to perform repeated joint actions per second |
| **Bone Density**    | • Bone loss of 0.3 - 0.5% per year after 3rd and 4th decade  
• Men only lose 2/3 of bone mass lost by women  
• Bone loss can develop into Osteoporosis | • Muscular traction provided by water resistance may increase bone density  
• Buoyancy eliminates high-impact stresses contraindicated for fragile bones but provides low-impact aerobic workout |
| **Cardiovasular Endurance** | • VO2 max decreases ~10% per decade  
• HRmax decreases approx 1 beat/year  
• Stroke volume max decreases  
• Decreased cardiac output occurs as a function of decreased HR and stoke volume | • Water walking HR at min of 147 bpm sufficient to maintain CV fitness in young individuals  
• Improved VO2, and HR with water exercise comparable to training effects on land  
• Increased VO2 max, HRmax, and work capacity in older adults  
• Decreased resting HR in older participants |
### Parameter Changes with Aging Effects of Water Exercise

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Changes with Aging</th>
<th>Effects of Water Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, Proprioception and Reaction Time</td>
<td>• Neurological changes contribute to muscle atrophy&lt;br&gt;• 35% decreased number of spinal cord axons&lt;br&gt;• 10% decrease in nerve conduction velocity&lt;br&gt;• Sensory and proprioception deficits&lt;br&gt;• Reaction times slows&lt;br&gt;• Osteoarthritis contributes to balance deficits</td>
<td>• Improved static postural sway measures&lt;br&gt;• Dynamic balance may also improve based on improved gait characteristics and speed&lt;br&gt;• Reaction time decreased</td>
</tr>
</tbody>
</table>

### Osteoarthritis

- Degenerative changes restrict joint movement, impair balance, cause pain, and restrict activity
- Improved psycho-social well being
- Decreased adverse joint reactions
- Improved strength and ROM
- Improved gait
- Decreased pain

---

The information on this table on age-related changes in physical function and the reported benefits of water exercise programs for older people is adapted with permission from Lindsay et al, 2000.

CSA = cross sectional area; HRmax = maximal heart rate; VO\textsubscript{2}\text{max} = maximal oxygen uptake

### References:

CALA CERTIFIED MEANS CLEARLY QUALIFIED

CONGRATULATIONS TO THE FOLLOWING LEADERS WHO HAVE Recently ACHIEVED CALA CERTIFICATION.
Suzanne Arsenault
Simin Bassir
Kathy Callaghan
Sharon Denton
Norrine Fawcett
Rachel Girard
Pat Grosse
Julie Hiemstra
Megan Messenger
Johnny Nesgaard
Tim Page
Kelly Patrick
Irene Vaneeno
Dawn Wells
Erit Zajdfudem

CALA CERTIFIED in WATER RUNNING and AQUAJOGGING
Colin Hyland
Allan Warner

CALA RECERTIFIED! WOW, THREE YEARS LATER & STILL GOING STRONG. WELL DONE & HUGE CONGRATULATIONS TO THE FOLLOWING LEADERS WHO RECENTLY RECERTIFIED WITH CALA
Dana Bach
Morven Barnes
Linda Bevilacqua
Cindy Cotterill
Karen Doutrre
Katie Farrow
Pauline Johnson
Charlene Kopansky
Victoria Kullas
Tanya Labreque
Dona Lopez
Karen MacDonald
Fran Maguire
Monica Marquis
Gerry McCready
Leslie Moogridge
Debbie Palmer
Carolyn Quantrell
Linda Rampen
April Reding
Trudy Rivard
Barbara Sawler
Elizabeth Spencer
Debbie Stokke
Francis Tucker
Michele Valentino
Monique Vanderlinden
Shirley Watchorn
Lynn Wilson
Corinna Wong

Please contact the CALA office if you notice your name is misspelled or missing from the lists above. We do apologize if we missed you this time.

PERSONAL PORTABLE AMPLIFIER WITH HEADSET & LAPEL MICROPHONES

A GREAT HELP FOR AQUAFIT INSTRUCTORS

For purchase information or questions, please contact:
Rami Shalev,
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TWO PURCHASE OPTIONS ARE AVAILABLE

OPTION 1: AMPLIFIER UNIT COMES WITH NO BATTERIES. SIX AA ALKALINE BATTERIES ARE REQUIRED. PRICE: $180.00 + TAXES.

OPTION 2: AMPLIFIER UNIT COMES WITH 6 AA RECHARGEABLE NICAD BATTERIES AND AC ADAPTER. PRICE: $205.00 + TAXES

PLEASE ADD $12.00 FOR SHIPPING & HANDLING IN ONTARIO
PLEASE CALL FOR SHIPPING & HANDLING CHARGES OUTSIDE ONTARIO

ANNOUNCEMENT!
A NEW TRAINER IS APPROVED
WELCOME TO WENDY ANDRUSKI TO THE CALA TEAM

NOW AN APPROVED CALA TRAINER.
Wendy completed her apprenticeship in June 2002, to positive feedback from her first CALA course participants. Wendy lives in Thunder Bay and has big plans to keep the positive CALA energy flowing in this vast northern region. Good luck Wendy and congratulations.
INDIVIDUALS WITH QUALITY, INTEGRITY AND COMMITMENT

CALA COURSE GRADUATES FROM CALA FAST TRACK AND TOTAL TRACK AND SPECIALTY COURSES TO MAY 31, 2002

After checking the last two issues of our newsletter, I discovered that several lists of grads were missing. I do apologize if we missed your name, and have included the missing courses and participants in this issue.

GUELPH, ON
TOTAL TRACK, NOV 2001
Robin Andrews
Vanessa Everett
Susan Garlock
David Hatch (FT)
Jodi Lunn
Bailey Van Watershoot
Irene Vaneeno (FT)
Candice Vecmanis
Carolyn Wilkie
Trainer: Pat Richards

HULL, PQ
TOTAL TRACK, NOV-DEC 2001
Karine Bosse
Stella Brunet
Natasha Gagnon
Stefanie Gingras
Rachel Girard
Keynia Gosselin
Livia Hodgson
Trainer: L. Marr & C. Morissett

SHERBROOKE, PQ
FAST TRACK, DEC 2001
Marie-Pierre Arsenault
Melissa Audet
Emmanuel Baril
Patrick Beauchemin
Alex Bernier
Marie-Claude Blain
Razvan Butta
Eric Carignan
Elyse Daoust
Sebastien Despars
Amélie Dulac
Charles-Oliver Dumont
Alex Duquette
Paul EL-Haddad
Catherine Ferland
Vanessa Fournier
Eve Gendron
Michael Laplante

HULL, PQ
TOTAL TRACK, NOV-DEC 2001
Karine Bosse
Stella Brunet
Natasha Gagnon
Stefanie Gingras
Rachel Girard
Keynia Gosselin
Livia Hodgson
Trainer: L. Marr & C. Morissett

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Razvan Butta
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Elyse Daoust
Sebastien Despars
Amélie Dulac
Charles-Oliver Dumont
Alex Duquette
Paul EL-Haddad
Catherine Ferland
Vanessa Fournier
Eve Gendron
Michael Laplante

GUELPH, ON
TOTAL TRACK, NOV 2001
Robin Andrews
Vanessa Everett
Susan Garlock
David Hatch (FT)
Jodi Lunn
Bailey Van Watershoot
Irene Vaneeno (FT)
Candice Vecmanis
Carolyn Wilkie
Trainer: Pat Richards

HULL, PQ
TOTAL TRACK, NOV-DEC 2001
Karine Bosse
Stella Brunet
Natasha Gagnon
Stefanie Gingras
Rachel Girard
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Michael Laplante

Please contact the CALA office if you notice your name is missing from the lists above. We do apologize if we missed you this time. Please inform CALA if your name has been spelled incorrectly.
CATCH THE EASTERN WAVE IX
Date: September 7, 2002
Location: Sackville, Nova Scotia
Presenter: Jennie Queen from Ottawa, Ontario
Workshops: Maximum Abs & Seniors Strength Training
Registration: Registration

CATCH THE WESTERN WAVE
Date: October 26, 2002 from 9:30 am - 6:00 pm
Location: The Talisman Centre, Calgary, Alberta
Presenter: Charlene Kopansky, Ontario
Workshops: Maximum Abs & Seniors Strength Training
Registration: All P.P. (403) 233-8393, Ext. 169

SASKFIT 2002
Date: November 1, 2, 3, 2002
Location: Saskatoon, Saskatchewan
Presenter: Charlene Kopansky (for aquafitness)
Workshops: Aquafit, Communication: Top Deck, No Equipment, No Problem, and Seniors Strength Training

H2Oz - Australia
Date: November 9, 10, 16, 17, 2002
Location: Melbourne, Sydney, Newcastle, Perth, Australia
Presenter: Charlene Kopansky
Workshops: Aquafit, Aquarobic, Aquaspin, and Seniors Strength Training

KITCHENER, ONTARIO
SPECIALTY COURSE - AQUA ARTHRITIS
Exact dates and registration information to be determined
Date: July 2002 - 22 hours (To be determined)
Location: Kitchener, Ontario
Registration: YWCA of Kitchener, Attention: Melanie Simons
Call CALA for details: 1-866-710-9823 or email: cala@calaling.com
Trainer: Connee Jasinski
Credits: 22 CALA, 22 NSFLLAA, & FIS (CanFitPro), YWCA, YMCA

DARTMOUTH, NOVA SCOTIA
SPECIALTY COURSE - WATER RUNNING
Date: Saturday, July 6, 2002 - 8 hours
Location: Dartmouth Sportplex, 110 Wyse Road, Dartmouth, NS B3A 1M2
Registration: Dartmouth Sportplex, Debbie Murphy
Ph: 902-444-2600 ext. 101 or Fax: 902-444-2902
Credits: 7 CALA, 7 NSFLLAA, & FIS (CanFitPro), YWCA, YMCA

CERTIFICATION FOR WATER RUNNING (optional)
Date: Sunday, July 7, 2002, scheduled theory exam and practical assessments
Location: Dartmouth Sportplex, 110 Wyse Road, Dartmouth, NS B3A 1M2
Registration: Dartmouth Sportplex, Debbie Murphy
Ph: 902-444-2600 ext. 101 or Fax: 902-444-2902
Theory exams (one hour) are open book and written in a group setting. Practical assessments require a 4.5 minute swim time per person and must be booked through Debbie Murphy at the Sportplexes.

CHARLOTTETOWN, P.E.I.
A variety of workshops and certification
Location: Charlottetown Recreation Centre, Charlottetown, Prince Edward Island
Registration: Charlottetown O.C., (Tom Baker)
Ph: 902-891-4560 or Fax: 902-891-5500
i. Aquafit Physiology and Aquafit Anatomy
Date: Friday, July 12, 2002 from 8:00 pm - 9:30 pm
ii. Aquafit Kick Box & Aquaspinning
Date: Saturday, July 13, 2002 from 8:30 am - 12:30 pm
Credits: 4 CALA, 4 NSFLLAA, & FIS (CanFitPro), YWCA, YMCA
iii. Lifaffitness Certification with CALA
You must be a current CALA member to try a CALA course graduate to try certification
Date: Saturday, July 13, 2002 from 1:00 pm
These certifications are booked & paid through CALA

CALA • 125 Lilian Dr.,
Toronto, ON, Canada M4R 3W6
Tel: (416) 751-9823 • 1-888-751-9823
Fax: (416) 751-1832
cala@interlog.com • www.calaing.org

Owen sound, ontario
Workshop: Aqua Kick Box, Senior Strength Training and Aqua Spinning
Date: Sept. 7, 2002
Location: The Stone Tree Golf and Fitness Club
Registration: Phone Janet: 519-576-1999 or Fax: 519-576-1530
CECs: 7 CALA, CanFitPro, OFC, YMCA, YWCA

Hamilton, ontario
SPECIALTY COURSE - AQUA ARTHRITIS (20 hrs)
Date: October 18, 20, 21, 2002
Location: YWCA of Hamilton, 75 McNab Street South, Hamilton, Ontario
To register or for more information contact Tara Wiedenreich (Jones) at: 905-522-9922 ext 107
Trainer: Connee Jasinski
CECs: 20 CALA credits, plus credits with NFRA, OFC, CanFitPro (FIS), YWCA

ottawa, on
i. Aqua Pre-Natal and i. Aqua Motion
Date: Sunday October 27, 2002 from 3:00 pm - 6:00 pm
Location: Ray Freni Centre, 1950 Tenth Line Rd., Ottawa, ON K1E 3B8
Registration: Contact CALA
Trainer: Line Marr
Credits: 3 CALA, 3 OFC, & FIS (CanFitPro), YWCA, YMCA

Calgary, Alberta
Aqua Spinning Part II
Date: Monday, November 4, 2002
Location: Westside Regional Recreation Centre, Calgary, Alberta
To register or for more information contact fitness Centre 403-531-5875 ext. 229
Phone: 403-571-3199
Email: training@westsidecal.com
Trainer: Charlene Kopansky
Credit: A RCA, CALA, CANFitPro (FIS), ORC, YMCA

Ottawa, ontario
CALA Aquafitness Leadership Training Course ‘Fast Track’ (22 hrs)
Date: July 9, 10, 11 and 12, 2002
Location: Nepean Sportsplex Aquatic Center, 17001 Woodroffe Ave. Ottawa, ON
To register or for more information contact the Centre: 613-727-6665 x265

Toronto, ontario
CALA Combined Basic Fitness Theory and Aquafitness Leadership Training Course ‘Fast Track’ (44 hrs)
Date: Sept. 7, 8, and 9, 2002
Location: University of Guelph, Guelph, Ontario
To register or for more information call CALA at: 416-710-9825
Trainer: Tara Wiedenreich
Recognized by NFRA, OFC, CanFitPro (FIS), YMCA

toronto, ontario
CALA Combined Basic Fitness Theory and Aquafitness Leadership Training Course ‘Total Track’ (44 hrs)
Date: Sept. 7, 8, and 9, 2002
Location: University of Guelph, Guelph, Ontario
To register or for more information call CALA at: 416-710-9825
Trainer: Tara Wiedenreich
Recognized by NFRA, OFC, CanFitPro (FIS), YMCA

guelph, ontario
CALA Combined Basic Fitness Theory and Aquafitness Leadership Training Course ‘Total Track’ (44 hrs)
Date: November 1, 2, and 3, 2002
Location: University of Guelph, Guelph, Ontario
To register: 519-824-4380 x2574 or email: prichton@uoguelph.ca
Trainer: Pat Richards
Recognized by NFRA, OFC, CanFitPro (FIS), YMCA

Guelph, ontario
CALA Aquafitness Leadership Training ‘Fast Track’ (22 hrs)
Date: November 1, 2, and 3, 2002
Location: Same as above (Total Track), Guelph, Ontario

Guelph, ontario
CALA Combined Basic Fitness Theory and Aquafitness Leadership Training Course ‘Total Track’ (44 hrs)
Date: February 7, 8, and 9, 2003
Location: University of Guelph, Guelph, Ontario
To register: 519-824-4380 x2472 or email: prichton@uoguelph.ca
Trainer: Pat Richards
Recognized by NFRA, OFC, CanFitPro (FIS), YMCA

Guelph, ontario
CALA Aquafitness Leadership Training ‘Fast Track’ (22 hrs)
Date: February 7, 8, and 9, 2003
Location: Same as above (Total Track), Guelph, Ontario