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ERGO TIMES



The Mexican Grocery



My parents are retired and happily spending their winter months in Mexico. Of course, they are always on the lookout for ergo interventions, having been thus “trained”. They sent these photos to show an “ergo” intervention that they spotted, tested, and documented for us. Their local grocery store has two stories; to make shopping more convenient, they have an escalator that allows customers to place their cart on the sloped surface and ride up the escalator *standing on the escalator* behind it (as shown at left). No pushing is involved to get the cart up to the second floor, and no manual control is required to lower the cart to the lower floor. I later found the same innovation in a local grocery in Kitchener, and also in a department store in Mississauga, so perhaps they aren’t as advanced in Mexico as my parents thought! (For the record, my dad is “testing” the cart’s stability on the angled conveyor surface shown above right. I

suspect that our safety-minded readers are probably cringing to see someone “riding” a cart down a ramped surface!)

How does it work? Each of the wheels has a smaller inner disc, sandwiched between two larger outer wheels. The inner discs have “hooks” that catch onto the links in the escalator, acting like a brake. (The inside disc is covered at the top so you can’t see the hooks from above.) When the cart reaches the end of the escalator, the outside wheels roll normally on the floor. It is possible for the customer to position the cart “askew” on the escalator, causing it to slide out of control, but the escalator is narrow enough to discourage this from happening, and as soon as the wheels “lock in” it is difficult to disengage them before the end of the escalator.



Competing technology is also available, although I haven’t found any locally. The most common found online allows the cart to be “parked” in an elevating device, while the customer rides an escalator that runs parallel, right beside it. The manufacturer reports that this is safer, because people are not being transported with the carts. Further, baby strollers *can* be rolled onto the escalator described above, but, because they do not have locking wheels, taking a stroller on the ramp is dangerous. (Strollers will not fit into the parallel elevating device. An “elevator option” is needed.) However, these escalators look a bit intimidating to use, with all their gates and signage. (<http://www.cartveyor.com>)

Our mission:

Inspiring, building, and supporting partnership between your organisation and our innovative team to advance ergonomics excellence.

Our team:

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All of our ergonomists are members of:





We would love to find an application for this technology elsewhere in industry. Anywhere that employees push carts up or down sloped surfaces, this type of device would be amazing. Similarly, overhead carrier systems that run on wheels carried along a track could also work this way. (Maybe they do!) If you've seen this technology applied in an industrial setting, please share it—we'll send a shirt to the first person to send us a publishable photo.

Aging Ergonomists (and others)

We've been working on a new presentation about aging and ergonomics. (Funny, how 16 years ago we were interested in pregnancy, followed shortly by the challenges of parenting infants, toddlers, and children, and more recently driving. Those of you who have been reading this newsletter for a long time are probably amused by our shifting focus! I thought about including photos of our ergonomists, taken over the 18 years that we've been publishing this newsletter, but decided I didn't really want to age so "publicly"! While we are not quite ready to commit ourselves to the "aged" category just yet, we are certainly more aware of aging issues. Ever since mandatory retirement was shelved, we've had more questions from clients on this topic. We thought we'd share some of the interesting points that we've learned.

We know a lot about the not-so-pleasant age-related changes, which include:

- Weight gain (average 8-10 kg of body fat!)
- Loss of balance
- Increased reaction time
- Reduction in manual dexterity
- Longer recovery time after injury
- Hearing loss
- Vision loss
- Cognitive decline
- More fatigue/lower cardiovascular fitness
- Less tolerance to shift work

We could go on about these changes, and how they impact work design. We know it's a bit depressing, but it isn't all bad news! Here are three "silver linings":

- Many of these changes are noticed only when workers are required to change jobs; a worker who has been at the same job for many years is not really at any higher risk, as s/he tends to adapt and maintain a level of fitness for the job that is done every day.

- Changes made in the workplace to help older workers will also benefit younger workers. So perhaps, with an aging workforce, you might convince management to fund some interventions that they previously considered unnecessary, such as improved lighting, or extra material handling devices. Nothing that you do to enhance the older worker's experience is going to harm a younger worker. And, sadly, with the "epidemic" of obesity, and the trend toward poor fitness, many younger workers exhibit more pronounced "symptoms" of old age than their more senior counterparts.
- Although everyone tends to focus on what is lost with age, employers and employees alike would be wise to consider what is gained! Older workers offer experience, and smart companies leverage that experience by having them involved in training. An older worker, particularly one who has suffered a back injury, will be able to identify "best practices" that would benefit all employees. S/he will invariably be able to identify a method that requires less energy (no wasted time or effort) and less bending (no added back strain). I challenge you to find an older worker who treats his/her body with the same type of carelessness that we see with younger, "invincible" employees. When we are asked to develop lifting training (or any technique training, for that matter), we always seek out the most "experienced" employees, so we can tap into their expertise.

For more information including tips on how to design for older workers, and what older workers can do to help themselves, please join us at CSSE local chapter meetings in Hamilton (March) or Kitchener (April). Presentations, including this one, to professional groups can often be made free of charge. A charge does apply for presentations made to groups of employees.



Promoting the Golfer's Lift

Looking for a low-cost product to distribute to your staff as a reminder to lift safely in the spring? We offer a package of four golf-tees (with the Taylor'd Ergo mannequin on the ball marker, of course), which include a little reminder label about how to use the "golfer's lift" safely. A labeled 4-pack of tee's is only \$2.50 plus hst. Volume discounts apply; contact

Carrie for details. (Please check the store on our web page for other promotional products!)

About the newsletter...

Your address: If your mailing address is incorrect, please let us know by emailing (info@taylordergo.com or faxing (519 632 7469) a correction. We'll enter you into a sweatshirt draw. Congrats to Susan Vuylsteke, of St. Joseph's Health Care, who earned a shirt this month.

Electronic: We're happy to send you a hard copy if you prefer to read it on paper, but we also distribute the newsletter electronically. You can also download it from our website at www.taylordergo.com Just let us know your preference!

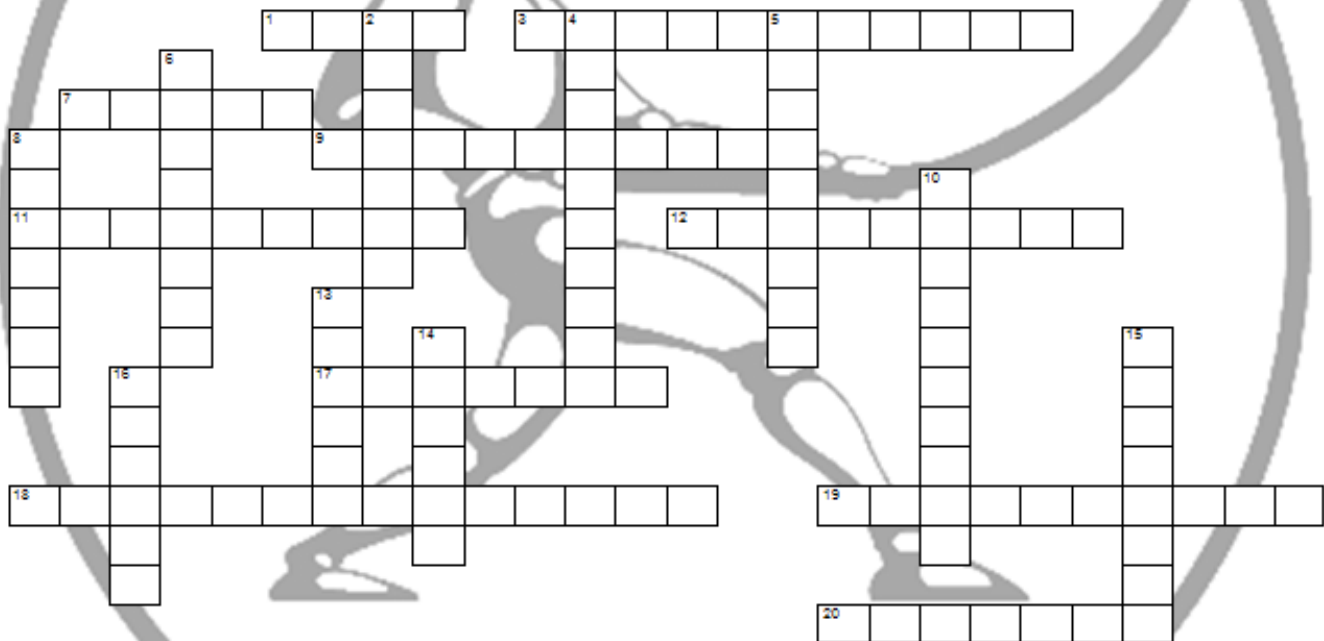
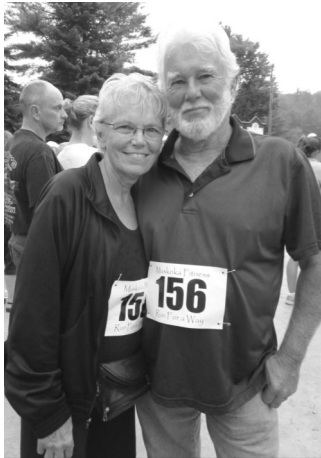
After you've read it: Please send the newsletter along to a colleague, post it on your safety board, take it home for your family, or leave it in your lunch room. When everyone is done with it, please recycle!



Good things come to those who wait

This crossword focuses on the *many* positive things that happen as we age. (Bet you had to read that twice!)

If we had only one word of advice for those who are concerned about counteracting the less-than-positive effects of aging it would be this: exercise! Increasing your tolerance to loads will make any task seem easier. This will work for young and old alike. Consider a job (or activity) that requires you to lift 10 kg, or walk a kilometer. If you **can** lift 40 kg, a 10 kg load is only 25% of your capacity—fairly low risk! If you **can** walk 5 k, a 1 k walk is only 20% of your capacity—easy! However, if your lifting capacity is only 15 kg, or your walking capacity is only 2k, the same tasks will tax your system immensely! Exercising your brain works on much the same principle; Sudoku and crossword puzzles (like this one) increase your tolerance for mental challenges. (I couldn't resist the temptation to include a photo of mom and dad after their most recent 5k run. They only started running a few years ago.....it's never too late to start living an active lifestyle!)



Across

1. The opposite of leathery (skin)
3. Obtained from a point of view; the benefit of hindsight
7. The mind's picture of your body is your body ____.
9. The stage when you are not expected to work unless you want to, sometimes begins at 65
11. Paid ____, stood at ____, or sent to your ____
12. The accumulation of facts in your brain
17. Grandchildren and coworkers love to hear these told.
18. Mental process involved in solving math equations and other solving challenges (p.s.:2 words)
19. Useful in crossword puzzles and winning at scrabble; gets expanded by reading the dictionary
20. The ability to commiserate with others

Down

2. The absence of work constraints
4. What you get from having done it over and over again; a commonly valued attribute of age
5. Those who cry when happy or sad; that type of maturity shown by maintaining a constant character despite forces that threaten to disturb it
6. A virtue that can be cultivated; the more you have, the less likely you are to lose it; characterised by lack of rushing
8. This decreased sense is considered a loss by many, but Grandpa may have thought it was a pleasant side-effect of age, in his relationship with grandma
10. The ability to "bounce back", recover, or cope with stress
13. Thought to be possessed by owls and the old
14. This sense is considered rare in youth
15. The quality of being humble; the absence of pride; sometimes expressed as thanks
16. The sense that makes us laugh (in Canada only with "u", not at you!)



Ergo Design March 13, or October 2, 2013

Participants, including engineers, safety coordinators, and ergo team members, will learn to incorporate effective ergonomic design features into new workstations, jobs, and layouts, using our detailed design guidelines. [You will learn to:](#)

- Describe and use "anthropometric (body size) data".
- Use design guidelines to identify the **specifications** of a solution. In particular, you will learn to apply the guidelines for working **height, reach,** and **clearance**, through a variety of case studies.
- The course also includes **detailed ergo design guidelines** for the following:

Carts	Design for repair	Hand work	Mechanical assists	Work design
Containers	Displays	Hand tool design	Personal protective equipment	Work flow/conveyors
Controls	Floor surface	Lighting	Seating	

Ergo Hazard Identification April 10, 2013

This one-day course will help participants to use the Ontario MSD Prevention Guidelines tools. This is a great course for your ergo team or JHSC. [You will learn to:](#)

- Use key tools included in the MSD Prevention Guidelines Tool Box, such as **discomfort surveys, feedback surveys, workplace inspection** checklists, **computer** work station checklists, and more.
- Effectively use the **risk assessment checklist**. This will include learning to quantify and evaluate force, awkward posture, and repetitive movements.
- Identify when and how an **in-depth risk assessment** should be done.
- Set an action plan for **implementing** the MSD Prevention Guidelines.

Physical Demands Description May 7-8, or September 4-5, 2013

This two-day session will allow participants, including ergo co-op students, nurses, safety coordinators, and return-to-work coordinators, to collect data and write a concise physical demands description report for the WSIB, employee's doctor, physiotherapist, or for internal company use. [You will learn to:](#)

- Identify a **primary job objective**.
- Discriminate between **essential** and non-essential duties.
- Use tools to measure **force, posture, and repetition**.
- Learn to take **photos** effectively. (Bring a digital camera from your facility, or use one from our class set.)
- Measure and document **workstation** parameters.
- Describe environmental, sensory, and mobility demands.
- Write a **concise physical demands description report** including a summary of the "functional requirements" that matches the WSIB's FAF form.
- Validate** the report, obtaining worker and management verification.

ONLINE registration and payment is now available through our web page! To register manually, complete and fax this page to 519 632 7469, with your purchase order number, or mail it with a cheque to Taylor'd Ergonomics, Box 1107, Ayr, ON N0B 1E0. Your registration will be **confirmed by email, 1-2 weeks before the course**. Register early, as space is limited. Cancellations within one week of the workshop will be subject to a \$100 charge, although substitutions are welcome at any time.

Name(s): _____

Company: _____

Phone: _____

e-mail: _____

P.O.# _____ (if no PO, please send cheque with registration)

Please register me for the:

- Ergo Design** course on Mar 28, \$425+hst
 - Physical Demands Description** workshop on May 7-8, \$785 plus hst
 - MSD Hazard Identification** course on Apr 10, \$355+hst
- HST#89765 6377



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