

Post-Workout Yoga

maximize training on every level.

Yoga may be utilized for diverse purposes based on the desired effect. Core strength, stabilizer strength, and breath-efficiency are some of the many benefits stemming from a yoga practice filled with standing postures, sun salutations and forearm stands. What if your client-training has included these elements of fitness, and a cool-down involving strategic flexibility exercise is all that is needed? A particular approach to yoga, utilizing specific yoga breathing techniques, selected yoga poses, and considerations in the duration of yoga posture 'holds,' will offer effective solutions, economizing workout times and avoiding redundancy in the construction of the training regimen.

Personally speaking, I began to include yoga as part of my training routine 33 years ago, finding it to be more comprehensive than any other form of flexibility training that I had been exposed to. Realizing yoga had such a diverse set of strategies that could be applied as benefits for training, I sought out many yoga masters to learn more. I read extensively on yoga posture practice, yoga philosophy, and how yoga related to anatomy, physiology, kinesiology, and injury rehabilitation. Sifting through some of the ambiguity and junk-science, sometimes evident in modern yoga thought, I found there were many yoga concepts congruent with solid scientific fact, often adding enlightenment on the subject of fitness.

Yoga is not simply stretching, although you could look at it that way if you thought of it in a superficial way. Elements hand-picked from yoga's tapestry, can make the perfect cool-down in the post-workout phase, including: flexibility training, energy recovery, and autogenic meditation. A strategy can be set up by extracting techniques from yoga ideologies spanning: raja yoga's notion that thought is energy and the eight-limbed classical philosophy of yoga for deep meditation, to gnana yoga's regard that inherent wisdom can be channelled through the body in the forms of nervous system reaction and signals from fibers known as spindles, to hatha yoga's wide array of physical yoga styles and postures. Yoga has the depth of content to

We must be able to see beyond current yoga trends and modern fabricated yoga culture to exact its true benefits. It's not surprising trainers may cast suspicion upon yoga as a valid form of training since some of yoga's adherents are more interested in setting 'new age' agendas than passing along practical yoga techniques for mental, physical and spiritual health. Trainers have discernment when it comes to fitness concepts. It's important to me to offer current information and dispel with yoga rhetoric that is not based in science. Safety is paramount in the yoga practice I offer, so rather than leading students in a 'follow-the-leader' approach so typically taught today, I prefer an approach familiar to trainers. Each posture is taught individually in my classes, before any attempt to connect them into a flow series. Trainers approach fitness in precisely the same way; ensuring good form and extensive instruction for each physical exercise before expecting a client to work through an entire routine.

Use the true cutting-edge training procedures from yoga for your clients' needs, and be educated so you can explain how and why it works.

Congratulations to Mike for achieving the 2015 CPTN Award of Merit for his contributions to the field of personal training and to his community!

"In the 25 years that I have been teaching yoga, Mike Chapman is one of the most knowledgeable yoga colleagues that I have met. His knowledge of yoga theory, the nuances of yoga asanas, human physiology and how the three inter-connect is superior to anyone else I have met. He's also enthusiastic and passionate about the craft and that is reflected in the enthusiasm and passion of his students."

> -Caron Shepley, BPHE Former CPTN Yoga Specialist Course Conductor Corporate Director Personal Best



HYPOPRESSIVE™





By Trista Zinn BA, CPTN-CPT, Hypopressive Course Instructor Level 4

LOW PRESSURE FITNESS® **Core Training rEvolution**

hen it comes to fitness training, we have certainly seen and tried a variety of different approaches and methods over the years, and this is a good thing. Being that the fitness industry is still relatively young, it is only natural that it should evolve as our knowledge of the human body grows, and the impact of what we do to it comes to light.

We are obligated as fitness and health professionals to inspire, recognize and embrace this evolution; there is no doubt that some of the more traditional exercise programs taught previously would be deemed detrimental today. As professionals, we need to be concerned with what we are teaching and how we train, keeping abreast of current developments in the industry, and committing ourselves to applying our knowledge in order to offer our clients the best possible fitness experience.

The way we view, understand and train the core is a prime example of this change. We now understand that the core is fundamental to our overall health, and this complex system deserves a new means of conditioning that embraces a more global approach - one that addresses its overall function. Hypopressive exercises have gained recognition in Northern Europe as a new vision for core exercise, a technique that addresses the central system with a more global approach while giving relevance to the pelvic floor and diaphragm.⁽¹⁾

Core Strength vs. Core Function

Traditionally the emphasis on core training has been abdominal-centric, either for aesthetic appeal or to generate strength and power - building and toning these muscles with voluntary movement. Not only are these muscles being over-worked, but popular exercise programs fail to address the conditioning of three other major segments of the core: the multifidus, pelvic floor (a postural and respiratory muscle⁽²⁾ and the diaphragm.⁽³⁾

Perhaps the traditional approach to core training does not take the core's true required purpose into consideration and is starting to prove counterproductive in our efforts to attain a more optimized and functional core. By ignoring these three important pieces (multifidus, pelvic floor and diaphragm) and their intricate roles within the core, we are hampering our ability to achieve optimal core function.

Enter Hypopressive Exercise

The Hypopressive techniques were developed in the 1980s with the goal of helping postnatal women on abdominal, pelvic floor muscles⁽⁴⁾ and improve perineal dysfunctions such as prolapse⁽⁵⁾ or urinary incontinence. These techniques are also used by pelvic floor physiotherapists as a proprioceptive local tool for pelvic floor muscles.⁽⁶⁾ From the outset, the objective was to develop a global approach to core health through the creation of an abdominal and pelvic rehabilitation technique that would benefit the whole core system⁽¹⁾ and eliminate the possible increase of intra-abdominal pressure towards the pelvic floor, which is ill-advised in women with pelvic floor dysfunction.^(7,8)

The success with the technique, and its unforeseen benefits have inspired its evolution from a rehabilitation tool for women, to a complete core restoration and re-programming technique practised by men and women around the globe.

Why Hypopressives?

Hypopressive or Low Pressure Fitness[®] system targets the deep core musculature (multifidus, abdominals, pelvic floor, diaphragm) and its synergistic function as a unit using postural and respiratory tasks for this objective. This global approach creates a balance between each segment as a whole so it can function as designed, and can balance and counter-balance the pressures caused from everyday living (e.g. coughing, laughing, lifting, etc.), and optimize it for our activities and sports. Simply, hypopressive exercise targets the tonic function of the core to work harmoniously.

Compare this to conventional abdominal work that isolates the voluntary movement of these individual muscles and is routinely performed at too great an intensity and frequency for functions that are actually beyond their intended means. This traditional mode of training can lead to a spike of injuries amongst men and women that are symptomatic of an unbalanced core: abdominal and vertebral hernias, incontinence and prolapse (symptomatic of weak pelvic floor) to name a few.

Hypopressive Practice

The Hypopressive techniques involve an organized series of rhythmic postural and sequential respiratory pattern that allows the integration and memorization of proprioceptive messages associated with certain postural positioning.⁽¹⁾ These exercises are carried out in different positions, following specific patterns, in order to facilitate and enhance postural muscle activity by: bringing forward the centre of gravity axis, axial stretching, activation of the shoulder girdle, contraction of inspiratory muscles, and respiratory apnea. It is this combination of rhythmic breathing coupled with the specific and detailed postures that seeks a deepmuscle activation.

Continued onto next page

HYPOPRESSIVE™



CPTN REPORT



Hypo-IMpressive Benefits

As a specific global postural and respiratory training system, the technique's popularity in Europe, is opening eyes in the Personal Training and Pelvic Floor Physiotherapy fields here in North America.

Once learned, Hypopressive training can benefit nearly anyone, regardless of sex or age. It is an ideal and SAFE means for the new mom to restore her abdominal and pelvic floor muscles after giving birth. It seems to offer optimal training for athletes looking to increase their respiratory capacity and improve their sports performance⁽⁹⁾ or physical fitness.⁽¹⁰⁾ Acute changes in waist circumference and extensibility of the lumbar spine performed by physically active women were shown after a program of hypopressive training,⁽¹¹⁾ and among fitness trainers.⁽¹²⁾

The diaphragmatic aspiration produced during the Hypopressive exercise causes a change in the angle urethrovesical,⁽⁶⁾ this effect leads to a pelvic decongestion and increase of pelvic vascularization.⁽¹³⁾

Hypopressive exercises are optimal for postural alignment and activation of deep core muscles ⁽¹⁴⁾ without an increase of intraabdominal pressure, so they can be useful tools for prevention of issues related with systematic increase of intraabdominal pressure.

Hypopressives / Low Pressure Fitness: Coming Soon Near You

Pelvic Floor

The Hypopressive movement is gaining momentum here in Canada. Introduced only 2 years ago, there are already trainers and physiotherapists certified in the method spanning the entire country. Now awakened to its advantages over crunches and other HYPERpressive programs, most of these health and fitness professionals have foregone partici-

> pating in and teaching their traditional core exercises in favour of Hypopressive/Low Pressure Fitness training. While not yet a mainstream technique, it is gaining exposure and is realizing rapid organic growth in popularity thanks in large part to the testimonials of those who have had the opportunity to benefit Diaphragm from it. And as more fitness professionals concerned about Transversus Abdominis offering their clients an effective means of safely optimizing their core function become exposed to the technique, it is only a matter of Muscles of the

time before Hypopressive/Low Pressure Fitness is found in every gym across the country.

Trista Zinn, B.A., CPTN-CPT, Hypopressive Level 4, is the founder of Coreset Fitness, and Director & Instructor for Hypopressives Canada, who specializes in pelvic floor health and core re-programming.

BIBLIOGRAPHY

1. Rial, T., & Pinsach, P. (2013). Hypopressive Techniques. Ed. Cardeñoso: Vigo.

2. Hodges, P. (2007). Postural and respiratory functions of the pelvic floor muscles. *Neurology and Urodynamics*. 26(3), 362-371

3. Kolar, P., Sulc, J., Kyncl, M., Sanda, J., Cakrt, O. et al. (2012). Postural Function of the Diaphragm in Persons With and Without Chronic Low Back Pain. *J Orthop Sports Phys Ther* 42(4), 352-362,. doi:10.2519/jospt.2012.3830

4. Stüpp L, Resende A, Petricelli C, Nakamura M, Alexandre S, Zanetti M. (2011). Pelvic floor muscle and transversus abdominis activation in abdominal hypopressive technique through surface electromyography. *Neurology Urodynamics*, 30(8), 518-21.

5. Bernardes B, Resende A, Stupp L, Oliveira E, Castro R, Bella Z, et al. (2012) Efficacy of pelvic floor muscle training and hypopressive exercises for treating pelvic organ prolapse in women: randomized controlled trial. *Sao Paulo Medical Journal*, 130(1), 5-9.

6. Latorre, G., Seleme, M., Resende, A.P., Stüpp, L. y Berghmans, B. (2011). Hypopressive gymnastics: evidences for an alternative training for women with local proprioceptive deficit of the pelvic floor muscles. *Fisioterapia Brasil*, 12(6), 463-466.

7. Hamad, NM, Shaw, JM, Nygaard, IE, Coleman, TJ, Hsu, Y, Egger, M, and Hitchcock, RW. (2013). More complicated than it looks: the vagaries of calculating intra-abdominal pressure. *J Strength Cond Res* 27(11), 3204-3215.

8. Yamasato, K.S., Oyama, I.A., Kaneshiro, B. (2014). Intraabdominal pressure with pelvic floor dysfunction: do postoperative restrictions make sense? *J Reprod Med.* 59(7-8), 409-13.

9. Rial, T., Pérez, R., Chulvi-Medrano, I. (2014). Effects of diaphragmatic aspiration on physical and blood parametres of professional mountain bikers. *Journal Strength and Conditioning Research*, IV National Strength and Conditioning Association International Conference, 28(11), 16.

10. Marcilla, A., Rial, T., Chulvi-Medrano, I., Soidan-García, JL (2014). Can a program based on postural exercise associated with intermittent apneas improve physical fitness of young students? *Journal of Sport and Exercise Science*, Suppl 2. doi: 10.12863/ejssxs1x-2014.

11. Rial. T, Sousa, L., García E, Pinsach P. (2014). Immediate effects of one session of hypopressive exercises in different body parameters. *Cuestiones de fisioterapia: revista universitaria de información e investigación en Fisioterapia*, 43 (1), 13-21.

12. Rial, T., Chulvi-Medrano, I. Pinsach, P., Navarro, I. (2014). Can a session of hypopressive exercises provide effects on fitness trainers? *Journal Strength and Conditioning Research*, IV National Strength and Conditioning Association International Conference, 28(11), 6.

13. Thyl, S., Aude, P., Caufriez, M., Balestra, C. (2009). Incidence de l'aspiration diaphragmatique associée à une apnée expiratoire sur la circulation de retour veineuse fémorale: étude par échographie-doppler. *Kinésithérapie scientifique*. 502: 27-30.

14. Humanes, R. Rial, T, Chulvi-Medrano, I. (2014). Does Hypopressive Technique and Pilates increase the activity of stabilizing core muscles? *Journal Strength and Conditioning Research,* IV National Strength and Conditioning Association International Conference, 28(11),7.

Multifidus

www.cptn.com

Periodization of Flexibility WHY FLEXIBILITY IS DEVELOPED BEFORE STRENGTH, SPEED, POWER OR ENDURANCE

- With The Flexible Periodization Method the various qualities of flexibility are developed to achieve a balanced posture, to perform specific movements optimally, to acutely improve strength/power and to aid in recovery.
- Several types of flexibility exist that are developed with various flexibility training methods and for multiple purposes as mentioned above. For this reason the optimal sequencing (periodization) of flexibility training becomes an important issue in long-term training.
- Based on the different purposes of flexibility training and an understanding of the factors that support periodization of flexibility training, this article describes how flexibility training is periodized with an emphasis on similarities and differences to the periodization of other components of the training program.

As you read the following information think about how the above mentioned strategies apply to the athletes or clients you train.



1 | Long-term periodization (across macrocycles)

Except for sports like gymnastics that require exceptional degrees of flexibility, the optimal levels of flexibility for a particular sport might be achieved within the first year of training. Thus, in contrast to several other bio-motor abilities that are relevant to the sport, actual developmental flexibility training may take up a very limited portion of long-term training.

The long-term periodization of flexibility training may be described in three major stages:

STAGE 1

The purpose of flexibility training is to achieve a balanced length tension relationship around all joints. This stage should take up no more than a few weeks of training and is never repeated unless flexibility is lost.

STAGE 2

The purpose of flexibility is to develop sport-specific (or movement specific) range of motion, dynamically and/ or statically. The sport specific (movement specific) flexibility requirements may be greater or smaller than the requirements for balanced length-tension relationships. In some sports with limited flexibility requirements, an athlete may clear this stage within the first year of training. In sports with more extensive flexibility requirements, this stage can be repeated in subsequent macrocycles until the required levels of flexibility are achieved.

STAGE 3

The purpose of flexibility training in Stage 3 is to maintain range of motion and release residual muscle tension after workouts. Since both sports and everyday activities, particularly sitting, can result in residual muscle tension, Stage 3 is essentially a lifelong stage.

2 Short-term periodization (within macrocycle)

It is the strength, power, speed and endurance exercises that support sport performance. Adequate flexibility supports the strength, power, speed and endurance exercises. Therefore, when increased range of motion is needed, the development of flexibility should happen as early and as quickly in the macrocycle as possible in order to allow for as many weeks of training as possible with the new and increased range of motion.

It is worth noting that strength and coordination supports the development of high amplitude, high velocity, and dynamic flexibility because of the strength required to stabilize, accelerate and decelerate involved body parts.

3 | Micro-periodization (within a week)

The acute adaptations from a bout of flexibility training can both enhance or reduce performance in strength, power or endurance exercises. Therefore, the timing of flexibility training is of high importance.

High volume stretching of the agonists can reduce strength and power of the same muscle groups when stretching is performed immediately prior to the strength and power movement.⁽¹⁾

Shortened antagonist muscles can inhibit strength of the agonist muscle. Stretching the hip flexors prior to a vertical jump and the

Continued onto next page

What stage or stages are your athletes and fitness clients in?

www.cptn.com

Periodization of Flexibility

FALL 2015 CPTN REPORT

Static Active Flexibility

Dynamic flexibility

hamstrings prior to knee extensions may enhance jump height, power output and strength.⁽²⁾ The study did not report if the stretched muscles were tight or had normal length.

Static

passive

flexibility

4 | Flexibility should be developed in the order of passive static, active static and then dynamic flexibility

Looking at the various qualities of flexibility there is good reason to develop those qualities in a specific order:

1. Emphasize the development of passive static flexibility before active static flexibility. Passive static flexibility increases the speed of acquisition of active static and dynamic flexibility as passive resistance from antagonists is reduced.

EXAMPLE: Athletes or fitness clients who might perform cervical retractions (for joint mobility or postural optimization) with tight upper trapezius muscles and sub-occipital muscles are "fighting" the tension in their own muscles to perform the movement.

2. Emphasize the development of passive static flexibility before dynamic flexibility particularly in multi-joint movements. Without adequate passive, static flexibility in all joints dynamic flexibility movements may result in compensatory patterns leading to hyper-mobility and injury.

EXAMPLE: Athletes or fitness clients perform front-to-back leg swings with tight hip-flexors (or poor coordination, in this case poor hip-spine dissociation) typically display compensatory movement in the low back.

3. Emphasize the development of active static flexibility before dynamic flexibility. By first controlling the end range during a static movement the athlete/client learns the dynamic movements faster and safer. \clubsuit

Karsten Jensen is a periodization coach and expert who has trained world-class and Olympic athletes from 26 different sports. He shares all aspects of The Flexible Periodization Method through his book, workshops, and FPM Certifications (Levels I-IV).

REFERENCES

1. Rubini EC, Costa ALL, Gomes PSC. The Effects of Stretching on Strength Performance. Sports Med. 37: 213-244. 2007

2. Sandberg, J.B., D.R. Wagner, J.M. Willardson, and G.A. Smith. "Acute Effects of Antagonist Stretching on Jump Height, Torque and Electromyography of Agonist Musculature." *Journal of Strength and Conditioning Research.* 26(5):1249-1256. 2012



Certified Professional Trainers Network

www.cptn.com





ADD SOME KICK TO YOUR PERSONAL TRAINING SESSIONS

Many personal trainers who are interested in expanding their client base are offering one-on-one fitness Mixed Martial Arts (MMA) sessions. These trainers find that the broader skill base gives them more options to help their clients reach their fitness goals. If you're interested in adding fitness MMA to your personal training repertoire, here's what you need to know.

GET QUALIFIED

A fitness MMA personal trainer doesn't have to be a competitive kickboxer or a martial arts instructor. However, an instructor must have the following skills and abilities:

- Obtain and maintain your Fitness Kickboxing Canada Certification.
- FKCI Certified Trainers are permitted use of the Fitness Kickboxing Canada trademarked logo to advertise their sessions (terms of use apply)
- Possess a good working knowledge of authentic MMA techniques. The instructor must know how to teach these specialized techniques safely and correctly.
- Have a basic understanding of combination flow.
- Be in very good physical condition and able to lead clients through vigorous workouts. Lead by example; your physical condition is a reflection of your program.

Session Format

The format for teaching fitness MMA personal training is similar to the format for teaching small group fitness MMA, except the trainer does the pad holding. A typical session includes these components:

- **1** Warm Up (5-10 minutes as per the certification training workshop instructions)
- 2 Primary Workout includes instruction using focus pads utilizing the pre-determined combinations provided in your FKCI Instructor manual, formatted in 2 or 3 minute rounds (30 minutes)
- **3** Strength and Conditioning focus on free body compound exercises (10 minutes)
- **4** Cool down and Stretch (5-10 minutes)

Be sure that verbal instruction time is not too long or your clients may not get a challenging enough workout. Displaying the components of the session on a "White Board" for your clients to view before the session helps them mentally prepare for the session. Provide basic instruction and correct their techniques as they work out. Focus immediately on correcting techniques that may cause injury. Watch for signs of fatigue; this is when injuries can occur.

Stay away from aerobic training. Personal training clients are usually looking for sport-specific drills. The majority of the drills should be predetermined combinations with focus pads. Be sure that they are basic and simple to start. As clients improve, you can easily increase the level of difficulty with more complex combinations.

GET EQUIPPED

Well-maintained equipment is a must for safe and productive training. Check that your equipment is cleaned regularly with a disinfectant cleaner and is free of perspiration for each session. Immediately replace equipment when the protective padding starts breaking down.

CONSIDER SMALL GROUP PERSONAL TRAINING

Fitness MMA small group personal training is best with two to four clients per session. This is a win/win opportunity for yourself and your clients.

Benefits for the Client

- 1 A reduced fee
- 2 A training partner to help keep on track
- **3** Increased retention

- **Benefits for the Trainer**
- 1 A higher hourly rate
- 2 Another option to sell sessions to people who don't want to pay one-on-one prices
- **3** Clients will bring in partners who are not currently training with you

If you follow the FKCI training formats you will fill your client roster and provide safe, friendly and challenging training sessions for your clients, and they will reward you with repeat business and many referrals.



FALL 2015

OUR NEW CPTN CERTIFIED TRAINERS & SPECIALISTS

NEW BRUNSWICK

Jamie Guislain, Newcastle Centre - CPT

NEWFOUNDLAND

Sabrina Lawlor, Labrador City - CPT

NOVA SCOTIA

Spencer Boyd, Halifax - CPT Bridget Brennan, Antigonish - CPT Benjamin Crowell, Elmsdale - CPT Tiffany MacDonald, Truro Heights - CPT Cheryl Rhynard, Centreville - GFL Charley Savoy, Sydney - CPT Donald Tabor, Antigonish - CPT Mary Thompson, Antigonish - CPT

PRINCE EDWARD ISLAND

Chloe MacDonald, Souris - CPT

Justin Bailey, Thornhill - CPT Hilary Bennett, Mississauga - CPT Jesse Bieman, Kitchener - CPT Alicia Bing, Cambridge - CYS Mohammad Boleini, Thornhill - CPT Ben Brock, Kitchener - CPT Alicia Brown, Toronto - CPT Delannie Chapman, Cambridge - CYS Keshia Charles, Mississauga - CPT Sandra Clark, Guelph - CPT Daniella Comacchio, Cambridge - CYS **Richard Court, Burlington - CPT** Anabela Da Costa, Toronto - CPT John David Del Col. Hamilton - CPT Adam Deverett, Thornhill - CPT Ismail Fasih, Mississauga - CPT Tyler Freamon, St. Jacobs - CPT Laura Gingrich, Brampton - CPT Judith Henry, London - CPT Shahrzad Janati, Richmond Hill - CPT Rahul Joshi, St. Catharines - CPT Heykel Kader, London - CPT Raya Kelly, Toronto - CPT Jared Little, Goderich - CPT Dan Lock, Toronto - CPT Andrea Louttit, Stratford - CPT

JUNE 4-6, 2015

ONTARIO

Michael Lukacs, Harrow - CPT David Lyons, Kitchener - CPT Alicia MacDougall, Camlachie - CPT Dennis Ng, North York - CPT Jeffrey Ng, Scarborough - CPT Harleen Nijjar, Markham - CPT Candice O'Donnell, Schomberg - GFL Alex Parent, Ancaster - CPT Angela Pereira, Toronto - CYS Monique Petricone, King City - CPT Yannick Picard, Toronto - CPT Yulia Pranskevichus, Toronto - CPT Amanda Reaney, Simcoe - CPT Tara Roberts, Pickering - CPT Mallory Robinson, Prescott - CPT Ariana Shaw, Toronto - CPT Alexandra Sheiman, Richmond Hill - CPT Susan Stasiak, Dundalk - CPT Evan Stewart, Hamilton - CPT Nicole Stokes, Caledon - CPT Taylor Tiessen, Thorold - CPT Maria Tourloukis, Whitby - CPT Danielle Vandyk, Waterloo - CPT Simon Watson, Hamilton - CPT Patty Jo Wight, Kitchener - CYS Charryl Zuccala, Guelph - CPT

SHERIDAN COLLEGE'S INAUGURAL FITNESS LEADERSHIP AWARD



ongratulations Hilary

Hilary Bennett was an exemplary student and natural leader advocating health, both at Sheridan and in the community. Having completed a previous degree, she enrolled in the Sheridan Fundamentals of Fitness Leadership Certificate program to enhance her applied skills. She is currently working full-time in the fitness field, and is a CPTN-CPT. Good luck Hilary.