

Here is what is happening at the Pulse Generator in October...

Save the Date for November 27th to attend the PG AGM. Drop by for snacks and see what has been happening over the past year and what is in store for the coming year.

Spring Into the Mountains is back for 2020 and YOU are invited. Come join the PG staff and fellow members for a fun and relaxing weekend in Kananaskis.

We have a few important notes for all members to be aware of regarding a change to our payroll deduction process. We will also be launching a new website to better navigate our offerings.

If you have not seen the article, Insite has recently published an article all about the history of the PG and the benefits of onsite fitness and wellness within the AHS community. View this article on page 4.

Round up your co-workers and get them a buddy pass to join you for a workout and have a tour around our facilities. Stop by to see our staff for more details and to get your pass.

The PG also has a new "Friend" in Iron Kreek Ranch. Get your name into our draw by Nov 26th for a chance to win a quarter of beef from this new friend.

Our DID YOU KNOW theme continues with more information about the Science of Exercise. Attached this month you will find several great articles on improving cardiovascular function as well as hydration.

All of this plus our usual member profile and more. October is proving to be a busy month with lots on offer for all of you.



Save the Date...

Sulse Generator AGM Nov. 27,2019

Edmonton and Calgary Locations - 4:30 - 6:00pm



www.pulsegenerator.ca



Join us for our 5th Annual

SPRING INTO THE MOUNTAINS

June 5 - 7th, 2020 Pomeroy Kananaskis Mountain Lodge

Your weekend includes:

- Accommodations for 2 nights at the Pomeroy Mountain Lodge
- A \$50 food and beverage credit
- 3 Yoga Classes
- Hiking
- Friday social with a craft beer exchange
- A wine tasting (additional cost)
- A discount to the Kananaskis Nordic Spa
- A great time with great people!

Only \$385 per person based on double person occupancy

REGISTER TODAY! \$150 RESERVES YOUR SPACE! CONTACT US AT PULSEGEN@AHS.CA

Important Notes for All PG Members

New PG Website Launched

It has been a few months in the works, but we are finally happy with our end product and will be launching a new look to the PG website in October.

Have you joined the PG Facebook group yet?

Click the icon to join and get content that is only available to the PG Facebook group.

Change to Payroll Deduction Cancellations...

Effective Oct 1st, any member who cancels the payroll deduction to the Pulse Generator before a 1 year period has passed since initial sign up will be subject to a \$25 one time cancellation fee. This is changing from the old fee of an extra month at \$14.25.



Fitting in Fitness:

Thank you Brittany for representing the Pulse Generator and the benefits of onsite fitness and wellness in this month's AHS Insite. We appreciate your support and are always excited to share the healthy stories of our members with the Alberta Health Services community. You can view the article <u>here</u>.





www.pulsegenerator.ca

Welcome Iron Kreek Ranch as our newest "Friend of the PG"



We are always excited to welcome a new member to our "Friends of the Pulse" Family. We welcome Alberta based businesses, who approach us, with the opportunity to promote their business to our membership through promotional offerings. We are pleased to introduce our new "Friend", Iron Kreek Ranch. They currently offer 100% grass fed beef and lamb. Their products are hormones and antibiotic free. They are passionate about their job and their land and treat them both with the utmost respect! They truly believe that their product is among the best and healthiest meat in the world! They are just west of Red Deer and this is a third generation Ranch. They comment about their operations:

"We have always loved nature, and our land is suited more for livestock and supports a healthy wildlife population, so we don't use sprays. We use alternative methods to control weeds like timing of seeding or grazing, cover crops as an example. We have noticed when you work with nature while trying to make a living instead of smashing it to pieces while making a living, she will help you grow plants and control weeds and bugs. As an example we are now seeing bugs that are helping to control our weeds and good bugs that attack the bad bugs that want to eat the plants. They say that if you have a healthy ecosystem for every bad bug that wants to eat that plant there are sixteen hundred good bugs that want to destroy it! A lady bug will fight to the death to protect her plant!"

They sell quarters, halves and wholes for beef and halves and wholes for lamb.

The best way to contact Iron Kreek Ranch at this time is either thru Facebook or email or phone.



Enter online by Nov 26th at <u>www.pulsegenerator.ca</u>; one entry per Pulse Generator Member for the month of October and November. Any member who enters who is also a member of the **Pulse Generator Facebook Group** will receive an additional entry to this draw. Join our Facebook Group to stay up to date on all Pulse Generator happenings.

Member Profile



Chelsey Fedema–PG GNCH

I initially joined the Pulse Generator in 2017 after experiencing a back injury. I needed an easy way to incorporate fitness into my life to strengthen my core and prevent further injury. Being able to head down to the gym at the end of my work day makes for a no excuse option. The small but mighty gym is not intimidating for a newbie like me and offers many work-out options and equipment. The Thursday afternoon Hatha Flow Yoga class at GNH has become a staple of my week. Each week I look forward to a challenging, yet relaxing session with awesome instructors that make you feel so welcome.

Are you new to the Pulse Generator or thinking of joining? Register for a free orientation with the PG. This 20 min orientation will include a tour of the facility, types of equipment available, equipment bookings, class registration and other PG services. Register online!



PULSE GENERATOR PERIODICAL: EXPLORING THE SCIENCE OF EXERCISE AND PHYSICAL ACTIVITY

What's the Best Way to Improve Cardiovascular Function – Removing the Confusion

In September we introduced our Exercise is Science theme and kicked it off with a simple self-assessment you can do on your own to determine where you are at right now. Over the next several months we'll be providing some programs you may choose to follow with the goal being an improvement in your results during a reassessment. This month we are focusing on the cardiovascular portion of the assessment. Based on your results you may decide cardiovascular function is an area to focus on, but what is the best way to improve it? Should you do HIIT (High Intensity Interval Workouts) or a moderate intensity workout? You can find information in support of each approach, which can be confusing, so we took a look at the latest research and here's what we found.

A <u>meta analysis study</u> of healthy young to middle aged adults found both HIIT workouts and traditional endurance training elicited improvements in VO2Max, with HIIT showing possible greater gains. Another <u>study</u> involving patients with coronary artery disease showed similar improvements in exercise capacity regardless of method. Yet another <u>study</u> compared Sprint Interval Training (SIT) with Moderate Intensity Continuous Training (MICT) and the results showed similar improvement in insulin sensitivity with both methods. However SIT required only a 30 minute commitment per week vs MICT which required a 150 minute per week commitment.

However, when it comes to exercise adherence, personal preference cannot be underestimated. A <u>study</u> of low active, obese women found that although HIIT may be promoted as a time saving solution, this group had a lower enjoyment level associated with HIIT which can lead to a reduced likelihood for adherence. An additional <u>study</u> found that during a 5 week study comparing High Intensity Training to Moderate to Vigorous Training with obese young women, both forms of exercise improved cardiovascular fitness, but this group rated the HIIT higher on a Physical Activity Enjoyment Scale.

For a further comparison, here is an infographic that summarizes the difference between HIIT (High Intensity Internal Training) and LISS (Low Intensity Steady State), which although a lower intensity than moderate exercise, still provides a good overview of the differences. **www.pulsegenerator.ca**

HIIT		LISS
80% You need to work at this percentage of your max heart rate for it to count as 'high-intensity'. Go all out, rest, then repeat	VS	65% being the percentage of your max heart rate to alm for during LISS to reach the fat-burning zone
When you're going hard and working anaerobically, it's the fast-twitch muscles that are doing their thing. These are the ones you need to engage to build power and strength.	The science	LISS can be any form of low-intensity cardio where you maintain a constant pace. Slow-twitch fibres used during LISS provide their own source of energy, so you can work out for longer.
Your metabolism keeps burning calories long after you hit the showers. A short daily session can cut 5% body fat in just 45 days, according to researchers from Southern Illinois University in the US.	CCC The good	Any form of regular cardio strengthens your heart and lungs and builds endurance. Plus, a 2013 study comparing high- and low-intensity regimes found that a gentier approach was more likely to lead to long-term success.
HIIT pushes your body to the max. A study" found that participants with lower fitness levels found vigorous HIIT training less enjoyable. You can also increase your injury risk if you dive into a sesh that's beyond your ability.	The bad	If you're not into it, LISS can feel like a chore. A study from the University of Florida found that those who varied their workouts enjoyed their session 45% more than those who repeated the same workout. Hix it up.
Consuming a snack with a 3:1 ratio of carbohydrates to protein within 30 minutes of completing your HilT workout is best for replacing energy stores and aiding recovery.	The nutrition	Fasted or fed? According to one study, fasted cardio may burn up to 20% more fat than eating pre-LISS. Plus, we reckon breakfast tastes better post-workout.
'HIIT stimulates production of growth hormones and testosterone for muscle growth, and endorphins and adrenaline to help you keep up the pace. It also increases your ability to use fat as an energy source? Doug Tannahil, osteopath at the Centre for Health & Human Performance	The expert verdict	'Less abrasive on the body, LISS is a great way to keep active and burn fat while you're recovering. But when used alone, the body adapts quickly to the movement and its rhythmic cardio pattern, so the benefit is limited.' <i>Abi Dewberry, master trainer at Best's Bootcamp</i>

So what does all of this mean? Both HIIT and moderate intensity provide cardiovascular benefit, so unless you have very specific goals where one training method may give you an advantage, choose to do the one you have time for and enjoy! The key to getting results is consistency, so when you are deciding what approach is right for you, consider what you are willing to make time for and how much time you are will to make. Then just go do it!

With that in mind, here are two different plans you can follow to test it out and see what is right for you!

HIIT

A high intensity interval workout means you are performing short intervals of work at a high intensity with a recovery period in between. The key is working at an intensity high enough to significantly increase heart rate. Using the methodology in one of the studies, you can follow this plan 3 times per week for 12 weeks; choose your method of activity and perform it at a light intensity for 5 minutes as your warm up. Then increase the intensity so you are going all out for 20 seconds, then reduce your intensity for 2 minutes to recover. Repeat 2 more times and then cool down for 5 minutes. Your time commitment per workout is 15 minutes.

Moderate Intensity Training

A moderate intensity continuous training plan can also be done 3 times per week with a longer working time. Again, perform 5 minutes at a light intensity as your warm up. Then increase your effort so that you are working at moderate intensity. This means you are working hard enough that you can't sing but you can talk and carry on a conversation. Continue working for 30 minutes at this level and then cool down for 5 minutes at a light intensity. Your time commitment per workout is 50 minutes.