May Newsletter Part II



"For Sport, For Life"

www.caseperformance.com

Here is the news that we'll cover in Part II of this month's newsletter....

I. Welcome	2
II. Donations	3
III. Article News at CasePerformance	4
IV. Improved Social Media Function at CasePerformance	5
V. Articles on Partner Websites	7
VI. CP Performance Tips: Increased Fertility + Breast Cancer Reduction	8

.

"For Sport, For Life"

www.caseperformance.com

Hello,

Glad to see that you're tuning into Part II of this month's newsletter! I'm confident you found value in Part I of our "mother" themed newsletter. As stated there, with > 100 countries celebrating Mother's Day during the month of May, I thought it was only fitting to shine the spotlight on them with our newsletter. Part I featured an excellent interview with strength athlete and proud mom, Kristine Poirier who shared with us her story in how she became involved in figure competitions, powerlifting and the role her kids play in her active lifestyle. In addition, Sarah Stevens discussed how she maintained a very active training lifestyle throughout her pregnancy. Sarah then goes into discussion on her return to training following the birth of her daughter and how she has raised Olive in a gym environment.

In Part II of our May newsletter, we take a quick peek at the news of note here at CasePerformance. Then, we continue the Mothers Day theme from Part I of our newsletter, discussing DHEA and how it may assist females with fertility issues. In addition, we examine a topic pertinent to all women, breast cancer and some modifiable factors that may reduce a female's risk of developing it.

Respectfully,
Sean Casey

"For Sport, For Life"

www.caseperformance.com

II. Donations for CasePerformance Are Welcomed

As you've probably noticed while surfing around the CasePerformance website, we do not litter our pages with advertisements or have "Members Only" sections that require a paid subscription.

Why do we do this?

My goal is to reach as many individuals as possible. If an individual truly wishes to improve their health and performance, I want them to succeed. This holds true regardless if they are a multi-millionaire or a college student pinching pennies.

A Potential Downside & What You Can Do To Help

The cost of running a website in conjunction with paying for full access to the various sport science and nutrition research journals I use is extremely expensive. Also, all of the authors at CasePerformance put considerable time into writing the articles for this site. If you enjoy the free information provided on this site, we humbly ask you to show your support by making a small donation. Thanks for your support!

<u>CLICK HERE</u> to make a donation. Please know that <u>ANY AMOUNT</u> is greatly appreciated!

"For Sport, For Life"

www.caseperformance.com

III. Article News at CasePerformance

Two new articles have been added to the CasePerformance library since the last newsletter was sent out:

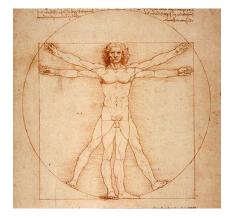
1) Kettlebell Complex Training by Arnav Sarkar

Arnav Sarkar of <u>Sarkartraining</u> writes a great guest article for us. In it, he shares the benefits that kettlebell complexes can have for those competing in the sport of Girevoy as well as the average fitness enthusiast! A sample kettlebell training complex provided and accompanying videos too!

2) <u>Prolotherapy Part II: Heal Those Chronic Cartilage, Tendon and Ligament Injuries - Or Not?</u> By Sean Casey

Avoid the surgical knife and heal your connective tissue injuries with a few simple prolotherapy injections... Sounds great, but does it actually work? In Part II of this series, we examine the effects of traditional prolotherapy healing agents such as glucose and sodium morrhuate on various connective tissue injuries in humans.

Top Read Article in March at CasePerformance...



<u>Prolotherapy Part II: Heal Those Chronic Cartilage, Tendon and Ligament Injuries - Or Not?</u> By Sean Casey

"For Sport, For Life"

www.caseperformance.com

IV. Improved Social Media Functionality



CasePerformance is now better equipped and more "user" friendly for those looking to follow us on <u>facebook</u> (and other social media sources). <u>Matt Huser</u> did an excellent job reformatting the logo, which he originally designed, to fit our <u>page</u>.



Additionally <u>Patrick Gokey</u> implemented "instant share" buttons so one can directly share our articles with others via Facebook, Twitter, Linkedin, Pinterest and email. They can be found between the article title and "Quick Hit Summary" of each post.

"For Sport, For Life"

www.caseperformance.com

IV. Improved Facebook Functionality (cont)



Last, but certainly not least, CasePerformance contributor <u>Brian Putchio</u> worked extremely hard on formatting issues to ensure that facebook was pulling the appropriate wording for text previews. Now, all previews default to saying "Training, Nutrition for Sport & Life." As a side note, if you want to change the wording on the facebook preview, double click on the text box, it will highlight blue (as shown above) and change it to your preferred wording.

I am grateful for these individuals assisting me. As anyone who knows me well enough can tell you, I'm kind of an idiot when it comes to technical website formatting issues. Thus, I greatly appreciate the ability to lean on these guys for help!

"For Sport, For Life"

www.caseperformance.com

V. Articles on Partner Websites

CasePerformance Contributors Phil Stevens, Brian Putchio both have their own websites as well which I have written on during the past month:

Nutri-Bodies Blog: Nutrition Research & Exercise Physiology Blog

- * Owned and operated by Brian Putchio
- * This is a great site for those looking for "quick hit" articles. During the past month I contributed the following "quick hit" articles:
 - 1) Prolotherapy
 - 2) Paleo diet
 - 3) Tribulus.

Strength Guild

* Owned and operated by Phil & Sarah Stevens

Specific Articles I contributed during the past month:

- 1) Post Workout Recovery Techniques: Hydrotherapy
- 2) Oh, the People You'll Meet

*** Both of these sites have great articles, beyond the ones I've written, so even if you're bored with my stuff, you'll definitely want to check out the thoughts of the other contributors!

"For Sport, For Life"

www.caseperformance.com

VI. CP Performance Tip: Potential Beneficial supplements for Fertility + Modifiable Breast Cancer Risk Factors

Now that you're caught up on all the news and happenings of late here at CasePerformance, it's once again time to pick up with the overriding theme of our May newsletter, honoring mothers and women in general as we examine a few supplements to enhance fertility or ways to protect against cancer....

Fertility

Supplementing with the sex hormone DHEA has been suggested by some as a potential method to increase fertility in women with diminished ovarian reserve (**DOR**). [For reference, ovarian reserve refers to "the number and quality of oocytes in the ovaries of woman of childbearing age."] To date most of the research has been prospective without true controls. Yilmaz et al found that 25 mg, 3x/day for >6 weeks significantly improved markers of DOR in 41 patients. Pregnancy rates were 15% and 28% per cycle and embryo transfer which as stated Yilmaz et al, is impressive as the rate of pregnancy with assisted techniques without DHEA supplementation have been shown to be only 2-18% following in-vitro fertilization^{2,3}. Following 3 months of a similar treatment (25 mg, 3x/day), Hyman et al also noted positive effects in those struggling to conceive children.⁴

However, I caution you by saying that more research needs to be conducted in this area using the gold standard clinical control trial before definitive conclusions can be drawn. Yet, the news that DHEA *may* assist those struggling to have kids is quite exciting for those seeking the help!

Last but not least, I am not a medical doctor and this is not intended as medical advice. This discussion is intended to increase your awareness of the potential effects of DHEA for those with fertility issues. Please consult with your physician prior to starting any hormonal supplementation. Additionally, the doses stated here are that studied for potential fertility benefits with DHEA ... Not for anything else!

"For Sport, For Life"

www.caseperformance.com

Breast Cancer Protection (Exercise, Food, Supplements)

1) Exercise

The best supplement that you can add to your daily life with respect to reducing the risk of breast cancer is something that I hope you're already doing – EXERCISE! In a large study completed by Friedenreich & Cust, which reviewed the results of 62 previously conducted studies, it was found that those who exercised at moderate to vigorous levels had a 25-30% risk reduction in developing breast cancer!⁵ The author hypothesized these benefits are related to

- A) **Reduction of sex hormone levels** (ie estrogens and some androgens) which stimulate breast tumor formation. I do stress the emphasis should be placed on reducing these levels to "normal" vs. subnormal levels. Last thing we want to do is destroy your sex hormone levels, leading to irregular menstrual cycles and if not properly corrected, the female athlete triad.
- B) **Modulation of Inflammation** (Stress on the word "modulation"... Not total elimination!!!)
- C) Cellular pathways potentially more adapt to producing a "healthier form" of estrogen with respect to breast cancer.

I realize that all of the females reading this newsletter likely engage in exercise, so sleep easy tonight knowing that you're (assuming you're female) daily workout not only helped to keep those love handles away, but also just lessened your risk of developing breast cancer!

2) Food/Supplements

Switching gears here and looking at dietary factors... Healthy polyphenols found in plants (fruits, vegetables, tea and coffee) appear to reduce the risk of developing breast cancer according to Touvier et al who followed 4141 women for a median follow-up period of 12.6 years.⁶ However, the research team made an interesting observation; an INCREASED risk of developing breast cancer was associated with polyphenol intake in those who had alcohol intakes > 6g/d. For reference, 14g of alcohol are in 12 oz beer, 5 oz wine, and 8 oz malt liquor.⁷

"For Sport, For Life"

www.caseperformance.com

Table 1. Risk of developing breast cancer with or without consuming > 6.5g alcohol/day. Results below were statistically significant. Data adapted from Touvier et al. Image created by Sean Casey

Polyphenol	< 6.5g Alcohol/d	> 6.5g Alcohol/d
Hydroxybenzoic Acid	- 62%	+ 128%
Flavonoids	- 65%	+ 146%
Catechins	- 52%	+ 128%
Proanthocyanidins	- 61%	+ 198%

Touvier et al hypothesized that this effect observed with alcohol intake was potentially due to the procarcinogenic of the alcohol itself.^{8,9} They also noted a potentially negative interaction of alcohol + high dose polyphenols ultimately leading to heightened circulating sex hormone levels may be behind the observed results.

Actual clinical trials and lab tests would have to be done to confirm these hypotheses. But until then, I'd be careful with mega-dosing polyphenol supplements (but still eat up on whole food sources!), especially if you like to unwind with >4 drinks per week! Last thing we want is a repeat of the clinical trials where smokers and/or asbestos workers were supplemented with 20-30mg of the antioxidant beta carotene with the expectation that it would decrease the risk of developing cancer.... only to find that it INCREASED the incident of stomach and lung cancer vs. the placebo groups!¹⁰

Breast Cancer Bonus Link

Last but not least, my buddy Adel Moussa has had various <u>breast cancer related posts</u> at his SuppVersity site for those looking for more in-depth discussion on the topic.

"For Sport, For Life"

www.caseperformance.com

References

- 1. Yilmaz N, Uygur D, Inal H, Gorkem U, Cicek N, Mollamahmutoglu L. Dehydroepiandrosterone supplementation improves predictive markers for diminished ovarian reserve: serum AMH, inhibin B and antral follicle count. Eur J Obstet Gynecol Reprod Biol. 2013 May 8
- 2 Ulug U, Ben-Shlomo I, Turan E, Erden HF, Akman MA, Bahceci M. Conception rates following assisted reproduction in poor responder patients: a retrospective study in 300 consecutive cycles. Reprod Biomed Online 2003;6:439–43.
- 3. Jenkins JM, Davies DW, Devonport H, Anthony FW, Gadd SC, Watson RH, Masson GM. Comparison of 'poor' responders with 'good' responders using a standard buserelin/human menopausal gonadotrophin regime for in-vitro fertilization. Hum Reprod. 1991 Aug;6(7):918-21.
- 4. Hyman JH, Margalioth EJ, Rabinowitz R, Tsafrir A, Gal M, Alerhand S, Algur N, Eldar-Geva T. DHEA supplementation may improve IVF outcome in poor responders: a proposed mechanism. Eur J Obstet Gynecol Reprod Biol. 2013 May;168(1):49-53. doi: 10.1016/j.ejogrb.2012.12.017. Epub 2013 Jan 9.
- 5. Friedenreich CM, Cust AE.Physical activity and breast cancer risk: impact of timing, type and dose of activity and population subgroup effects. Br J Sports Med. 2008 Aug;42(8):636-47. doi: 10.1136/bjsm.2006.029132. Epub 2008 May 16.
- 6. Touvier M, Druesne-Pecollo N, Kesse-Guyot E, Andreeva VA, Fezeu L, Galan P, Hercberg S, Latino-Martel P. Dual association between polyphenol intake and breast cancer risk according to alcohol consumption level: a prospective cohort study. Breast Cancer Res Treat. 2013 Jan;137(1):225-36. doi: 10.1007/s10549-012-2323-y. Epub 2012 Nov 7.
- 7. Center for Disease Control and Prevention. Alcohol and Public Health. Accessed May 31, 2013 from: http://www.cdc.gov/alcohol/faqs.htm
- 8. Chen WY, Rosner B, Hankinson SE, Colditz GA, Willett WC Moderate alcohol consumption during adult life, drinking patterns, and breast cancer risk. JAMA. 2011 Nov 2;306(17):1884-90. doi: 10.1001/jama.2011.1590.
- 9. Tao MH, Marian C, Shields PG, Nie J, McCann SE, Millen A, Ambrosone C, Hutson A, Edge SB, Krishnan SS, Xie B, Winston J, Vito D, Russell M, Nochajski TH, Trevisan M, Freudenheim JL.Alcohol consumption in relation to aberrant DNA methylation in breast tumors. Alcohol. 2011 Nov;45(7):689-99. doi: 10.1016/j.alcohol.2010.11.006. Epub 2010 Dec 18.
- 10. Druesne-Pecollo N, Latino-Martel P, Norat T, Barrandon E, Bertrais S, Galan P, Hercberg S.Beta-carotene supplementation and cancer risk: a systematic review and metaanalysis of randomized controlled trials. Int J Cancer. 2010 Jul 1;127(1):172-84. doi: 10.1002/ijc.25008.

"For Sport, For Life"

www.caseperformance.com

That wraps up this CasePerformance newsletter. Hope you enjoyed our 2 Part Mother Themed Newsletters for the month of May... Let it be known though, testosterone shall rise next month as the spotlight shines brightly on the guys and fatherhood.

Last but not least, thanks for being a part of the team. We look forward to hearing your feedback on anything and everything so drop us a note on **FACEBOOK**.

And as always... Train smart, train hard and leave the excuses to someone else!

Sincerely,

The CasePerformance Team