# November Newsletter Part II



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## In Part II of this month's newsletter....

I. Leading Off	2
II. Donations	3
III. CP Article News	4
IV. CP Performance Discussion: Prebiotics, Probiotics and My Approach to Optimiz the Gut Microbiome	
V. SuppVersity Corner Report	9

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# I. Leading Off...

Hello,

Glad to see that you're tuning into Part II of our newsletter! I hope you enjoyed <u>Part I</u> which featured an exclusive interview with physical preparation coach and former Danish national triathlon member, Ole Stougaard who shared with us his background, approach to training for triathlons/ultra-endurance events as well as highs/lows of representing Denmark on the world stage. After our interview we got straight to our CP Community member discussion, *IIFYM-ood to Achieve Your Weight Loss Goals*, by Orit Tsaitlin, who discusses the mental outlook needed to achieve one's weight loss goals.

Shifting gears a bit, we're proud to bring you Part II of our November '14 newsletter. We kick things off by taking a quick peek at some article news here at CasePerformance & partner sites. We then move on to our CP Performance Discussion, *Prebiotics, Probiotics and My Approach to Optimizing the Gut Microbiome.* Finally we conclude with our SuppVersity Corner Report. Enjoy!

Respectfully,

Sean Casey

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## **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 those pinching pennies.

#### The 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!

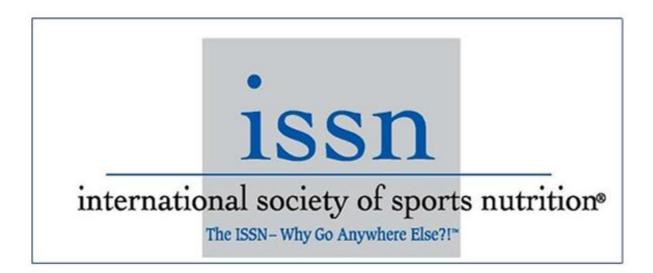
<u>CLICK HERE</u> to make a donation. Please know that <u>ANY AMOUNT</u> is greatly appreciated!

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## **III. Article News at CasePerformance**

One New Article was added to CasePerformance since our last newsletter...

2014 ISSN Conference Review – Part IIb

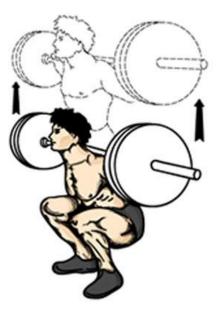


In Part IIb of our ISSN conference review we focus on the following presentations: Jacob M. Wilson PhD and Ryan Lowery BS CSCS (Fat Loss Strategies for Optimizing Body Composition), Jeff Volek PhD RD (The Many Facets of Keto-Adaptation – Health, Performance, & Beyond), and research from Dr. Lonnie Lowery's lab on *The Effects of VIA® Instant Coffee on Bench Press Performance: A Gender Comparison*.

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Top Article at CasePerformance during the month of November...

**Mechanics of Squatting** 



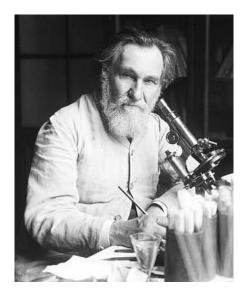
This blast from the past article, originally written in 2010, came out of nowhere to be the #1 article on the CP website for the month of October and once again reigned in November! Here's what it's all about...

The squat is a favorite exercise for many hard core resistance athletes. Recent research has provided an interesting look at squat mechanics. It appears that it's OK if your knees extend over your toes during the movement (within reason of course). The key thing, with respect to preventing injuries, is weight distribution on the foot. Also, when squatting with the same relative loads (70% 1RM) front squats appear to reduce the compressive stresses on the knee vs. the back squat. As a final note, don't forget to consciously explode out of "the hole" while squatting. Even if they weight is heavy (i.e. 1RM or 3 RM) one should attempt to push the weight as fast as possible.

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## **IV. CP Performance Discussion**

## Prebiotics, Probiotics and My Approach to Optimizing the Gut Microbiome



By Sean Casey

Figure 1. Elie Metchnikoff – An early advocate of probiotics. Image Source.<sup>1</sup>

I find prebiotics, probiotics and the gut microbiome to be an extremely interesting topic of conversation. Although we often consider this the "new" frontier in health, the purposeful use of swallowing bacteria to boost one's health has been around for quite some time. For instance, one of the forerunners in the probiotic movement was Elie Metchnikoff, winner of the 1908 Nobel Prize, who recommended the regular ingestion of lactobacilli.<sup>2</sup>

One area that has gained my interest during the past 1-2 years is focusing on increasing intake of dietary prebiotics vs. actually taking probiotics on a long term basis. I find prebiotics (ie - the food sources bacteria feed on) to be extremely interesting. Ultimately if we can create an environment that allows the "good" bugs to thrive, they'll drown out the "bad" bugs (I put quotes around "good" and "bad" because we're still far from drawing definitive conclusions on which ones are good and if they're good/bad ONLY when present in certain ratios with all the other bacteria in the gut).

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A lot of research has shown that simply adding prebiotic food sources to one's diet increases the amount of what we believe to be the healthy bacteria in our gut without having to do any sort of additional probiotic supplementation.<sup>3</sup> This is in contrast to simply taking a probiotic and not feeding it the prebiotics it needs to thrive.

"...yes we "know" these bacteria are in the gut but do we really "know" how they're interacting with the rest of the environment?" I really think that when it comes to probiotics there is a pile of stuff (good/bad/indifferent) that we really don't know; especially when it comes to adding them to the diet of a healthy individual. What irks me is when a guru promotes them as if they know EXACTLY how/what they're doing in the gut and short/long term implications of their presence. Using an analogy: Taking probiotics and thinking that we "know" with certainty about the beneficial effects it will have on our health is like going into a bathroom that you've never been in before, with the lights turned off, taking a pee and assuming that it is going directly into the toilet simply because you "know" you are standing somewhere in the bathroom.... yes we "know" these bacteria are in the gut but do we really "know" how they're interacting with the rest of the environment?"

And just so the point of my message above is not lost, I'm by no means anti-probiotics. If you find something that really works well, continue on – I'm not here trying to stop you. I myself have experimented with various bacterial strains in the past. There is some cool research on them with respect to disease states/sickness, and/or following anti-bacterial meds to repopulate the healthy bacteria (Please note, even in these instances, research is still in the infantile state and far from conclusive). However, I believe there is a lot of guesswork still involved when it comes to probiotics, especially in those who already eat a nutritionally sound diet.



**Figure 2.** The Acacia Tree - Source of one of my favorite supplemental prebiotics.<sup>4</sup>

Besides... Do we really know what the 'good'

bacteria are at certain stages of life? Do we TRULY understand the symbiotic relationship between the 'good' bacteria, the 'bad" bacteria as well as their relationship with us, the human host? To what degree does the "optimal" gut microbiome vary from individual to individual?

These are the questions I continue to explore with respect to probiotics, prebiotics & their usefulness in maximizing human health... which, who knows, may make for a future

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CasePerformance article sooner or later (Hint – Keep an eye out for next month's CP Newsletter)!

#### References

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- Gordon S. Elie Metchnikoff: father of natural immunity. Eur J Immunol. 2008 Dec;38(12):3257-64.
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## V. SuppVersity Corner Report!



<u>SuppVersity</u> is one of my favorite sites. It's run by my friend <u>Adel Moussa</u>. One of the things we do on the CasePerformance <u>FACEBOOK</u> page is highlight one of their excellent posts each week. Here they are for the past month...

#### Week of Nov 3rd-9th

How to Switch Off Your Menstrual Cycle W/ Exercise & Dieting - More Than 22% Deficit ⇒ Increased Risk of Menstrual Irregularities + Reduced (!) Weight Loss

#### CP Quick Thoughts

Some ladies are surprised that I don't make drastic cuts in daily caloric content when helping them lose weight. Decreasing energy intake by 15% is great plenty. This excellent write up by my buddy Adel Moussa clearly shows why.... Eat more food, lose more weight AND still maintain normal menstrual cycles vs. 'hard core' crash and dash nutrition/training programs.

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#### Week of November 10-16<sup>th</sup>

Farmed vs. Wild-Caught: Pollutants and A Low Omega-3/6 Ratio - Is Wild Caught Fish Always the Better Choice? Plus: Krill, Fish Oil, or Whole Fish - What's Best for Your Health?

#### CP Quick Thoughts

A longer, but worthwhile look at the differences b/w wild and farmed fish.

#### Week of November 17th-23rd

Lack of Sun Exposure & Type II Diabetes - Contemporary Evidence Suggests: There is a Link!

#### CP Quick Thoughts

No wonder Type II diabetes is rampant in vampires despite the fact they're on a low carb diet.

#### Week of November 24<sup>th</sup>- Nov 30<sup>th</sup>

Calorie Shifting (Refeeding) for Max. Fat Loss: Classic Body Building Principle Has Overweight Women Lose 8kg of Pure Fat in 42 Days - 2.6x More Than Calories In vs. Out Predicts

#### CP Quick Thoughts

Score another one for including refeeds into your dietary plan! Reading this study reminded me a bit of alternate day fasting (ADF) in that you have periods of low kcal intake followed by ad-libitum diet. We covered ADF in <u>Part 1 of our 2014 ISSN Report</u>.

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That wraps up this CasePerformance newsletter. 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