



Health, Hormones and Fat Loss presentation Feb 2012

Brian Ellicott

“Genes are reversible, you are not stuck with what you have, you can always better your health. It’s not easy and it never will be, but it is possible. Make a real difference and do the same for your kids. Don’t wait until something bad happens, start living healthy now.”

- Eric Falstrault

(Canadian strength coach)

What is BioSignature Modulation?

- Effective fat loss system that re-builds health
- Developed by Charles Poliquin since 1982
- 12 site body-fat measurement using calipers
- Each site reflects the health of a particular hormone
- Gives us an overview of your overall hormone levels. What is your biggest imbalance?

The 12 sites

- Chin and cheek = non survival fat. Usually the first two sites to drop.
- Pec and triceps = androgens – how male you are. Low testosterone = low muscle mass, low sex drive, lethargy and a slow metabolism
- Mid-axillary – thyroid health and function. Your thyroid controls the metabolism of every cell in your body.

The 12 sites continued...

- Sub-scapular and supra-iliac = insulin and carbs. The lower your sub-scap reading, the better you can process carbohydrates in your diet.
- Umbilical = cortisol, the stress hormone. Most common causes are missing meals and food intolerances.
- Knee and calves = growth hormone, sleep and overall toxicity.
- Quad and hamstring – estrogen – how female you are and how much you are being poisoned by estrogen in the environment.

What are the benefits?

- Helps us to create a tailored blueprint of supplementation, diet, lifestyle and training needed to help you lose fat and build health – specific to your body
- Accurately monitor how your body responds and the results you are getting week by week
- What gets measured, gets done

Lets see some results!

Ritchie Edworthy - 12 week transformation:



Week 1 - 23% bodyfat

Week 12 - 13% bodyfat

Adam Heawood



August 2010 - 107 kgs



Feb 2011 - 87.7 kgs

Russ Tanner - 10 week transformation:



In 10 weeks Russ has lost 10% bodyfat and gained 2kg of lean mass

**Shoulder and Bicep injury at work – no training at all weeks 2 – 8.
Remedial training then after.**

What results should I aim for?

- You get out what you put in
- Get the diet right!
- Aim for 0.5 – 1% decrease in bodyfat per week
- 4-5% = drop in a dress size
- 10% decrease is visually remarkable



Health, hormones and fat loss
(or why just counting calories will get
you nowhere fast)

Calories in, calories out...

- Ignores the hormonal responses generated by different foods – the glycemic index. 1000Kcals of broccoli versus 1000kcal of sugar
- Ignores the relationship between insulin, cortisol and blood sugar levels
- Ignores the importance of nutrient dense foods (vitamins, minerals, amino acids, fats, fibre)
- Weight loss versus healthy fat loss
- Impractical for people to stick to long-term

Calories in, calories out...

- Calories do matter, but they are far from the whole story
- Far more practical long-term to concentrate on the quality of food and let your appetite self-regulate. Very hard to get fat on lean meats, fish and green veggies.

Insulin...



**“I think diabetes is affecting my eyesight.
I have trouble seeing the consequences
of poor food choices.”**

Insulin

The uncomfortable truth:

“You have 100% control over insulin via the foods you **choose** to eat.”

Diet is 80% of you results

- Insulin is the only hormone you have direct control over via the food you eat
- Avoid sharp rises in blood sugar, insulin and cortisol – apple shape fat storage
- Rebuild insulin sensitivity – make it easier to stay leaner long-term
- Diseases related to insulin problems – inflammation, LDL & arterial plaque, heart disease, type-2 diabetes

Blood sugar, insulin and cortisol

- Avoid large spikes and crashes in blood sugar
- Reduce insulin and cortisol production via the fishing effect
- High blood sugar and excess insulin (during insulin resistance) in the blood stream will stimulate cortisol as the body attempts to solve the problem
- Alcohol – acts like a simple sugar inside the body – 7 calories per gram, sugar has 4

Insulin and Exercise

Regular exercise, especially resistance work, will increase the amount of insulin receptor sites your muscle cells have*

*Translation: regular exercise will help you become more insulin sensitive = easier to stay leaner and healthier**

**Translation: stop being a lazy ass and lift some weights!

Insulin - What can I do today?

- Eat a lower carb diet – high in protein, vegetables and healthy fats
- Natural foods and avoid refined carbohydrates
- Fibrous, low-glycemic carbs: kale, broccoli, lettuce, cabbage, cauliflower, mushrooms, green beans, asparagus, cucumber, spinach, peppers, zucchini.
- Some fruit: strawberries, blueberries, bilberries, raspberries, cherries, nectarines, avocado, tomatoes

Insulin Summary

“Exercise is king. Nutrition is queen. Put them together and you've got a kingdom.”

— Jack Lalanne



Wonderful, Wonderful Omega-3



Omega-3 Fish oils

- Every cell in the human body has a receptor site for Omega-3
- EPA/DHA = two main beneficial fatty acids
- EPA = anti inflammatory. Combine with acetyl-L-carnitine to improve heart health.
- DHA = supports cell membranes = cognitive and nervous system benefits
- Mitigates the insulin response to food
- Helps lift mood – boots serotonin

Omega-3 and behaviour

“A deficiency of omega-3 EFAs is associated with certain mental and behavioural disorders, such as ADHD, depression, dementia, dyspraxia, greater impulsivity and aggressive behaviour...”

- *Associate Parliamentary Food and Health Forum January 2008.*

<http://www.ifbb.org.uk>

Omega-3 and behaviour

- In the UK at Aylesbury Prison, when inmates were given multivitamins, minerals and essential fatty acids, violent offences dropped by 37%.
- Australia: Dr Gordon Parker of the Black Dog Institute has co-authored a scientific review of omega-3 polyunsaturated fatty acids and the treatment of mood disorders. Published in the American Journal of Psychiatry, it confirmed that omega-3 supplementation may benefit individuals suffering from depression, or the depressive phase of bipolar disorder.

Omega-3 fish oils

- Buy a high quality supplement – you get what you pay for – EPA/DHA content and screened for heavy metals
- Take enough – 1 to 1.5g per % bodyfat per day. Yes you need more than 1-2g per day!
- Important to balance Omega-3 and Omega-6 fats (grain fed red meat)
- DHA especially good for children – helps improve concentration and mood

Wheat and Gluten

How they make you fat, dopey and stupid.






Gluten

- Protein composite of a gliadin and a glutelin, conjoined with starch
- Found in all wheat based products, barley and rye
- Spectrum of intolerance – celiacs are very extreme, but the majority of people do better without it in their diet
- Tends to exasperate immune disorders and allergies – hayfever!
- Inflames and aggravates the digestive system

Gluten

- Gluten has been shown to negatively affect thyroid function
- Gluten removal shown to help reduce symptoms of autism in children
- Inflames the brain and its glutamate content can kill brain cells via NMDA (N-methyl-D-aspartate) receptors
- Can aggravate menopausal symptoms
- Strong allergen (raises cortisol) and raises insulin dramatically

Gluten - Chris

To add a line  Before And after Pictures Print  Body fat system  Bio-signature

mm

Date	Age	Height		Weight		mm											Sum 10	Sum 12	% fat	Lean mass		
		cm	inches	Kg	lbs	Chin	Cheek	Pec	Triceps	S-scap	Midax	Supra	Umbil	Knee	Calves	Quadric				Hamst.	Kg	lbs
16/7/2011	29	197		91.0		10.4	12.2	21.6	6.8	22.0	16.1	35.2	25.8	6.6	5.8	8.0	17.0	162.5	187.5	23.1	70.0	153
9/7/2011	29	197		92.0		11.4	12.4	24.0	8.4	22.4	20.0	37.6	28.6	6.3	7.7	8.2	18.0	178.8	205	24.6	69.4	152
3/7/2011	29	197		93.7		12.4	15.3	29.8	9.2	30.4	21.6	52.6	39.3	7.6	9.0	9.5	27.0	227.2	263.7	28.5	67.0	147

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Notes

POLIQUIN

4% Decrease in bodyfat in 7 days by removing gluten from his diet alone!

Wheat products in general

- Addictive - National Institutes of Health researchers (www.nih.gov) showed that gluten-derived polypeptides can cross into the brain and bind to the brain's opiate receptors = mild euphoria after eating them which leads to addiction
- Modern grains highly genetically modified and hybridised for higher yields – these processes can add further toxins (sodium azide)
- Amylopectin A (70% of starch) – more efficient conversion to blood sugar than even table sugar (part of starch)

Wheat: But I need it in my diet!

- No you don't. Every positive nutritional benefit to having wheat sources in the diet, for example fibre, can be obtained from other sources.
- Breakfast – part of a balanced breakfast? No, you are just reciting 30+ years of advertising
- Large companies have vested interests in you eating their products – whether or not it is healthy for you.

Gluten – What can I do today?

Remove all gluten based produce from your diet

- You need 100% elimination – Gluten has been shown to stay in the body for up to 12 days after eaten
- No nutritional benefit to having gluten in your diet
- Very pro-inflammatory – you may find certain aches and pains subside after elimination
- Elimination can help reduce attention and concentration issues in children – ADHD, autism

Estrogen

Man boobs, cancer and sitting down to pee...



Estrogen

- Major problem when doing BioSignature assessments – both for male and female
- Increased fat storage around the thighs – pear shape for women
- For men – increase in fat around the chest “man boobs”
- Increased risk of estrogen related cancers – ovarian, breast and prostate
- Increased symptoms of menopause with poor excretion

Parabens and xenoestrogens

- Parabens – man made preservatives in cosmetics and toiletries
- Can mimic estrogen inside the body
- Been found in breast cancer tissue in small quantities – more research needed
- Different forms: Butylparaben, Ethylparaben, Heptylparaben, Methylparaben, Propylparaben

Plastics and estrogen

- BPA – commonly found in plastics and tinned products – behaves like estrogen in the body
- Never heat plastic food containers – high temperatures increase risk of transferring toxins from plastics – use glass versions
- Link between BPA exposure in the womb and hyperactivity in young children – especially in girls
- Lowers testosterone by inhibiting androstenedione - important step for producing androgens

Alcohol and estrogen

"Alcohol causes the blood to clear estrogen very slowly leading to a rise in levels. This is done as it inhibits the P430 system in the Liver. This impact can be seen if you wander into any UK city on a weekend as this will either a) Increase aggression or b) Increase depression.....people are either fighting or crying."

- Phil Learney

Estrogen excretion and green veg

- Cruciferous vegetable family: broccoli, kale, cabbages, pok choy, watercress, etc
- Aids excretion of excess estrogen via Indole-3-carbinol, sulforaphane, DIM
- Keeps urine alkaline – helps the kidneys in phase 3 detoxification
- As fat cells are broken down, toxins are released – fibre needed to help excrete toxins from colon

Estrogen – What can I do today?

- Reduce exposure – bin anything with parabens/BPAs in and find an alternative
- Eat organic meat or at least meat without added hormones
- Reduce dairy intake or switch to grass fed, organic
- Eat WAY MORE green leafy veg to aid excretion
- Reduce intake of sugary carbs = reduction in aromatase production = less man breasts

5 health tips...

- Eat a Paleo/lower carb diet
- Avoid gluten and wheat
- Take fish oils – TAKE ENOUGH!
- Reduce exposure to estrogen and aid excretion
- Eat WAY MORE green leafy veg!
- BONUS: book in for BioSignature Modulation – the most effective method to lose fat and build health.