

Patient:

Date:

Sunday 25<sup>th</sup> November 2018

**Comments:**

- I have scrupulously followed Dr . 's guidance sheet, which I have copied with corresponding interventions in front of each concern and recommendation. I appreciate such great summary; thus, I suggest using it to explain all my treatments and dietary advice, in respect of Functional Medicine rules.
- Despite normal DIO2 genotype ensuring good genetic capacity to convert thyroid prohormones T4 into active hormones T3, your blood free T3 level cannot be seen as satisfying. I blame significant stress and lack of converting cofactors zinc/ZNRPY & selenium/SEOSJ, plus deficient iodine (IDWPY) indispensable for secreting any thyroid hormone. We support T3 levels with gentle non-prescriptive glandular GTAEN.
- L-thyroxine prescribed dosage seems optimal for now, but low T3 still triggers multiple symptoms that reflect thyroid insufficiency: water retention, depression (no need for lithium), high cholesterol, even osteoporosis that can be favoured by low as well as by high T3 levels - T3 is a major bone growth factor.
- Of course, I confirm the interest of vitamin D (D5LPY) and magnesium (MGDPY) for your bones, to which I add vitamin K (VL2PY) and bio-identical oestradiol through transdermal route (gel OEHG). Balance will come from bio-identical progesterone (UTHG) that will besides boost quality sleep aside magnesium and natural mix of melatonin, GABA, L-theanine, and many calming herbs (SLWPY - two capsules at 10 pm).
- You cannot experience great mood and libido with no sexual hormones, both undetectable in your blood because, after menopause, they originate from adrenal glands. However, yours are severely deficient with unusually low blood levels for testosterone and two prohormonal precursors pregnenolone & DHEA.
- I have prescribed compound capsules providing both, which should suffice to revive testosterone level without really prescribing it (which I rarely do). Better adrenal and thyroid functions will stimulate your metabolic drive, while I also rely on benfotiamine (BFWPY), lipoic acid (RLCPY), and berberine (BBRPY).
- The latter will show critical for our management by '*hitting many birds with the same stone*': berberine improves insulin sensitivity, decreases triglycerides and cholesterol, and dramatically alters intestinal microbiota, benefiting carbohydrate & lipid metabolisms on one hand, plus dysbiosis on the other hand.
- Profound dietary modifications will show compulsory to deliver success: **fast sugars, fructose, juices, grains (popcorn), alcohol**, and more generally **carbs** must be dramatically reduced. Your E3/E3 apoE genotype, which I like to label "*hunter*", definitively indicates need to move on high-**fat**/low-**carb** diet.
- To help you manage such changes, I suggest you see my nutritionist who will provide a nice **eating-plan**.

Georges MOUTON MD