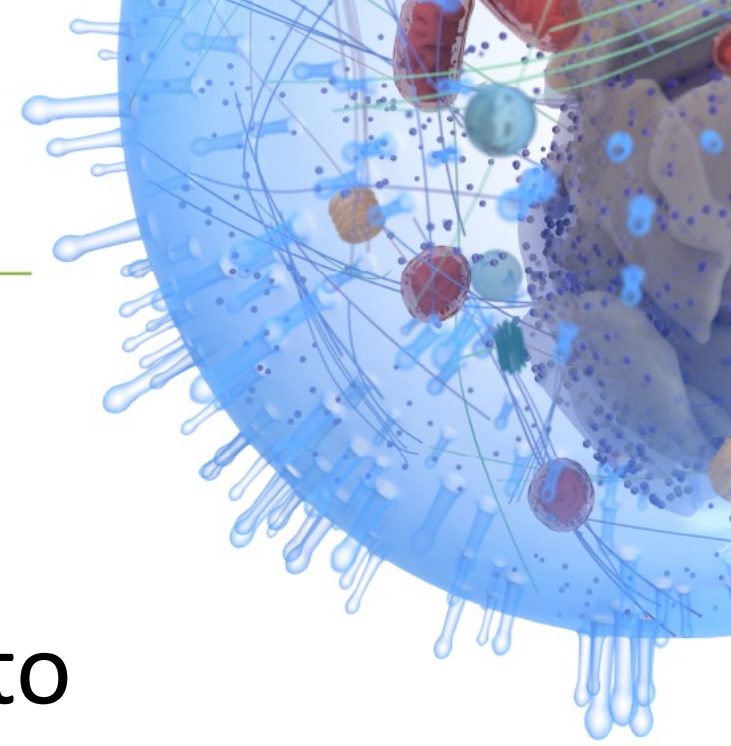


The dietary and nutritional inputs to optimise the immunological response to micro-immunotherapy

Dr Sarah Myhill MB BS
Upper Weston Llangunllo Knighton Powys LD7 1SL
www.doctormyhill.co.uk



Improving energy delivery mechanisms

THE FACTS:

- The immune system must be in a fit shape to respond properly to internal and external disruptive factors.
- Like any “standing army” it needs a **good supply of energy and raw materials**.
- Essential nutritional and lifestyle interventions are necessary to put the immune system in tip top shape and thereby optimise the response to micro-immunotherapy.

THE STEPS: The body is like a “machine”, and the car analogy helps explain the way it functions. For your car to run, you need:

1. the correct fuel in the tank (Paleo-Ketogenic diet, gut function)
2. an engine to use this fuel (mitochondria) together with
3. the thyroid accelerator pedal
4. and the adrenal gear box.



The fuel: Basic measures

1. Improve diet

- Mitochondria work best on ketones
- Take a basic package of supplements
- Calories – make sure you are eating sufficient
- Protein – not too little, not too much
- Fibre – for the microbiome, fuel and more
- Fats and oils are essential fuels, building materials and hormone precursors
- All fats which occur naturally are good fats
- Carbohydrates

2. Treat the upper fermenting gut

- Normalise digestion (encourage chewing)
- Vitamin C to bowel tolerance (most end up with 6-8grams daily)
- Lugol's iodine 15%, 3 drops in water at night (approx. 50mgs)

3. Get rid of toxic substances

- Pesticides and volatile organic compounds (measure with urine test and detox with heating regimes)
- Toxic metals (measure with urine test with DMSA and detox with several nutritional interventions; toxic metals are not excreted with heating regimes)
- Bacterial endotoxin and fungal mycotoxins, immune mediators (cytokines, immunoglobulins, etc.)

The engine: What does your mitochondria need?

Raw materials your mitochondria needs:

We do not need to test, experience shows that the below are the common essentials:

- Coenzyme Q10 (100-300mgs) as ubiquinol
- Magnesium (300mgs) (absorption greatly enhanced by Vitamin D 10,000iu daily), (possibly injections)
- Niacinamide (1500mgs daily)
- Acetyl L carnitine (500-2,000mgs)
- Vitamin B12 (1-5mgs daily) (possibly injections)
- D ribose (5-15grams daily) – but has to be part of the PK diet carb count. I suggest using this as a rescue remedy to shorten recovery time if the patient has over-done their activity.

Problem	Remedy
Lactic acid	Must pace activity more carefully
Products of the fermenting gut	PK diet, vitamin C to bowel tolerance, iodine mastic gum
Diamino compounds e.g. dyes from hair, foods, drugs	Avoid
Parabens (widely used disinfectant e.g. in toothpaste) Polybrominated biphenyls - fire retardants in soft furnishings Pesticides Nickel (jewellery) mercury (dental amalgam) and other toxic metals	Avoid Get rid with heating regimes (e.g. sauna, hot bath, sunbathing followed by washing off in shower) Detoxify with multi-minerals and glutathione 250mgs daily May need chelation therapy – I use oral DMSA(captomer) 15mg/kg weekly dose
Malondialdehyde – a result of a poor anti-oxidant status	Improve anti-oxidant status especially with vitamin B12 injections and vitamin C to bowel tolerance
Mycotoxins, viral proteins, immunoglobulins	Look for an infectious cause. See “The Infection Game”

The control mechanisms: the thyroid accelerator pedal and the adrenal gearbox

Both thyroid hormones and adrenal hormones impact on energy delivery mechanisms through their effects on mitochondria.

- **The bare minimum of testing that is required is the measure levels of:**

- TSH
- free T4
- free T3

(If there are abnormalities, then check for thyroid antibodies to look for autoimmune damage. Why? With one autoimmune disease there is increased risk of others.)

Treatment for adrenal fatigue:

- Identify the cause of the unremitting stressor: metabolic syndrome (carbs and deficiencies), immunological (infection, allergy, auto-immunity), mental, emotional (PTSD), social (families!), financial, etc.
- Use adrenal support such as pregnenolone (25-100mgs), DHEA (25-100mgs), adrenal glandulars. Take sublingually for best absorption.
- Useful herbal preparations include ginseng and ashwaganda.
- Adjust the dose using core temperatures – we can use this to “fine tune”.

Conclusion

To improve energy delivery mechanisms you have to do it all and in the right order.

Groundhog Basic

- The Paleo-Ketogenic diet
- Basic package of supplements: multivit, minerals, EFAs, Vitamin D 10,000iu
- 5 grams of vitamin C
- Sleep
- The right sort of exercise
- Lots of sunshine!
- https://www.drmyhill.co.uk/wiki/Groundhog_BASIC_%E2%80%93_what_we_should_all_be_doing_all_the_time

Groundhog Chronic

- Episodic fasting
- Take the mitochondrial package of supplements
- Check thyroid and adrenal function
- Detox
- Review any prescription medication – they are all potential toxins!
- Check your living space for electromagnetic pollution
- https://www.drmyhill.co.uk/wiki/Groundhog_CHRONIC_%E2%80%93_the_starting_point_to_treat_any_chronic_infection_AND_to_live_to_our_full_potential