



# Rules of the Road

*Rules of the Road is a shortened explanation and version of the 7 things you can do right now to help to put your body in a better place, in order to be healthier, recover quicker and improve your overall wellness.*

*Over the coming weeks each topic will be dealt with in more detail, but for the time being, we want you to start to implement some change right away and we can go further down the rabbit hole as the weeks progress.*

## **1. Parasympathetic stimulation: Gargling for 1-2 minutes until your eyes water or Gagging 1-2 minutes until your eyes water**

By gargling or gagging we naturally increase activation of our parasympathetic nervous system. Our parasympathetic nervous system controls repair and rejuvenation within our body. When we feel stressed our sympathetic nervous system increases production of fight or flight hormones which over time causes chronic inflammation and neuro-degeneration throughout the body. It is important that we employ techniques throughout the day to calm down our stress response.

Gargling or gagging until the eyes water provides confirmation that you have achieved very strong activation of the parasympathetic nervous system. When then eyes start to water that is the sign that you have achieved your goal.

## **2. 3-5 minutes HIIT/interval training**

Intense short vigorous exercise produces “Brain Derived Neurotropic Factor”. This is the vital ingredient that reduces neurological inflammation and promotes Neurogenesis. Neurogenesis is the process that encourages new neurons to be born. This will lead to increased cognitive/brain function, mood, well-being and concentration.

Find an exercise that you can do without pain, and do it as hard as you can for a short period of time. A suggestion would be:

30 Seconds Work, 30 Seconds Rest (x 5) with an exercise that is hard enough to push you. This may be Burpees, Star Jumps, Mountain Climbers.

Example:

<https://www.popsugar.com/fitness/5-Minute-HIIT-Workout-44046957>

## **3. Low Glycaemic index diet**

Food stuffs that release their calories quickly are High glycaemic index foods. Sugars, cakes, white bread and pasta all fall into this category.

High glycaemic index foods are generally considered to be pro-inflammatory to the body and cause excitotoxicity. Excitotoxicity is the process that causes overstimulation to our cells. In this case often we supplement with sugary foods to increase our mood or cognition but in turn this will actually cause the cells to become overstimulated and die. In the long term this is not a good strategy. This must be avoided whilst in recovery.

Low GI Foods:

<http://documents.hants.gov.uk/hms/HealthyEatingontheRun-LowGlycemicIndexFoodList.pdf>

#### 4. Supplementation

To reduce neuro-inflammation and upregulate your metabolic capacity is the goal here. Our body has only one response to a threat: be it physical or emotional, and that is production of stress hormones to enable us to fight or flight.

Chronic production of stress hormones creates chronic neuro-inflammation which in turn causes neuro-degeneration over time. To reverse these effects we need to supply our bodies with nutrients to reduce the neurological inflammation and increase our capacity for nerve cell activity.

Alpha Lipoic Acid 200-300mg daily

Magnesium 100% Rda

Vitamin D3 100% Rda

DHA rich omega 3 100% Rda

Pure EPA 1000 mg daily

Ubiquinol 100% Rda (which is active form of CoQ10)

**Or**

CoQ10 with zinc at 100% Rda

Supplements to be taken for 6 weeks initially.

#### 5. Cold / Red light Therapy

**Cold** 2-5 minutes of cold shower each day (as cold as you can tolerate) then air dry (we want the goosebumps)

**Followed by** 8-10 minutes of exposure to red and near infrared light whilst still undressed and airdrying.

**Cold therapy is incredible:** It increases parasympathetic activation (like gargling/gagging). It increases energy production on a cellular level. It is powerfully anti-inflammatory. It also helps produce dopamine, which increases mood and concentration. Air drying afterwards causes goose bumps which increases surface area and the cold cools blood plasma which increases absorption of red light.

**Red light with air drying:** Red light and near infrared light is one of the most important vital ingredients that fuels every cell in your body. It has been proven to:

- Strongly anti-inflammatory. It increases internal antioxidants (rejuvenation of cells)
- Decreases free radicals and oxidative stress (controls inflammation)
- Increases stem cells (improves longevity)
- Increases Nerve growth factor (regeneration)
- Increases Brain-derived neurotrophic factor (neurogenesis)
- Increases ATP production (energy production)
- Increases the number of mitochondria (energy production)
- Help prevents cell death (longevity)
- Increases our body's natural opioids (pain killing)

## **6. Blue light blocker and reduce EMF**

- The WHO's International Agency for Research on Cancer (IARC) classifies electromagnetic fields such as Wifi and the Radiofrequencies and Microwaves that are emitted from our smart phones as 'possible human carcinogens' that might transform normal cells into cancer cells. This means that they can't rule out that it is in fact a carcinogenic.
- It advised the public to adopt safety measures to reduce exposure, like the use of hands-free devices or texting.
- Blue light is a specific frequency of light that is emitted from our light bulbs, phones, TV's, Screens etc. This is extremely confusing to our Body clock as our Brain thinks that it is now Summer year round – having a vast impact on proper hormonal production (especially sleep hormones)

- At this stage we recommend you reduce wifi exposure and utilise flight mode as much as possible, and shut your wifi router off at night.
- To reduce Blue light exposure you can do the following:
- Use Blue light blocking glasses:
  - [https://www.amazon.co.uk/s/ref=nb\\_sb\\_noss\\_2?url=search-alias%3Daps&field-keywords=blue+light+blocking](https://www.amazon.co.uk/s/ref=nb_sb_noss_2?url=search-alias%3Daps&field-keywords=blue+light+blocking)
- Use F.Lux on your Computer - <https://justgetflux.com/>
- Iphone settings - Accessibility>Colour Filter>Red
- Android – App Twilight to be used.
- Switch to Full Spectrum Bulbs, switch lights off in the house once the sun has gone down, and use candle light which will not affect us at all.
- Maximise your time with Natural light coming in – even if it means leaving the Car window open a crack (The glass blocks UV rays)

## **7. Gratitude**

- It has been shown that gratitude and mindfulness go a long way in our recovery, not just from pain, but to also create an overall sense of wellness about our well-being. When we live in Chronic Pain, it is easy to forget the small wins that you may have throughout the day, as well as notice small improvements in symptoms.
- At the end of the day, write down three things that you are grateful for in that day, reflect on a positive “win” for the day, and just one main goal for the following day.
- This will allow you to stop the internalising thoughts and anxiety that so many of us have in regards to our body, and also offers us an

opportunity to reflect back and see where we have come FROM (it is easy to forget the pain you had a few weeks ago)

If you have any issues with any of the information here please do not hesitate to get in touch with us at

**[info@Cardiffpainandperformance.com](mailto:info@Cardiffpainandperformance.com)**