

LIFESTYLE MODIFICATION

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You may consider engaging yourself in life-style modification by doing the following:

1) NUTRITION (ENERGY SOURCE)

- Preserve gut bacteria (microbiome) which maintains our immune system
- Eat healthy breakfast and lunch



FIGURE 1. Clockwise: green juice (top), boiled egg, oatmeal with berries, raw almonds soaked in water (overnight), papaya, Manuka honey (UMF 20+) in water with lemon (center).

- Light dinner
- Maintain a good dietary habit eating **organic** leafy vegetables, fresh fruit. fish, egg, **grass-fed beef** (once a week or less) and **less carbohydrate** (rice, pasta, tortillas, sugar, soda, alcohol). **AVOID PROCESSED AND PRESERVED FOOD!**
- Eat the following (**avoid any one of these if you have allergy, intolerance, or gastric irritation**):
 - **FRESH JUICE:** buy a **juicer** and make fresh juice and drink immediately (do not keep in the refrigerator for later use):
 - i. Beet (half or full depending on the size)
 - ii. 2-3 kale leaves or Swiss chard or any leaf you like (avoid too much spinach which may cause kidney stone)
 - iii. ½ cucumber
 - iv. 2-3 sticks celery
 - v. 1-inch piece of ginger root (prevents acid reflux)
 - vi. 1 green or red apple
 - vii. If on **warfarin**, please check INR after 2-3 days of being on this juice, it might reduce the INR (for kale)
 - Steel cut oats
 - Ground flax seed

- Hemp
- Berries
- Olive oil
- Plain yogurt and fermented food
- Fenugreek seeds (soak in the water for 24 hours – drink water and eat seeds)
- Black cumin seed extract
- Turmeric (half teaspoon) in plain warm water or in green juice, or capsules
- 8 – 10 raw almonds (soak in the water at night before taking them in the morning).
- Green tea
- This dietary habit improves microbiome and gut health, and augments gut-brain-axis
- Take Vitamin D 5000 IU (do not take calcium supplement)

2) **PHYSICAL EXERCISE:** Cardiovascular / Yoga / isotonic / isometric exercises that you can tolerate and maintain (30 mins to 1 hour) to improve blood circulation which rejuvenate stem cells in all organs and tissues. Improved circulation also diminishes pain by reducing the concentration of pain-producing substances and cytokines in the local tissues. Cancer cells do not thrive in well oxygenated tissue or organ.

3) **RESPIRATORY RETRAINING (BREATHING EXERCISE) TO REDUCE ANXIETY:**

- Close your eyes and concentrate in between eyebrows, and on your breathing.
- Breathe out and breathe in via your nostrils very slowly (**NOT THROUGH THE MOUTH**). Alternate nostril breathing by occluding one nostril with thumb and little finger is very effective (pranayama)
- Complete breathing cycle 4-6 times/minute.
- Practice this deep breathing exercise for 5 minutes 2 times/day to maintain balance in the autonomic nervous system. Start the practice for 2 minutes each time and slowly increase the duration of respiratory retraining.

4) **SLEEP:**

- Maintain sleep hygiene by going to bed and waking up at similar time every night.
- Don't be on Computer, Cellphone or TV an hour before sleep (minimize AI addiction!!)
- Sleep for approximately 6 hours or more.

5) **MAINTAIN DISCIPLINE IN LIFE AND MINDFUL ABOUT YOUR DAILY ACTIVITIES.**

REFERENCES

1. Bouvard V, et al. Carcinogenicity of consumption of red and processed meat. *Lancet Oncology* (2015) 16.
2. Zhang et al. Complex roles of cAMP–PKA–CREB signaling in cancer. *Exp Hematol Oncol* (2020) 9:32.
3. Stading R, et al. Molecular mechanisms of pulmonary carcinogenesis by polycyclic aromatic hydrocarbons (PAHs): Implications for human lung cancer. *Seminars in Cancer Biology*. (2021) 76.
4. Liyang Z, et al. Anticancer applications of phytochemicals in gastric cancer: Effects and molecular mechanism. *Front. Pharmacol.* (2023) 13.