STRESS RESPONSE SUMMARY

We live in stressful times. We are all subjected to hundreds of stresses. There are 3 main types of stress…Physical, chemical, mental/emotional. Hans Selye demonstrated that our brain reacts to each type of stress exactly the same way, by initiating the "stress response." It must be emphasized that the physiological changes associated with the acute (short term) stress response are absolutely necessary for **survival** in a stressful environment so you can get yourself into a more hospitable environment. Genetically, we are designed perfectly for short term stress. (2-5 minutes) HOWEVER, we are not designed to stay in an environment that continually creates daily stress to our cells. What was designed to keep us above in an acute fight or flight situation is now being stimulated chronically for days, weeks, months or even years! (This is potentially deadly.) Every time we are in a chronically stressful environment, we force our body minds to adapt to that environment by creating an ongoing "stress response". The physiological adaptations resulting from a chronically stressful environment can to summarize as follows:

1. Increased cortisol-leads to adrenal fatigue and centripedal (midsection) body fat.
2. Increased catecholamines- increased stress hormones, cravings for sugars/fats.
3. Increased heart rate
4. Increased vasoconstriction (blood vessels get smaller/more rigid)
5. Increased blood pressure
6. Increased blood glucose levels (blood sugar problems)
7. Increased blood lipid levels ("thick blood")
8. Increased blood cholesterol levels (increased LDL: decreased HDL)
9. Increased clotting factors ("thick blood")
10. Increased protein degradation of muscle and connective tissue (muscle break down and weakness, fibromyalgia)
11. Insulin resistance (pre-diabetes)
12. Increased feelings of stress, fear, anxiety and depression
13. Decreased short term memory, ability to concentrate, and learn new material (ADD)
14. Decreased serotonin levels; increased noradrenaline levels (sleeplessness, anxiety)
15. Increased sensitivity of sensory systems (pain, allergies, fibromyalgia)
16. Decreased cellular immunity (increased susceptibility to colds/flu) (increases possibility of developing various cancers)
17. Decreased anabolic hormones like growth hormone and testosterone and luteinizing hormone, etc. (infertility, increase in "site specific" cancer – i.e. breast, ovarian and prostate.)
18. Bone loss, muscle fiber type changes (osteopenia and osteoporosis)

If you went to the mountains where there is less oxygen, the normal response of your brain would be to increase red blood cell production (thicker blood) to increase oxygen uptake to meet the "new demands." This change is your body adapting perfectly to a "stressful" environment. This is not a disease and it is not pathological. If you did not initiate this acute survival response, you would not live long enough to have degenerative stress diseases later in life. Look at the list above, see what can result from being forced to adapt to this unnaturally stressful environment. These physiological changes were NEVER designed to be chronic. When we force our body minds to produce them chronically in order to keep us alive in our stressful environment we are taxing our adaptability to the limit and physiological (cellular) dysfunction inevitable results.

Trying to "treat" the effects on the list above has never and will never work. You must address the causes of your chronic stress. Come to our Wellness Classes (as many times as is necessary) to find out how to EAT WELL, MOVE WELL and THINK WELL!