

New Options for Wellness news



Stanford Linear Accelerator Center

Published by the SLAC Medical Department *May/June 2006*

What's Inside...

☀ The 10 Most Important Blood Tests



Wellness Activities

- **Volley Ball:** Nicolas Berger sets up the volleyball net on front lawn Tues. & Wed. 12-1:00 PM & Thurs. 5-6:00 PM. Call Nicolas Ext.3434 for more info.
- **Healthy Back Cross Training:** Taught by HIP instructor on site. 3/30-6/3/05 Wed. & Fri. 11-11:55 AM in Bldg. 27. STAP fund: Yes
- **Smoking Cessation:** A free consult by P. L. Sachs, M.D. Questions? Dr. Gherman Ext. 4382.
- **Body Sculpting & Step Aerobics:** Taught by Ziba Mahdavi, this stretching class is offered on Tues. & Thurs. 12-1PM in Bldg. 27. Questions? Please call Ext.4458 or 2281.
- **Pilates:** Taught by Kerry Spear & Mary O'Connell Mon. & Wed. 5:15-6:15PM in Bldg. 27 at SLAC. Classes run 3/28 – 6/15/05 Register at: <http://hip.stanford.edu>
- **Yoga:** Taught by Kim Tanzer Friday 12-1:00PM in Bldg. 27 at SLAC. Classes 4/17 – 6/17/05. <http://hip.stanford.edu>
- **Ballet/Lyrical Jazz:** Taught by Vicky Brey, Friday 5:15-6:30 PM in Bldg. 27. Questions? olga@SLAC.Stanford.EDU
- **Aerobics:** Taught by Cecilia Glower, Mon. & Wed. 12-1PM, Tues. & Thurs. 5-6 PM in Bldg. 27. Questions? Michelle Steger @ x.3011 or Bette Ferandin @ x 2601.
- **Stress Counseling:** Rosan Gomperts & Kevin Carr, Stanford Help Center counselors at SLAC on Tues. 10 -4 PM, Thurs. 8-11AM in the Medical Dept. Call Ext.2281 for an apt. at SLAC, or (650) 723-4577 for an apt. at the Stanford campus office.
- **Massage:** Mer Baldoza, CMT, is at SLAC medical Tues., Wed, Thurs., and Fri., 3:30 PM. Call Ext. 2009 to schedule an appointment.
- **Gym:** weights & equipment in NW corner of Bldg. 34. Call Diane Jenkins to join or for more info Ext. 2215.
- **Soccer:** On the front lawn Mon. & Thurs. at noon Call Rafael Miranda x 4471 or Tu Ly x 4442

The 10 Most Important Blood Tests.

People over the age of 40 should have these tests done each year. Armed with the results, aging adults can work together with their physicians to avert serious health problems and achieve optimal health.

1. Chemistry Panel and CBC. This test provides a broad range of diagnostic information to assess your vascular, liver, kidney, and blood cell status :for infections, anemias, and other hematological abnormalities. The Chemistry Panel provides information on the status of your cardiovascular system by testing total cholesterol, HDL, LDL, triglycerides, and the total cholesterol/HDL ratio. It also measures blood glucose, which is critically important for detecting early stage metabolic syndrome, diabetes, and coronary artery disease. Also included is an assessment of critical minerals such as calcium, potassium and iron.



2. Fibrinogen. An important contributor to blood clotting, fibrinogen levels increase in response to tissue inflammation. High fibrinogen levels not only associated with an increased risk of heart attack, but also are seen in other inflammatory disorders such as rheumatoid arthritis and glomerulonephritis (inflammation of the kidney). A combination of lifestyle and behavioral changes-such as quitting smoking, losing weight, and becoming more physically active-may help to lower fibrinogen levels to the optimal range. You and your physician may wish to discuss the use of fish oil, niacin, and folic acid, along with vitamins A and C.

3. Hemoglobin A1C. One of the best ways to assess your glucose status. This test measures a person's blood sugar control over the last two to three months and is an independent predictor of heart disease risk in persons with or without diabetes. Maintaining healthy hemoglobin A1C may also help patients with diabetes to prevent some of the complications of the disease. Nutritional therapies may help to optimize hemoglobin A1C levels.



4. DHEA Dehydroepiandrosterone, a hormone produced by the adrenal glands, is a precursor to the sex hormones estrogen and testosterone. Healthy levels of DHEA may support immune function, bone density, mood, libido, and healthy body composition. Elevated levels of DHEA may indicate congenital adrenal hyperplasia, a group of disorders that result from impaired ability of the adrenal gland to produce glucocorticoids



5. PSA. Prostate specific antigen elevated levels may suggest an enlarged prostate, prostate inflammation, or prostate cancer. PSA levels may also be used to monitor the efficacy of the therapeutic regimens for prostate conditions. Elevated levels of PSA may not necessarily signal prostate cancer, and prostate cancer may not always be accompanied by expression of PSA. Levels can be elevated in the presence of urinary tract infection or an inflamed prostate. A PSA level over 2.5 ng/ml, or a PSA doubling time of less than 12 years, may be a cause for concern.

6. Homocystein. The amino acid homocystein is formed in the body during the metabolism of methionine. High homocystein levels have been associated with increased risk of heart attack, bone fracture, and poor cognitive function, age related macular degeneration, presence of gallstones in middle-aged men. Natural

therapies may help to optimize homocystein levels. You may wish to discuss with your doctor the use of vitamin B12, vitamin B6, folic acid, and trimethylglycine.

7. C-Reactive Protein. Medical science is discovering that inflammation within the body can lead to a range of life threatening degenerative diseases such as coronary heart disease, diabetes, macular degeneration, and cognitive decline. CRP testing like-wise reveals systemic inflammation that is associated with disease activity in patients with rheumatoid arthritis. Natural therapies may help to optimize CRP levels. You may wish to discuss with your doctor the use of fish oil, L-carnitine, and soluble fiber before meals.



8. Thyroid Stimulating Hormone (TSH). Secreted by the pituitary gland, TSH controls thyroid hormone secretion in the thyroid. When blood levels fall below normal, that indicates hyperthyroidism, also called thyrotoxicosis, and values are above normal, this suggests hypothyroidism. Mild hypothyroidism may be associated with reversible high blood cholesterol and cognitive dysfunction, fatigue, depression, cold intolerance, dry skin, constipation, and weight gain. Hyperthyroidism is often associated with atrial fibrillation, reduced bone density, weight loss, heat intolerance, nervousness, insomnia, muscle weakness, shortness of breath, and heart palpitations. You may wish to discuss with your doctor the use of L-tyrosine, iodine, and selenium.

9. Testosterone free. Optimal levels may support healthy mood, libido, body composition, and cardiovascular wellness. You may wish to use of supplements such as DHEA and pregnenolone.

10. Estradiol. Like testosterone, both men and women need estrogen for numerous physiological functions. Optimal levels may support healthy bone density, cardiovascular health, and well-being. You may discuss with your doctor the use of DHEA, pregnenolone, bioidentical estrogens, soy, black cohosh, and pomegranate.