Nutrition For Polycystic Ovarian Syndrome (PCOS)

Polycystic ovarian syndrome (PCOS) is a condition in women that results in increased androgens (male hormones) and irregular menstrual cycles. Other symptoms commonly experienced in women with PCOS include:

- Excessive abdominal weight
- Acanthosis nigricans (dark, discolored patches on the skin)
- Hair loss from the head (alopecia)
- Excessive hair growth on the face and other parts of the body, including navel and inner thighs (hirsutism)

Approximately 50%-70% of women with PCOS have insulin resistance, a condition in which your body does not respond appropriately to the normal amount of insulin produced in your body. As a result, women with PCOS are at a high risk for developing cardiovascular disease, type 2 diabetes, and metabolic syndrome. Changes in diet and lifestyle have been shown to reduce the risk for disease and improve symptoms among women with this condition.

Nutrition Goals for Improving PCOS:

- Eat a colorful variety of fruits and vegetables every day to get a wide range of protective nutrients. For example, mixed salad greens with tomatoes, sliced cucumbers, red onions, and bell peppers.
- Choose nutrient-rich whole grains, a good source of dietary fiber, magnesium, and other important nutrients. Whole-grain sources include whole wheat, spelt, bulgur, amaranth, whole-grain barley, buckwheat, oats, brown rice, quinoa, whole rye, and popcorn.
- Choose protein-rich foods such as lean meats, poultry, and eggs with meals and snacks to add fullness and help manage blood sugar levels.
- Select foods high in omega-3 fatty acids, a type of polyunsaturated fat.
 Examples include fatty fish* (salmon, mackerel, herring, lake trout, sardines, and albacore tuna), seeds (flax seeds, chia seeds), oils and nuts (walnuts).
 *Women who are pregnant, nursing, or who could become pregnant, as well as young children, should avoid king mackerel, marlin, orange roughy, shark, swordfish, tilefish (Gulf of Mexico), and bigeye tuna due to higher levels of mercury. Check local advisories before eating locally-caught fish. For more information, visit www.epa.gov/fishadvice.
- Choose fat-free or low-fat dairy foods such as milk, cottage cheese and yogurt.
- Limit refined grains and foods and drinks that are high in added sugars.

Tips for a Healthy PCOS Lifestyle:

- Apply stress management strategies such as exercise and mindfulness practice to reduce stress.
- Get adequate hours of sleep each night. If you snore, you may want to get checked for obstructive sleep apnea, which is common in women with PCOS.
- If overweight, weight loss of 5 to 10 percent of total body weight has been shown to improve insulin resistance and other symptoms of PCOS.
- Engage in moderate-intensity physical activity for at least 30 minutes on most or all days of the week. This may lead to improved insulin resistance and support weight loss and maintenance.
- Athletes with PCOS have specific needs and are advised to seek the
 assistance of a registered dietitian nutritionist (RDN) for a personalized
 eating plan. Visit the SCAN website at www.SCANdpg.org to locate a
 RDN who specializes in sports nutrition.



Tips to Take With You

- 1. Eat 4 to 6 times each day and include a variety of nutrient-rich foods in each meal and snack (e.g., whole-wheat toast with peanut butter and a piece of fruit).
- 2. Be active by engaging in some form of physical activity each day.
- 3. Achieve or maintain a healthy weight.

Since women with PCOS typically have a cluster of symptoms they should consult a registered dietitian nutritionist for a personalized eating plan. To find a RDN near you, visit: www.eatright.org

Contact SCAN www.scandpg.org 800.249.2875

References:

- 1.Grassi A. PCOS: The Dietician's Guide. 2nd ed. Luca Publishing Harverford, PA 2013.
- 2. Grassi A. Polycystic ovary syndrome. In, The Academy of Nutrition and Dietetic's Nutrition Care Manual. Chicago, IL. 2012.
- 3. Moran LJ, Misso ML, Wild RA, Norman RJ. Impaired glucose tolerance, type 2 diabetes and metabolic syndrome in polycystic ovary syndrome: a systematic review and meta-analysis. Human Repro Update. 2010;16(4):347-363.
- Dietary Composition in the Treatment of Polycystic Ovary Syndrome: A Systematic Review to Inform Evidence-Based Guidelines Moran, Lisa J. et al. Journal of the Academy of Nutrition and Dietetics, 2013, Volume 113, Issue 4, 520 – 545
- Blay SL, Aguiar JV, Passos IC. Polycystic ovary syndrome and mental disorders: a systematic review and exploratory metaanalysis. Neuropsychiatr Dis Treat. 2016;8;12:2895-2903.
- Asemi Z, Esmaillzadeh A.DASH Diet, Insulin Resistance, and Serum hs-CRP in Polycystic Ovary Syndrome: A Randomized Controlled Clinical Trial. Horm Metab Res. 2014.
- 7. Amany Alsayed Salama AA, Amine EK, Salem HAE, Fattah NKAE. Anti-Inflammatory Dietary Combo in Overweight and Obese Women with Polycystic Ovary Syndrome. N Am J Med Sci. 2015 Jul; 7(7): 310–316.

Written by SCAN registered dietitian nutritionists (RDN) to provide nutrition guidance. The key to optimal meal planning is individualization. For personalized nutrition plans contact a SCAN sports dietitian or Board Certified Specialist in Sports Dietetics (CSSD) by accessing "Find a SCAN Dietitian" at www.scandpg.org or by phone at 800.249.2875.

© 2017 Sports, Cardiovascular, and Wellness Nutrition (SCAN) Contributing Author: Angela Grassi, MS, RDN, LDN