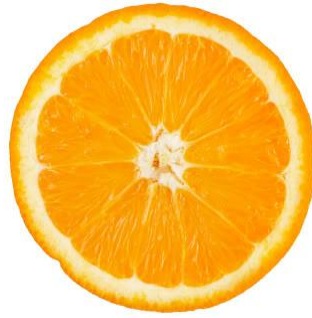


Prep School Performance Nutrition News with *Kathleen Searles, MS, RD, LDN*



(978) 697-2834

www.lunchbox-nutritionist.com

Nutritionist. Speaker. Consultant.

Spring greetings! The April issue of Prep School Performance Nutrition News will step away from performance to take a look at the common teen concern of acne. The Journal of the Academy of Nutrition and Dietetics recently featured an article reviewing the evidence linking diet and acne severity. I hope that you will find some useful tips to share with your students!

- *Kathleen Searles, MS, RD, CSSD, LDN*

Can Dietary Changes Affect Acne Development?



Acne (formally known as acne vulgaris) is a skin condition that affects up to 80-90% of teens at some point. Recognizing and treating acne can help forestall the social, psychological, and emotional effects of acne for teens.

Researchers and consumers alike have long wondered about the relationship between diet and the development of acne. As far back as the late 1800's, practitioners were advising those with acne to avoid

I can help your students to develop an individualized plan to promote healthy skin and reduce acne. Healthy skin = an increase in self confidence = happier and more productive teen!

Please call or e-mail me today to learn more information!

Contact Kathleen Searles, MS, RD, CSSD, LDN at [978-697-2834](tel:978-697-2834) or ksearles@lunchbox-nutritionist.com.

Skin Friendly Diet Tips

- Here are the healthy food choices that may help control acne:
- Whole grains in place of processed grains
- Few sugary foods
- Frequent intake of vegetables
- Frequent intake of fish and other omega-3 fatty acid sources

chocolate, sugar, and dairy products. During the 1960's a couple of studies cast doubt on this advice, and for many years the diet and acne link was downplayed. A number of recent studies, however, are revisiting this topic.

Acne results when the sebaceous glands secrete excess sebum, which then leads to occluded follicles. (Follicles connect the glands to the pores of the skin.) The occluded follicles create a favorable environment for the overgrowth of the bacterium *Propionibacterium* acnes. This, in turn, leads to an immune response and inflammation. Sebum production is influenced by androgen hormones and insulin-like growth factor (IGF-1).

In the March 2013 *Journal of the Academy of Nutrition and Dietetics* 27 research articles dating from 1960-2012 were reviewed and analyzed. Many of the studies have serious shortcomings, but some trends and possibilities for future research did emerge. The two most consistently identified negative dietary factors are a high total dairy intake and a high glycemic load diet. These dietary patterns are associated with complex hormonal interactions that culminate in hyperinsulinism (high levels of circulating insulin), increased androgen hormones (leading to increased sebum production), and increased follicle growth.

Dairy foods are associated with increased IGF-1 levels, hyperinsulinism, and increased androgen hormones, thus contributing to increased sebum production. Milk and skim milk have a relatively high glycemic load (meaning that they increase blood sugar and thus insulin.)

A high glycemic load diet contains more sugars, juices and processed foods vs. whole foods such as whole grains, fruits, and vegetables. The high glycemic load diet promotes hyperinsulinism, increased follicle growth, and increased androgen hormones. Some other dietary factors were looked at, but the evidence did not seem as consistent as that for dairy (specifically milk) intake and glycemic load. A couple of studies linked high omega 3 fatty acid and/or fish intake with less acne. One showed an association between acne and a high fat diet with frequent fried foods. Some studies linked acne with chocolate, sweets, and infrequent vegetable intake.

The authors of this comprehensive review article state, "This evidence, to date, does not demonstrate that diet causes acne, but may aggravate or influence it to some degree." It will be interesting to see what future studies uncover in this area!

Primary Resource: Burris J, Rietkerk W, Woolf K. "Acne: the role of medical nutrition therapy." *J Acad Nutr Diet.* 2013 Mar; 113 (3): 416-30.

<http://www.ncbi.nlm.nih.gov/pubmed/23438493>

- Limit or avoid milk (be sure that calcium and Vitamin D intake remain adequate!)

Additional Points to Ponder:

Why whey protein supplements may not be a good idea for acne sufferers...

Associated with increased insulin levels

Associated with increased cellular (follicle) growth

Associated with increased androgen hormone levels

Associated with increased oil production in the sebaceous glands

Why students taking the acne medication Accutane (isotretinoin) need to watch what they eat...

In a study of isotretinoin users 44% had elevated blood triglyceride levels and 31% had elevated cholesterol levels

A low glycemic diet (whole grains, veggies, few sugars) is indicated for elevated triglycerides

A low fat, low cholesterol diet is indicated for elevated cholesterol levels

© 2013 Kathleen Searles, MS, RD, CSSD, LDN

Like Prep School Nutrition's Facebook Page for more up to date information!



