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May 2019

Moms & Babies

Omega-3s improve child cognition, reduce autism symptoms

Mom's DHA boosts infant problem-solving

In the third trimester of pregnancy, infant brains experience a large growth spurt. Mothers' DHA levels at that time influence infant DHA levels at three months, and cognitive development at 12 months. In this study, doctors measured DHA levels in 32 pregnant women at week 28 and again at three months postpartum, and in their offspring at three, six, and 12 months.

At three months, children of mothers with higher DHA levels also had higher DHA levels themselves. And, at 12 months, children whose mothers had adequate DHA levels during the third trimester were better able to solve problems compared to children whose mothers had lower DHA levels while pregnant.

Discussing the results, doctors said it is the fatty acid content in membranes of circulating red blood cells during pregnancy that have the strongest link to later problem-solving skills, and that higher problem-solving scores in infancy translate directly to higher childhood IQ scores later.

Omega-3s with GLA reduce autism symptoms

Because children don't receive a formal diagnosis of autism spectrum



disorder (ASD) until at least age four, most autism studies have focused on these older kids. Doctors felt they might have the best hope of improving ASD by starting younger, and focused on prematurely born children, who are more likely to develop ASD.

In this study, doctors gave 28 kids born at least 11 weeks premature, omega-3, -6, and -9, including 338 mg EPA, 225 mg DHA, and 83 mg GLA per day, or a canola oil placebo containing alpha-linolenic, linoleic, oleic, palmitic, and stearic acids.

After three months, the omega-3 group saw significantly improved ASD symptom scores. Discussing the findings, doctors said in ASD, some metabolic pathways for processing fatty acids may not be as efficient as in healthy people, and that GLA may combine with fatty acids so the brain can use omega-3s more efficiently.

REFERENCE: NUTRIENTS; 2018, VOL. 10, No. 5, 529

MAY'S

Healthy Insight Veggies for Vision

Green leafy vegetables and beetroot contain nitrate, a precursor of nitric oxide, the molecule that helps blood vessels relax, increasing blood flow. In this study, doctors measured the diets of 2,037 adults, aged at least 49, and followed up 15 years later.

Those who consumed between 100 and 142 mg of vegetable nitrates per day were 35 percent less likely to have developed early-stage age-related macular degeneration (AMD) compared to those who got less than 69 mg per day. AMD blurs or eliminates sight in the center of the field of vision; one of the most common age-related eye conditions.

REFERENCE: JOURNAL OF THE ACADEMY OF NUTRITION AND DIETETICS; 2018, VOL. 188, No. 12, 2311-4

This Issue

VITAMIN D AND OMEGA-3 IMPROVE PCOS	2
PHYCENOGENOL® AND FOLIC ACID FOR MEN'S REPRODUCTIVE HEALTH	2
QUERCETIN SPEEDS RECOVERY, REDUCES MUSCLE DAMAGE	3
EARLY-STAGE DISCOVERIES IN NUTRITION	3
ROASTED BEETS & CARROTS WITH CITRUS GINGER SAUCE	4

Beating PCOS

Vitamin D and omega-3 improve PCOS

What is PCOS?

Polycystic ovary syndrome is a hormone imbalance—including excess male hormone levels—that changes menstruation, can impair fertility, and raises chances for metabolic syndrome and other physical and psychological conditions.

Vitamin D

In this study, 40 women with PCOS took a placebo or 3,200 IU of vitamin D per day. After three months, vitamin D levels had more than tripled in the vitamin D group, and increased 1.5 times for placebo. Signs of systemic inflammation had decreased for vitamin D while remaining unchanged in the placebo group.

Doctors were interested in liver function, which can deteriorate in PCOS. When the liver is damaged, it

releases excess amounts of a protein-metabolizing enzyme, alanine transaminase, or ALT, into the bloodstream. ALT levels declined for the vitamin D group and increased for placebo.

In women who were both overweight and deficient in vitamin D, those taking vitamin D showed fewer signs of liver scarring, and had improvements in liver function.

Vitamin D and omega-3

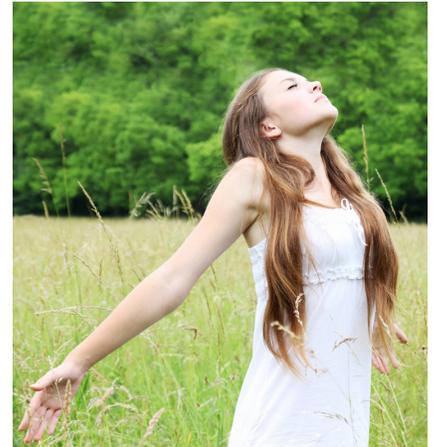
In this study, 60 women with PCOS, aged 18 to 40, took a placebo or 50,000 IU of vitamin D every two weeks plus 2,000 mg of omega-3 fish oil daily.

After 12 weeks, compared to placebo, women taking vitamin D with omega-3 had much lower testosterone levels, and saw significant decreases in high-sensitivity C-reactive protein, and

malondialdehyde—both markers for systemic inflammation.

Total antioxidant capacity also improved significantly for the vitamin D-omega-3 group vs. placebo. And, women taking D and omega-3 showed three times the improvement in depression scores compared to placebo.

REFERENCE: NUTRIENTS; 2019, VOL. 11, No. 1, 188



Men's Health

Pycnogenol® and folic acid for men's reproductive health

Pycnogenol for BPH

An enlarged prostate, or benign prostatic hypertrophy, is a common condition in adult men that can affect quality of life. In this study, 75 men with BPH, aged 55 to 75, followed



standard, non-drug diet and exercise guidelines, took standard drug treatments, or 150 mg of Pycnogenol per day.

After eight weeks, bladder-holding capacity improved most for Pycnogenol, then for the drug group, and last for the non-drug group. Complete bladder emptying improved 42 percent for Pycnogenol, 9 percent in the non-drug group, and 6 percent for the drug group.

Men in the Pycnogenol group also had the best results compared to either the drug or non-drug groups for reduced daily urination frequency, fewer overnight urination needs, less straining, and better flow. The Pycnogenol group also reported no side effects, including erectile dysfunction, a concern with some BPH drug treatments.

Folic acid and ED

New evidence suggests low folic acid levels may increase chances for erectile dysfunction (ED). In this study, doctors measured folic acid levels in 60 men with ED and compared them to folic acid levels in 30 healthy men. Folic acid levels in the ED group were nearly half that of healthy men: 7.1 vs. 13.4 nanograms per milliliter of blood (ng/mL). Low folic acid levels were linked to diabetes, high blood pressure and cholesterol, and smoking.

Men with folic acid levels below 2.2 ng/mL are considered deficient, but tests are able to begin predicting higher chances for ED when folic acid levels fall below 9.43 ng/mL.

REFERENCE: MINERVA MEDICA; 2018, VOL. 109, No. 4, 280-4

Performance

Quercetin speeds recovery, reduces muscle damage after exercise

Quercetin boosts performance, recovery in triathletes

Intense exercise creates oxidative stress, delaying muscle recovery and increasing pain after exercise. In this study, 48 amateur triathletes, aged 30 to 40, took no supplement or 250 mg of



quercetin twice per day for two weeks. All went through the same training including a 750 meter swim in open seawater, cycling 29 kilometers, and running 5 kilometers.

On day one, and again after two weeks, participants completed a baseline run. Runners in the quercetin group beat their original time by 11.3 percent compared to a 3.9 percent improvement for the non-supplement group. Afterwards, the quercetin group reported less post-run muscle pain, fewer cramps, less localized pain, and faster recovery times.

Quercetin protects muscles

Earlier exercise studies using antioxidants have had inconsistent muscle-damage results. In this study, 12 moderately active men, average age 26, took a placebo or 500 mg of quercetin

at breakfast and again 12 hours later over two weeks. After a three week non-treatment period, the men switched groups.

Putting muscles under load while lengthening them is the fastest way to induce damage. At the start and end of the study, the men did 10 sets of 10 maximal muscle-lengthening contractions. While the placebo group had not changed, men taking quercetin saw a 4.7 percent increase in isometric strength, and muscle fiber decay was significantly lower.

Doctors also saw fewer biochemical signs of damage, and observed better muscle function, commenting that quercetin seems to be a suitable nutritional supplement to reduce discomfort, maintain strength, and may improve overall fitness.

REFERENCE: MINERVA MEDICA; 2018, VOL. 109, NO. 4, 285-9

MAY'S

Ahead of the Curve

Early-Stage Discoveries: EGCG, Goji Berry, Kefir

Good results in the lab can lead to larger human trials. Here are some of the most promising recent findings.

EGCG reduces arterial plaques

In the late stages of fat building up in arteries, a type of a protein—apolipoprotein A-1, or apoA-1—combines with fat to form unstable plaque deposits, increasing chances for adverse events. In the lab, researchers found a compound from green tea, epigallocatechin-gallate (EGCG), binds to apoA-1 fibers, making them smaller, more soluble, and less likely to damage blood vessels. Doctors said, “Our results show that this intriguing compound might also be effective against types of plaques which can cause heart attacks and strokes.”

Goji berry alleviates colitis, gut inflammation

Chronic inflammation in the gut increases chances for colorectal cancer. In this study, goji berry promoted probiotics in the gut, creating beneficial effects against colitis, and reducing chances for colorectal cancer.

In the lab, mice fed goji berry for 10 weeks had higher levels of the probiotic bifidobacteria in the gut microbiome compared to the start of the study. Goji berry also promoted a type of bacteria that fed on itself, reducing chronic inflammation and increasing preventive effects against colitis.

Kefir reduced precancerous lesions

One of the earliest changes in the colon that can lead to cancerous polyps are clusters of tube-like glands in the lining. In the lab, rats that got kefir in their diet for 18 weeks saw a 36 percent decrease in these abnormal glands. Kefir also promoted gut resistance to infection and protection from oxidative damage.

Discussing the findings, doctors said kefir reduced the development of lesions by increasing short-chain fatty acids, reducing gut permeability and increasing antioxidant activity.

REFERENCE: JOURNAL OF BIOLOGICAL CHEMISTRY; AUGUST, 2018, PUBLISHED ONLINE

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Roasted Beets & Carrots with Citrus Ginger Sauce

This delicious dish will make veggie lovers out of everyone! Please see page 1 for a new study that found adults who got the most vegetables in the diet were more likely to have healthy vision.

Prep: 20 minutes Cook: 1 hour Servings: 6

Ingredients:

4 large organic beets, peeled and sliced	1/3 c fresh pink grapefruit juice
3 large organic carrots, peeled and quartered	1/4 c fresh lemon juice
2 tbsp extra virgin olive oil, reserve one tbsp for sauce	2 tbsp red wine vinegar
1 tsp sea salt	1 tbsp honey (or agave if vegan)
	1 tsp ground ginger
	1/2 tsp soy or tamari sauce

Directions: Preheat oven to 400F. Set aside 1/2 cup each of beets and carrots for the sauce. Place remaining beets and carrots in a 9x13 inch baking dish, drizzle with 1 tbsp olive oil, sprinkle with sea salt and toss to coat. Cover dish with foil and bake in preheated oven for 15 minutes. While veggies bake, put reserved beets and carrots into a blender. Add remaining ingredients and blend until smooth. After beets and carrots have roasted for 15 minutes, stir in the citrus sauce. Recover and continue baking another 45 minutes until veggies are tender. Serve with a crisp green salad.

Your Good News!®

We're dedicated to discovering the benefits of good nutrition and healthy lifestyle, and hope this issue of Natural Insights for Well Being® informs and inspires you to take an active role in your health. Please ask us to assist you with any natural products you would like to know more about.

These articles provide nutritional information only and do not replace professional medical advice.

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