Nutrition and Autism –
What’s a Dietitian To Do?

By Lee Shelly Wallace, MS, RD, LDN, FADA

In spite of articles and books with titles like “We Cured Our Child’s Autism” there is not yet an across-the-board cure for autism. But what is available in articles, in books, and on the Internet, is a staggering amount of information and misinformation about the relationship of diet and nutrition to autism spectrum disorder (ASD). Try googling “diet and autism” – would you believe it brought up about 3,770,000 results?

Parents are overwhelmed. Health care providers are uncertain. Research is underway. Controversy abounds. Pro or con – there is someone with a strong opinion on either side of any discussion about treatment modalities for autism.

What’s a dietitian to do when asked to provide treatment for a child – or adult – with autism? The steps themselves are simple, but the variety of options is where having a good knowledge base and resources becomes valuable. First is to determine the area of nutritional concern(s): assessment. Second, to provide information to the family about options. Third, to be sure the family is adequately informed about all options related to diet and nutrition – which means the dietitian needs to be informed, too. Then, the dietitian should support the family in their diet and nutrition choices, with counseling and education to provide optimal nutrition for the child.

So let’s look at the background of those steps: the things a dietitian should become acquainted with in relation to nutrition and diet and ASD. There are many food-related issues for people with ASD, including mealtime and eating behaviors, medication & nutrient interactions, gastrointestinal problems, and specialized diets and nutrition supplements. A dietitian should also know how to explain to a family how to evaluate the nutritional theories and claims, how to define “evidence-based”, and how to set up and evaluate a treatment plan for the child.

Then we’ll look at an overview of special diets and supplements, often called complementary and alternative medicine (CAM) therapies. Complementary therapies complement or are in addition to conventional treatments or therapies. Alternative therapies are instead of conventional treatments. While professionals may not often recommend CAM therapies, they should be able to support a family who chooses to use them. If a parent is interested in trying a CAM therapy, it should be discussed with the child’s pediatrician and other health care professionals. The American Academy of Pediatrics (AAP) has a series of fact sheets on “Caring for Children with Autism Spectrum Disorders.” Their policy statement in 2001 encourages pediatricians to become familiar with popular CAM treatments for children with ASD.

Evaluation Research

One child’s success with a treatment intervention does not make a study. What works for one child may or may not work for another. But a success can point in a direction of possibilities. When a parent is reading about treatments modalities, they can learn to evaluate the theories the same way medical and health professionals evaluate evidence used to support ANY therapy, traditional or CAM, or drug. Crucial elements of study design include:

• A randomized, double-blind controlled design
• Placebo-controlled design (important because a change in interaction between parent and child may affect result)
• Adequate sample size to support the statistical analysis presented

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Gene Variant Associated With Both Autism and Gastrointestinal Dysfunction

As a BHN member, you are one of an elite group of nutrition professionals! In addition to caring for individuals who are most at risk of being left out of “traditional” medicine, you bring your heart and soul to the job every day, even under imperfect conditions. It has been a pleasure and an honor to serve as your leader this year, and I know I am turning over the helm to the capable hands of Andrea Shotton, MS, RD, LDN.

I am grateful to everyone who has volunteered for BHN this year, and hope that more of you will do so in the future. Our group is here to meet the needs of our members, and although your Executive Committee is meant to represent our members, we do not know your specific concerns unless we hear directly from you.

My one request to you as I leave my position as Chair is that when you renew your ADA membership and your membership in BHN, reach out to a colleague and invite them to join their voice with ours. There is strength in numbers. I know that many of you work in facilities where you are the only dietitian on the team. With this new membership cycle, we now have a Student Membership category and a Friends of BHN membership category, so reach out to someone you know in one or both of those groups. The more we grow, the more impact we will continue to have.

In light of all of our accomplishments in 2008-2009, as well as the colleagues and friendships I have gained through BHN, thank you for the opportunity to serve as Chair of this fabulous DPG.

Sincerely,
Jessica Setnick


A study led by researchers at the University of Southern California (USC) and Vanderbilt University have identified a specific gene variant that links increased genetic risk for autism with gastrointestinal (GI) conditions. The findings suggest that disrupted signaling of the MET gene may contribute to a syndrome that includes autism and co-occurring gastrointestinal dysfunction, says principal investigator Pat Levitt, PhD, director of the Zilkha Neurogenetic Institute at the Keck School of Medicine of USC and chair-designate of the department of cell and neurobiology.

Autism is a developmental disorder characterized by deficits in communication abilities, social behavior disruption and inflexible behavior. While gastrointestinal conditions are common among individuals with autism, researchers have long debated whether co-occurring GI dysfunction represents a unique autism subgroup. Levitt and lead author

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Nutrition and Autism
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- Appropriately designed and matched study participants
- Control for confounding factors
- Homogeneous and well-defined study populations

Other items of concern to health care providers:
- Potential or reported adverse side effects of treatment
- Use of case studies or anecdotal data rather than carefully designed studies
- Claims that children will respond dramatically and some will be cured (expectations)

Deciding on CAM Treatments

The AAP notes that up to 60% of children with autism in the United States are treated with CAM. There may be a conflict between parent’s choice of therapy and the practice of their primary care physician. Parents & providers can agree to disagree, as consistency of general health care is important for the child. Especially when limiting or altering classes of foods, the assistance of a professional such as a dietitian can help ensure there are adequate nutrients for the child to grow normally.

Before beginning a diet therapy, with the support of a dietitian or other health care professional, parents or families should:
- Identify behaviors to change and how to measure them. If more than one therapy is being considered, start each therapy one at a time to find out the effects of each one before beginning another
- Consider the costs (both in money and time)
- Remember that if the diet is being changed, there may be behavioral effects, and they may be good or bad
- Consider how the child eating different foods will affect the family
- Define clear treatment objectives and how you will measure improvement
- Determine how data (that measures improvement) will be collected.
- Sometimes therapists or teachers can collect data and be blinded to the CAM treatment (not knowing when or what is changing)
- Keep lines of communication open with all therapy and care providers

A dietitian’s general goal for any child with or without ASD, is adequate nutrition for growth and development. The rest of the family should model by others)

Determine how data (that measures improvement) will be collected.
- Sometimes therapists or teachers can collect data and be blinded to the CAM treatment (not knowing when or what is changing)
- Keep lines of communication open with all therapy and care providers
- A dietitian’s general goal for any person, with or without ASD, is adequate nutrition for growth and development. To properly grow and develop, the body needs macronutrients (protein, carbohydrate, and fats) and micronutrients (vitamins & minerals). The recommended dietary allowances (RDA), and now the daily recommended intakes (DRI) set levels for recommended intake for most of these nutrients. “Tolerable upper limits” indicate a level above which there are concerning adverse side effects. These levels can be measured by blood or urine testing. This becomes more important in children with ASD because many of the characteristics of ASD affect eating and mealtime behaviors.

Nutrition and Eating Behaviors Related to Autism

Up to three-quarters of children with ASD are reported to have problems with eating. These may include:
- Need for routine (refuses new foods, limited intake, any change decreased intake)
- Short attention span (loses interest in eating rapidly)
- Impaired social interaction (less responsive to positive behaviors modeled by others)
- Increased sensitivity to food textures, color, taste, or temperature (restricted intake)
- Food obsessions or ritual
- Eating or mouthing nonfood items

Structure and routine to mealtimes
- Eating or mouthing nonfood items
- Compulsive eating or drinking
- Packing the mouth with food
- Throwing up, gagging, chewing or eating objects

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Alternative Therapies

Gastrointestinal (GI) Problems

ASD problems include constipation, diarrhea, reflux, vomiting, bloating, belch pain and feeding problems. Genetic or other causes of ASD may result in neurodevelopmental or other medical symptoms. Some children have bloating and diarrhea similar to celiac disease (a disease of the small intestine caused by intolerance to ingredients – gluten – in wheat and some similar foods).

Investigators are looking for signs of inflammation in the intestines of children with ASD. At this point it is still controversial as to whether children with ASD have intestinal inflammation or a “leaky gut” as there is no scientific evidence. Hopefully, ongoing research will become available to help GI management of children with ASD.

A child with GI symptoms should be evaluated as any other child. Some symptoms, such as constipation or diarrhea, may relate to diet, so picky eaters may be affected. Also children with ASD may not be able to talk about GI pain, and may act out as a way to let parents know something is wrong.

Complementary and Alternative Therapies

Gluten-free, Casein-free (GFCF) Diet

This restrictive casein- and gluten-free diet is based on the “gliadin excess theory.” The theory is based on the hypothesis that children with ASD have a “leaky gut,” which leads to the absorption of biologically active casein- and gluten-derived peptides (caseomorphins and glutemorphines), which cross the intestinal brush-border and act as opiates in the brain. The implied

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behavioral issues, other nutritional to be more selective eaters due to Also, because children with ASD tend ruled out for possible inadequate intake. and protein. Because of the elimination of and impaired growth. Nutrients of result in compromised nutritional status and older should be placed on a trial diet for three months to see if there are any improvements; children who are six years and older should be placed on a trial diet for six months.

Diets that eliminate food groups may result in compromised nutritional status and impaired growth. Nutrients of concern include calcium, vitamin D, iron and protein. Because of the elimination of most fortified foods (which are gluten and casein-containing), no nutrient can be ruled out for possible inadequate intake. Also, because children with ASD tend to be more selective eaters due to behavioral issues, other nutritional concerns may be present.

It is a diet families frequently want to attempt, but it requires extensive label reading, frequent separate food preparation for the child, and time and money. For some children, it has helped. Evidence is inconclusive as to the effectiveness of the GFCF diet; some studies show benefits, some studies show none.

Specific Carbohydrate Diet

The Specific Carbohydrate Diet (SCD) is a strict grain-free, lactose-free, and sucrose-free dietary regimen, and intend ed for those suffering from Crohn's dis ease, ulcerative colitis, celiac disease, and irritable bowel syndrome. The diet was originally developed by Dr. Sydney Haas, M.D. and is based on the same guidelines Elaine Gottschall followed decades ago in her bout with ulcerative colitis. The ration ale of the diet described in Breaking the Vicious Cycle is as follows:

- When the body receives complex carbohydrates (disaccharides or polysaccharides) these substances must be broken down before they can be absorbed
- In the body of a person who is not able to break these substances down efficiently, an influx of undigested material causes harmful bacteria to flourish
- Bacterial overgrowth is accordingly followed by a significant increase in the waste and other irritants they produce
- Irritation in the lining of the digestive tract results in the overproduction of mucus and injury to the digestive tract, which in turn causes malabsorption and makes it even more difficult to maintain proper digestion

The purpose of the diet, as described in the book, is to break the ongoing cycle caused by an overpopulation of harmful bacteria in the gut. When the body is able to absorb the proper nutrients from simple sugars and other carbohydrates that are easy to digest, the inflammation and other complications caused by many auto-immune diseases can be lessened. The goal is to rid the body of complex saccharides so that the gut will be able to heal itself and enable further healing to occur. The method of the diet is to keep the gut flora balanced and to allow the gut to digest all of the food it is given, thereby starving out the harmful bacteria.

**Foods Not Allowed**
- Sugars: no sugar, fructose, corn syrup (honey is allowed with caution)
- Starches: no grains (wheat, rice, corn, oats, barley etc.), no potatoes or yams, no seaweeds
- Dairy: no milk products (except natural cheese and homemade yogurt)

**Allowed Foods**
- Fruits
- Vegetables (except canned or starchy vegetables)
- Meat and fish (except processed or canned)
- Dairy: natural cheese and home made yogurt
- Nuts

There is currently no evidence to support the improvements in children with ASD that this diet claims.

**B6 & Magnesium**

Mega-doses of vitamin B-6 have received much attention over the years. Bernard Rimland, PhD of the ARI (Autism Research Institute) was a main proponent. The theory involves the role of vitamin B-6 in the production of certain neurotransmitters: dopamine, GABA (gamma aminobutyric acid), serotonin, dopamine, epinephrine, and norepinephrine.

In most cases, magnesium is given along with B6, in order to counterbalance the deficiency of magnesium that mega-doses of B6 can induce. Therapeutic doses of vitamin B6 for children may vary. In studies promoting the use of vitamin B6, the dose used was approximately 1mg per pound of body weight (480 mg for a 60-pound child). This reported dose is approximate 480 times the DRL, which is 1 mg/day for a ten year old. While overall toxicity is rare, high doses of B6 have been known to cause ataxia (shaky and unsteady movements that result from the brain’s failure to regulate the body’s posture and the strength and direction of movements), loss of fine motor control, changes in gait and peripheral neuropathy (the network that transmits information from the brain and spinal cord to every other part of the body and back). Proponents claim that the benefits of B6 and magnesium for people with autism vary considerably but may include improved speech, better sleep habits, greater attention span and eye-contact, reduced hyperactivity, less self-stimulation and improved general health. However, an evidence-based review concluded that there was insufficient evidence to recommend vitamin B6 and magnesium as a treatment modality for children with ASD. Although often perceived as safer than drugs, vitamins and minerals CAN be toxic at high doses, which makes mega-doses still controversial.

**Omega-3 Fatty Acids**

Some children with ASD given omega-3 fatty acids showed improvement (decrease) in hyperactivity. The dosage ranged from 20 to 60 mg per kilogram of body weight. So, for a 25 kg (55 lb) child, this would be 500 to 1500 mg per day of omega-3 fatty acids. Because this supplement is in capsule form, it is easier to do double-blind and crossover studies. There are studies with preliminary evidence that show benefits. Stay tuned for further studies. A family using fish oil, should be sure they are using a pure source. A potential risk is contaminants in less-refined fish oil supplements (heavy metals, or others).

**DMG/TMG**

The theory of treatment with dimethylglycine (DMG) or trimethylglycine (TMG) is that they act as a methyl donor, impacting the immune response, and enhancing neurotransmitter production. Aneofinal claims are that use improves eye contact and speech, and decreases frustration. No controlled studies of DMG have been done. No side effects are known.
Others: Co-Q10, Zinc, Vitamins A, C, & E

These and others are promoted to families of children with ASD, and a link is suggested between autoimmune dysfunction and ASD. No evidence-based conclusions have been reached. Some have known toxicities (vitamin A, zinc), and should be used, if at all, with caution.

Food Additives

There is information on the Internet about excluding a wide range of food additives, including coloring, MSG, aspartame, flavorings, benzoate preservatives, and caffeine. The theory is that people with ASD are intolerant to these additives, which affects their behavior. There is NO evidence that people with ASD should avoid these food additives. Some people with or without ASD have intolerance to these foods.

Related to this are:

Sugar and hyperactivity: Scientific studies show no link between sugar and hyperactivity. Food dyes and hyperactivity: This theory was promoted in the 1970’s, but studies failed to prove a conclusive link. Some children who were already diagnosed as hyperactive, had increased symptoms on exposure to food dyes. Recently some studies have shown that there is no evidence that eating less refined sugars (including fruit), fermented meats. The theory is that eating less sugar, and specific meats. The theory is that eating less sugar, and meat products, and autism for graduate students and others who have experience with people with ASD is important for families who want to try CAM treatments. As dietitians we may or may not want to recommend specific treatments, but we can help the family explore the options available. We can help them be objective. We can support their nutrition choices whether or not they show benefits for the child.

The dietitian can ensure there are adequate nutrients for the child to grow normally, especially when a child’s variety of food intake is self-limited or when limiting groups of foods, like gluten or casein. Dietitians can assist the family in planning special diets. Assistance may be needed in shopping, label-reading, food preparation, and balancing multiple food needs within the family. The assistance and support of a dietitian can help a family plan the treatment setting goals and expectations, developing a data collection system, periodically monitoring and reassessing the plan, and keeping communication lines open with all health care providers.

References


5. MRT Testing has also shown food sensitivity issues in persons who also have autism, ADHD, arthritis, GERD, chronic cough, sinusitis, insomnia, and weight imbalances. No controlled studies for ASD have been done.

Summary

In summary, there are many diets and nutritional supplements that proponents claim offer benefits to children or adults with autism. Some interventions have no evidence to support their claims; some interventions do. The role of a dietitian is to be objective. We can support their nutrition choices whether or not they show benefits for the child.

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About the Author: Lee Shelly Wallace, MS, RD, LDN, FADA, is employed by The Boiling Center for Developmental Disabilities, College of Medicine, at the University of Tennessee Health Science Center in Memphis, TN.

The author wishes to note that she does not consider herself an expert in this area, but an experienced learner. A discussion about different treatments arose on the BHN listserv while she was researching and putting together basic information about nutrition and autism for graduate students and others at her place of employment. This article comes from those presentations and is intended as an overview.
What are Feeding Disorders?

Feeding disorders in children typically involve the inability or refusal of the child to eat sufficient amounts or varieties of food to meet nutritional needs. Feeding disorders are of great concern to health care professionals because they significantly impact growth and development in young children. Even though feeding disorders occur in 25% to 35% of typically developing children (Rudolph & Link, 2002), they are more commonly seen in children with developmental disabilities and occur in up to 64% of children with developmental disabilities (Field, Garland, & Williams, 2003). Although there is no widely accepted classification system, feeding disorders are often grouped according to causative factors or symptoms. Etiologies of feeding disorders include medical conditions (e.g., gastroesophageal reflux disease), behavioral problems (e.g., feeding aversions), oral motor deficits (e.g., poor lip closure), difficulty swallowing (e.g., food or liquid entering the airway [aspiration]), or multifactorial causes (e.g., medical-behavioral). Symptoms of feeding disorders may include failure to thrive, food refusal, developmentally inappropriate selectivity of food type or texture, oral motor difficulties, swallowing difficulties (dysphagia) resulting in aspiration pneumonia, or recurrent emesis.

Assessment of Feeding Disorders

A thorough assessment is an important first step in the management of feeding disorders. Effective assessment and treatment of feeding disorders requires the expertise of several disciplines. Members of the interdisciplinary feeding disorders team include the speech-language pathologist, occupational therapist, psychologist, dietitian, nurse practitioner, pediatrician, and gastroenterologist. Each team member provides valuable insights into variables that may contribute to or result in a feeding disorder. Family and caregivers are also important team members. They are often the first to report feeding disorders in children and play a key role in management.

A detailed feeding, medical, and developmental history along with a physical examination and observation of the feeding process guides the assessment and helps identify variables contributing to the feeding disorder. The assessment begins with a detailed feeding history, including current types and textures of foods and liquids consumed; whether current feedings are oral, enteral, or a combination; and medical conditions or medications that may contribute to or exacerbate the feeding disorder. An observation of feeding during a meal is also completed and includes observation of muscle tone, posture, and position during feeding; inappropriate behaviors; types, textures, and amount of food and liquid consumed; the time taken to complete a meal; and oral structure and function. It is important to determine whether a child’s feeding patterns are developmentally appropriate. A critical decision that has to be made during assessment is whether a child’s nutritional needs will be met by oral feeding. Nutritional assessment by a dietitian is essential for developing an appropriate dietary regimen. For some children on the autism spectrum or with developmental disabilities, food selectivity or inadequate oral intake may result in growth failure. Oral feeding may be unsafe in other children with developmental disabilities because of the risk of life-threatening complications such as aspiration pneumonia. Sometimes, diagnostic tests such as

<table>
<thead>
<tr>
<th>Age</th>
<th>Possible factors in feeding, eating &amp; body regulation disturbances</th>
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<tbody>
<tr>
<td>Infancy</td>
<td>Low oral-motor tone; Decreased ability to taste; food refusals; Parents misunderstand feeding cues and under- or overfeed the infant; Reflux or vomiting may occur because infant is overfed</td>
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<tr>
<td>Early Childhood</td>
<td>Develop selective eating patterns (tactile, gustatory, auditory or visual sensitivity); Infants unable to sense own hunger or never feeling satiated; Negative behavior manifested in oppositional feeding pattern; Increased independence may result in refusal to eat or tendency to overeat</td>
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<tr>
<td>Middle Childhood</td>
<td>Autonomy, emotional, behavioral or self-regulation difficulties; Increased time away from home, includes eating in the school environment; Increased awareness of body comparative issues (e.g., weight, shape, etc.)</td>
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<tr>
<td>Adolescence</td>
<td>Unresolved early issues in feeding, eating or body-regulation factors; Increased use of diet behaviors (e.g., fasting, purging, restriction, excess exercise); Peer group influence (e.g., not eating lunch or eating low-nutrient-density snacks)</td>
</tr>
</tbody>
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Factors that can occur throughout the developmental cycle

- Extreme health-food enthusiast or vegetarian caregiver; parental emphasis on thinness
- Family concerned with medical condition (e.g., follow a low-fat diet due to a fear of heart disease)
- Inadequate eating occasion structure throughout day (e.g., 3 meals with 1-3 snacks)
- Preference for non-nutrient-dense foods or snacks
- Difficult temperament; child or adolescent oversensitivity to specific textures, temperatures, etc.
- Disruption of normal hunger-satiation system; using food as reward or bribe
- Problems of parental/caregiver attachment (secure parenting style is best)
- Deficient sleep, bowel disorders and underlying anxiety or depression
- Inadequate physical activity or body movement throughout day; excessive TV or screen time
- Heightened familial tension, stress, or limitations (i.e., socioeconomic status)
- Overscheduled or overstimulation
- Decrease in family time, including meals eaten together

Nutritional Therapies for Mental Disorders

By Shaheen E. Lakhan and Karen F. Vieira

Abstract
According to the Diagnostic and Statistical Manual of Mental Disorders, 4 out of the 10 leading causes of disability in the US and other developed countries are mental disorders. Major depression, bipolar disorder, schizophrenia, and obsessive compulsive disorder (OCD) are among the most common mental disorders that currently plague numerous countries and have varying incidence rates from 26 percent in America to 4 percent in China. Though some of this difference may be attributable to the manner in which individual healthcare providers diagnose mental disorders, this noticeable distribution can be also explained by studies which show that a lack of certain dietary nutrients contribute to the development of mental disease. Major depression is among the most prevalent mental health disorders, affecting America and other developed countries; and are exceptionally deficient in America and other developed countries: major depression, bipolar disorder, schizophrenia and anxiety disorders. The main goal of intervention are nutritional stability, safe feeding, and making feeding a pleasant experience. The main goals of intervention are nutritional stability, safe feeding, and making feeding a pleasant experience. The main goals of intervention are nutritional stability, safe feeding, and making feeding a pleasant experience.

such as altering the consistency of food or liquids for safe and easy swallowing, special modifications related to positioning the child for feeding, using adaptive utensils and equipment to facilitate eating, pacing the rate of eating, and behavioral treatment approaches. Besides medical doctors, occupational therapists and professionals play a role in managing feeding disorders depending on the cause. For example, the child may need expert guidance from a speech-language pathologist for physiological and neuromuscular deficits, a psychologist for behavior-related feeding disorders, and an occupational therapist for improving poor posture or positioning that may contribute to the feeding disorder. Dietitians play an important role in the management of pediatric feeding disorders by ensuring that nutritional needs are met irrespective of the cause. In addition, family and caregivers play a critical role in implementing and following up the treatment regimen efficiently. Finally, it is crucial that team members communicate effectively with one another to make any feeding program successful and efficient.

References

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Daniel Campbell, PhD, says. “Gastrointestinal disorders don’t cause autism. Autism is a disorder of brain development,” Levitt says. “However, our study is the first to bring together genetic risk for autism and co-occurring GI disorders in a way that provides a biologically plausible explanation for why they are seen together so often.”

In the brain, the MET gene is expressed in developing circuits that are involved in social behavior and communication. Disturbances in MET expression result in alterations in how these critical circuits develop and mature, Levitt explains. Research indicates that MET also plays an important role in development and repair of the GI system. Researchers analyzed medical history records from 214 families in the Autism Genetic Resource Exchange (AGRE). They found that a variant in the MET gene was associated with autism specifically in those families where an individual had co-occurring autism and a GI condition.

The study brings researchers closer to understanding the complex genetic risks for autism. However, further research is needed, as different combinations of genes are likely to result in different types of autism features, Levitt says. “We believe that there are other genes that will help identify different subgroups of individuals who have autism spectrum disorder,” he says. “We also believe that there needs to be research looking at whether the children with co-occurring GI dysfunction and autism have unique features that will help us predict what treatments will be best for them.”

The study was funded by the Simons Foundation, the Nancy Lurie Marks Foundation, the Dan Marino Foundation’s Marino Autism Research Institute, the National Institute of Mental Health and the National Institute of Child Health and Human Development.

It is BHN Awards Time!

Once again we will host a Member Reception and Award Presentation at FNCE this fall, and we need your help identifying those among us who have shown “Excellence in Practice” in each of our four practice areas. We are also accepting nominations for one exemplary BHN “Distinguished Member.”

Visit www.bhndpg.org/about/awards.asp for nomination forms and information. Application deadline is June 1, 2009. If you have any questions, please contact Jessica Setnick at jessica@understandingnutrition.com.
Robert Hedaya, MD, FAPA, a psychiatrist in Chevy Chase, MD recently presented a 90-minute webinar titled Depression and Nutritional Deficiency: State of the Science and Treatment sponsored by The Institute for Functional Medicine (IFM) in Gig Harbor, WA.

At his clinic Dr. Hedaya practices what he terms “whole psychiatry,” encompassing antecedents, mediators, and triggers of depression as we currently understand them. He describes depression as a final common pathway. This path may include: digestion, nutrition, detoxification, immune dysregulation, oxidative stress and energy balance and metabolism, neuro-endocrine signaling, genetics, developmental experience and challenges, spiritual, cognitive and depth psychological constructs as well as cultural, economic, and other environmental factors.

Nutritional aspects in his treatment of depression include amino acids (tryptophan and tyrosine), minerals (deficiencies of zinc, calcium, copper, iron, magnesium, potassium and excesses of calcium, magnesium, vanadium), B vitamins (B12, folic acid, pyridoxine, riboflavin, thiamine, and biotin), EFAs (EPA and DHA), and vitamin D. After reviewing examples of scientific evidence, Dr. Hedaya reported his protocols for diagnosis and nutritional interventions as well as several case studies.

Following the webinar, IFM sent registrants a copy of the bibliography, a summary of “Clinical Pearls” and a pdf file of the PowerPoint presentation. The webinar from IFM was well worth the fee of $30.00 for non-members.

A monograph titled Depression: Advancing the Treatment Paradigm, by Robert Hedaya, MD, and Sheila Quinn is available for $59.95 through the Institute for Functional Medicine at http://www.functionalmedicine.org/.

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**Executive Committee Announces Election Results**

Joining BHN’s Officers for 2009-2010 are:

**Chair-Elect** - Kathryn Russell, MS, RD

**Treasurer** - Janice Scott, MS, RD, DSP, LD

**Nominating Committee Member** - Therese Shumaker, MS, RD, LD

**Nominating Committee Member** - Sharon Lemons, MS, RD, LD

Welcome new officers, and “Thank you” to all who participated in the election process!

Please offer all of the volunteer officers and committee members your support and appreciation. Thank you to all who strive to make BHN so valuable through the efforts of sharing your time and talents.

There has been a change to BHN’s Guiding Principles, making the nominating committee a slightly different selection process. It is a small change, but the membership must be alerted to any changes in our guidelines. If you would like to read the changes, please visit the BHN-Web site at www.bhndpg.org; Sign In to Member’s Only Area, Guiding Principles, page 6.

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OFFICE OF BEHAVIORAL AND SOCIAL SCIENCES RESEARCH LAUNCHES NEW WEB SITE

**NATIONAL INSTITUTES OF HEALTH NIH News**

Release: Thursday, January 8, 2009

A redesigned and enhanced Web site for scientists, advocacy groups, the media and the general public, providing key information on behavioral and social science research and activities at NIH, is now online at http://obssr.od.nih.gov.

The site, which features a new appearance, format and architecture, was launched by the Office of Behavioral and Social Sciences Research, in the Office of the Director at the National Institutes of Health.

The National Institutes of Health (NIH) — The Nation’s Medical Research Agency — includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. It is the primary federal agency for conducting and supporting basic, clinical and translational medical research, and it investigates the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov.

White House Health Care Reform Summit March 5, 2009

President Obama’s White House health reform summit sought to help build support and momentum for overhauling the health sector in 2009. The President reiterated his goal to enact comprehensive legislation this year. One hundred fifty lawmakers and stakeholders met in five breakout sessions to discuss the problems of quality, accessibility and affordability of health care. Sticky issues remain to be worked out - among the toughest are how to pay for the overhaul, how to bring down cost, whether health insurance should be mandated and whether the government should compete with private plans.

Building on Thursday’s White House Forum on Health Care Reform, on March 6, 2009 President Obama announced a series of Regional White House Forums on Health Reform that will bring the conversation about health care reform directly to communities across the country. Forums will give Americans from all over the country the opportunity to express their concerns and ideas about reforming our health care system.

The Regional White House Forums on Health Care Reform will be hosted by the governors of California, Iowa, Michigan, North Carolina and Vermont in March and April. Participants from many walks of life will be tapped to create what the White House calls an open conversation with everyday Americans, local, state and federal elected officials - both Democrat and Republican - and senior Obama administration officials.

In June, Chairman of the Senate Finance Committee Max Baucus (D-MT) has announced that he plans to mark up health care reform legislation. His plan calls on the committee to begin in April and to consider delivery system improvements for universal health care. In May, the committee focus will shift to coverage and cost containment with public hearings planned. Senator Baucus is attempting to coordinate with Senate Health, Education, Labor and Pensions Chairman Ted Kennedy (D-MA). The American Dietetic Association (ADA) has learned that the Finance Committee and HELP professional staffs are working closely together to draft similar or complementary measures that can be readily merged into one for consideration by the full Senate later this year.

To stay up to date on the latest information about Health Care Reform and other issues, subscribe to On The Pulse from ADA. www.eatright.org log on and click on Advocacy and then you will see On The Pulse where you can subscribe.

Charlotte Caperton-Kilburn, MS, RD, CSSD, LDN
BHN Public Policy Coordinator

BHN Making a Global Impact

BHN publications are valued not only in the U.S., but around the globe. Orders have come in from Hong Kong, Switzerland, Jordan, Greece, Yemen, and Canada.

Total sales to date:

Would you like to receive a free copy of one of our publications? Submit a review to a newsletter or Web site that you belong to, and when it is published, we will refund your purchase price! Submit your published review to Paula Kerr, MS, RD, LD at pkerr1492@gmail.com.

BHN PUBLICATIONS

The Adult with Intellectual and Developmental Disabilities

This resource tool is designed to provide an overview of nutrition in individuals with intellectual and developmental disabilities. The resource guide is contained on one CD-ROM as a 209 page PDF file.

BHN Member Price: $28.00

Psychiatric Nutrition Therapy

This resource guide is intended for anyone working in the 4 practice areas within Behavioral Health Nutrition: mental illness, eating disorders, addictions, and those with intellectual and developmental disabilities who also require psychiatric care. The resource guide is contained on one CD-ROM as a 170-page PDF file.

BHN Member Price: $28.00

Nutrition & Addictions

This is a 244-page manual of information about addiction and drugs of abuse, including legal, illegal and pharmaceutical drugs, alcohol, nicotine, caffeine, and more. Patient educational handouts on nutrition and recovery topics are also included.

BHN Member Price: $24.95

To order, visit http://www.bhnpg.org/publications/index.asp
50 Years and More Dietetics Journey by BHN Members

By Harriet Cloud, MS, RD

Did you know that BHN gives out $1600 a year to BHN members to fund programs in our four practice areas? All you have to do is fill out the request form on our Web site telling us about your event at www.bhndpg.org. Members Only Area and click on Forms/DPG Business.

“ADA membership among 9 BHN dietitians extend from 50 to 62 years”

Behavioral Health Nutrition DPG at the present time has nine members who are 50 year members of ADA. The years of ADA membership among these dietitians extend from 50 to 62 years. It was my task as a past officer of this DPG to contact as many of the members as possible to find out how they happened to become dietitians and choose Behavioral Health Nutrition as their area of practice.

One of our 50 year members is Shirley Ekvall, PhD, RD, who is a charter member of BHN and selected in 2008 to receive the BHN Distinguished Member award. Shirley’s interview was published in the Fall 2008 issue of the BHN Newsletter. Listed below are the other 50 year members:

- Pauline Schatz, Burnsville, MN
- Dorothea F. Meagher, Oregon City, OR
- Mildred T. Moore, Newport News, VA
- Harriet H. Cloud, Birmingham, AL
- Joel L. Anderson, Hancock, MI
- Elizabeth Ann Prendergast, Chevy Chase, MD
- Elaine Sassa, Palos Heights, IL
- Pauline E. Schatz, Woodland Hills, CA
- Valerie Kay Schonberg, Burnsville, MN

Questionnaires were sent to these members about their ADA journey. Two member’s responses had the following interesting careers to share.

Mildred T. Moore graduated from the University of Alabama and completed her dietetic internship at the St. Louis University Hospital. For the past 25 years Mildred has worked as a consulting RD to ICF/MR Group Homes in Newport News, VA. When asked to name her greatest accomplishment in dietetics, she felt that influencing young women to enter the field, starting with her daughter, Lynn, was her greatest accomplishment. Prior to consulting Mildred taught nutrition to student nurses for 20 years, which led to her recruitment by a home for the elderly and as a consultant for the Association of Retarded Citizens. Mildred has been very active in her community. PTA president, all activities of the Presbyterian Church, and president and delegate for the Virginia Dietetic Association.

The good news for BHN: Mildred is still consulting and continues to explore the role of medications and weight management for the populations she serves.

Pauline Schatz was raised in Sioux City, IA and was introduced to dietetics by her physics teacher in 1940. Her teacher thought Pauline would always be able to find a job, a critical concern, since we were just emerging from the Great Depression. Pauline spent her first two years of college at the University of Iowa, transferring to UCLA when her family moved to California. There she received an MS in foods and nutrition, followed by an MSPH in public health education and later an EdD in educational psychology from the University of Southern California. Pauline also completed a dietetic internship at West Los Angeles VA Hospital, better known as Wadsworth. Pauline tells us that she was in the first internship class, there was no set curriculum, and the program had a great deal of flexibility in what was considered important.

Teaching diet therapy for many years to nurses and dietetic students led to her interest in the interaction between diet and behavior, especially epilepsy and the ketogenic diet. Later she was the founder and first program director for the Coordinated Dietetic program at California State University in Los Angeles. When asked about continuing education topics from BHN, Pauline feels that behavioral problems and mental illness and the role of diet and behavior deserve a lot of attention.

We are fortunate to have all of our 50 year members who can bring a perspective to BHN through their journey of varied careers and extensive experience.

Have you ever tried to calculate the cost of being a member of the American Dietetic Association (ADA) for 50 years? It would be a lot of work, for sure, and many members might not want to do it. But for BHN the membership dues have increased steadily since the beginning of ADA. Add to that the addition of Dietetic Practice Groups (DPGs) and their dues for those who chose to join in the 1970s when DPGs began.

Mildred T. Moore served as a member of the American Dietetic Association. The good news for BHN: Mildred is still consulting and continues to explore the role of medications and weight management for the populations she serves.

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“The first time I heard Ed’s voice was when I was four years old wearing my ballet tutu and thought I was fat because my thighs were rubbing together,” reported Jenni Schaefer on Tuesday, October 7, 2008 in front of a crowd of nearly 200 people. Her struggle with eating disorders continued to develop through middle school and high school and her relationship with “Ed” grew stronger and stronger even in college. Despite graduating from college with a 4.0 (Jenni being a perfectionist), she could not start medical school because of her eating disorders.

Jenni battled anorexia and bulimia until she hit rock bottom at 22 years old when she moved to Nashville. At that point, she looked for treatment. She learned to let go of Ed and some of her personality traits, like perfectionism, that led to her eating disorder. She became the real Jenni after a long treatment.

Now at 32, Jenni considers herself fully recovered. She is a singer, author, consultant and speaker. She shares her struggle and brings a flame of hope to those affected.

Thank you to BHN for making this event possible.
A big THANK YOU to all of the BHN member authors who donated their products to the ADA Foundation (ADAF) Silent Auction! Our Behavioral Health Nutrition Mega-Library included:

- Counseling Tips for Nutrition Therapists, donated by Molly Kellogg http://www.mollykellogg.com/
- Feeding: A Priority for the Dietetics Professional CD/DVD, donated by Harriet Cloud http://www.nutritionmatters.us/
- Visual Feast, an original work of art donated by Renee Hoffinger
- PLUS all of the fantastic BHN publications.