CAM Therapies in the Management of Neurodevelopmental Disorders

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Definitions

- Complementary Medicine
- Alternative Medicine
- CAM
- Integrative Medicine
Pediatric Integrative Medicine Principles

- The Whole Child ideal
- Family-centered care
- Focus on wellness and prevention
- Individualized therapies
- Relationships are the key
- Respectful, multidisciplinary collaboration
- Complementary approach
AAP Publications


From the AAP web site (www.aap.org):
A new Provisional Section on Complementary, Holistic, and Integrative Medicine was recently approved and will continue to develop and identify educational and policy strategies, and to advocate for continued research on CAM therapies used in pediatrics. For further details on section, contact Junelle Speller at jspeller@aap.org.
Autism is prevalent
* 1 out of 6 children are diagnosed with a developmental disorder and/or behavioral problems
* 1 in 166 children are diagnosed with an autism spectrum disorder
* Developmental disorders have subtle signs and may be easily missed

Listen to parents
* Early signs of autism are often present before 18 months
* Parents usually DO have concerns that there is something wrong
* Parents generally DO give accurate and quality information
* When parents do not spontaneously raise concerns, ask if they have any

Act early
* Make screening and surveillance an important part of your practice (as endorsed by the AAP)
* Know the subtle differences between typical and atypical development
* Learn to recognize red flags
* Use validated screening tools and identify problems early
* Improve the quality of life for children and their families through early and appropriate intervention

Refer
* To Early Intervention or a local school program (do not wait for a diagnosis)
* To an autism specialist, or team of specialists, immediately for a definitive diagnosis
* To audiology and rule out a hearing impairment
* To local community resources for help and family support

Monitor
* Schedule a follow-up appointment to discuss concerns more thoroughly
* Look for other features known to be associated with autism
* Educate parents and provide them with up-to-date information
* Advocate for families with local early intervention programs, schools, respite care agencies, and insurance companies
* Continue surveillance and watch for additional or late signs of autism and/or other developmental disorders

For More Information: www.medicalhomeinfo.org
CAM Use Epidemiology

Parental Perceptions and Use of CAM Practices for Children with Autistic Spectrum Disorders

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Number of Children with Reported Medical Symptom (N=77)

- Neuro: 64%
- GI: 60%
- Immuno: 44%
- Allergic: 39%
The Iceberg Model

PHENOMICS

METABOLOMICS

PROTEOMICS

GENOMICS
CAM Therapies

- Nutritional
- Immunomodulation
- Biochemical/Metabolic
- Detoxification
- Sensory Integration Therapy
- Music and other Expressive Texts
- Additional Therapies
Nutritional Therapies: Theory

Nutritional Therapies: Food

- GFCF diet
- Other elimination diets
- Food allergies/sensitivities
Nutritional Therapies: Supplements

- Vitamins
- Minerals
- Amino Acids
- Essential Fatty Acids
- Probiotics
- Enzymes

Biochemical/Metabolic Therapies

[Diagram of biochemical pathways involving folate-dependent phospholipid methylation, SAM, and folic acid metabolism.]
Oxidative Stress/Detoxification

Sensory Integration Therapies
Additional CAM Therapies

- Homeopathy
- TCM/Acupuncture
- Chiropractic
- Craniosacral Therapy
- Reiki/Energy Healing
- Yoga
Future Directions: Integrative Model
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