

INFORMATION SHEET*

RRCASD: Informing Families and the Community of Autism Spectrum Services and Resources

Controversial Treatments

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Overview

Children with autism spectrum disorder (ASD) often receive controversial treatments—interventions that are popular even though they have little or no scientific and theoretical support. Studies show that many children start controversial treatments almost immediately after receiving a diagnosis, and most receive such treatments at some point during their lives, often continuing for many years. Here are two of many examples of controversial treatments:

Auditory Integration Therapy (AIT) involves identifying sound frequencies to which the participant is believed to be over- or under-sensitive. AIT providers then filter these frequencies partially or completely from a piece of music. The child with autism wears headphones to listen to the filtered music during 1-3 hour sessions. Across sessions, the total time that the child listens ranges from about 10 to 90 hours, depending on the AIT approach.

Why is AIT controversial? Many children with autism are under- or over-sensitive to sounds, but it is unclear whether AIT providers can reliably identify these sounds and whether listening to music is an appropriate way to correct under- or over-sensitivity.

What does research say about AIT?: Several small studies of AIT have obtained mixed results, with some studies showing benefits and others failing to do so.¹ Additional studies are needed to evaluate AIT more conclusively.

The Gluten-Free Casein-Free (GfCf) diet involves removing gluten and casein from the diet of children with autism. Gluten is an elastic protein in wheat that gives cohesiveness to dough. Casein is a protein in milk, cheese and other dairy products.

Why is the GfCf diet controversial? Although many children with autism have unusual eating patterns such as being highly selective about what they will eat, these patterns may be unrelated to gluten and casein.

What does research say about the GfCf diet? One small study found that the GfCf diet reduced autistic behaviors but did not have an effect on three other outcome measures.² Another small study found no evidence of benefit.³ Other research indicates that the GfCf diet may lead to inadequate nutrition, therefore, dietary counseling is important for families who place their children on the diet.⁴

The proliferation of controversial treatments for children with ASD is probably due to many factors. For example, although conventional behavioral, educational, and medical interventions may help children in important ways such as improving their communication and social interaction, they are not cures for ASD. Therefore, some caregivers may be eager to try a variety of treatments in search of a favorable outcome for their children. Moreover, the range of possible treatments to consider is large because ASD is a complex behavioral syndrome with many areas of need.

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The following are some recommendations for families and providers who are considering controversial treatments:

1. Discuss the potential benefits and risks with your child's physician or autism consultant.
2. Find out more about the treatment by consulting reliable sources of information (see Resources).
3. Make only one treatment change at a time so that you can test the effect of that change.
4. Identify specific target behaviors to be addressed by the treatment.
5. With help from your child's medical or educational providers, obtain objective data on whether the target behaviors improve or not with the treatment.
6. Use these data to guide decisions on whether or not to continue the treatment.

Find Out More

Books

Thompson, T. (2007). *Making sense of autism*. Baltimore, MD: Paul H. Brookes Publishing Co.

Volkmar, F. R., & Weisner, L. A. (2009). *A practical guide to autism: What every parent, family member, and teacher needs to know*.

Websites

American Academy of Pediatrics: <http://www.aap.org/healthtopics/autism.cfm>

Association for Science in Autism Treatment: www.asaonline.org

National Institute of Mental Health: <http://www.nimh.nih.gov/health/publications/autism/complete-index.shtml#pub4>

References Cited

1. Sinha, Y., Silove, N., Wheeler, D., & Williams, K. (2005). Auditory integration training and other sound therapies for autism spectrum disorders. *The Cochrane Database of Systematic Reviews*, 4.
2. Knivsberg, A-M., Reichelt, K. L., Høien, T., & Nodland, M. (2002). A randomised, controlled study of dietary intervention in autistic syndromes. *Nutritional Neuroscience*, 5, 251-261.
3. Elder, J. H., Shankar, M., Shuster, J., Theriaque, D., Burns, S., & Sherrill, L. (2006). The gluten-free, casein-free diet in autism: Results of a preliminary double blind clinical trial. *Journal of Autism and Developmental Disorders*, 36, 413-420.
4. Levy, S. E., & Hyman, S. L. (2003). Use of complementary and alternative treatments for children with autism spectrum disorders is increasing. *Pediatric Annals*, 32, 685-691.

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