Approaches to Autism Treatment

According to reports by the American Academy of Pediatrics and the National Research Council, behavior and communication approaches that help children with ASD provide structure, direction, and organization for the child and include family participation. Here is a list of some autism treatments that fit that framework.

Applied Behavior Analysis (ABA)

https://www.autismspeaks.org/applied-behavior-analysis-aba-0

A notable treatment approach for people with ASD is called applied behavior analysis (ABA). ABA has become widely accepted among healthcare professionals and used in many schools and treatment clinics. ABA encourages positive behaviors and discourages negative behaviors to improve a variety of skills. The child's progress is tracked and measured.

There are different types of ABA. Here are some examples:

Discrete Trial Training (DTT)

https://www.autismspeaks.org/expert-opinion/what-discrete-trial-training DTT is a style of teaching that uses a series of trials to teach each step of a desired behavior or response. Lessons are broken down into their simplest parts, and positive reinforcement is used to reward correct answers and behaviors. Incorrect answers are ignored.

Early Intensive Behavioral Intervention (EIBI)

https://www.autismparentingmagazine.com/early-intensive-behavioral-intervention/
This type of ABA is usually for very young children with ASD younger than 5 and often younger than 3. EIBI uses a highly structured teaching approach to build positive behaviors (such as social communication) and reduce unwanted behaviors (such as tantrums, aggression, and self-injury). EIBI takes place in a one-on-one adult-to-child environment under the supervision of a trained professional.





Early Start Denver Model (ESDM)

https://www.autismspeaks.org/early-start-denver-model-esdm

This is a type of ABA for children with ASD between the ages of 12-48 months. Through ESDM, parents and therapists use play and joint activities to help children advance their social, language, and cognitive skills.

Pivotal Response Training (PRT)

https://www.autismspeaks.org/pivotal-response-treatment-prt-0

PRT aims to increase a child's motivation to learn, monitor their behavior, and initiate communication with others. Positive changes in these behaviors are believed to have widespread effects on other behaviors.

Verbal Behavior Intervention (VBI)

https://www.autismspeaks.org/verbal-behavior-therapy

VBI is a type of ABA that focuses on teaching verbal skills. Two versions of VBI include Milieu Teaching (http://mosaic.pitt.edu/milieuteaching.html) and Enhanced Milieu Teaching (http://enhancedmilieu.com/). Both can be done by parents trained in the intervention. Using the natural environment and teaching opportunities that occur throughout the day, the parent/caregiver waits for the child to show interest in something, then they are encouraged to use communication skills to make the request. Enhanced Milieu Teaching includes management of problem behaviors by using a schedule, timer, and offering choices.

Assistive Technology

https://utahparentcenter.org/assistive-technology-101/

Assistive technology, including devices such as communication boards and electronic tablets, can help people with ASD communicate and interact with others. The person is taught to use picture symbols to ask and answer questions, and have a conversation. Other individuals may use a tablet as a speech-generating or communication device.

Cognitive Behavior Therapy

 $\underline{https://www.nichd.nih.gov/health/topics/autism/conditioninfo/treatments/cognitive-behavior}$

This therapy is based on the perceived connection between thoughts, feelings, and behaviors. It focuses on helping the individual learn to identify and change thoughts that lead to problem behaviors in particular situations. This approach is commonly used to address needs when there are coexisting mental health issues.

Community-Based Instruction

http://project10.info/DPage.php?ID=158

This is an educational approach that promotes the teaching and use of academic and functional skills in a natural setting. While it is generally focused on classrooms and students, it can also be used by therapists and families to teach, practice, and generalize skills into a community setting.

Conscious Discipline®

https://consciousdiscipline.com/

Conscious Discipline® is an evidence-based, trauma-informed treatment that teaches children and adults social-emotional skills.

Developmental, Individual Differences (DIR), Relationship-Based Approach (also called "Floortime")

https://www.autismspeaks.org/floortime-0

Floortime focuses on emotional and relational development (feelings and relationships with caregivers). It also focuses on how the child deals with sights, sounds, and smells.

Functional Behavior Assessment (FBA)

https://www.understood.org/en/school-learning/evaluations/evaluation-basics/functional-assessment-what-it-is-and-how-it-works

A Functional Behavior Assessment is a system for collecting information about a specific behavior, to identify the function of the behavior. FBA describes the problem behavior, identifies what happens before the behavior as a trigger, or the results that occur after the behavior to then be able to control the behavior or prevent it from happening.

Occupational Therapy

https://www.autismspeaks.org/occupational-therapy-ot-0

Occupational therapy teaches skills that help the person live as independently as possible. Skills may include dressing, eating, bathing, and relating to people. It focuses on fine motor as well as gross motor skills, motor planning, and more.

Sensory Integration Training

https://healthychildren.org/English/health-issues/conditions/developmental-disabilities/Pages/Sensory-Integration-Therapy.aspx

This type of therapy helps the individual process sensory information, like sights, sounds, and smells. It can be part of Occupational Therapy or separate. Sensory integration therapy can be helpful for a child who, for example, is bothered by certain sounds or does not like to be touched.

Peer Therapy

https://vkc.vumc.org/assets/files/tipsheets/peerinterventionasdtips.pdf

Interactions with peers are important for all children but especially so for children with Autism Spectrum Disorder because as they interact and see appropriate behavior being modeled by peers from a young age, it helps them to develop proper thinking, language, and social skills. Many peer therapy interventions can be found on the National Professional Development Center on Autism Spectrum Disorders list of evidence-based practices: https://autismpdc.fpg.unc.edu/evidence-based-practices.

Additional Peer Therapy Resources include:

- Peer-Based Intervention and Autism Spectrum Disorders
 https://vkc.vumc.org/assets/files/tipsheets/peerinterventionasdtips.pdf
- UC San Diego Autism Center of Excellence https://medschool.ucsd.edu/som/neurosciences/centers/autism/pages/default.aspx
- Children with Autism Can Learn Social Skills Through Peer Interaction www.jpost.com
- Incorporating Typical Peers Into the Social Learning of Children with ASD
 https://www.iidc.indiana.edu/irca/articles/incorporating-typical-peers-into-the-s
 ocial-learning-of-children-with-autism-spectrum-disorders.html

Relationship Development Intervention (RDI)

https://www.autismspeaks.org/relationship-development-intervention-rdi-0

Relationship Development Intervention (RDI) is a behavioral treatment that focuses on building the natural relationship of the parent as the guide and the child as the apprentice in learning social and emotional skills, filling in gaps where natural development has not occurred. Parents are trained as the primary therapist in most RDI programs. See https://www.rdiconnect.com/

Social Skills Training

https://www.autismspeaks.org/social-skills-and-autism

Social skills training teaches children the skills they need to interact with others, including conversation and problem-solving skills. Most training occurs in groups which allows for practice, role-play, and feedback.

Social Stories

https://carolgraysocialstories.com/social-stories/what-is-it/

A Social Story is a way to present a context, skill, achievement, or concept according to 10 defining criteria. It can use words, pictures, or icons that are meaningful for the child. The resulting story should be descriptive, meaningful, and physically, socially, and emotionally safe for the child, adolescent, or adult with autism.

Social Thinking®

https://www.socialthinking.com/

Social Thinking® is a social skills curriculum developed by Michelle Garcia Winner that helps people with ASD and social-communication challenges figure out how to think in social situations. Individuals are taught to observe and think about their own and others' thoughts and feelings. The focus on thinking can help individuals understand how to interact more effectively with others.

Speech Therapy

https://www.autismspeaks.org/speech-therapy

Speech therapy helps to improve a person's communication skills to communicate in a functional way. Some people can learn verbal communication skills. For others, using gestures, alternative communication devices, or picture boards is more realistic. Speech therapists work on such things as articulation, social and non-verbal communication, receptive, and expressive communication.

Picture Exchange Communication System (PECS)

https://pecsusa.com/pecs/

As part of speech therapy, or introduced separately, PECS® uses picture symbols to teach communication skills. The goal of PECS® is to teach children a fast and functional communication system through exchanging pictures/icons with a communication partner.

TEACCH Autism Program

https://www.autismspeaks.org/teacch-0

TEACCH uses visual cues to teach skills. For example, picture cards can help teach a child how to get dressed by breaking information down into small steps. See www.teacch.com.

Additional resources:

- Autism Speaks:
 https://www.autismspeaks.org/technology-and-autism
- Autism Society:
 http://www.autism-society.org/living-with-autism/treatment-options/
- Dietary Supplement Fact Sheets: https://ods.od.nih.gov/factsheets/list-all/
- Evidence-Based Practices:
 https://autismpdc.fpg.unc.edu/evidence-based-practices
- Evidence-based practices, definitions, and number of articles across review periods: https://ncaep.fpg.unc.edu/sites/ncaep.fpg.unc.edu/files/imce/documents/NCAEP%20Report%20-%20Table%203.1%20-%20EBP%20list.pdf
- National Center for Child Health and Human Development: https://www.nichd.nih.gov/health/topics/autism/conditioninfo/treatments
- National Center for Complementary and Integrative Health: https://www.nccih.nih.gov/health/autism