

Evolution of a Vague Disorder

Diagnostic and Statistical Manual of Mental Disorders (DSM)

1952	DSM I	Hyperkinetic Syndrome
1968	DSM II	Minimal Brain Injury (MBI) or Minimal Brain Dysfunction (MBD)
1980	DSM III	Attention Deficit Disorder with or without Hyperactivity
1987	DSM III-R	Attention Deficit Hyperactivity Disorder (AD/HD) Attention Deficit Disorder – Not Otherwise Specified (ADD-NOS)
1994	DSM IV	Attention Deficit Hyperactivity Disorder (AD/HD) Attention Deficit Hyperactivity Disorder – Inattentive Type Attention Deficit Hyperactivity Disorder – Hyperactive-Impulsive Type
2000	DSM IV-TR	
2013	DSM-5	

Incidence Rates for AD/HD

Attention deficit hyperactivity disorder (ADHD), whether primarily inattentive or impulsive-hyperactive type, affects approximately 6 to 10% of the school age population. This translates into an average of about 1 or 2 children in every classroom. Boys are 4 times as likely as girls to exhibit symptoms of ADHD. Minority children are less likely than white children to be diagnosed with AD/HD (Hispanic children 45% less often diagnosed than non-Hispanic white children, black children 69% less often diagnosed than white children).

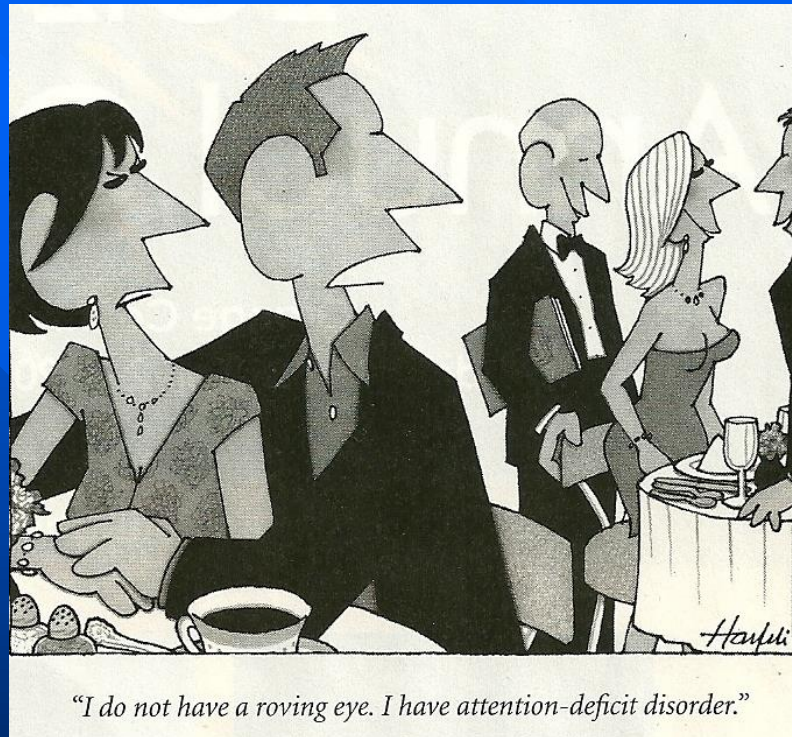
Frequently Reported Symptoms

- Fails to give close attention to details or makes careless mistakes in schoolwork or other activities.
- Has difficulty sustaining attention in tasks or play activities.
- Does not seem to listen when spoken to directly.
- Does not follow through on instructions and fails to finish schoolwork or chores.
- Has difficulty organizing tasks and activities.
- Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort.
- Loses things necessary for tasks or activities.
- Is easily distracted by extraneous stimuli.
- Is forgetful in daily activities.
- Fidgets with hands or feet or squirms in seat.
- Leaves seat in situations (i.e., classroom) in which remaining seated is expected.
- Runs or climbs excessively in situations in which it is inappropriate.
- Has difficulty playing quietly.
- Is often “on the go” or acts as “if driven by a motor.”
- Talks excessively.
- Blurts out answers before questions have been completed.
- Has difficulty awaiting turn
- Interrupts or intrudes on others.

Specifics for AD/HD Diagnosis

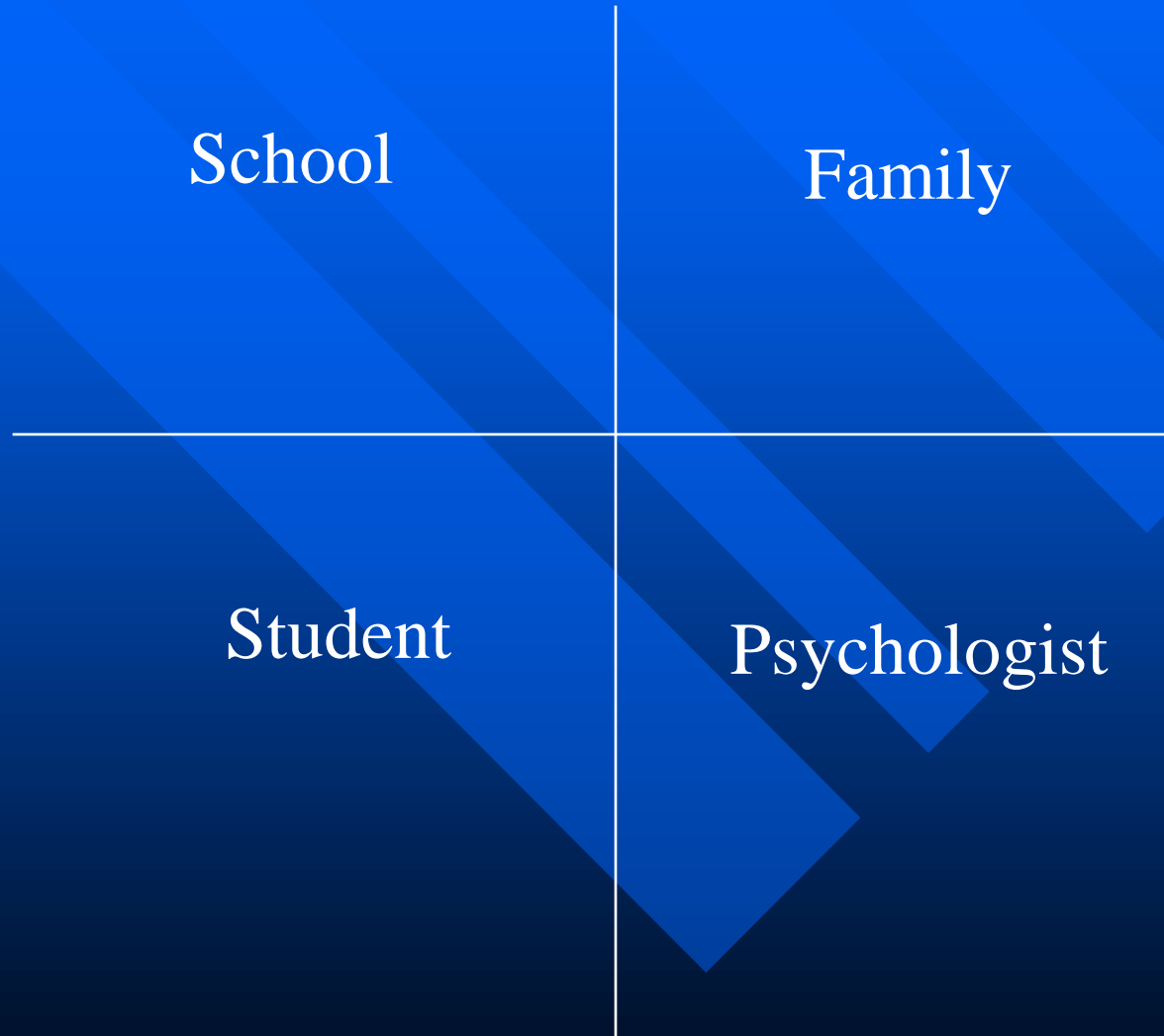
All children, of course, may exhibit these symptoms at one time or another, especially at various ages or stages of development. The thing that distinguishes the AD/HD child is that many of these behaviors are exhibited more often than other children of the same age and sex. The symptoms must be present in two or more settings (i.e., home and school) and result in significant impairment in social or school functioning.

It used to be assumed that the symptoms disappeared after puberty but now it is recognized that for most individuals, AD/HD continues into adulthood and contributes to lifelong difficulties.



When diagnosing adults, one must document that the symptoms have existed since childhood, must be present in two or more settings (e.g., home and work) and result in significant impairment in functioning.

Factors in AD/HD Diagnosis



Attention Deficit Disorder Evaluation Scales

TO RATER: Rate the subject using the quantifiers (0-4) provided.
Every item must be rated. Do not leave any items blank.

DOES NOT
ENGAGE
IN THE
BEHAVIOR

0

ONE TO
SEVERAL
TIMES PER
MONTH

1

ONE TO
SEVERAL
TIMES PER
WEEK

2

ONE TO
SEVERAL
TIMES PER
DAY

3

ONE TO
SEVERAL
TIMES PER
HOUR

4

SECTION 1

- | | |
|--|---|
| <p><input type="checkbox"/> 1. Completes assignments with little or no regard for quality or neatness of work</p> <p><input type="checkbox"/> 2. Has difficulty listening to and/or paying attention in conversations with fellow employees and/or supervisors (NOT DUE TO HEARING LOSS)</p> <p><input type="checkbox"/> 3. Needs verbal directions and questions frequently repeated (e.g., misses part of directions/questions)</p> <p><input type="checkbox"/> 4. Fails to direct attention or fails to maintain attention to important sounds in the immediate environment (e.g., warning signals, intercom announcements, etc.)</p> <p><input type="checkbox"/> 5. Has difficulty with activities which require sustained listening (e.g., listening to and following verbal directions) (NOT DUE TO HEARING LOSS)</p> <p><input type="checkbox"/> 6. Attends more successfully when close to the source of sound (e.g., the person speaking during a conference or meeting situations) (NOT DUE TO HEARING LOSS)</p> <p><input type="checkbox"/> 7. Requires eye contact in order to listen successfully (e.g., one-to-one situation) (NOT DUE TO HEARING LOSS)</p> <p><input type="checkbox"/> 8. Has difficulty demonstrating short-term memory skills (e.g., fails to remember two- or three-step directions, fails to remember materials needed for a task, etc.)</p> <p><input type="checkbox"/> 9. Has difficulty remembering sequences (e.g., events in a daily routine, steps in an activity, task, assignment, etc.)</p> <p><input type="checkbox"/> 10. Has difficulty concentrating (e.g., staying on an assigned task, following a conversation, concentrating when reading, etc.)</p> <p><input type="checkbox"/> 11. Loses track of what he/she is doing (e.g., forgets why he/she went to get something)</p> <p><input type="checkbox"/> 12. Fails to complete and return work assignments taken home (If the individual does not take work home, rate this item 0)</p> <p><input type="checkbox"/> 13. Fails to perform and/or complete work assignments during work time (e.g., fails to use the workday efficiently to finish tasks, fails to meet stated deadlines for project/assignment completion, will go on to another assignment before completing the first, etc.)</p> | <p><input type="checkbox"/> 14. Is disorganized at work (e.g., to the point of not having necessary materials, missing materials, failing to find completed assignments, failing to follow the steps of the assignment, etc.)</p> <p><input type="checkbox"/> 15. Fails to independently perform and complete assignments (e.g., fails to finish tasks by himself/herself, fails to finish work-related tasks)</p> <p><input type="checkbox"/> 16. Fails to remain on-task during work (e.g., is more interested in other activities, sits and does nothing, etc.)</p> <p><input type="checkbox"/> 17. Fails to perform up to his/her ability level (e.g., performs below expected level of performance)</p> <p><input type="checkbox"/> 18. Has difficulty following steps required to complete a task (e.g., does steps in wrong order, omits a step, etc.)</p> <p><input type="checkbox"/> 19. Has difficulty reading (NOT DUE TO VISION LOSS) or following written directions (e.g., has difficulty following written steps until task is completed, written steps are provided but are not followed)</p> <p><input type="checkbox"/> 20. Changes from one activity to another without finishing the first, without putting things away, before it is time to move on, etc.</p> <p><input type="checkbox"/> 21. Has difficulty managing time at work (e.g., fails to accurately estimate the amount of time to finish an assignment or task, fails to complete work on time)</p> <p><input type="checkbox"/> 22. Has difficulty getting a task started and tends to put off things and procrastinate</p> <p><input type="checkbox"/> 23. Has difficulty managing paperwork on the job (If the individual does not work on paperwork rate this item 0)</p> <p><input type="checkbox"/> 24. Is disorganized with possessions (e.g., loses or fails to find important papers, car keys, wallet, etc.)</p> <p><input type="checkbox"/> 25. Forgets (e.g., forgets important events or appointments, forgets to do things, forgets to return things)</p> <p><input type="checkbox"/> 26. Has a short attention span unless the topic or task is interesting to her/him (e.g., fails to direct attention to the task at hand, is easily distracted)</p> |
|--|---|

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0

1

2

3

4

27. Has difficulty organizing responsibilities (e.g., fails to perform assignments, loses things, fails to come to work on time, does not return things)
28. Is easily frustrated by tasks which are not interesting to her/him (e.g., gives up easily, fails to put forth his/her best effort, etc.)

_____ Raw Score

_____ Subscale Standard Score

SECTION 2

29. Begins an assignment before receiving or reading complete directions or instructions or fails to follow directions or instructions
30. Has difficulty waiting his/her turn (e.g., has difficulty following established protocol for making appointments, waiting to see someone, etc.)
31. Blurts out responses or answers before it is appropriate
32. Interrupts fellow employees (e.g., begins talking while another employee is talking, interrupts another employee when he/she is busy with another task)
33. Talks to others when he/she should be working independently
34. Moves about while seated, fidgets, squirms, etc.
35. Appears restless (e.g., shifts position in seat, paces about, etc.)
36. Disturbs other employees who are trying to work, listen, etc. (e.g., attempts to carry on irrelevant conversations)
37. Makes unnecessary comments or noises in the work place (e.g., interrupts, hums, talks excessively, etc.)
38. Is impulsive (e.g., reacts immediately to situations without thinking, is impatient, fails to wait for a turn or for assistance from a supervisor/fellow employee, etc.)
39. Fails to consider consequences of his/her behavior (e.g., acts before evaluating consequences of his/her actions)
40. Has difficulty following a routine (e.g., does things out of order, fails to wait for an activity at the scheduled time, etc.)
41. Has difficulty working effectively in a group situation (e.g., fails to stay on-task and remain productive when at a table with fellow employees and/or at a desk with co-workers nearby, etc.)

42. Handles objects excessively (e.g., twirls pencils or pens, clicks ball-point pens, repeatedly sharpens pencils, etc.)
43. Talks beyond what is expected or at inappropriate times
44. Has difficulty adjusting his/her behavior to the expectations of different situations (e.g., gets excited at lunch/break time and does not settle down, etc.)
45. Engages in inappropriate behaviors while seated (e.g., tips chair or desk, puts feet on desk, taps and makes noises, etc.)
46. Becomes overexcited (e.g., loses control in group activities, becomes loud, etc.)
47. Moves about unnecessarily (e.g., has difficulty sitting still, leaves seat during a meeting, walks around the work space excessively, etc.)
48. Engages in nervous habits (e.g., bites fingernails, paces, twirls hair, drums fingers on top of tables, chews pencils or pens, chews inside of cheek, etc.)
49. Engages in unpredictable behavior (e.g., fails to react in a socially acceptable manner to daily occurrences, acts before thinking)
50. Engages in physically daring activities (e.g., takes unnecessary risks, fails to consider the possible hazards to his/her behavior)
51. Is late, or unprepared for work (e.g., fails to finish expected tasks, is tardy to work)
52. Needs to have demands at work met immediately (e.g., has difficulty waiting to talk to someone who is busy)
53. Intrudes on others (e.g., when people are talking, trying to work, or involved in activities, etc.)
54. Has accidents or makes mistakes which are the result of careless or impulsive behavior

_____ Raw Score

_____ Subscale Standard Score

_____ Sum of Subscale Standard Scores

_____ Percentile Score

Causes of AD/HD

- There appears to be an inherited genetic component.
- At times it may be the result of prenatal factors i.e., maternal exposure to teratogens such as viruses, drugs, or environmental hazards.
- Sometimes the symptoms are related to other conditions which must be ruled out .

Disorders With AD/HD Symptoms

Learning disabilities

Hypoglycemia, 6 hr. Glucose Tolerance Test

Neurological disorders (i.e., petit mal seizures)

Anxiety disorders (i.e., OCD)

Depression

Especially bipolar type

Disorders With AD/HD Symptoms

Allergies and asthma

[Healthy House Institute](#)

[Richard Jaeckle, M.D.](#)

[Doris Rapp, M.D.](#)

[Mold in Austin ISD](#)

Learning Disabled Students

Students are considered to be learning disabled when there is a significant discrepancy between measured mental ability and achievement in one or more of the following skill areas:

basic reading skills

reading comprehension

mathematical calculation

mathematical reasoning

spelling

written expression

receptive or expressive language

The discrepancy may not be the result of language differences, sociocultural, physical, emotional, or environmental factors. Students who are learning disabled possess average to superior intelligence and may exhibit cognitive strengths and weaknesses.

A Significant Discrepancy is...

A difference between measured mental ability (intelligence) and achievement that is statistically > 1 standard deviation. A standard deviation on virtually all of the tests commonly used to assess intelligence and achievement is 15 points.

Given this criterion, the higher one's measured mental ability (i.e., IQ), the easier it is to exhibit a significant discrepancy.

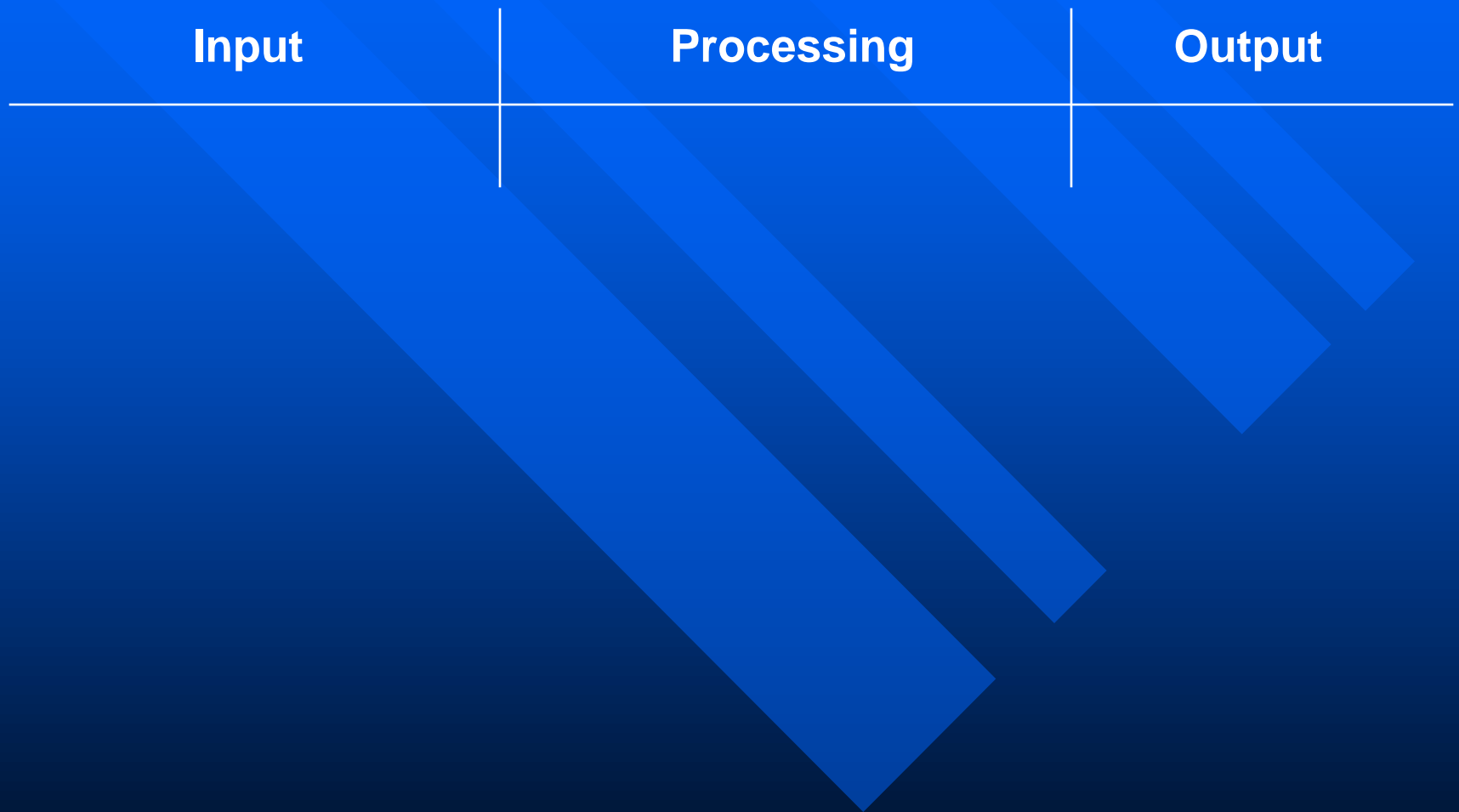
For example, a student with superior intelligence (i.e., IQ = 120+), may exhibit a discrepancy if his/her achievement in any area is a semester behind.

A student with above average intelligence (IQ = 110-119) may qualify as learning disabled if s/he is achieving a year below her/his enrolled grade level.

A student with average intelligence may have to be functioning two years below his/her expected grade level to produce a significant discrepancy.

A student with below average intelligence (IQ < 89) may have to be achieving three or more years below his/her current grade placement to be learning disabled.

Osgood's Model



Tests Administered:

Client: Male, CA = 10-11, Grade: 5th

Wechsler Intelligence Scale for Children – Third Edition

<u>Scale</u>	<u>IQ/SS</u>	<u>%ile</u>	<u>Range</u>
Verbal	135	99	Very Superior
Performance	113	81	Above Average
Full Scale	127	96	Superior
Verbal Comprehension	133	99	Very Superior
Perceptual Organization	114	82	Above Average
Freedom from Distractibility	126	96	Superior
Processing Speed	109	73	High Average

<u>Verbal Tests</u>	<u>SS</u>	<u>%ile</u>	<u>Range</u>
Information	15	95	Superior
Similarities	15	95	Superior
Arithmetic	17	99	Very Superior
Vocabulary	14	91	Superior
Comprehension	19	99.9	Very Superior
Digit Span	12	75	High Average

<u>Performance Tests</u>	<u>SS</u>	<u>%ile</u>	<u>Range</u>
<u>Picture Completion</u>	09	37	Average
<u>Coding</u>	11	63	Average
Picture Arrangement	10	50	Average
<u>Block Design</u>	17	99	Very Superior
Object Assembly	13	84	Above Average
Symbol Search	12	75	High Average

Tests Administered:

Client: Male, CA = 10-11, Grade: 5th

Draw a Bicycle Test

Range: Average

Tests of Lateral Dominance

Hand: Right dominance Eye: Right dominance Foot: Right dominance

Bender Visual Motor Gestalt Test

Errors: 1 Range: Average

Attention Deficit Disorders Evaluation Scale – Second Edition

<u>Scale</u>	<u>%ile</u> (Home)	<u>%ile</u> (School)
Inattentive	99	60
Hyperactive-Impulsive	60	60

Structured Pediatric Psychosocial Interview

<u>Scale</u>	<u>SS</u>	<u>%ile</u>
Resentfulness	04	31
Unhappiness	07	83
Composure	04	31
Emulation	04	31
Doubtfulness	02	07
Obdurateness	08	93
Fretfulness	05	50
Impetuosity	03	17
Adherence	09	97

Tests Administered:

Client: Male, CA = 10-11, Grade: 5th

Wide Range Achievement Test – Revision 3

<u>Subtest</u>	<u>SS</u>	<u>%ile</u>	<u>Grade Level</u>
Word Recognition	115	84	8th
Spelling	106	66	6th
Math	115	84	7th

Gray Oral Reading Tests – Third Edition

ORQ: 88 %ile: 21 Range: Below Average

<u>Scale</u>	<u>SS</u>	<u>%ile</u>	<u>Grade Level</u>
Rate	105	63	6.3
Accuracy	100	50	5.9
Passage	105	63	6.1
Comprehension	75	05	2.4

Test of Written Language – Third Edition

Spontaneous Writing Quotient: 104 %ile: 61 Range: Average

<u>Subtest</u>	<u>SS</u>	<u>%ile</u>	<u>Grade Level</u>
Contextual Conventions	100	50	5.4
Contextual Language	110	75	10.0
Story Construction	100	50	5.0

Treatment of AD/HD

Educational accommodations

Counseling (individual and group)

Diet

Biofeedback

Medication

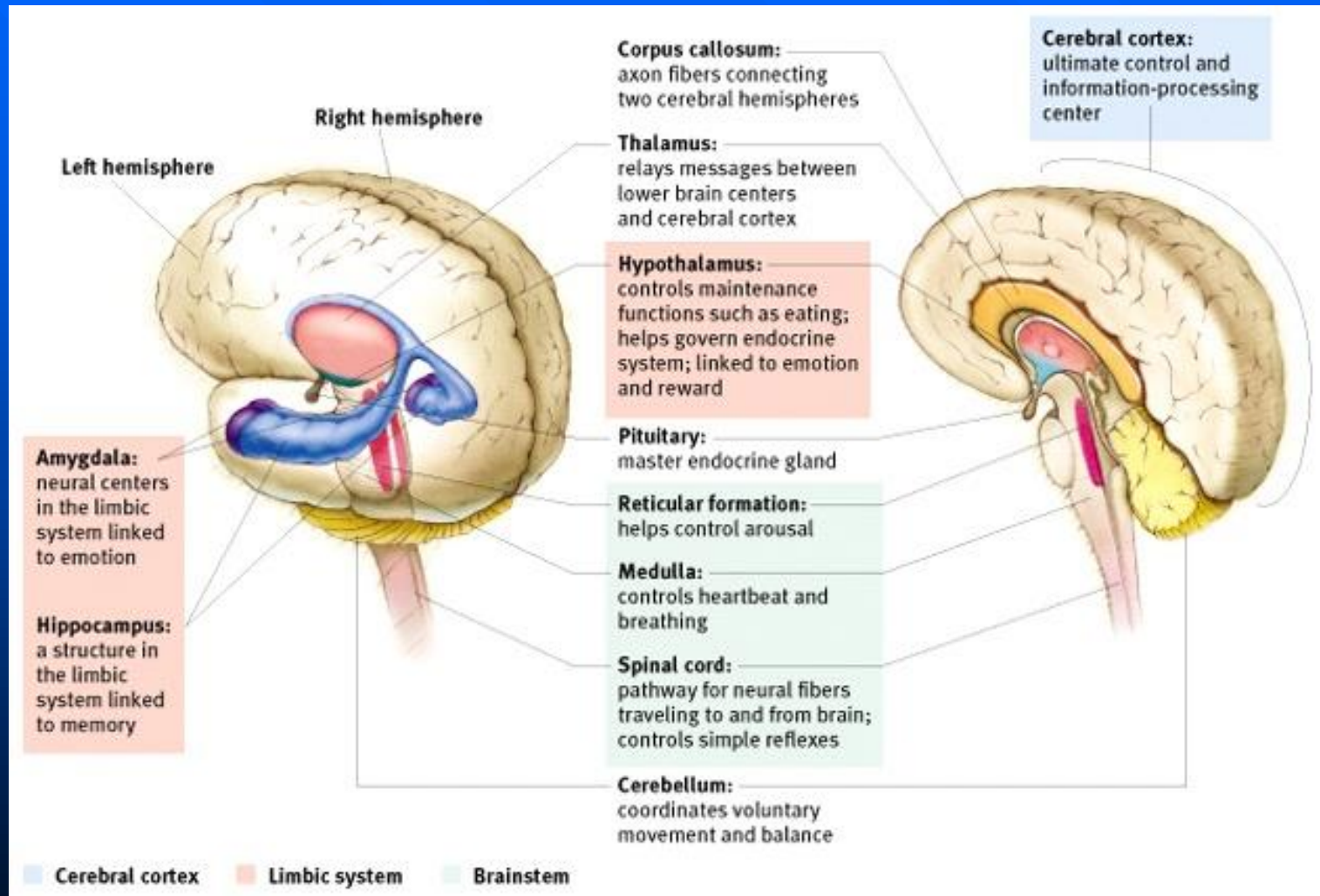
Stimulants and antidepressants

Supplements

Urinalysis generated profile

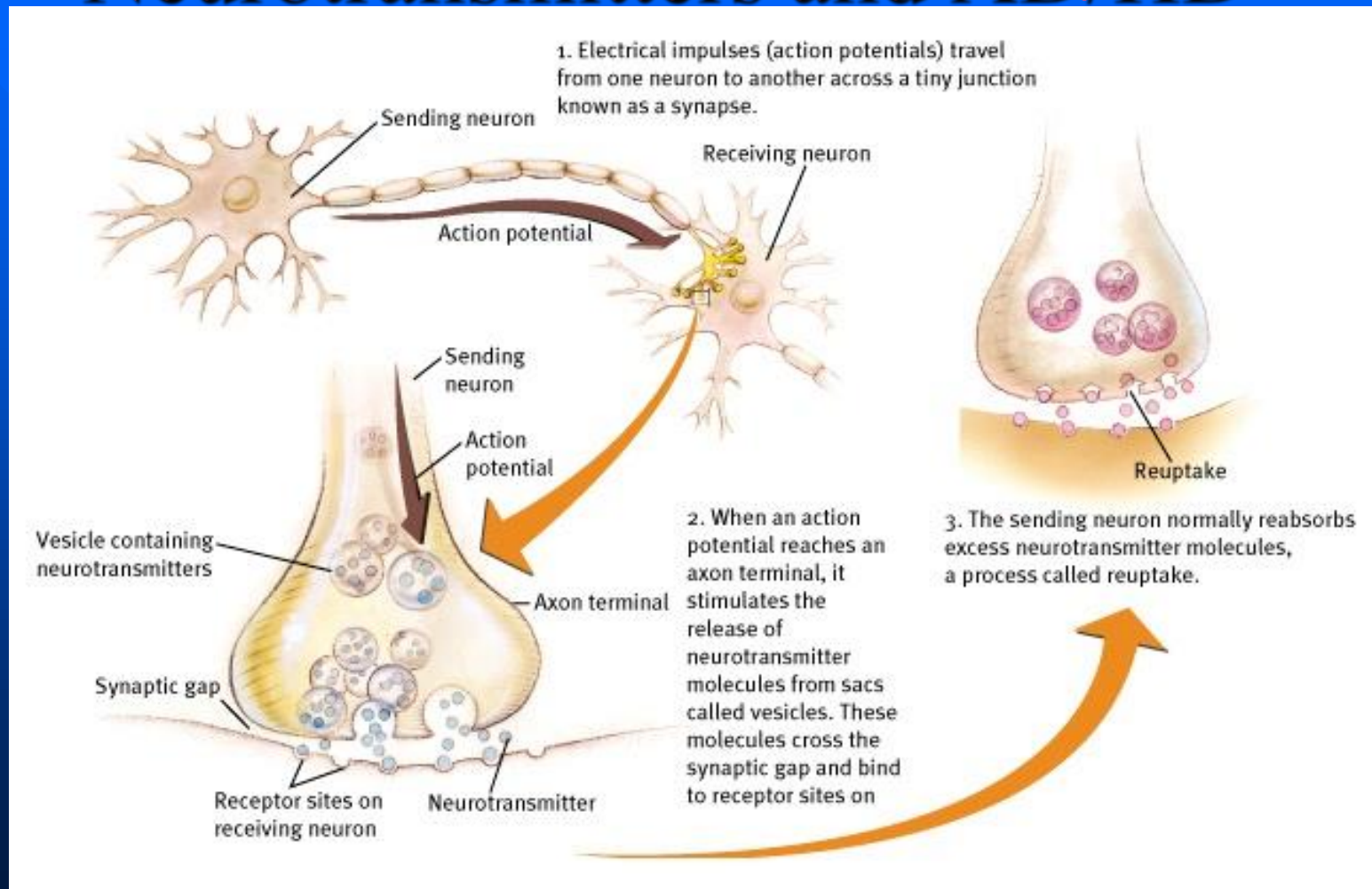
Supplement Examples

Medication for AD/HD



The Behaving Brain

Neurotransmitters and AD/HD



Treatment of AD/HD

Educational accommodations

Counseling (individual and group)

Diet

Biofeedback

Medication

Stimulants and antidepressants

Supplements

Urinalysis generated profile

Supplement Examples