

Historical View

- Foolish, drunken, or harebrain women most often bring forth children like unto themselves
*Aristotle in *Problemata**
- Behold, thou shalt conceive and bear a son: And now, drink no wine or strong drink.
Judges 13:7

Copyright: NTI Upstream 2008 Rosett, 1984

Fetal Alcohol Syndrome

- Low birth weight
- Central nervous system effects
- Facial dysmorphism

Copyright: NTI Upstream 2008

Fetal Alcohol Syndrome: The Older Child

- Poor growth, weight gain
- Central nervous system effects
- Facial dysmorphism

Copyright: NTI Upstream 2008

Diagnostic Criteria

- I. Growth retardation
- II. Facial malformations (>1): short palpebral fissures, thin upper lip, flat elongated philtrum, hypoplastic midface
- III. Neurodevelopmental disorder

FAS *Confirmed or unconfirmed* history of prenatal alcohol exposure
Meets criteria in all three categories: I, II, III

ARND *Confirmed* history of prenatal alcohol exposure
Meets criteria in III

NL444

Copyright: NTI Upstream 2008

FASD

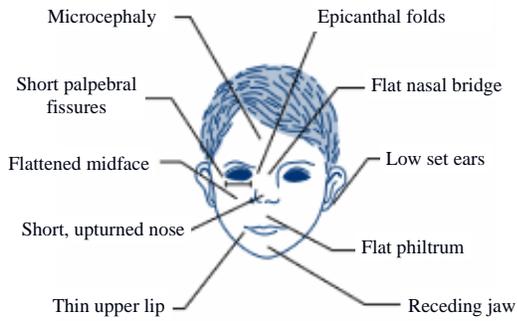
Fetal Alcohol Spectrum Disorders

“an umbrella term describing the range of effects that can occur in an individual whose mother drank during pregnancy. These effects may include physical, mental, behavioral, and/or learning disabilities with possible lifelong implications.”

Bertrand et al, 2004

Copyright: NTI Upstream 2008

Facies in Fetal Alcohol Syndrome



Risk Factors

- Dose of alcohol

Copyright: NTI Upstream 2008

Alcohol Dose

- 1 drink / week
Hyperactive and aggressive behaviors
- Moderate to heavy use
Delinquent behavior and overall problem behavior
- Any alcohol use in pregnancy
↑ 3.2 x risk for delinquent behavior

Sood et al. 2001

Copyright: NTI Upstream 2008

Risk Factors

- Dose of alcohol
- Pattern of exposure - binge vs chronic
- Developmental timing of exposure
- Genetic variation

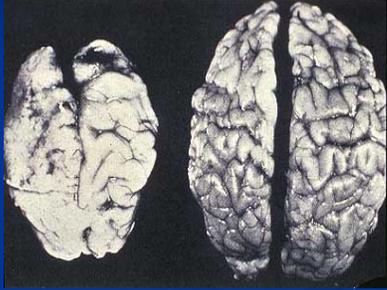
Copyright: NTI Upstream 2008

Risk Factors

- Dose of alcohol
- Pattern of exposure - binge vs chronic
- Developmental timing of exposure
- Genetic variation
- Maternal characteristics
- Interaction with nutritional variables
- Synergistic reactions with other drugs

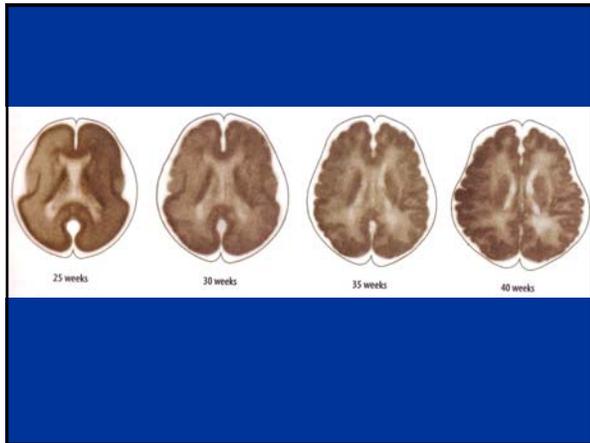
Copyright: NTI Upstream 2008

Brain Damage from Prenatal Alcohol Exposure



Copyright: NTI Upstream 2008

photo: Clarren, 1986

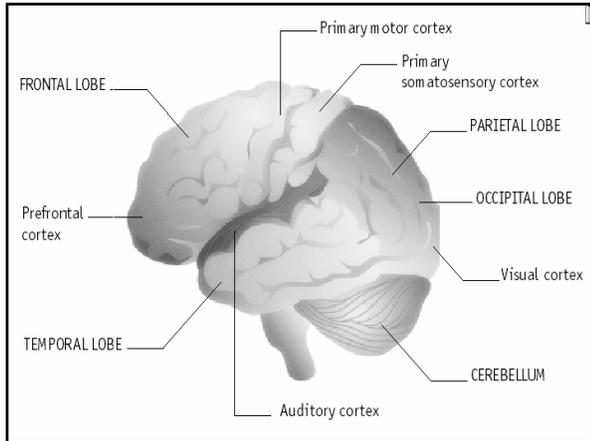


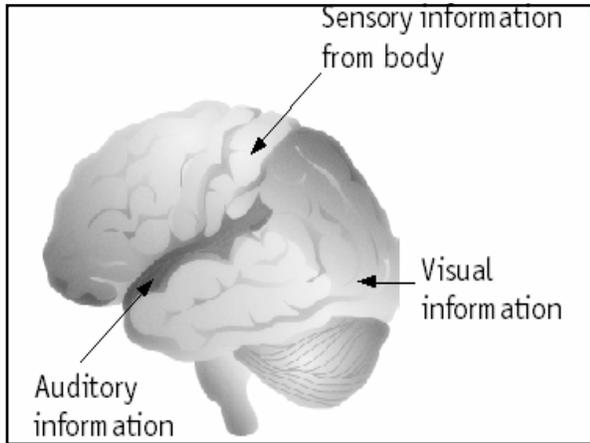
Information Processing Deficit Model

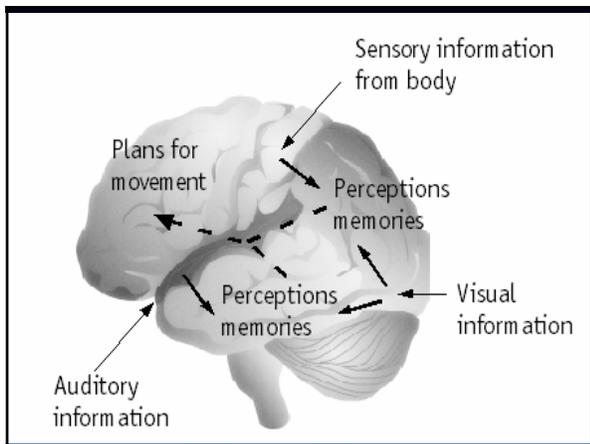
Four domains of information processing

- Input (recording information)
- Integration (interpreting input)
- Memory (storing input for later use)
- Output (appropriate use of language and motor skills)

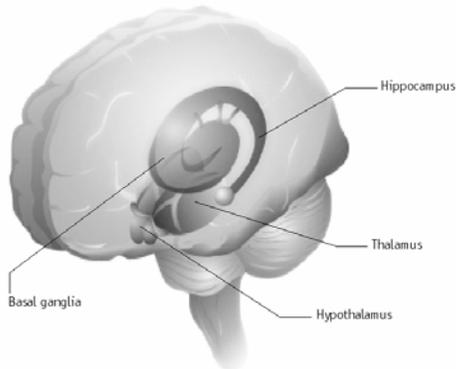
Copyright: NTI Upstream 2008



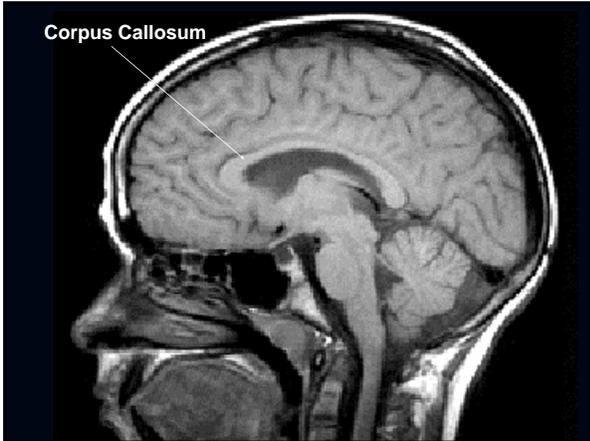




A schematic simplified drawing of the sub-structure of the brain



Corpus Callosum



Problems in Behavioral Regulation: The Older Child

- lack of behavioral inhibition
- poor attention to tasks
- impulsive behavior
- distractibility
- over activity
- poor modulation of affect
- poor executive functioning

Copyright: NTI Upstream 2008



www.childstudy.org/EASDtraining
