DOWN SYNDROME
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Down syndrome

A genetic disorder that causes delays in physical and intellectual development.
Causes of Down Syndrome

Caused by extra genetic material from chromosome 21
Prenatal Testing

**Amniocentesis:**

procedure in which a small sample of amniotic fluid is drawn out of the uterus through a needle inserted in the abdomen
Chorionic Villus Sampling (CVS) - prenatal test to detect birth defects that is performed at an early stage of pregnancy.
Prenatal Testing

- **Percutaneous Umbilical Blood Sampling (PUBS):**

  a genetic test that examines blood from the umbilical cord to detect fetal abnormalities
Prenatal Testing

- **Alpha-fetoprotein Test (AFP)**
  Alpha fetoprotein (AFP) is a protein normally produced by the liver and yolk sac of a developing baby during pregnancy in adults.

- **Sonogram**
  It is a picture taken of the baby during an ultrasound test.
Physical Traits

- A flattened facial profile
- Eyes that slant upward
- A small mouth, making the tongue appear large
- Dental anomalies
- Small and arched palate
- Short nose
- Flat back of head
- Abnormal ears

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Health Problems

- Congenital Heart defects
- Intestinal defects
- Vision problems
- Hearing loss
- Infections
- Thyroid problems
- Memory loss
Age Matters

The chance of having a child with Down syndrome increases with the mother’s age.
References and Resources

- **Websites**
  - About Down Syndrome
    - Source: National Down Syndrome Society
    - Down syndrome fact sheet
  - Down Syndrome
    - Source: National Institute of Health
    - What is Down syndrome?
      - [http://www.nichd.nih.gov/health/topics/down_syndrome.cfm](http://www.nichd.nih.gov/health/topics/down_syndrome.cfm)
  - Facts about Down Syndrome
    - Source: National Association for Down Syndrome
    - Down syndrome is a genetic condition that causes delays in physical and intellectual development. Discusses basic facts about Down syndrome.
      - [www.nads.org/pages_new/facts.html](http://www.nads.org/pages_new/facts.html)
  - Facts about Down Syndrome
    - Source: Kids Health
    - Facts and information for parents about Down syndrome.

- **Pictures obtained from:**
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