

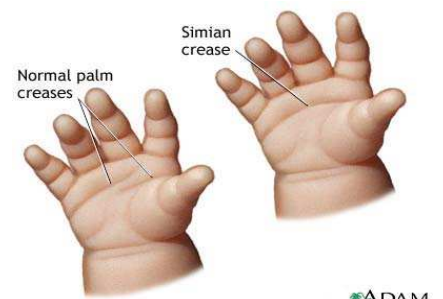


### ***What is Down S.?***

- *A genetic chromosomal syndrome.*
- *An extra third copy of chromosome 21.*
- *Affecting the physical features, usually causing mental retardation.*
- *1880, an English physician "J.L. Down" describe the condition as Mongol race like.*

### **Symptoms :**

- *Physical abnormalities.*
- *Mental retardation*
- *Congenital heart D.*
- *Upper and lower respiratory infections (chest, ear flu.....etc.)*
- *Autonomic disturbance > constipation.*
- *+/- cong.hypothyroidism.*



### **Physical abnormalities:**

- *Flattened face.*
- *Snub nose.*
- *Flattened nasal bridge.*
- *Upward slanting eyes.*
- *Short neck.*
- *Large protruded tongue.*
- *White spotted iris.*
- *A single deep transverse*
- *Palm crease.*
- *Hypotonia.*
- *Short stubby hands, feet.*

- *Poor coordination.*
- *Slow physical growth.*

### ***Down syndrome Nutrition***

- *They do not have any special nutritional needs.*
- *50% in early childhood are considered obese.*
- *They have constipation and lower resting metabolic rate than normal.*
- *They may refuse to chew textured food or eat limited foods.*
- *Large tongue, dental caries, swallowing difficulties.*

### ***Management (nutritional)***

- *Occupational therapy for: tongue, thrust and swallowing difficulties.*
- *Physiotherapy for: increasing metabolic rate and constipation.*
- *High fiber diet, low fat with plenty of fluids.*
- *Supplements, if susp.*
- *Sometimes surgery for tongue > speech, dental caries, chewing and swallowing.*