

Nutrition & Special Diets

Nutrition plays a role in determining **height**, weight, **strength**, skeletal and muscular development, **physical agility**, resistance to **disease**, appetite, **posture**, **complexion**, mental ability, and **emotional & psychological** health.

The **immediate** effects of good nutrition include a healthy appearance, a good **attitude**, proper **sleep** and **bowels** habits, a high **energy** level, enthusiasm and freedom from **anxiety**.

The effects of good nutrition also **accumulate** and may prevent or **delay** the following:

120
80

Hypertension - high blood pressure; may be caused by an excess of salt or fat in the diet; may lead to diseases of the heart, blood vessels and kidneys

Atherosclerosis - fatty deposits narrow the arteries; thought to be caused by a diet high in saturated fat and cholesterol; can lead to heart attack and stroke

Osteoporosis - bones become porous and break easily one cause is long-term deficiencies of calcium, magnesium and vitamin D

Malnutrition - caused by poor diet or illness; symptoms include fatigue, depression, poor posture, overweight or underweight, poor complexion, lifeless hair, irritability, reduced mental ability and sometime even death

The 6 Essential Nutrient Groups

1. **Carbohydrates** - provide **heat** and **energy**; supply **fiber** for good digestion and **elimination**
2. **Lipids** - provide essential **fatty acids**; provide heat and energy, carry **fat** soluble vitamins (**A, D, E, K**) to body cells
3. **Protein** - build and **repair** body tissues; provide heat and energy; help produce **antibodies**
4. **Vitamins** - **regulate** body functions; build and repair body tissues (see pg. 256)
5. **Minerals** - regulate body functions; build and repair body tissues (see pg. 257)
6. **Water** - carries **nutrients** and **wastes** to and from body cells; regulate body functions

$\frac{1}{2}$ body wt.
in O₂.

