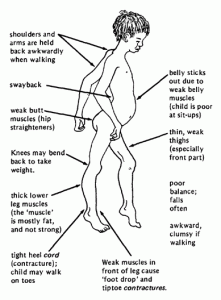
**Muscular dystrophy** (**MD**)

MD refers to a group of genetic and/or hereditary muscle diseases that weaken the muscles that move the human body. Muscular dystrophies are characterized by:

* progressive skeletal muscle weakness
* defects in muscle proteins
* and the death of muscle cells and tissue

Nine diseases are always classified as muscular dystrophy, including:

* 1. Duchenne
  2. Becker
  3. Limb Girdle
  4. Congenital
  5. Facioscapulohumeral
  6. Myotonic
  7. Oculopharyngeal
  8. Distal
  9. Emery-Dreifuss

but there are more than 100 diseases in total with similarities to muscular

dystrophy. Most types of MD are multi-system disorders with manifestations in

body systems including the heart, gastrointestinal and nervous systems,

endocrine glands, skin, eyes and other organs.

Symptoms:

1. Muscle weakness, slowly progressive (difficulty running, hopping, jumping; progressive difficulty walking
2. Toe-walking
3. use of Gower’s Maneuver to get up from the floor
4. frequent falls
5. difficulty breathing
6. non-progressive cognitive dysfunction
7. skeletal deformities (chest & back … scoliosis)
8. muscle deformities (contractions of heels, legs, pseudohypertrophy of calf muscles
9. fatigue
10. heart disease
11. elevated blood levels of CPK (creatine phosphokinase)

Suggestions:

1. Activity is encouraged. Inactivity (such as bed rest) or sitting down for too long on plane or car rides can worsen the muscle disease.
2. Physical therapy may be helpful to maintain muscle strength.
3. Orthopedic appliances such as braces and wheelchairs may improve mobility and self-care.

Supplement Recommendations:

1. Step 1
   1. Shaklee 180 Smoothees with Leucine are recommended to enhance the strengthening of the muscle.
   2. Vitalizer – to provide a smorgasbord of the 80 most important nutrients that support optimal health
   3. Vivix – to support cellular function and improve muscular energy
   4. Alfalfa – to maintain agility of the muscles and reduce “seizing-up” of the muscular tissue
2. Step 2
   1. CoQHeart to reduce cellular deterioration
   2. Essential Fatty Acids – Lecithin, OmegaGuard and GLA
   3. Herb-Lax – to support paristalic action in the intestinal tract (which is always more sluggish in MD)