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**DIAGNOSIS OF DUCHENNE MUSCULAR DYSTROPHY AND
NUTRITION MANAGEMENT**

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ABSTRACT

Duchenne muscular dystrophy (DMD) is a deadly genetically recessive X-linked disorder. Therefore, females mostly act as the carrier. Patients with DMD who are diagnosed, usually exhibit signs such as delayed motor milestones and frequent falls. These individuals' functional deficits worsen with time, resulting in loss of ambulation, pulmonary insufficiency, cardiomyopathy, and early death. It is a muscle-wasting illness that progresses rapidly. The early signs that are noticed in DMD patients are difficulty in mounting stairs, a waddling gait, and frequent falls, which appear at the age of 3-5 years. Around 10–12 years of age, most patients become wheelchair reliant, and around 20 years of age, they require assisted ventilation. Most DMD patients die between the ages of 20 and 40 from cardiac and/or respiratory failure if they get the best possible care. DMD is caused by mutations in the DMD gene (which codes for dystrophin) that prohibit the muscle isoform of dystrophin from being produced. The reading frame rule helps explain the diverse spectra of DMD illnesses. Muscles lacking the protein dystrophin are more vulnerable to injury, leading to progressive muscle tissue and function loss, as well as cardiomyopathy. Food rich in calcium and vitamin D can help muscle and bone health. Two specific nutritional interventions have been found that are beneficial for muscle strength and physical activities. Green tea extract (GTE) and leucine, a branched chain amino acid (BCAA) are two important nutritional components. The studies have shown that the muscle stimulations have improved rapidly from the second week of the intake of these two components. GTE is rich in antioxidants and leucine can regenerate tissues and facilitate other cellular processes. The goal of nutrition is to get a balanced diet which gives out energy and supports muscle development.

Keywords: Diagnosis, Duchenne Muscular Dystrophy, Nutrition Management