

# The Link between vitamin D, miRNA and multiple sclerosis

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#### Abstract

Multiple sclerosis (MS) is a complex autoimmune disease that poses a challenge to the medical field. To our current knowledge, MS is a disease with predisposing genetic variants and environmental influencers. Environmental factors may influence disease pathology through different mechanisms, one of which the author proposes to be microRNAs. MicroRNA (miRNA) is small non-coding RNA molecules with a size of approximately 22 nucleotides, involved in post-transcriptional regulation of genes. Vitamin D deficiency is an established risk factor for MS pathogenesis. The relation between vitamin D and miRNA may shed the light on the effect of vitamin D on MS pathology. Available data on vitamin D-miRNA-MS seems encouraging, though the data reproducibility has been a major limiting factor.



2. "Multiple Sclerosis and the Pathogenicity of Mir-155"

3. "Multiple sclerosis is prominent in the Gulf states: Review"4. "Elucidating the Molecular Basis of Multiple Sclerosis and Understanding the Disease Pathophysiology"

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### **Biography:**

Eiman M Mohammed has a master's degree in molecular biology from Kuwait University. She has interests in the pathophysiology of multiple sclerosis (MS) and writes frequent reviews on the topic. And as of 2020, she has published five papers on this topic. She currently works in Kuwait Cancer Control Centre in the Molecular Genetics Laboratory, the only referral laboratory in Kuwait for cancer-molecular testing.

### Speaker Publications:

1. "Association analysis of nitric oxide synthases: NOS1, NOS2A and NOS3 genes, with multiple sclerosis"

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