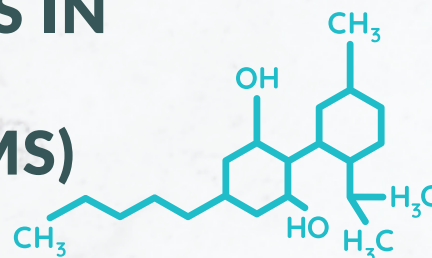
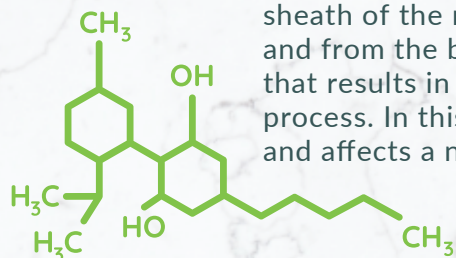


# THE ROLE OF CANNABIS IN THE TREATMENT OF MULTIPLE SCLEROSIS (MS)



Multiple Sclerosis is an autoimmune disease in which the protective myelin sheath of the nerves is damaged, affecting the transmission of messages to and from the brain and spinal cord. This is a progressive, debilitating disease that results in nerve deterioration which is, unfortunately, an irreversible process. In this disease, the body's own immune system attacks the nerves and affects a number of functions, like coordination, vision, and balance.<sup>1</sup>

## MS has a wide range of Symptoms<sup>1</sup>

### Vision

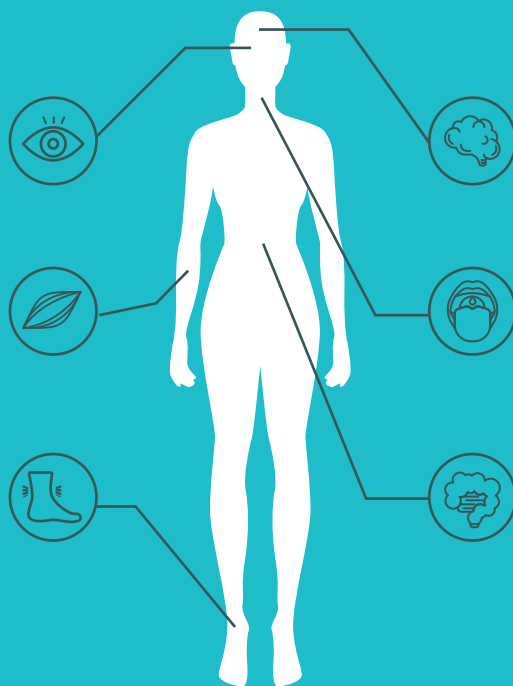
Blurred vision, irregular eye movement, visual impairment

### Muscles

Spasm, cramping, weakness, lack of coordination

### Senses

Increased sensitivity to pain, tingling, burning, pins-and-needles feeling



### Central Nervous System

Anxiety, Impairment, mood swings, fatigue, dizziness, hearing loss

### Speech and Mouth

Difficulty swallowing food, sudden slurring or stuttering in speech

### Digestive System

Sudden change in urinary frequency, constipation, diarrhea

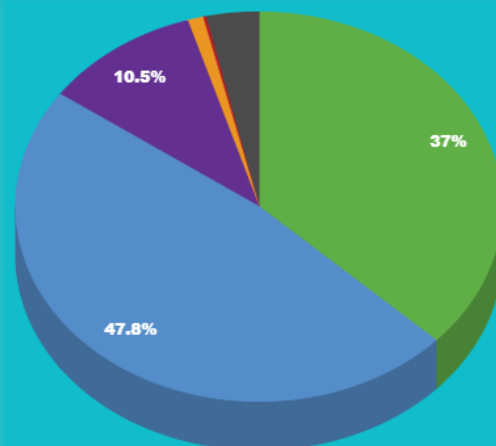
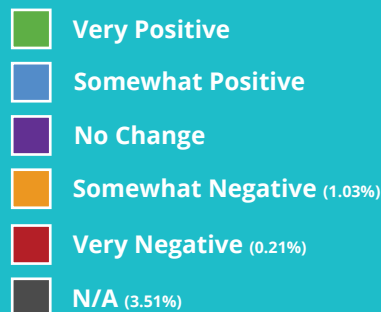
## Top 10 Medical Conditions Treated with Medical Cannabis<sup>4</sup>

- |              |                               |
|--------------|-------------------------------|
| 1 Anxiety    | 6 PTSD                        |
| 2 Insomnia   | 7 Fibromyalgia                |
| 3 Arthritis  | 8 Migraines/Headaches         |
| 4 Back pain  | 9 <b>Multiple Sclerosis</b>   |
| 5 Depression | 10 Inflammatory Bowel Disease |



# 84.79% of Harvest Medicine patients with MS self-report that medical cannabis has somewhat or very positively affected their quality of life.<sup>4</sup>

Total Sample Size 1453 | February 2017 - Q1 2021



## Entourage Effect

The Entourage Effect, first posited in 1988 by Mechoulam and Ben-Shabat, describes the synergistic nature of the many pharmacologically active compounds in cannabis, including cannabinoids, terpenes and flavonoids

### Cannabinoids

THC is not currently approved by the FDA for use by people with MS<sup>13</sup>

CBD – “it is our opinion that CBD supplementation may be advisable for patients with MS to reduce fatigue, pain, spasticity, and ultimately improve mobility”<sup>14</sup>, however “the exact method through which CBD interacts with the mechanisms that are thought to cause MS remains unclear.”<sup>15</sup> If trying CBD, a patient should ‘start low and go slow’<sup>16</sup> and consider gel caps as an easy to dose and relatively low health risk format, while Sativex is available as an oral spray.

### Terpenes<sup>17</sup>

Caryophyllene, Myrcene, Pinene & Humulene demonstrate anti-inflammatory properties, while Linalool & Myrcene may be helpful for pain

### Flavonoids<sup>18</sup>

An appropriate luteolin formulation that permits sufficient absorption and reduces its metabolism could be a useful adjuvant to Interferon Beta (IFN-β) in MS therapy

## Additional Resources

Speak with your healthcare practitioner about possible interactions with your current medications.

Patients can track results and progress using the Strainprint App.

**strainprint.ca**

Enter Harvest Medicine's unique activation code upon sign up: **HMED**

Call or visit us online to learn more

**1-844-488-4633 | hmed.ca**

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