

# ‘Brain rot’ – Unintended consequence of digital lifestyle?

Prasunpriya Nayak

## ABSTRACT

The growing colloquial concept of “brain rot” refers to a perceived decline in cognitive function and attention span caused by excessive digital content consumption. The current analysis explores how constant exposure to short-form content, instant gratification, algorithmic echo chambers, and “doomscrolling” may contribute to fragmented attention, diminished analytical skills, and increased vulnerability to misinformation. While acknowledging the benefits of accessing digital information, the potential for learned nonresponsiveness to sensory input and the suppression of emotional processing leading to cognitive decline has been emphasized. Symptoms associated with this phenomenon, such as poor memory, shorter attention spans, and impaired decision-making, are discussed concerning broader societal implications, including a less informed citizenry and difficulties in collective problem-solving. Finally, mindful digital habits, intellectual stimulation and a balanced relationship with technology were advocated to reduce potential adverse cognitive effects and harness the positive aspects of digitization. The recent acknowledgment of “brain rot” as the Oxford Word of the Year 2024 highlights the growing awareness and concern surrounding this issue.

**Keywords:** Brain rot, Digital content, Doomscrolling.

*Indian Journal of Physiology and Allied Sciences* (2025);

DOI: 10.55184/ijpas.v77i01.512

ISSN: 0367-8350 (Print)

## INTRODUCTION

Adaptability is key to keeping the brain’s complex neural networks alive, which works best with challenges. Skills, particularly if acquired, inevitably become vestigial if they remain unused for long enough. The difficulties in life originate from efforts, failures, and zeal to succeed. Though success and failure are relative terms, they can be generalized with reference to the enjoyment of the outcome of efforts. Physiologically, the reward phenomenon can be switched on with the agreement of outcomes of the efforts made or the non-occurrence of feared consequences of wrong deeds. Therefore, contentment should be associated with some activities where the person is involved actively. If the sense of felicity comes effortlessly, the demand for passive pleasure keeps growing and there begins the endless search to satisfy that. The vast aggregation of digital content is here as a pseudo-savior for these questing minds that do not care for trenchancy in the searches.

Surfing or scrolling through the internet is a simple process of glancing over the contents without really reading or thoughtfully evaluating the information depicted on those pages. Similarly, playing various auditory contents in the ear-attached instruments is also practiced without listening to those. Thus, we have learned to compromise the functions of two major sensory inputs so that received signals can bypass further processing. This learned behavior of nonresponsiveness is possible only if the suppression of the affective components of the sensory signals is practiced. Therefore, individuals are transformed into a count of users/responses to quantify the reach of a particular digital content. In this entangled situation, it is natural that the brain might look for situations without contradiction in sensory input, processing, and outcome. To escape stress, suppression,

---

Professor, Department of Physiology, AIIMS, Jodhpur, Rajasthan, India.

**\*Corresponding author:** Prasunpriya Nayak, Professor, Department of Physiology, AIIMS, Jodhpur, Rajasthan, India, Email: nprasunpriya@gmail.com

**How to cite this article:** Nayak P. ‘Brain rot’ – Unintended consequence of digital lifestyle?. *Indian J Physiol Allied Sci* 2025;77(1):1-2.

**Conflict of interest:** None

**Submitted:** 11/12/2024 **Accepted:** 18/01/2025 **Published:** 30/03/2025

---

and frustration in real life, one relieves oneself through digital content, particularly on social media. Numerous advertisements, hyperlinks and easy scrolling keep users busy and convert them into data consumers. Not to forget the competition and peer pressure that move them away from the real world and real-life challenges.

As we tune ourselves into the digital world, we unknowingly increase our dependency on digital tools and deliberately give up analytical skills and social interactions. This brings in some degree of cognitive decline. The term “brain rot” is not a medical diagnosis; however, it has emerged as a colloquial expression signifying a perceived decline in cognitive function and attention span, often attributed to undue consumption of digital content. The condition evokes a sense of cognitive decay, suggesting a loss of intellectual sharpness and a diminished capacity for analytical thinking. One of the primary drivers of this questionable euphoric condition is the constant bombardment of information and stimuli. The continuous influx of short-form content, notifications, and stimuli can fragment attention spans, making it challenging to engage in deep, sustained thought.

The instant gratification offered by these platforms can also diminish our tolerance for boredom and frustration, leading to a reliance on constant stimulation. Furthermore, the algorithms that curate our online experiences often create echo chambers, reinforcing existing beliefs and limiting exposure to diverse perspectives. This can stifle critical thinking and intellectual curiosity.

The rise of “doomscrolling,” the compulsive consumption of negative news and social media content, further exacerbates feelings of mental fatigue and cognitive decline. Continuous exposure to distressing events can result in anxiety, hopelessness, and emotional exhaustion, which may impair cognitive function and overall well-being. This persistent state of low-level stress can affect memory, decision-making, and the ability to process complex information.

However, digitization of information also has its set of benefits. Conversion of information to digital format has improved access to information and empowered the common person. Also, digital tools can enhance learning, creativity, and communication. The key lies in mindful consumption and a balanced approach. Cultivating healthy digital habits, such as setting time limits for screen use, prioritizing deep work, and engaging in offline activities, can help mitigate the potential negative effects of digital media. Even without accepting “brain rot” as a medical condition, one may experience a sense of poor memory functions, an inability to focus on tasks for extended periods, or a noticeable decrease in attention span at the early phase of the condition. With continued neglect of the condition, one may struggle to make decisions or display poor judgment in

simple and complex situations associated with a noticeable decline in interest or enthusiasm for previously enjoyable activities. On a broader scale, individuals with these symptoms can lead to a less informed and engaged citizenry, reducing the capacity for meaningful discourse and collective problem-solving. As individuals become more susceptible to sensationalism and misinformation, the potential for societal polarization and conflict increases. This can hinder progress in addressing complex global challenges, such as climate change, public health, and social justice.

By cultivating mindful digital habits, prioritizing intellectual stimulation, and engaging in activities that foster cognitive well-being, we can mitigate the possible adverse effects of our digital lifestyles and harness the power of technology for good. Through conscious efforts to engage in stimulating activities and maintain a healthy lifestyle, it is possible to preserve cognitive abilities and prevent the onset of what we might term “brain rot.” Rather than giving in to the anxieties surrounding “brain rot,” we should work towards developing a balanced and healthy relationship with technology, ensuring it enhances rather than diminishes our cognitive abilities.

The term ‘brain rot’ has been chosen as the Oxford Word of the Year 2024 (<https://corp.oup.com/news/brain-rot-named-oxford-word-of-the-year-2024/>), indicating growing awareness about the concept and its consequences. As we continue to advance technologically, it is essential to remember the value of caring for our minds in the same way we care for our bodies, ensuring a healthier and more vibrant future for all.

*Inputs from Dr. Bharati Mehta Professor, Department of Physiology, AIIMS, Jodhpur, and Dr. Shival Srivastav, Associate Professor, Department of Physiology, AIIMS, Jodhpur, during the writing of this Editorial, are gratefully acknowledged.*