

Why Do We Forget?

1. Introduction

Forgetting feels like a failure. You blank on a test answer, lose a name, or walk into a room and forget why.

There are three main ways your brain deliberately forgets:

1. **Neurogenesis-based forgetting** – new brain cells overwrite old memories
2. **Interference-based forgetting** – memories crash into each other
3. **Intrinsic forgetting** – a built-in molecular timer slowly erases unused connections

2. Neurogenesis-based forgetting



Your brain keeps growing new neurons, especially in the hippocampus — your memory centre. These baby brain cells don't just add storage. They rewire old memory circuits, sometimes erasing older memories to make space for new ones.

How it works:

- Stem cells in the hippocampus divide and produce new neurons.
- The newborn cells plug into existing memory networks.
- As they integrate, they weaken the connections that hold older memories.
- Old, rarely used memories become fuzzy or unreachable.

3. Interference-based forgetting

When multiple items share a retrieval cue, attempting to recall a specific target activates all associated items in parallel. These items compete for awareness, with the strongest or most relevant one winning, thereby blocking the target memory.

- To resolve competition, the brain actively suppresses non-target items, which can lead to their temporary forgetting.
- Highly similar items may blend together, preventing individual recall.

Over time, as more items attach to the same cue, the cue becomes overloaded and loses its diagnostic value.

4. Intrinsic forgetting

Intrinsic forgetting is an active biological process that occurs frequently in order to help clear unessential information by some "forgetting cells," continuously degrades molecular and cellular memory traces.

For example, you memorised a friend's phone number but after months of not using or recalling it, you forget it. This is because your brain is designed that way in order to help your brain:

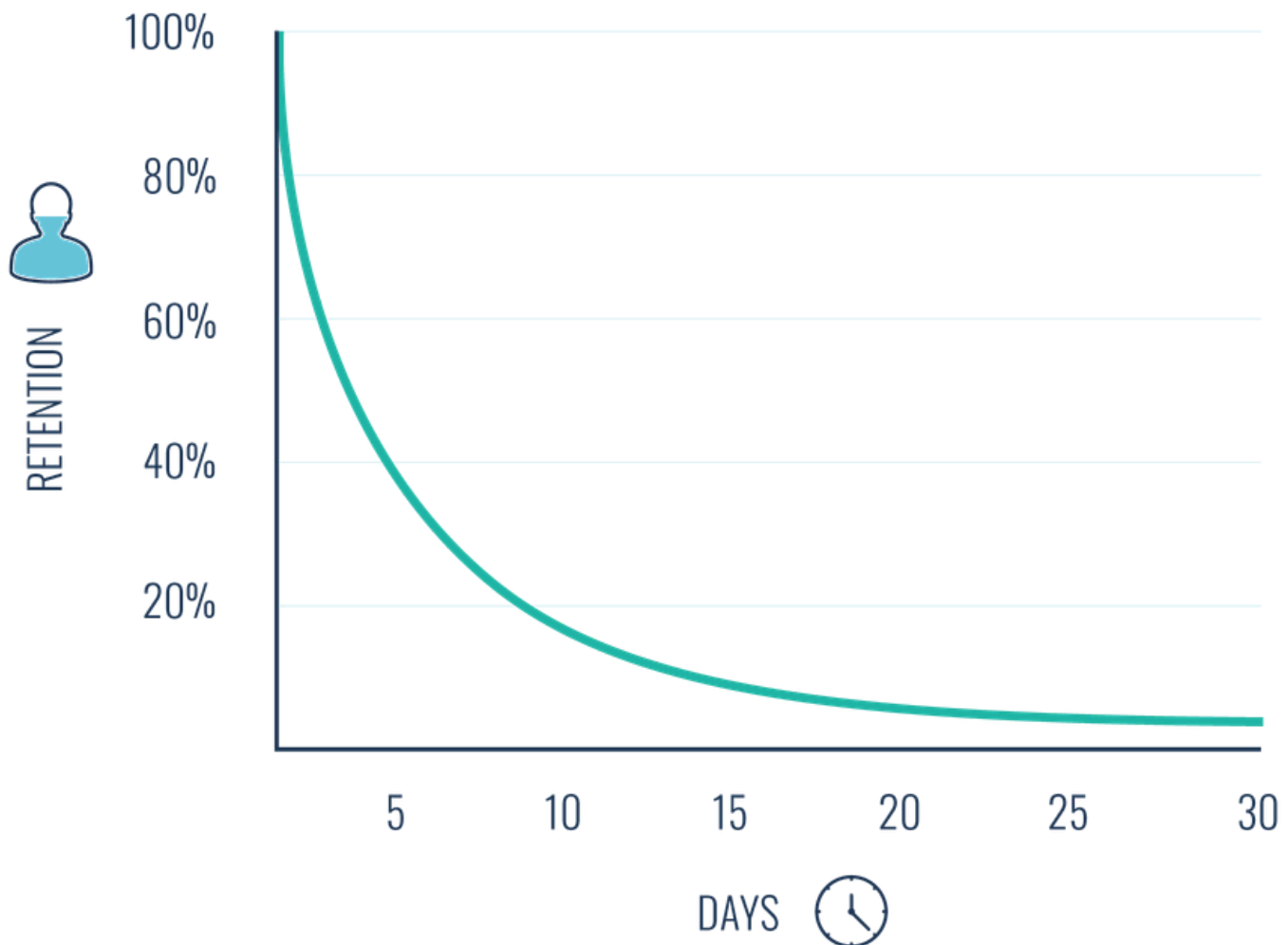
- **Save space** for more important new information
- **Avoid clutter** by letting go of old and unused memories
- **Focus on what matters** for your current life (conserves energy)

Key Aspects of Intrinsic Forgetting:

- **Active Mechanism:** a targeted, energy-dependent process that actively removes information in purpose
- **Dopamine's Dual Role:** Dopamine acts as a signalling agent that helps form new memories but also acts as a signal to erase them.



5. The forgetting curve



What is the graph trying to show?

The forgetting curve illustrates that memory retention declines exponentially over time, with the fastest loss occurring within the first 24 hours.

Without review, roughly 50%–90% of new information is forgotten within a few days.

How to Overcome the Forgetting Curve

- **Spaced Repetition:** Review material at increasing intervals to strengthen memory traces and slow the decay
- **Active Recall:** Instead of passive reading, test yourself using flashcards or quizzes to force the brain to retrieve information
- **Make Information Meaningful:** Connecting new information to existing knowledge or finding personal relevance makes it easier to remember

Monthly Question



If you can answer all the Question correctly, you will receive a small gift!

Deadline: 12/5/2026

April Quiz Answer

Q1: A Q2: A Q3: A Q4: A Q5: A

Relaxing Zone



		1		5		8		9
			1	7			3	6
	2	9	3					1
	3			2			4	7
		4	5		7	3		
8	7			4			2	
9					5	7	1	
5	1			8	2			
6		3		9		5		

1	6	5	9	4	3	8	7	2
9	8	3	7	6	2	4	1	5
7	4	2	8	5	1	3	9	6
5	1	9	4	8	6	7	2	3
4	3	7	2	1	9	6	5	8
6	2	8	5	3	7	9	4	1
4	3	7	2	1	9	6	5	8
8	7	1	6	9	5	2	3	4
2	5	4	3	7	8	1	6	9
3	9	6	1	2	4	5	8	7

Ans:

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