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education

DOPAMINE MENU

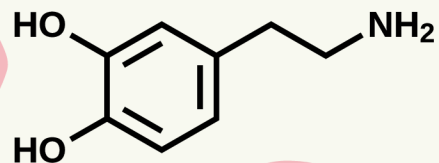
DOPAMINE

motivation (D1)

goal-directed action

incentive-salience

inhibition (D2)



emotional regulation

key neurotransmitter

regulation of movement

memory formation

Myth busting:

- Pop psychology & social media frame dopamine as the molecule of pleasure, but it actually drives anticipation, motivation, and wanting
- The actual sensation of satisfaction and enjoyment (liking) is mediated by our brain's opioid and endocannabinoid system
- So we should think of this as a 'dopamine regulation menu'



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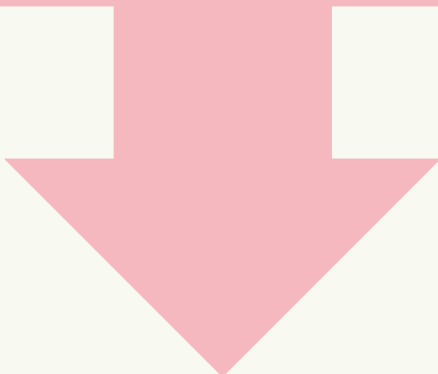
What is in this document?

An explanation for why we might/might not feel motivated to do things.

Examples and explanations for each 'course'.

A blank template, for you to create a menu of your own.

NOT SURE WHERE TO START?



**START
HERE**

How should I use this document?

However feels most helpful! That might mean:

- 1 Just reading it to learn about dopamine and motivation
- 2 Reading the examples to see if they resonate
- 3 Using the examples as models to craft your own menu

Wanting

Dopamine → Incentive salience

Dopamine is central to incentive salience, motivation, and reward prediction.

While it frequently responds to reward-predictive cues to drive action, its timing and signalling dynamics are shaped by learning, task structure, and uncertainty.



LIKING



Opioids & endocannabinoids

Hedonic pleasure is heavily dependent on opioid-related hedonic systems.

Endocannabinoids act as vital modulators within this network, interacting with dopamine and opioid pathways to amplify pleasure within specific brain 'hotspots'.

Learning

DOPAMINE & REWARD



Positive

Elevated opioid signalling drives hedonic pleasure, while an unexpected phasic dopamine surge (a brief spike in dopamine cell firing) registers a reward prediction error (the reward turned out better than expected). This error signal updates the brain's prediction for that cue, making it more motivating and more likely to be sought out again in future.



Expected

When the reward matches what was expected, there is no prediction error; dopamine neurons fire at their normal baseline rate rather than spiking. This tells the brain that its existing prediction was accurate, so no update to the cue's motivational value is needed.

STARTERS	'Getting in the zone'. These starter activities create a sensory or physiological shift that either up- or down-regulates autonomic alertness. This changes your baseline neural readiness, providing the core behavioural activation needed to smoothly switch your brain state (either from rest to focus, or from work to relaxation).
CUES	These need to be something that already happens, i.e. is an inevitable event that doesn't need to be learned or cued itself. Starters rely on the mechanism of 'IF' (existing cue) → 'THEN' (starter).

CUE (IF)	WHY?	STARTER (THEN)	WHY?
Your alarm goes off Optional: + voice reminder set	The alarm has to be set anyway. Linking the starter directly to it removes 'decision fatigue' in the morning. Building a habit (or behavioural chain) means that once established, the cue pushes you into motion before your brain can default to unhelpful habits.	Getting direct sunlight.	Retinal exposure to light stimulates ipRGCs, which signal directly to the SCN (the brain's master clock). This suppresses melatonin and helps shift the body from sleep to wake, contributing to the morning cortisol awakening response. So: morning light resets your body clock and helps 'switch on' motivation-related brain activity.
Sitting down at your desk	This utilises behavioural chaining. By anchoring the starter to an inevitable daily physical action, you build an automated 'IF->THEN' habit loop Bypassing the need for conscious decision-making or willpower.	Doing a 5 minute stretch	A brief stretch activates your muscles and joints, sending immediate nerve signals back to your brain. This sensory input clears away physical sluggishness and tells your nervous system that you are ready to switch from rest to focus.
Closing your laptop lid at the end of a study session	This functions as a definitive terminal cue that marks the exact end of a work block. Acting immediately upon this physical boundary utilises your existing momentum before your attention has a chance to drift.	Clearing your workspace	Spending two minutes clearing your workspace to remove visual clutter resets your desk into a neutral state. This physical 'stop-signal' lowers your cognitive load and provides a cue to your nervous system that work is over.

MAINS	<i>Doing something that you know makes you feel good, but can be feel ‘too much’ to initiate.</i> Engaging in complex, self-directed tasks drives the brain into a state of psychological flow. The deep sense of calm and satisfaction felt after completion is driven by your internal opioid and endocannabinoid systems rewarding your sustained focus.
FRICTION REDUCERS	A proactive strategy designed to lower the physical or mental effort required to start a challenging task, making it easier for the brain to overcome initial resistance and transition smoothly into action.

MAIN	WHY?	FRICTION REDUCTION TOOL	WHY?
Cooking a brand-new recipe completely from scratch.	Focusing fully on sensory-motor tasks coordinates multiple neural networks simultaneously. Working through a complex, novel procedure forces your attention away from passive rumination, leading to high post-task satisfaction.	Shrinking the start of the task to a micro-step (e.g., <i>just chopping the garlic and onions</i>).	Your brain looks at a heavy task and feels immediate mental friction. By reducing the starting requirement to a trivial micro-step, you prevent the prefrontal cortex from flagging the task as a threat, allowing you to build immediate momentum.
Reading one full chapter of a book.	Sustained linguistic processing engages your Default Mode Network (DMN) and Task-Positive Network (TPN) in tandem. When these networks work together it drives deep attentional focus on the text while simultaneously fuelling structured imagination, vivid visualisation, and creative processing.	Putting your devices in another room, out of sight.	Seeing your phone presents opportunities for reward and novelty: this up-regulates dopamine systems. Putting it out of sight removes this visual lure from attention, so the book is not competing with it.
Going for a structured run or workout.	Extended physical exercise triggers a release of anandamide, an internal endocannabinoid, driving the calming, anxiety-reducing effect of exercise.	Laying out your trainers, socks, and headphones the session <i>before</i> , right in the middle of the room.	Leaving materials ready to go reduces the exact physical steps needed to start. By removing the small delays that cause frustration (like searching for gear), you clear a frictionless path straight into the task.

SIDES	"Borrowing' motivation Highly desirable, intrinsically rewarding activities that you use exclusively as 'add-ons' to accompany low-incentive, boring, low-complexity tasks. By pairing unrewarding tasks with immediate external stimulation, you offset the boredom and create the anticipation of reward required to drive action.
DOPAMINE-PAIRING	Utilising the brain's anticipation of reward to upregulate dopamine by pairing a motivating activity with a low incentive salience task (boring/unrewarding). This lets us 'piggyback' off the dopamine driving the desirable activity to complete the boring task.

SIDE	PAIR WITH	WHY?
Listening to a highly engaging podcast, audiobook, or a new music album.	Organising your digital workspace, notes, and study files.	Anticipating narrative twists or musical resolutions releases dopamine along the mesolimbic pathway, providing the upfront drive to start. Simultaneously, the pleasure of the audio triggers localised opioid hotspots, creating a baseline of enjoyment that offsets the boredom of the background chore. Organising your files also has a future benefit of reducing cognitive load in the future (removing a future barrier to action).
Working alongside a peer or joining a quiet, virtual co-working stream.	Deep cleaning or re-arranging your bedroom desk area.	The passive presence of another person raises your autonomic arousal, keeping you alert during monotonous manual tasks. It introduces a subtle layer of social accountability, triggering mild cortical arousal that naturally dampens the impulse to abandon the chore.
Gamification: Setting a 15-minute timer to 'beat the clock' or ticking off a streak tracker.	Inputting data, updating flashcards, or tracking study habits.	Artificially injects reward salience: Monotonous administrative chores lack clear milestones. Introducing an artificial win condition, like a countdown, shifts your focus toward immediate feedback loops, increasing dopamine as you approach the goal (the goal-gradient effect).

DESSERTS	<i>Managing the pull of immediate gratification.</i> ‘Desserts’ are easily accessible activities that require minimal cognitive or physical friction to initiate and carry a high baseline of immediate appeal. Because these activities provide rapid, unpredictable feedback, they intensely trigger our dopamine-driven ‘wanting’ system. However, they are easily overdone; identifying our ‘desserts’ allows us to enjoy them mindfully and with purpose, rather than slipping into automatic, mindless loops that drain our time and energy.
BOUNDARY STRATEGIES	Intentional friction points or guardrails designed to pause your brain's automatic autopilot, helping you to choose when to start an activity, how to enjoy it fully, and when you have had enough.

DESSERT	WHY?	BOUNDARY STRATEGY	WHY?
Playing a game on your phone game (like Wordle) or scrolling a favourite social feed.	Provides easy micro-reward. However, because it relies on unpredictable feedback, it can activate a strong dopamine drive (wanting) to keep clicking or swiping, even when the actual pleasure (liking) has completely faded.	Introduce friction: Break the low-effort barrier by making the app harder to access. Use app timers, move the icons off your home screen, or shift the screen to greyscale to strip away the highly appealing visual stimuli.	Enjoying it as a deliberate choice prevents it from turning into a mindless habit loop. Adding physical steps (like entering a passcode) forces your brain out of autopilot, creating a pause where conscious choice can re-engage.
Surface-level texting, scrolling through message groups, or spending time with someone who is not really ‘present’.	Intermittent social notifications provide a quick burst of anticipation. Because these micro-interactions lack rich, present human feedback, they leave the brain understimulated, driving a constant urge to check back.	Designate specific windows to catch up on casual messaging rather than constant checking. Implement a strict ‘screens away’ rule when spending physical time with others.	It honours your need for easy, uncomplicated human contact, keeping you connected to your circle during low-energy periods of the day.
Impulse buying Browsing online marketplaces, holiday rentals, or fashion sites, and buying immediately.	Exploring curated imagery simulates a sense of discovery and creativity, letting you mentally map out future projects or styles with zero real-world cost. This ideation satisfies your anticipatory drives.	Create a wishlist: Use the basket or a wishlist as a digital mood board to collect ideas over time, rather than viewing it as a race to buy.	It transforms browsing from an impulsive urge to buy into a light, imaginative hobby that characterises future plans without financial stress.

DOPAMINE MENU

CUE		STARTER	
MAINS		FRICTION REDUCER	
SIDES		PAIRED TASK	
DESSERTS		BOUNDARY TOOLS	

References/further reading

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