

Be Your Own Bodyguard

What is the immune system and how we could strengthen it

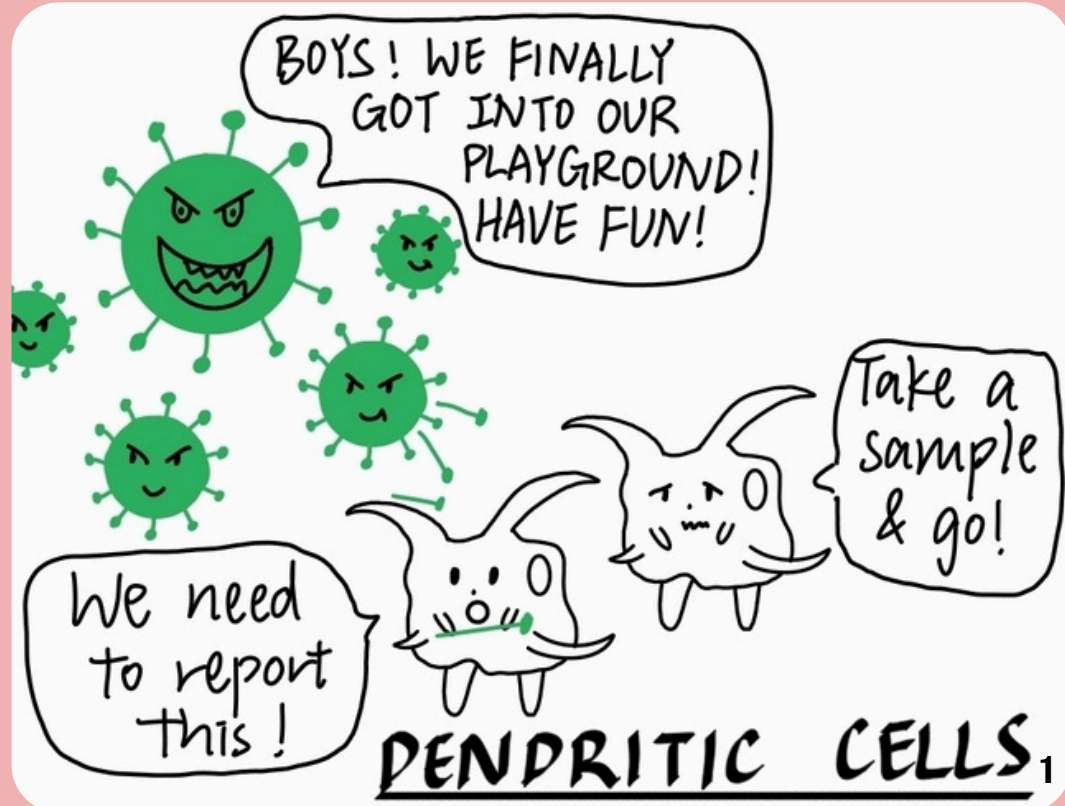


Hey there, recruit! I am a Helper T cell, the chief inspector of the immune system unit. Are you excited to start your journey as the body protector? There are 2 main departments that you need to know: the innate immunity department and the adaptive immunity department. Each has its specific functions that contribute to a common goal: eliminating intruders.

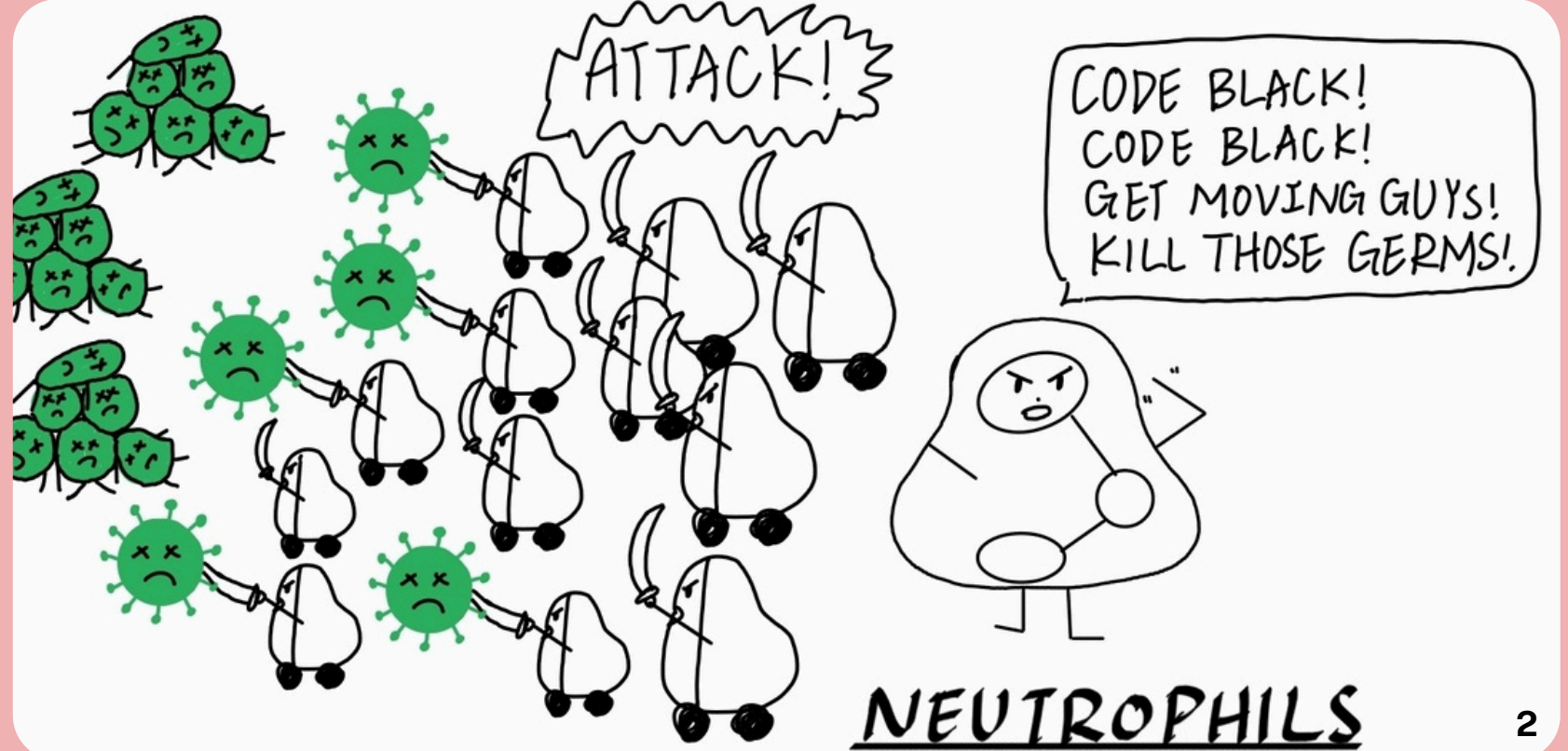
Let me take you around the station to familiarise yourself with what we do and how things work.

Quick reminder: look out for any germs that might come your way!

Innate immunity department



DENDRITIC CELLS

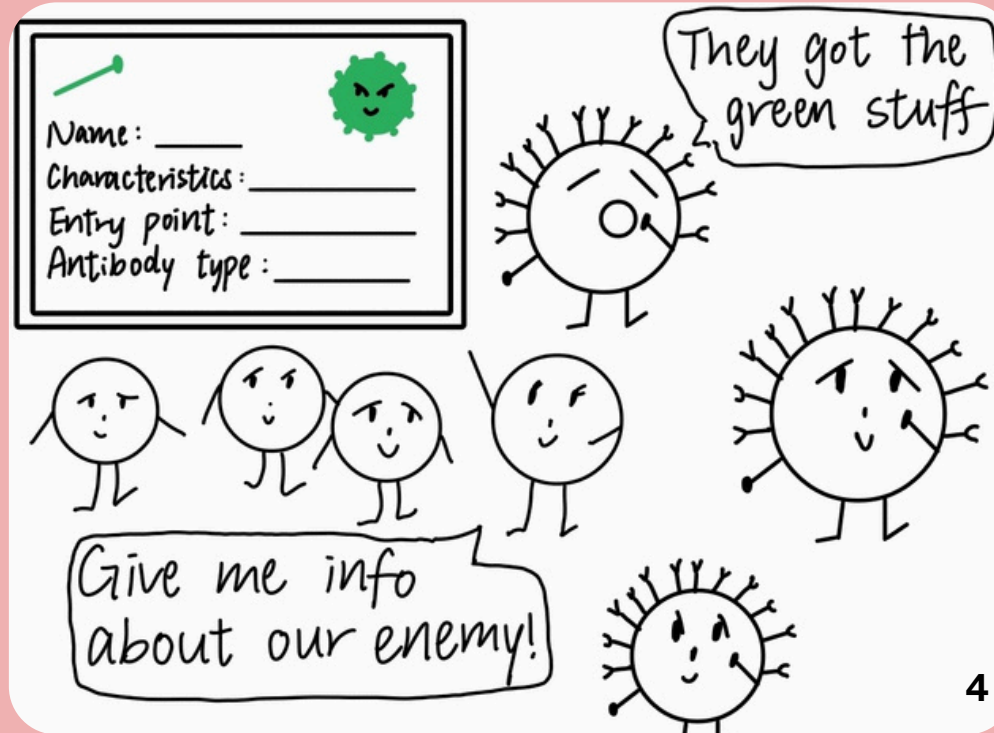


NEUTROPHILS

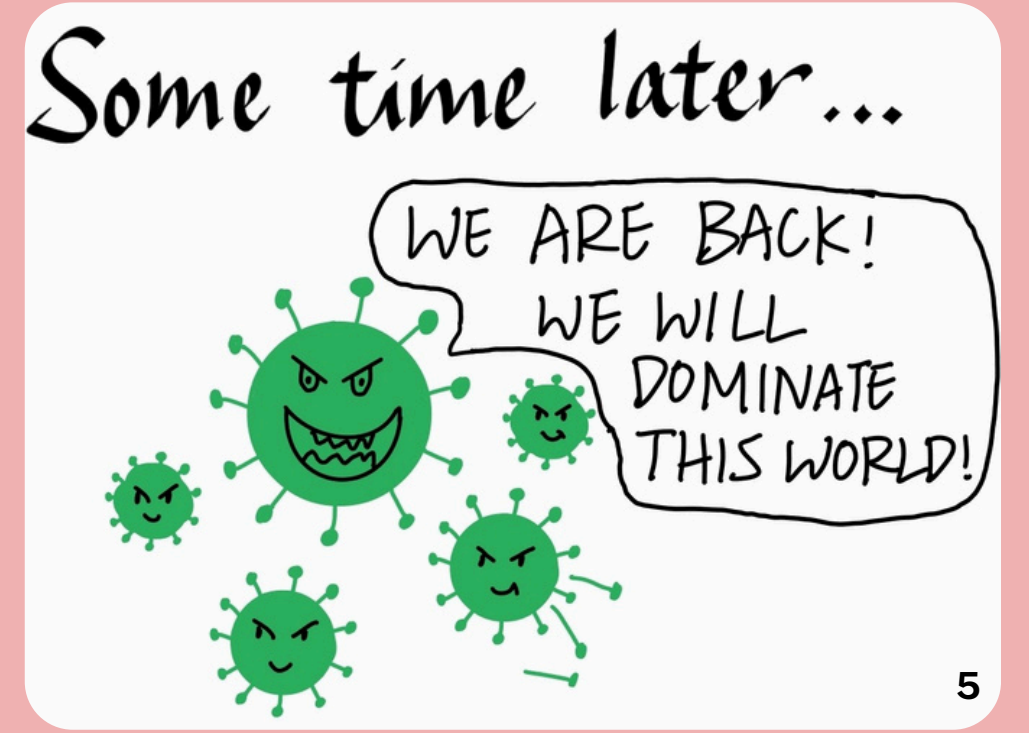
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MACROPHAGES

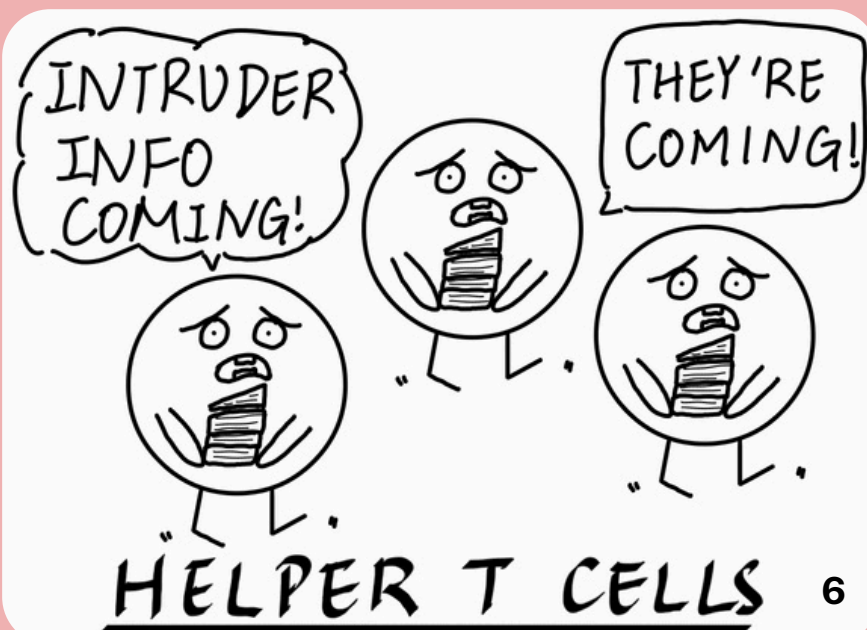


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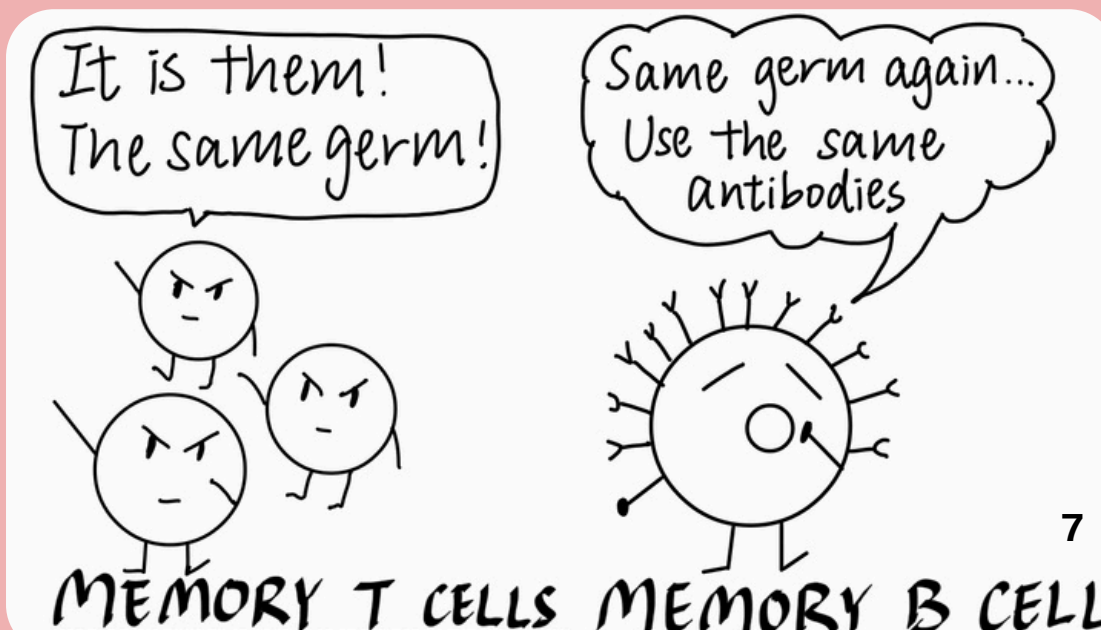


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Adaptive immunity department



HELPER T CELLS

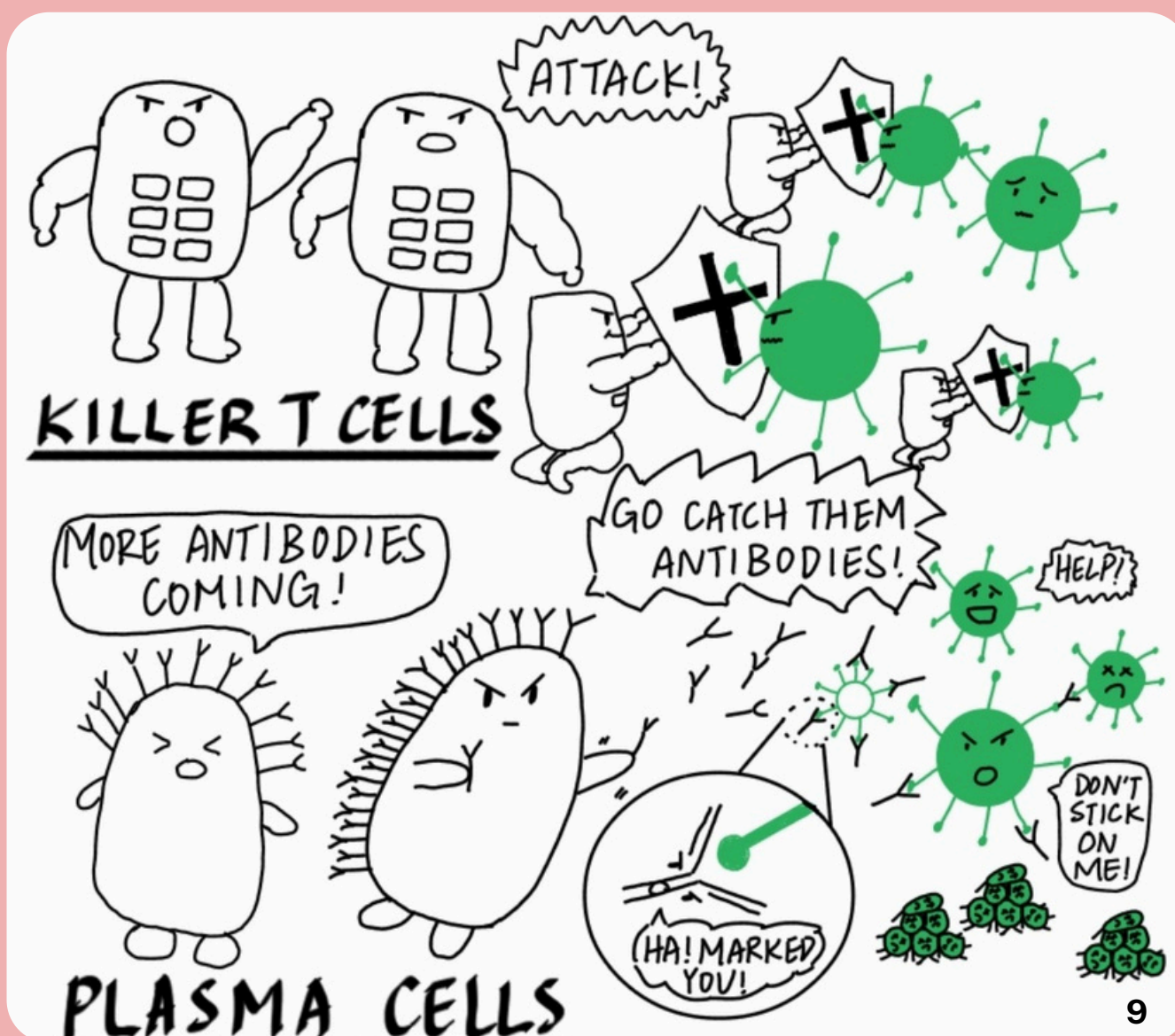


MEMORY T CELLS

MEMORY B CELL



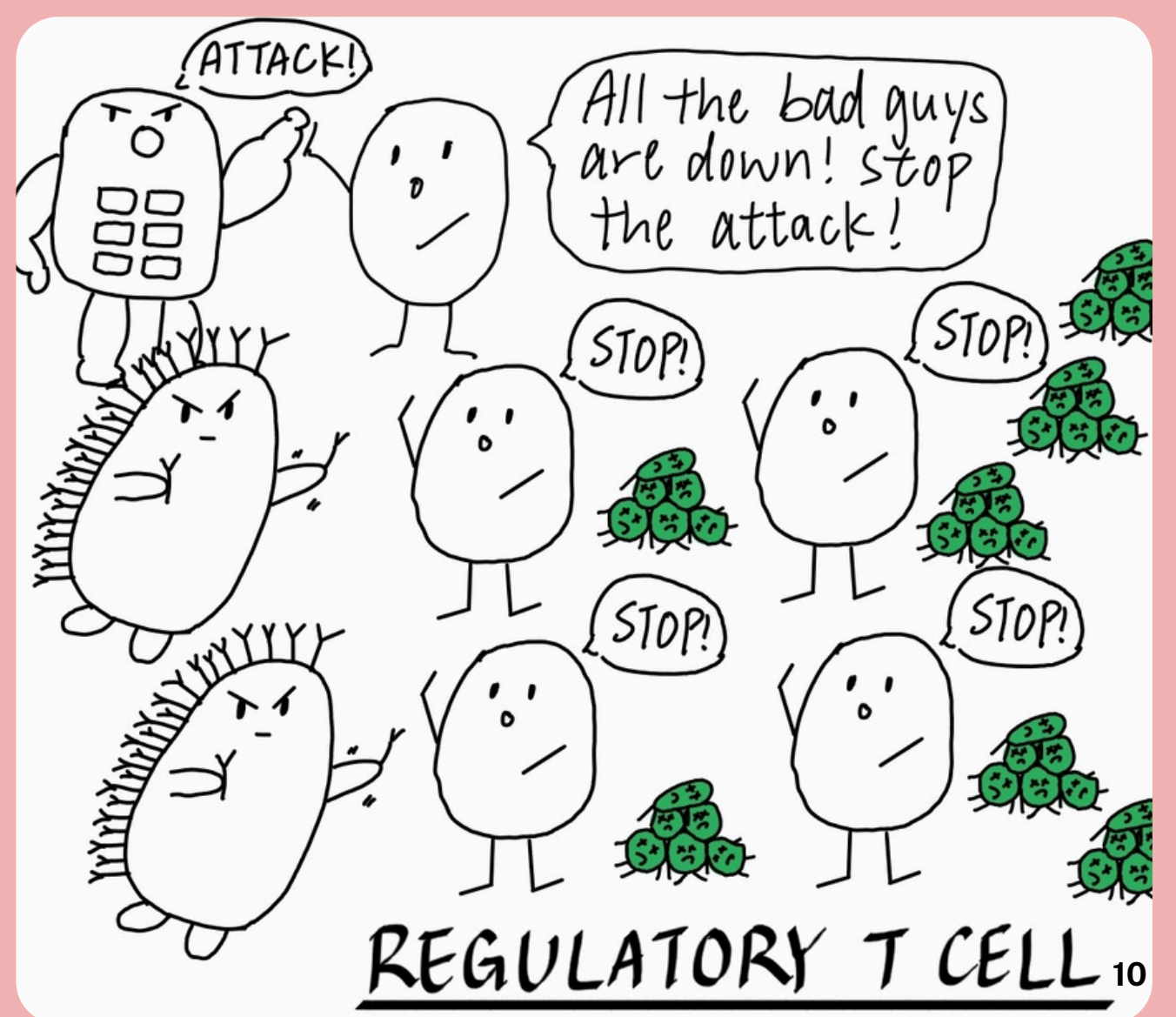
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KILLER T CELLS

PLASMA CELLS

9



REGULATORY T CELL

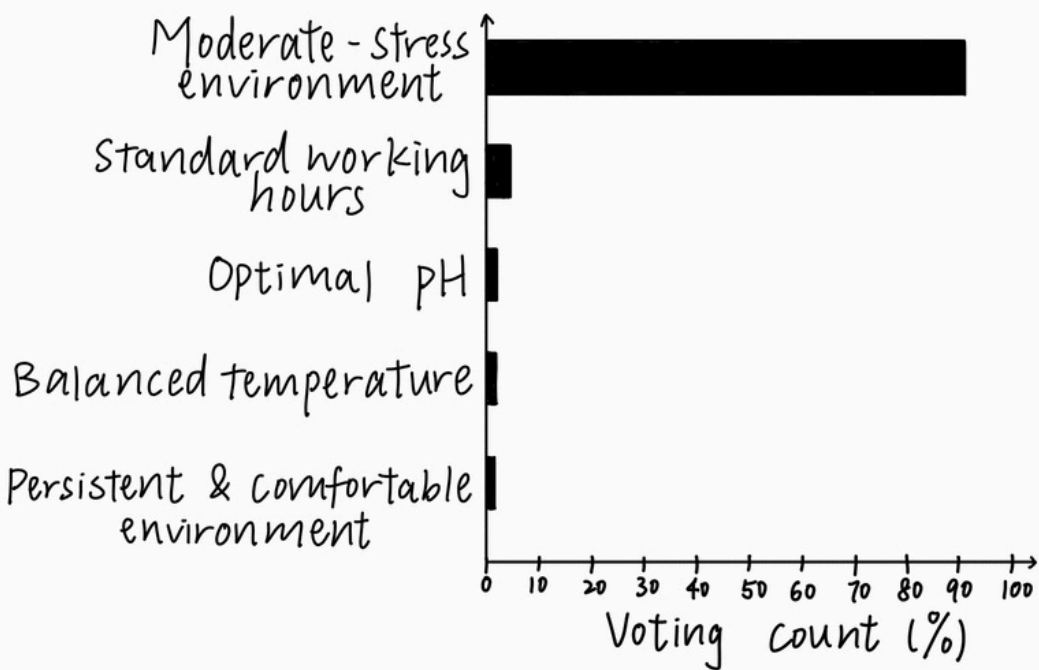
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Working conditions significantly impact immune functioning. As part of the well-being team, I conducted a survey asking our colleagues about their ideal working conditions, and concluded 3 main factors that were repeatedly mentioned were necessary for optimal performance.



‘What do you think is the best working condition?’

Just like you, we thrive in consistent, comfortable workspace with set hours. Most importantly, a moderate-stress environment is crucial peak performance (over 90% agreed)!



Homeostasis and stress management

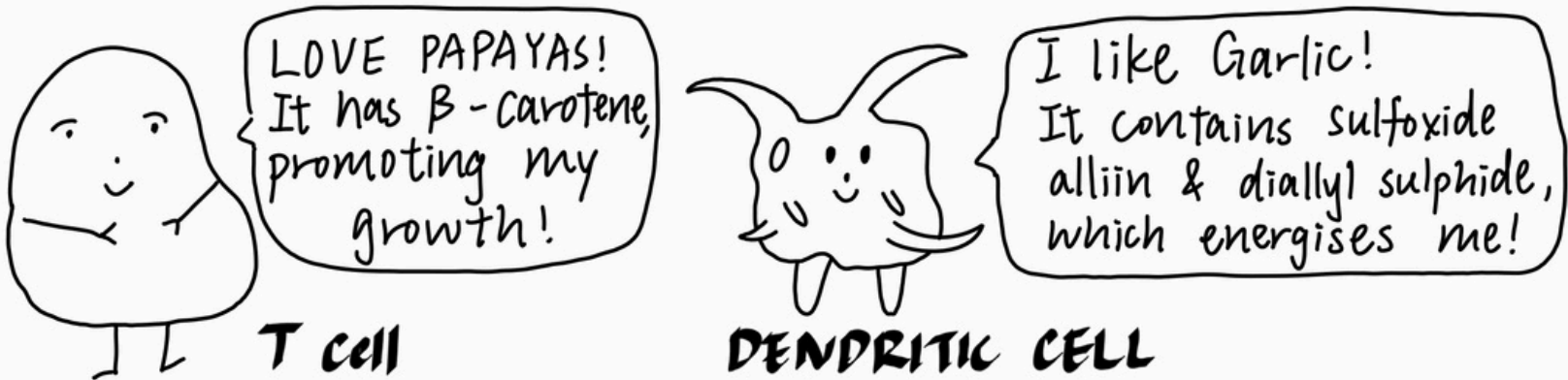


Did you know?
Your body is wired for a ‘fight or flight’ mechanism when under short-term acute stress, temporarily strengthening immune cells. Daily moderate exercise mimics this beneficial stress, enhancing our performance.
Want an immune boost? Get exercising!

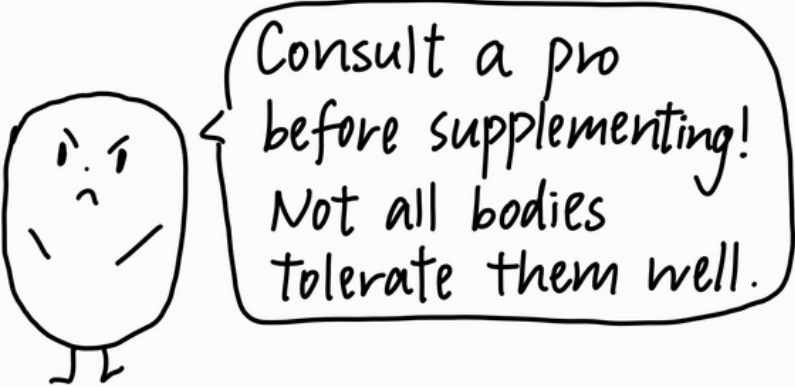
‘What powers us the most?’

A healthy, balanced and nutritious diet is our top choice! High-fat and sugary diets? Nah, almost everyone calls them ‘junk fuel’ -definitely not energising at all.

Just like humans, each immune cell has its favourite ‘superfood’ for peak performance. Here’s what some of our colleagues shared:



Optimal Diet

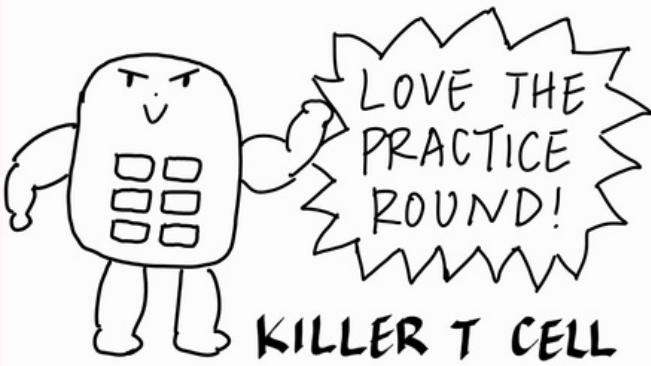
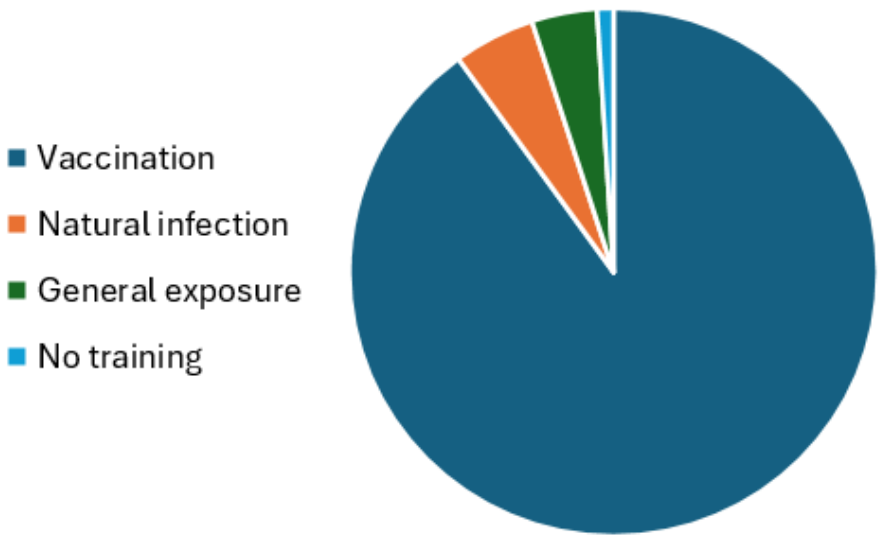


Struggling to get nutrient from diet alone? Supplements may help! Studies showed Vitamin C, D, E and minerals like zinc and selenium improved immune effectiveness against COVID-19, aiding virus removal.

Regular Trainings and Exposures

‘As preparation for future threats, what does your ideal ‘practice drill’ look like?’

The results were very obvious: Vaccination was their overwhelming favourite! Killer T cells explained that they allow them to practice eliminating enemies safely, without harming your body cells. Plus, more memory T and B cells are formed, providing rapid recognition and elimination of future threats!



Not everyone can be vaccinated (e.g. those with pre-existing health conditions). For them, herd immunity is vital! When vaccination rates are high enough (typically > 90%), it protects those who can’t be vaccinated, making the community a safer place for everyone.
So what are you waiting for? Get vaccinated for all!

Further Reading:

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