**DAY 5 SCRIPT**

Why do some people handle cold better than others? Why is it that some are so fearful of the cold; they’d rather die than be caught outside without all the winter gear on, mask and all, while others can wear one layer for a morning jog? What makes all the difference?

Imagine a giant furnace, to generate more heat we need to burn more coal.  Now imagine your body as this giant furnace, our metabolism is the fire and sugars are the coals. To generate more heat for warmth, our bodies’ burn more sugars. This is the first way we deal with cold.

Our blood circulatory system acts like highways to the different organs, imagine our blood as trucks carrying oxygen and heat to the organs. As the speed of the trucks are higher, more heat falls out and is lost to the surroundings. Hence our body slows down the flow of blood by tightening up the blood vessels. This is the same as squeezing a lane on the highway.

It turns out that our bodies aren’t always equally created. Some just have better genetic makeup than others, and are able to produce more heat from the same amount of sugars. Much like how some people never fatten up no matter how much they eat!

Contrary to belief, size DOES matter, and so does body type! For one, smaller bodies have more surface area to volume ratio and hence more areas to lose heat. Secondly, bodies with stockier frames and shorter arms mean less distance for blood to travel. Lastly, people with a “healthy bulge” have an extra layer of “insulation” from the cold!

But thankfully there is one way to increase our tolerance to cold: meditation!

Introducing “Wim Hof” from the Netherlands, In 2009, he completed a full marathon in temperatures below -20 degrees celcius dressed in nothing but his shorts. Wow. I’d probably not last 100metres. Wim Hof is aptly nicknamed “Iceman” for his ability to withstand extreme cold conditions by “turning up” his internal thermostat with his “mind”. Wim Hof practices meditation that allows his body to produce more heat than an average person, as well as shut down certain proteins to slow heat loss to surroundings.

In 2011, he spent 1hr 52mins standing fully immersed in ice. Now that’s just crazy!

After understanding all this knowledge about withstanding the cold… perhaps there are mutants around us? These would be people that have evolved to better survive the cold.

And if the next Ice Age were to come, maybe they’d be the only ones around.

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