Lily Type Artificial Nepleslian Physiology

Below is information on the key additions to the Lily Type Artificial Nepleslian from their Nepleslian counterparts. If born naturally from Lily parents (especially if it is just their father), they are largely Nepleslians with some exceptions.

Highlights

Fast Growth Rate (for VVIP customers and body replacement)

• Rate of gestation: 21 days

• Time to Maturity: 14 days (1 day per 1.5 years)

Standard Growth Rate

• Rate of gestation: 35 days

• Time to Maturity: 105 days (5 days for every year)

Life Cycle

With their extended stelomeres, it is estimated that Lily Type Artificial Nepleslians can live up to 150 years. Perhaps longer with modern medical science.

The effects of old age do not begin to manifest until around 60 years old.

Gestation

Lily Type Artificial Nepleslians are grown in AE-U1A Type 1 Growth Tanks and are filled with a \$\infty\$ Fluorocarbon based nanite enriched liquid. Their zygote is created by the AE-U1A's artificial ovaries and testicles (external donors are possible too), the combination of the nanites, certain chemicals, and genetic engineer in the presence of both allow Lily Type Artificial Nepleslians to take at least one Standard Yamataian Month (35 days) to reach full term.

Lilies are typically released when they reach the physical and mental age of 21. In an emergency, a Lily fetus can survive with liquid breathing (Fluorocarbon based liquid preferred) as soon as 2 weeks of development if placed in an artificial womb. The Artificial Nepleslian then (and any other time before the age of 21) grows at the same rate as their naturally born counterparts. Putting them back in a growth tank would result in severe physical and mental trauma and possibly death due to the body adjusting to growing without artificial help.

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Those that are born naturally to Lily mothers take 9 months to gestate.

Pre-7 years old

If the fetus was not subjected to accelerants from the growth tank (or another source), the body is unable to be grown at an accelerated rate. Lily Artificial Nepleslians grow at the normal rate as other baseline Nepleslians and humans. If they were exposed to the accelerants and continue to remain exposed, Lily Artificial Nepleslians grow at a rate of 1 year per 5 days.

7 years old

For both naturally born and vat-grown, the brain of the Lily Artificial Nepleslian is sufficiently complete enough to allow neural cybernetics to be installed. In almost a right of passage, the individual replaces the memory-boosting nanites for a full Zhenren I1N Digital Mind Implant or another implant with the same abilities. The empathic component of their implant is kept at a limited rate to prevent overloading the young mind with other's emotions.

The child can function without one, but they will be no different than their baseline counterparts. This can lead to some difficulty in interacting with their fellow peers.

Puberty

When puberty hits, the Lily Nepleslian is not all that different from their baseline counterparts (both those born naturally and vat-grown). Though their empathic component gradually reaches full power during this time. And augmentations designed to modify their physique are also installed during this time.

Adulthood

Lily Nepleslians are considered adults at the age of 18. Adult females undergo a minor transformation when they are pregnant. Their hips widen to accommodate the higher number of offspring they have (typically twins) as well as having fuller breasts to facilitate more breastfeeding (detailed below). The widen hips and usually increased breast tissue remains after the weening of the children giving them the "Matriarch" nickname (as opposed to "Maiden").

Reproduction

To ween the Reds off of using cloning as a near-exclusive means of increasing their population, it was both Armstrong and Dr. Sanders who agreed that they would need to tweak the number of offspring possible in a single pregnancy. Most of the changes come in the form of genetic and nanite engineering of female Artificial Nepleslians.

https://wiki.stararmy.com/ Printed on 2024/05/19 06:53 Instead of releasing one egg, the female's ovaries have a higher chance of activating both ovaries when regular "activities" are detected by the bodies' homeostasis nanites. An increase in breast tissue is also stimulated when pregnancy is detected as a minimum of twins will be common.

To accommodate the greater number of gestating offspring, many sossification centers are replaced with artificial growth plates similar to what is used for the Zhenren package. Responding to a special set of hormones when pregnancy is detected, they further widen the hips of individuals based on a preset length determined by their genetic estimation of their appearance. For some individuals, the additional widening will barely activate.

The use of artificial growth plates also prevents the pelvis from narrowing with age.

Due to NH-series lifeforms not having DNA in the biological sense, Lily clones can only reproduce with species derived from humans (Elysian, Nepleslians, Genshrins, etc). Lily gametes harden and go inert in the presence of chemical markers of femtomachine-based lifeforms. For a Lily mother to intermix, new DNA based on the appearance of the Minkan or Neko must be generated.

Lily Artificial Nepleslian Children

Some of the augmentations can be passed on to naturally-born children if their mother is a Lily Type. During gestation, children can gain the full Zhenren Genetic Enhancement Package thanks to a modified homeostasis nanite hive in their mother. A number of the mother's homeostatic nanites convert into "Queen" nanites which construct a new hive within the fetus when it reaches the appropriate stage of development.

The new hive then proceeds to maintain and develop the child's Myelin enhancement. The hive is fully activated during the child's first checkup after birth to ensure the nanites haven't mutated in a harmful way. The genetically engineered microfauna is also transferred to the mother at birth.

Diet

Due to the common use of nanites that use celluar respiration to power them, Lily Artificial Nepleslians need to eat more. To compensate for this, genetically engineered versions of microfauna (detailed below) found within the digestive system of humans are used to more efficiently extract nutrients and carbs otherwise lost to others.

The microfauna is also capable of processing a wider range of organic material without getting sick. With the help of cybernetics, the microfauna is also capable of processing plants as if the individual was a herbivore and can neutralize basic toxins to eat items like bark. The Lily will not enjoy the experience, but they won't starve to death as fast.

On average, a lily should eat 3,400 calories a day, More if they have an active lifestyle.

Augmented at Birth

Having access to cybernetics, it was decided to provide key quality-of-life augmentations. Lily Type Artificial Nepleslians have the following upon their release:

- Zhenren I1G Genetic Supplement (at gestation)
- Zhenren I3N Myelin Enhancement (at gestation)
- Zhenren I3B Digestive Enhancement Microfauna (at birth)
- Zhenren I1N Digital Mind (implanted at the age of 7)
- Zhenren I2N Cortical Modem (implanted at the age of 7)

Their bodies (being Nepleslian or engineered if human-based) are perfectly suited for additional Zhenren upgrades if the individual desires it. For the rare Artificial Nepleslians that are allergic to the augmentations or have some other adverse effect, they are typically removed as soon as it is safe to do so (at 3 weeks), given a body up to the event, and live their lives like normal individuals. It is expected for them to be adopted by an Artificial Nepleslian or an employee at Ryu Keiretsu with costs shared with the corporation (70% Ryu, 30% the Adopter).

OOC Notes

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