DEPD 2430: SOCIO-CULTURAL ISSUES IN DESIGN - FOOD FICTION

2030: A SPACE BABY

BAILEE VAN RIKXOORT JOEL BRISIBE MIKA LIIKALA

ANIMAL ETHICS

NANO-PACKAGING

GLOBAL VS LOCAL
FOOD PRODUCTION

CULTURE = IDENTITY

EXTRACTED FLAVOURS

SOCIAL

NURTURING VS DINING

FORM

PODS

SPACE TRAVEL

PIGMENTS

FOOD ORGANIZED BY EVENT
IN GROCERY STORES

THE FUTURE OF FOOD

PESONALIZED NUTRITION

FUTURE GENERATIONS

PRODUCERS

FOOD WASTE

ISSUES

STAKEHOLDERS

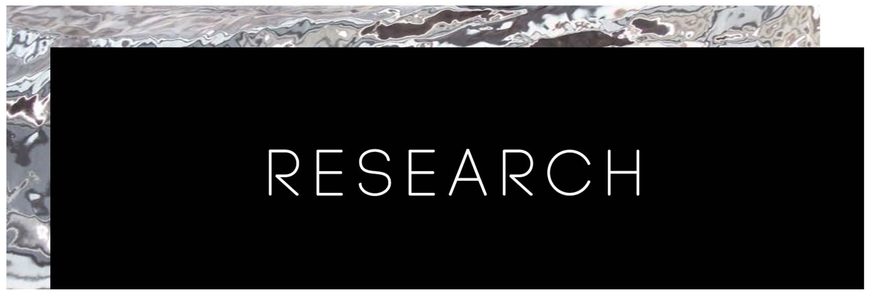
CORPORATIONS

SUSTAINABLE OPTIONS

CONSUMERS

GROCERY STORE
OVERABUNDANCE

5 SENSES
TASTE, TOUCH, SIGHT, HEAR, SCENT


RESEARCH

THE FUTURE OF SPACE TRAVELLING

AS TRAVELLING TO SPACE BECOMES AS PREVALENT AS TRAVELLING TO DIFFERENT AREAS ON EARTH, OUR UNIQUE HUMAN ENDEAVOURS WILL NEED TO ADAPT TO ACCOMODATE FOR AN UNFAMILIAR ENVIRONMENT - DISORIENTING EQUILIBRIUM, OVEREXPOSURE OF RADIATION, AND SCARCE RESOURCES.

ONE SUCH ENDEAVOUR, INEVITABLE TO OCCUR, IS GIVING BIRTH IN SPACE...

GIVEN THIS UNIQUE ENVIRONMENT, THERE ARE INTEGRAL ASPECTS OF THE INFANTS DEVELOPMENT THAT WOULD BE COMPROMISED:

INADEQUATE NUTRITION
AS A RESULT OF UNSUSTAINED RESOURCES

POOR IMMUNE SYSTEM
LACK OF GERM EXPOSURE, RENDERS EARTH A TOXIC PLACE TO LIVE

FIRST BREATHS WOULD BE ARTIFICIAL OXYGEN
AS OPPOSED TO NATURAL PLANT BASED OXYGEN EXISTING ON EARTH

BREASTFEEDING EXPERIENCE HINDERED
DUE TO ZERO GRAVITY

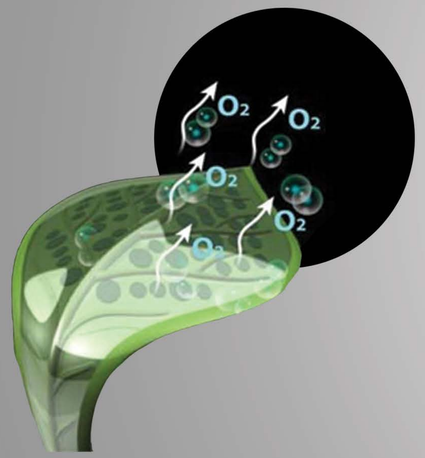
BRITTLE BONES
AS A RESULT OF WEAKER GRAVITY

HIGH RADIATION EXPOSURE
WILL ALTER THE SKIN TONE

THE WAY IN WHICH WE CARE FOR NEWBORN BABIES WILL DETERMINE HOW WELL THEY WILL BE ABLE TO ADAPT WHEN THEY ARRIVE BACK TO EARTH.

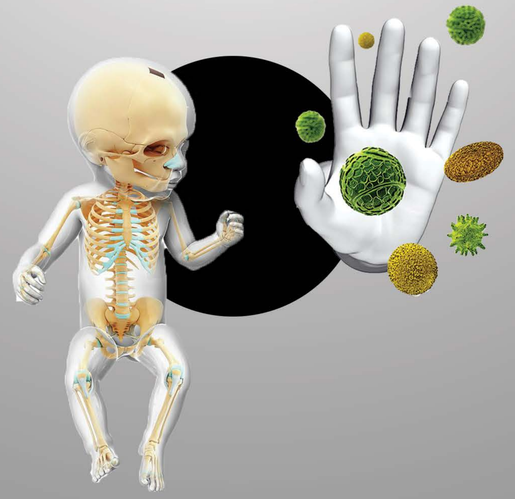
HOW MIGHT WE FEED BABIES IN SPACE?

ALGAE IS ALSO A SUSTAINABLE SOURCE OF OXYGEN, ALLOWING BABIES TO BECOME ACCUSTOMED TO PLANT BASED OXYGEN



ALGAE PRODUCES HIGH LEVELS OF DHA WHICH IS VITAL FOR INFANT DEVELOPMENT + SUSTAINABLE ALTERNATIVE TO BREAST MILK

DHA IS ALSO A VITAL FOR THE BONE DEVELOPMENT OF INFANTS. THIS WILL HELP MINIMIZE THE OCCURENCE OF BRITTLE BONES DUE TO WEAK GRAVITY



ULTIMATELY, HAVING THIS PROPER NUTRITION WILL HELP INCREASE THE INFANTS IMMUNITY

NEWBORNS PREFER THEIR MOTHERS VOICE MAKING BREASTFEEDING A PERFECT TIME TO START DEVELOPING THEIR FUTURE SOCIAL SKILLS

SKIN TO SKIN CONTACT HELPS REGULATE THE BABIES HEARTBEAT, BREATHING, AND TEMPERATURE

REFLEXES LEARNED DURING BREASTFEEDING:

ROOTING REFLEX: MOUTH OPENS WHEN LIPS ARE TOUCHED

SUCKING REFLEX: BABY WILL START TO SUCK IF SOMETHING TOUCHES THE PALATE OF THE MOUTH

SWALLOWING REFLEX: BABY KNOWS TO SWALLOW WHEN MOUTH IS FULL

BENEFITS OF BREASTFEEDING

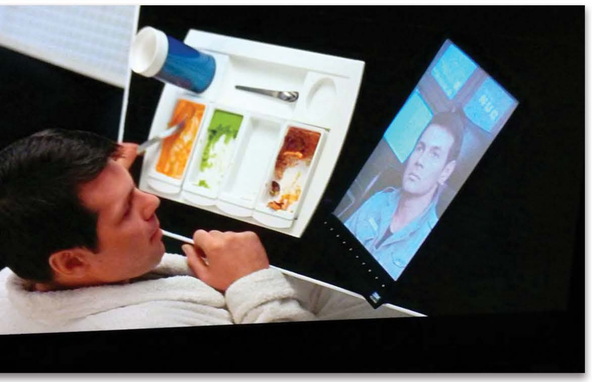
THE MONTGOMERY'S GLANDS UNDER THE AREOLA SECRETE OIL TRIGGERING AN AWARENESS OF THE MOTHERS PRESENCE

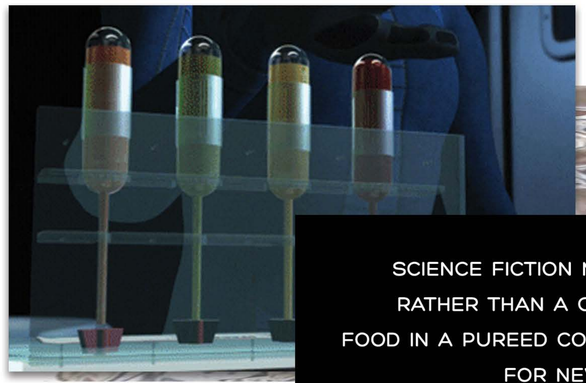
NEWBORNS RANGE OF VISION EVOLVED TO 8 - 15 INCHES - THE DISTANCE BETWEEN THE MOTHER AND BABYS FACE WHILE BREASTFEEDING. EYE CONTACT HELPS BUILD AN INTIMATE RELATONSHIP

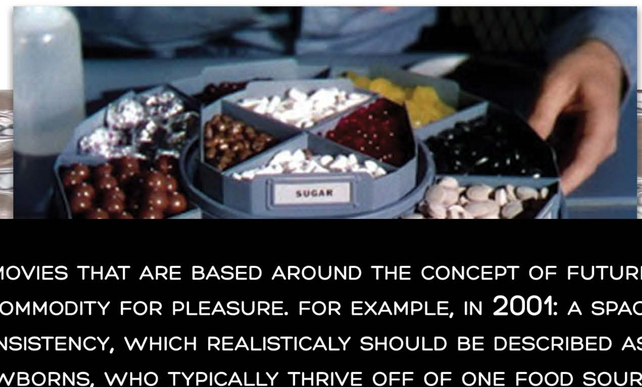
COLOSTRUM IS PRODUCED DURING THE FIRST FEW DAYS AFTER THE BABY IS BORN AND CONTAINS A RICH AMOUNT OF ANTIBODIES

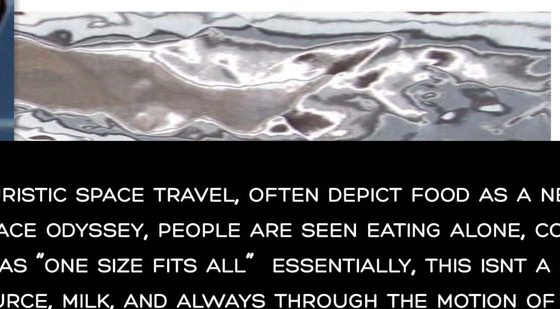
HOW MIGHT WE IMPLEMENT A NEW FEEDING SYSTEM WHILE FOSTERING THE BENEFITS OF BREASTFEEDING?

FICTIONAL FOODS IN MOVIES...







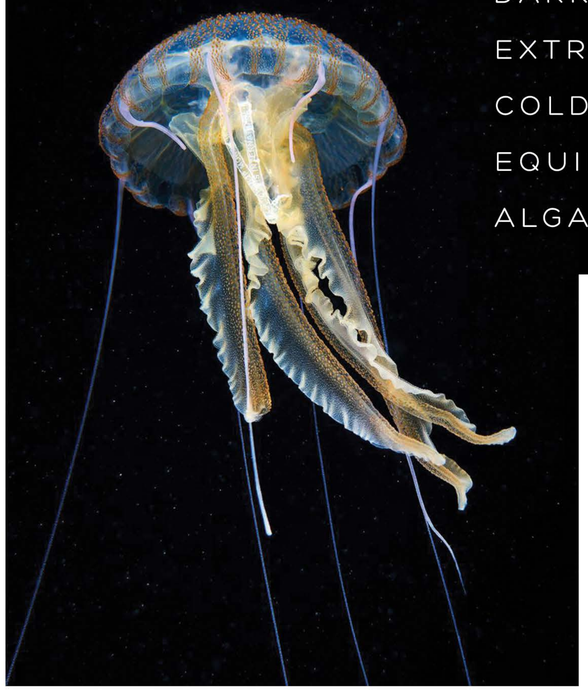


SCIENCE FICTION MOVIES THAT ARE BASED AROUND THE CONCEPT OF FUTURISTIC SPACE TRAVEL, OFTEN DEPICT FOOD AS A NECESSITY, RATHER THAN A COMMODITY FOR PLEASURE. FOR EXAMPLE, IN 2001: A SPACE ODYSSEY, PEOPLE ARE SEEN EATING ALONE, CONSUMING FOOD IN A PUREED CONSISTENCY, WHICH REALISTICALY SHOULD BE DESCRIBED AS "ONE SIZE FITS ALL" ESSENTIALLY, THIS ISNT A CONCERN FOR NEWBORNS, WHO TYPICALLY THRIVE OFF OF ONE FOOD SOURCE, MILK, AND ALWAYS THROUGH THE MOTION OF SUCKING. OUR GOAL IS TO PROVIDE A SUSTAINABLE ALTERNATIVE TO BREASTFEEDING THAT CAN BE READILY ADOPTED BY NEWBORNS.

NEVERTHELESS, WE ALSO WANT TO SHIFT THE DULL PERSPECTIVE ON FUTURE SPACE FOOD. WE WANT TO ENSURE THAT ONCE THESE INFANTS GROW AND BECOME THE TYPICAL 'PICKY EATER,' THAT THEY WILL BE SATISIFED BY THE FOOD OFFERINGS IN SPACE. WE SOURCED INSPIRATION FROM THE MOVIE WILLY WONKA AND THE CHOCOALTE FACTORY WHICH IS LOADED WITH FICTIONAL, SENSORY-CHARGED FOODS THAT OVERJOY YOUNG CHILDREN. EVERLASTING GOBSTOPPERS, THAT SUSTAIN FLAVOUR FOR MONTHS, TO FIZZY-LIFTING DRINKS THAT LET YOU FLOAT WHEN CONSUMED, THIS ALLOWED US TO EXPLORE THE IDEA THAT CHILDREN ARE MORE WELCOMING TO UNCONVENTIONAL WAYS THAT WILL HELP THESE FUTURE GENERATIONS ADAPT TO THE UNCONVENTIAL ENVIRONMENT IN SPACE.

OUTER SPACE IS LIKE...

BEING UNDERWATER



- DARKNESS
- EXTREME PRESSURE
- COLD WATER
- EQUILIBRIUM DIFFERENCES
- ALGAE POPULAR FOOD SOURCE

WHAT PARTICULARILY INSPIRED OUR CONCEPT WAS ANALOGIZING SIMILAR ENVIRONMENTS AND HOW THE SPECIES LIVING THERE SOURCE AND ACQUIRE THEIR FOOD.

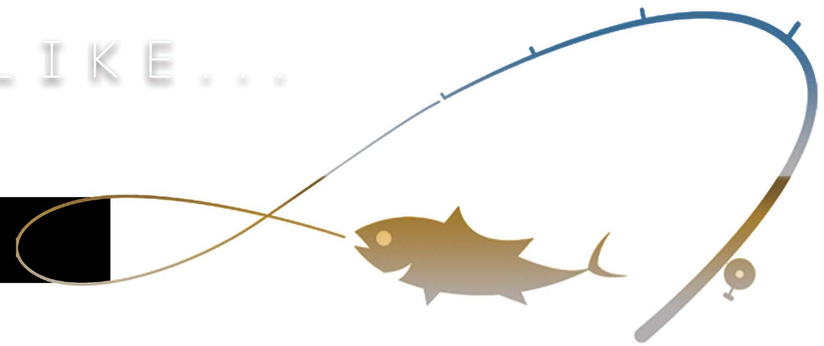
- NUTRITION THROUGH TUBES
- CONFINED LIVING SPACES

BEING IN THE WOMB

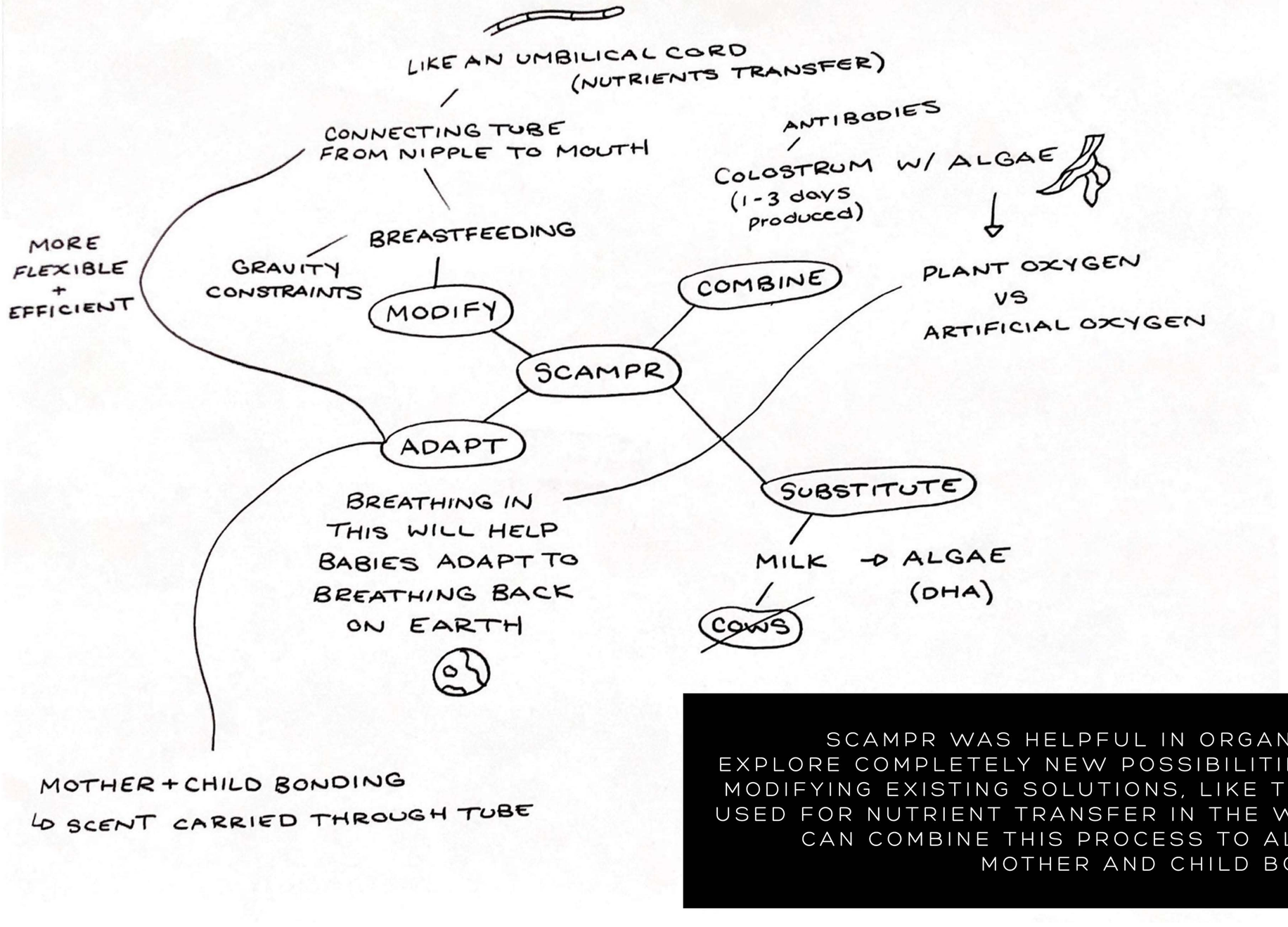
BREASTFEEDING IS LIKE...

WATERING A PLANT BY HELPING IT GROW

TRYING TO CATCH A FISH ON A LINE

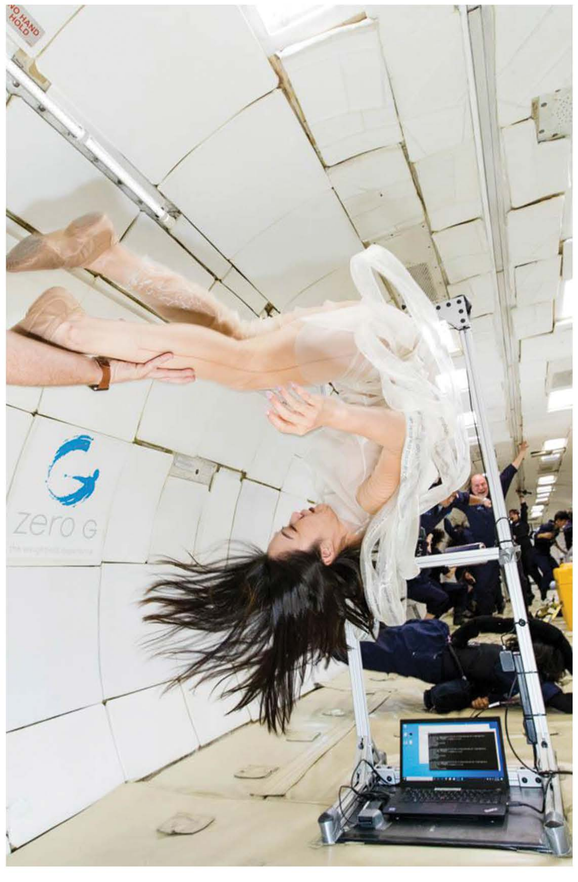


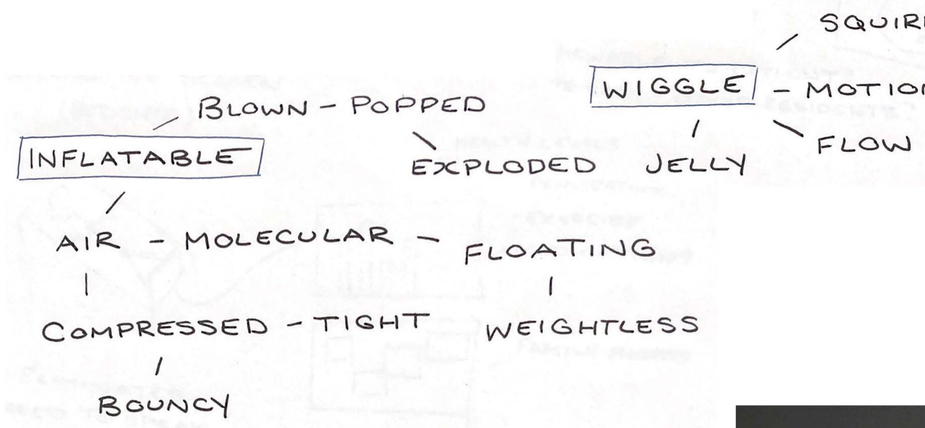
SCAMPR DESIGN METHODOLOGY

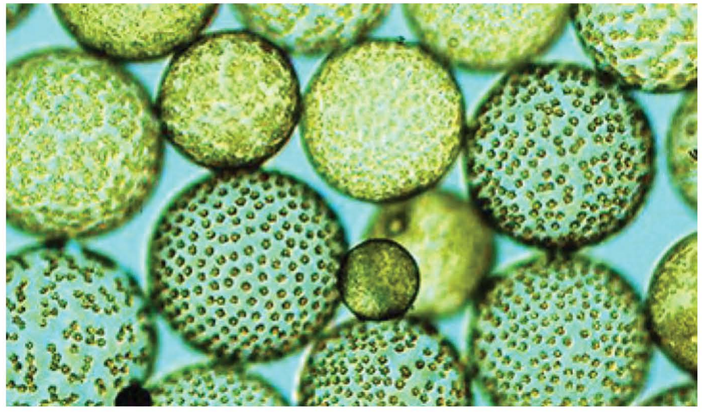


SCAMPR WAS HELPFUL IN ORGANIZING HOW WE CAN EXPLORE COMPLETELY NEW POSSIBILITIES IN SPACE - FROM MODIFYING EXISTING SOLUTIONS, LIKE THE UMBILICAL CORD USED FOR NUTRIENT TRANSFER IN THE WOMB, AND HOW WE CAN COMBINE THIS PROCESS TO ALSO FASCILIATE THE MOTHER AND CHILD BONDING EXPERIENCE

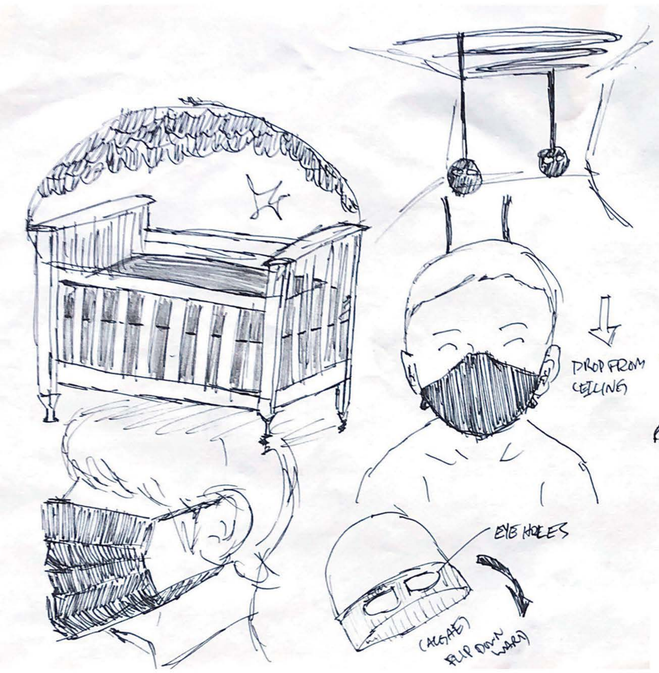
MOOD BOARD

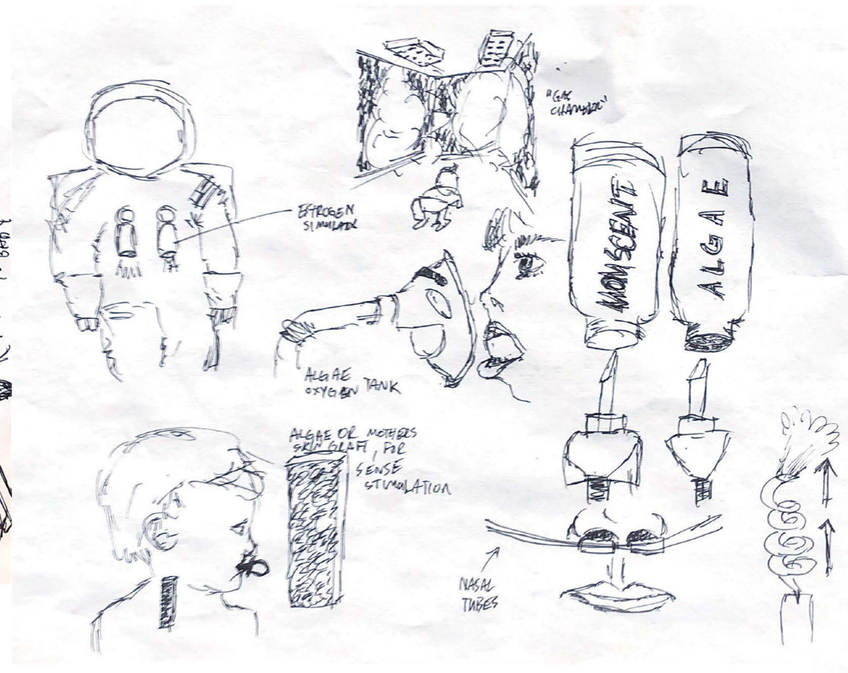

Zero G

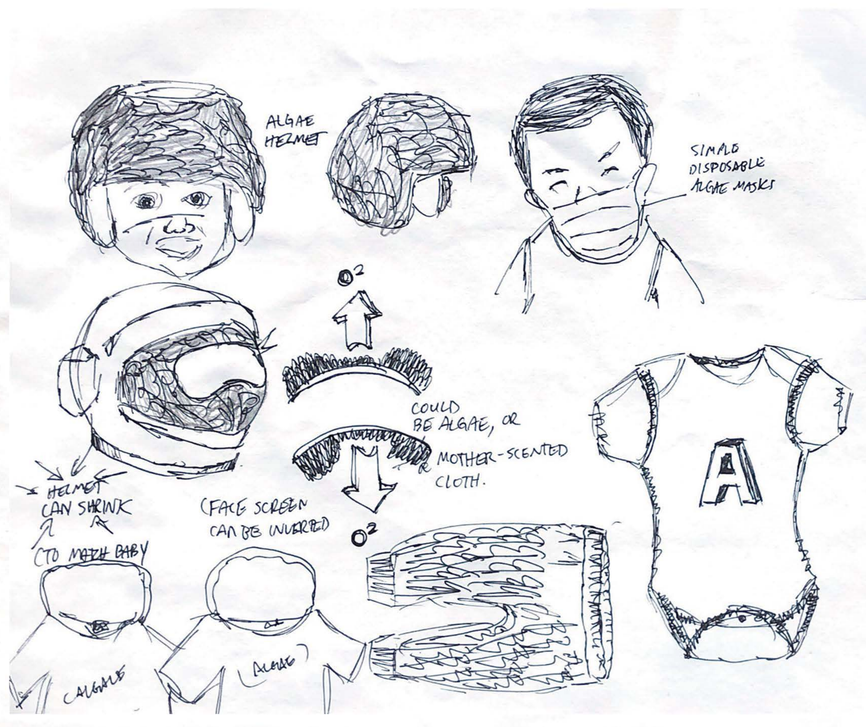

SQUIRM
WIGGLE
- MOTION
FLOW
BLOWN - POPPED
INFLATABLE
EXPLODED
JELLY
AIR - MOLECULAR - FLOATING
COMPRESSED - TIGHT
WEIGHTLESS
BOUNCY



CONCEPT SKETCHING



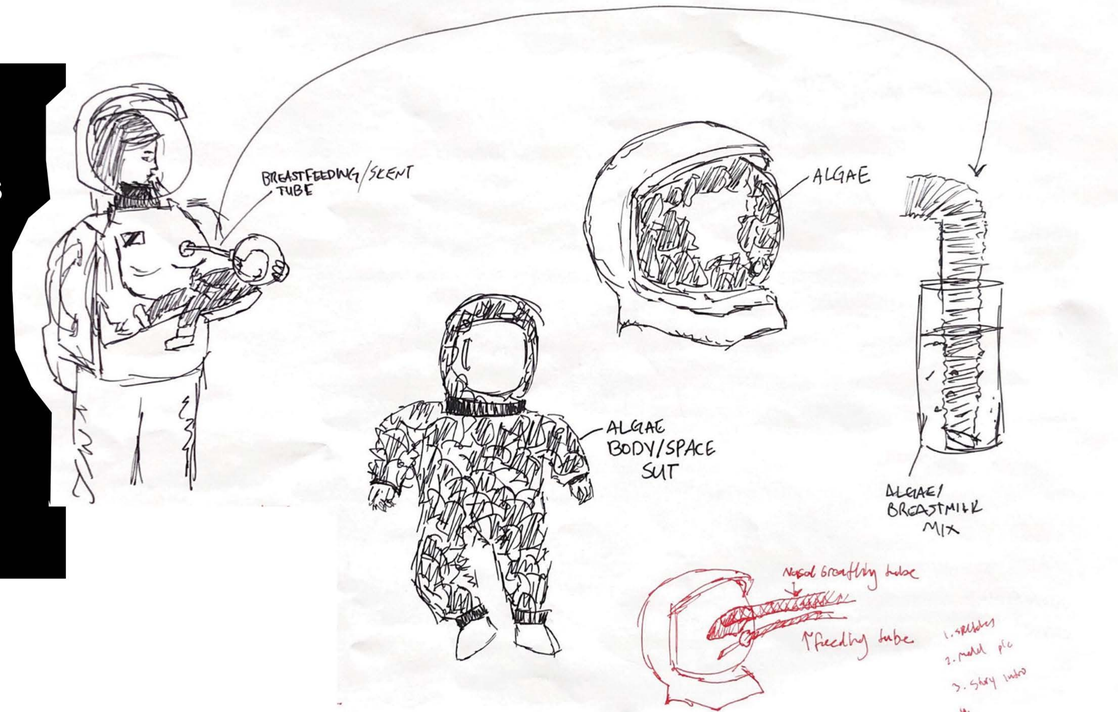




OUR GOAL WAS TO TAKE OUT SOME OF THE INTIMIDATION FACTORS AROUND SPACE, SO PEOPLE CAN MORE EFFICIENTLY ADAPT TO THE ENVIORNMENT. THIS IS WHY WE DECIDED TO PURSUE CONCEPTS THAT BEST MIMICKED NATURE:

ALGAE BODY SUIT: REPRESENTS A COCOON WHERE INSIDE A HUMAN IS GROWING AND THRIVING WITH THE HELP OF THE ALGAE BASED OXYGEN.

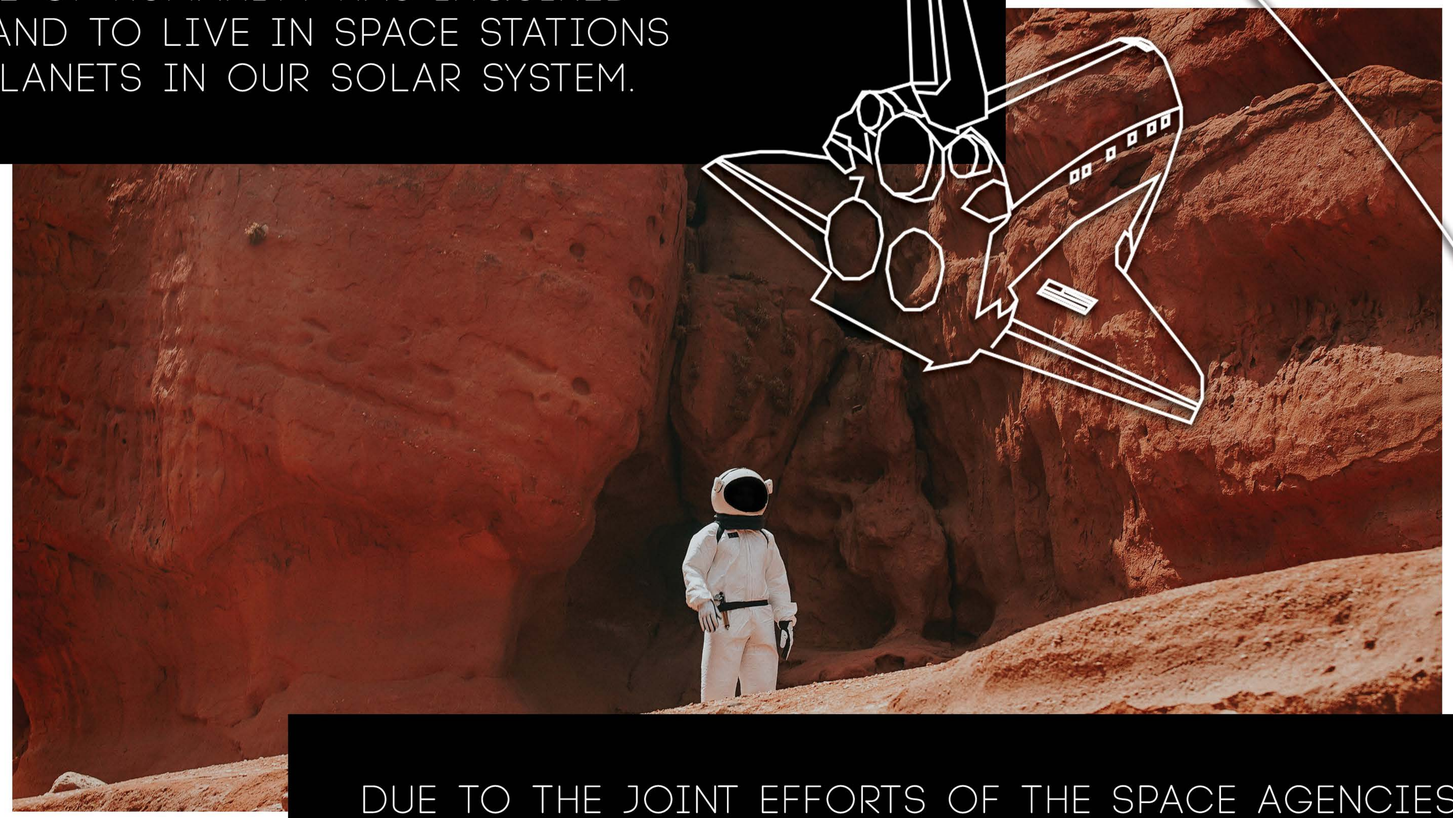
FEEDING TUBE: REPRESENTING THE UMBILICAL CORD THAT EFFECTIVELY DELIVERS NUTRIENTS IN A DARK, CONFINED, OFTEN UPSIDE DOWN ENABLING SPACE KNOWN AS THE WOMB.




2030: A SPACE BABY

SINCE THE TERRAFORMING OF MARS AND VENUS
TO HABITABLE PLANETS

MORE AND MORE OF HUMANITY HAS INQUIRED
THE UNKNOWN AND TO LIVE IN SPACE STATIONS
AND VARIOUS PLANETS IN OUR SOLAR SYSTEM.



DUE TO THE JOINT EFFORTS OF THE SPACE AGENCIES OF THE WORLD,

HUMANS HAVE CREATED THE MEANS FOR INFANTS TO BE ABLE TO
SURVIVE OUTSIDE OF THE PLANET EARTH

THIS STORY IS ABOUT THE FIRST BABY AND MOTHER IN SPACE, SWEDISH ASTRONAUT INGEN AND HER SON, POTATIS.

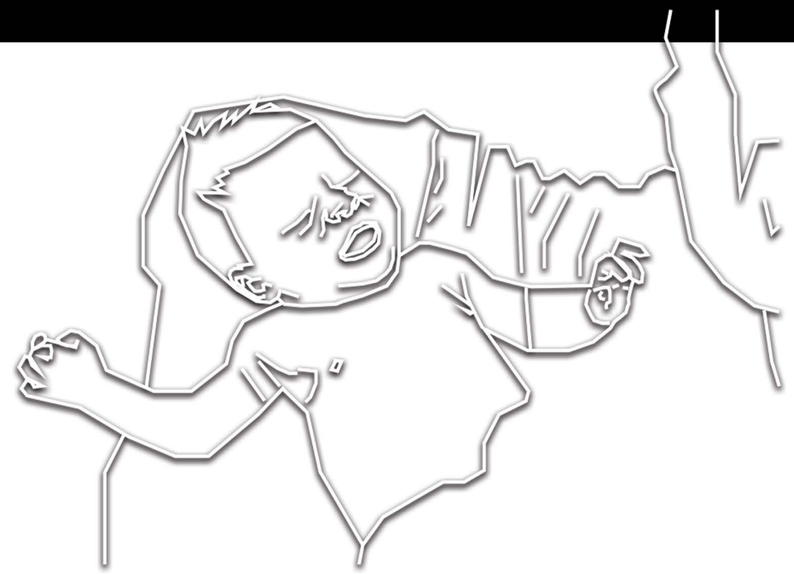
AFTER SUCCESSFUL EXPERIMENTS AND TESTS ON PLANET EARTH, THE EUROPEAN SPACE AGENCY INSTITUTED A PROGRAM TO CREATE HABITABLE ENVIRONMENTS FOR INFANTS IN OUTER SPACE.

SWEDISH ASTRONAUT INGEN KÖTTBULLE VOLUNTEERED FOR THE PROGRAM WITH HIS HUSBAND TJENA KÖTTBULLE WHO ALSO WORKED FOR THE EUROPEAN SPACE AGENCY AS AN ASTRONAUT.

NATURALLY, THE PRIMARY CONCERN FOR FEEDING INFANTS IN SPACE WAS THE NUTRITION ITSELF AND HOW TO MANAGE THE FEEDING PROCESS WITHOUT GRAVITY. IT WAS DISCOVERED THAT ALGAE PROVIDES A SUBSTANTIAL, SUSTAINABLE SOURCE OF DHA - A VITAL COMPONENT TO GENERATING A HEALTHY BABY. THE ALGAE-BASED FEEDING SYSTEM WAS A SIGNIFICANT INVENTION FOR HUMANS IN SPACE AS IT IS EASY TO PLANT AND GROW

IT WAS ALSO RECOGNIZED THAT THE FIRST BREATHES A BABY WILL BREATHE, WOULD BE ARTIFICAL, AS OPPOSED TO EARTHS UNIQUE PLANT BASED OXYGEN.

CONSEQUENTLY AN ALGAE BODY SUIT WAS DEVELOPED FOR WEAR AS SOON AS THE BABY IS DELIVERED. THIS 'SECOND SKIN' WILL ALLOW THE SKIN TO BREATHE WHILE ALSO PROVIDING THE 'SWADDLED' FEELING THAT BABIES FEEL SAFF IN



IN ADDITION TO NUTRITION ITSELF, THE CREATORS OF THE SPACE FEEDING MODEL WERE ALSO CONCERNED ABOUT THE PHYSICAL BOND OF A MOTHER AND HER BABY WHEN TRADITIONAL BREASTFEEDING WAS NOT POSSIBLE DUE TO THE LACK OF GRAVITY..

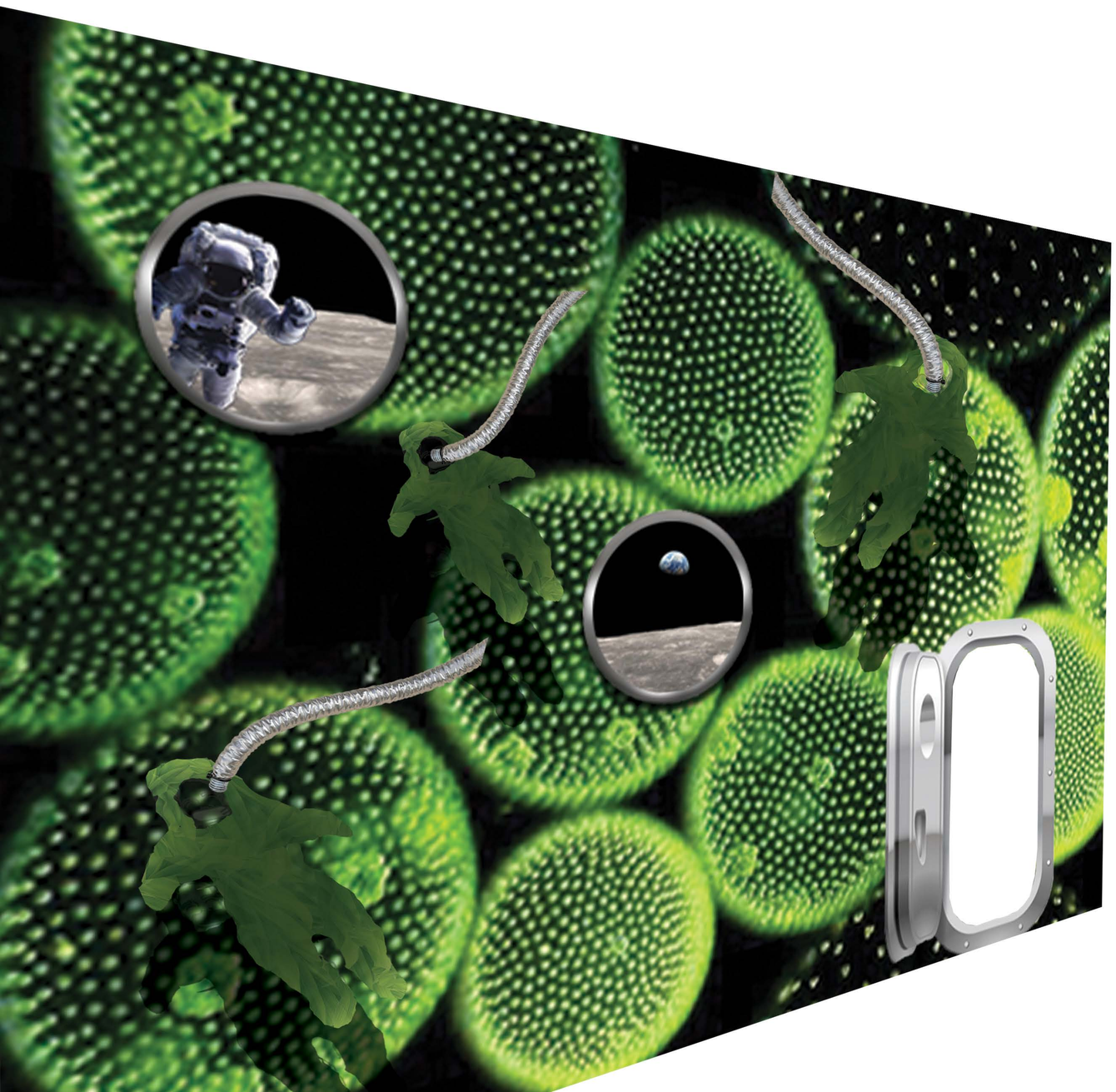
A SIMPLE, TUBE-LIKE FEEDER WOULD MAKE IT POSSIBLE FOR THE MOTHER TO FEED HER BABY EVEN IN CONDITIONS WITHOUT GRAVITY...

THIS IS PARTICULARILY USED IMMEDIATELY FOLLOWING DELIVERY OF THE BABY, AND THREE DAYS POST BIRTH, WHEN THE MOTHER PRODUCES A HIGH CONCENTRATION OF NUTRIENTS AND ANTIBODIES CALLED COLOSTRUM.

THIS WILL HELP POTATIS BUILD THE IMMUNITY HE NEEDS TO BE ABLE TO SURVIVE WHEN TRAVELLING BACK TO BACTERIA INFECTED EARTH.

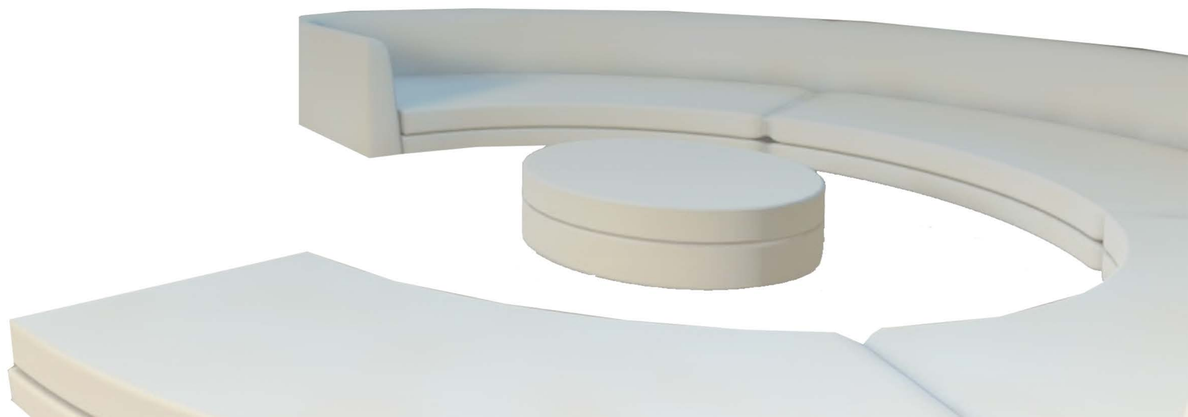
THE TUBE IS KEPT AT AN OPTIMUM DISTANCE TO ENSURE THAT POTATIS CAN MAKE EYE CONTACT WITH HIS MOTHER. THE TUBE ALSO FASCILITATES AN INITMIATE CONNECTION BY ENSURING THE BABY CAN SMELL THEIR MOTHERS SCENT FROM THE NIPPLE, SO THAT POTATIS IS AWARE THAT HE IS NEAR HIS MOTHER.

THE DESIGN OF THE TUBE AIMS TO REDUCE THE PREVALENCE OF BABIES FLOATING AWAY - SOMETHING THAT WAS MADE QUITE CLEAR UPON POTATIS DELIVERY. GIVEN THE ABUNDANCE OF COMMODITES TO EXPLORE, POTATIS COULD NOT ALWAYS BE ATTACHED TO HIS MOTHER.

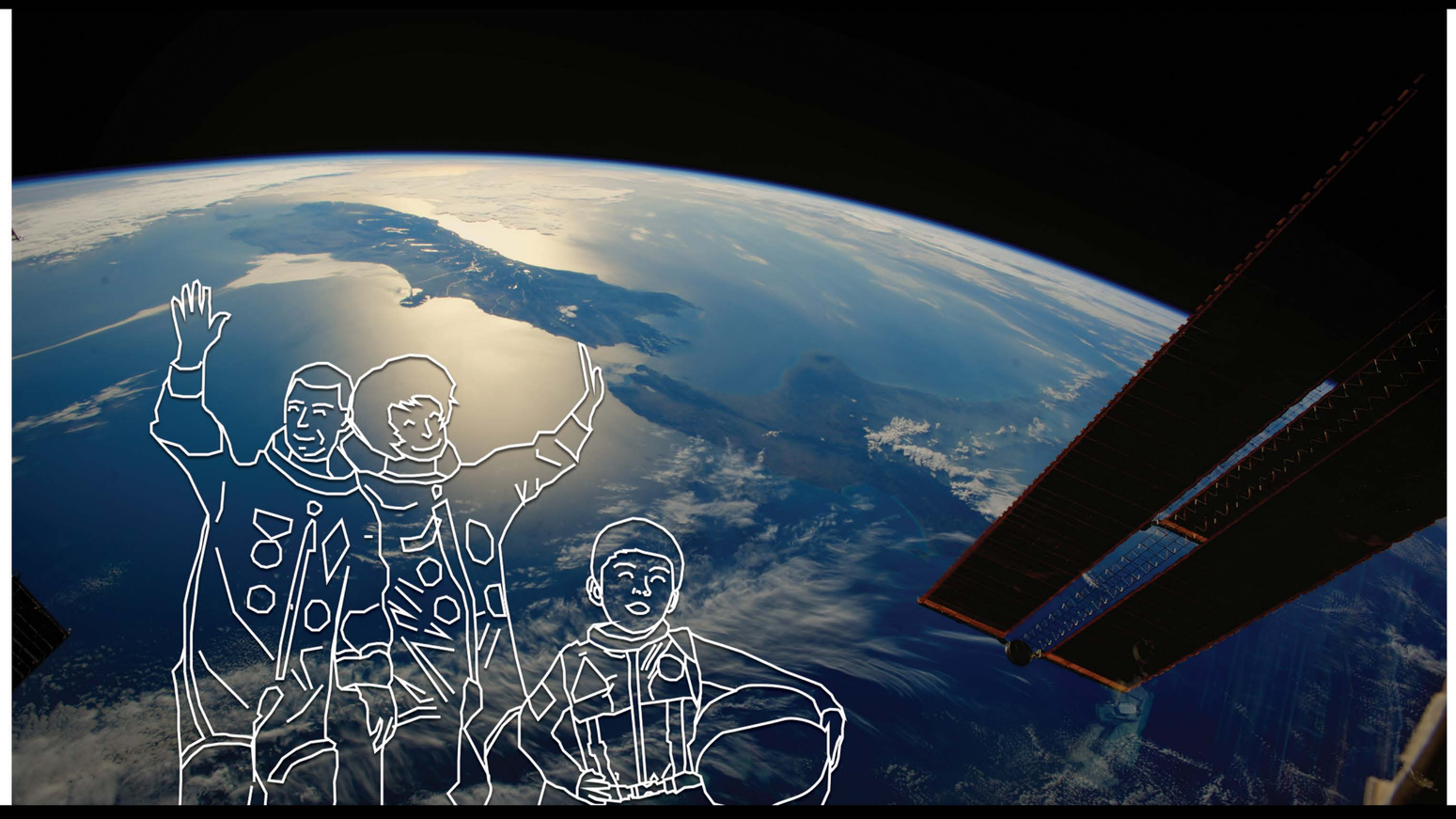


ON THAT BASIS, 'KINDERGARDEN' WAS ESTABLISHED TO PROVIDE NOT ONLY AN EFFICIENT SOURCE OF ALGAE, BUT A SPACE FOR SOCIAL INTERACTION WITH OTHER BABIES ON BOARD. AS SEEN TO THE LEFT, INGEN IS SHOWN CHECKING UP ON POTATIS AS SHE LEISURES AROUND MARS.

FOR SOME, OBSERVING THEIR CHILD INTERACT IN SUCH AN ENVIRONMENT ONLY OFFERED IN SPACE, WOULD BE FASCINATING ON ITS OWN. PARENTS CAN COMMUNE WITH OTHERS AS THEY WATCH THEIR CHILD THRIVE IN THEIR FIRST EXPERIENCES WITH SOCIAL INTERACTION.



AFTER THREE YEARS ABOVE THE INTERNATIONAL SPACE STATION, THE SWEDISH ASTRONAUT FAMILY WAS SCHEDULED TO RETURN TO PLANET EARTH.

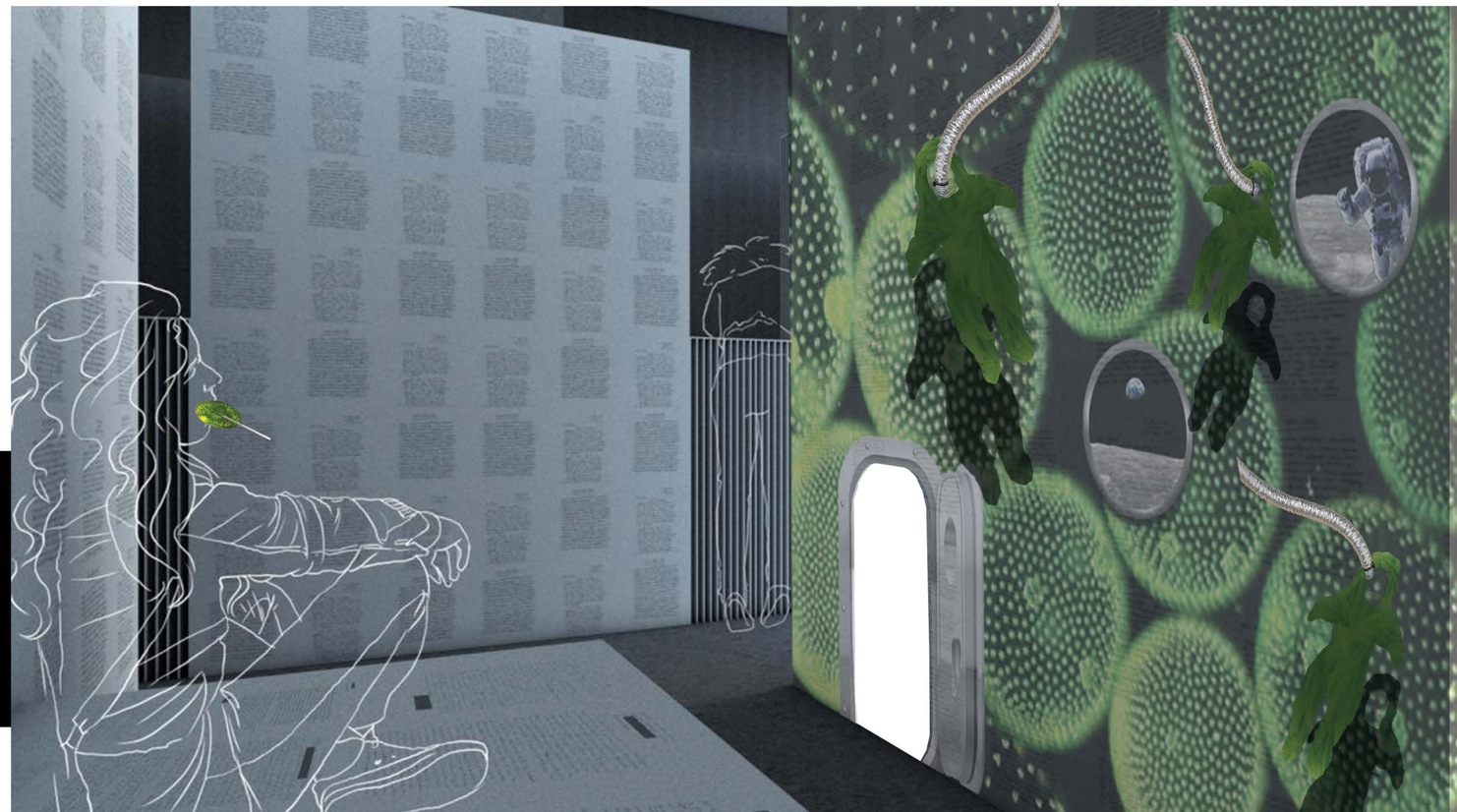


THE EXPERIMENT WAS A TREMENDOUS SUCCESS AND PAVED THE WAY FOR MANKIND'S FUTURE OUTSIDE OF EARTH.

INTERACTIVE PUBLIC INSTALLATION

THE HR MACMILLAN SPACE CENTRE WILL OFFER A MONTH LONG EXHIBIT WHERE SPACE TRAVELING ENTHUSIASTS CAN IMAGINE THE NOVEL YET HUMANE WAYS IN WHICH BABIES CAN THRIVE IN SPACE. THIS EXHIBIT AIMS TO EVOKE THE IMAGINATION OF THE POTENTIAL FOR FOOD TO FASCILITATE COMFORT AND SOCIAL INTERACTION IN SPACE, SOMETHING THAT HAS BEEN PREVIOUSLY ISOLATED.

AN ALGAE LOLLIPOP WILL BE OFFERED TO VISITORS WHO WANT TO ENGAGE IN A WORLD WHERE SUCKING ALGAE BECOMES AN INTRINSIC PART OF HUMAN BEHAVIOUR.



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