

# AUTISM AND FOOD



# WHO AM I?



- KATIE KERLEY, AN OCCUPATIONAL THERAPIST AND CLINICAL DIRECTOR OF HORIZONS THERAPY SERVICES IN DUNDALK
- MULTIPLY NEURODIVERGENT- AUTISTIC, DYSPRAXIC, ADHD
- SENSORY PROCESSING DIFFERENCES
- PASSIONATE ABOUT WORKING WITH NEURODIVERGENT PEOPLE AND HELPING THEM TO BE THE BEST AND MOST SATISFIED VERSION OF THEMSELVES.
- SPECIALISING IN SENSORY PROCESSING AND HOW IT EFFECTS MEANINGFUL OCCUPATION.
- FOODIE! (SOMETIMES)

- HUMANS AND OUR RELATIONSHIP WITH FOOD AND EATING IS VERY COMPLEX
- FOOD IS DEEPLY PERSONAL AND EMOTIONAL
- MOST OF THE NARRATIVE ABOUT FOOD IS FROM A NEUROTYPICAL PERSPECTIVE

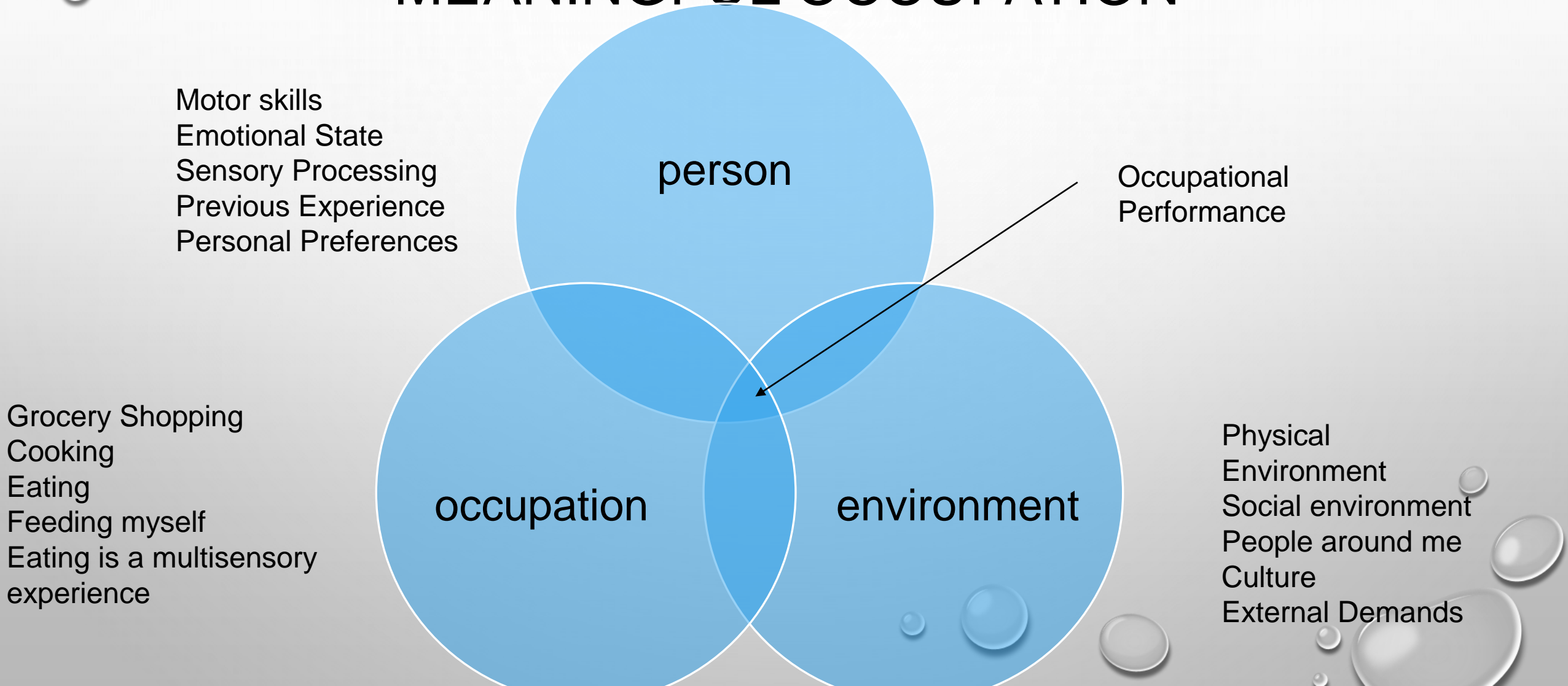


# OUR JOURNEY TODAY

- EATING AS A MEANINGFUL OCCUPATION
- DEVELOPMENT ACROSS THE LIFE SPAN
- SENSORY EXPERIENCE OF FOOD
- THE DEMANDS OF EATING
- INTEROCEPTIVE/ BIOLOGICAL ASPECTS
- EMOTIONAL , SOCIAL AND CULTURAL ASPECTS
- SELECTIVE EATING AND FOOD AVERSIONS
- WHAT MATTERS AND SHOULD YOU WORRY?
- WHAT CAN YOU DO ? SHOULD YOU?



# LOOKING AT FOOD THROUGH THE LENS OF MEANINGFUL OCCUPATION





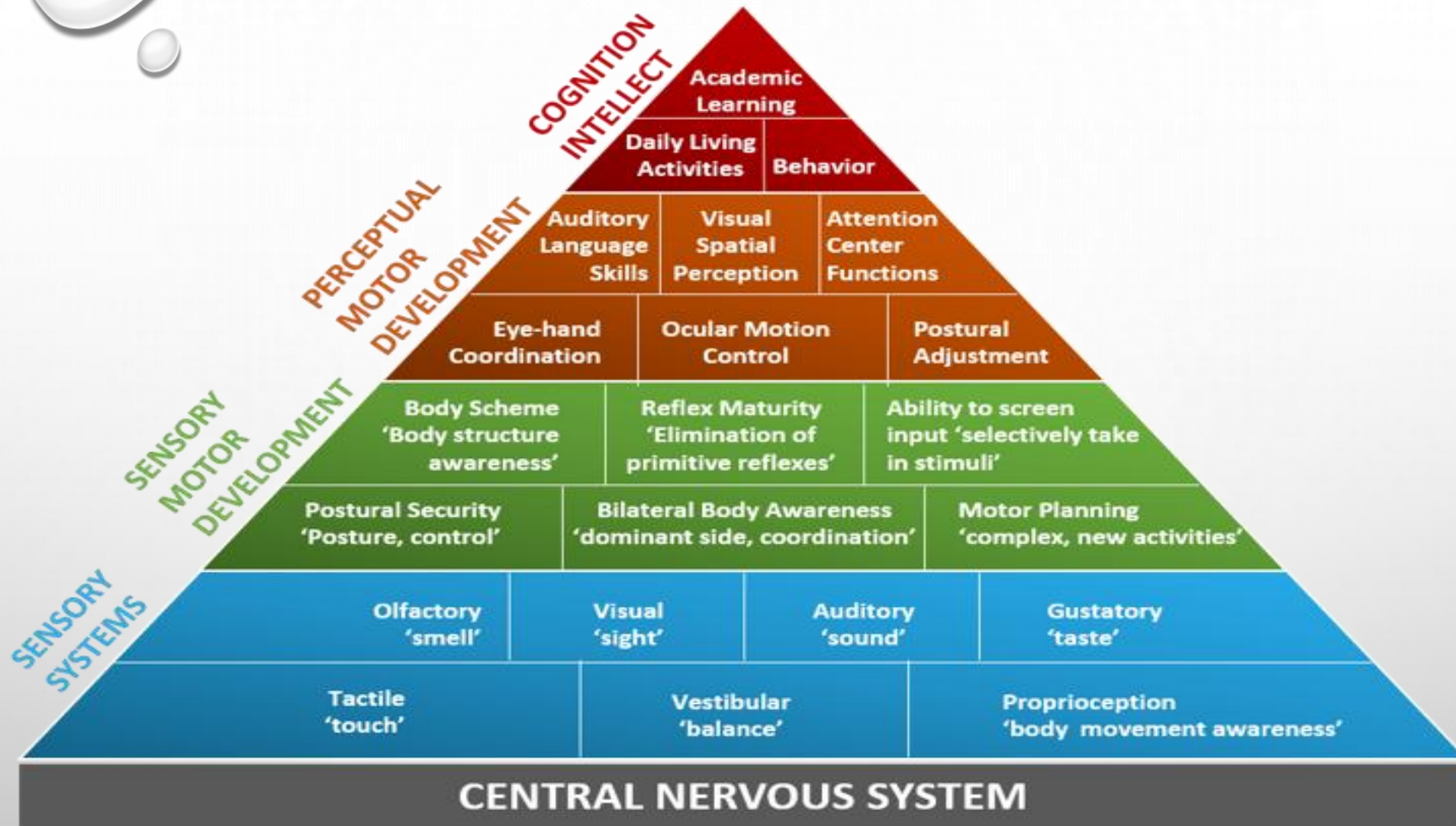
# A FEAST FOR THE SENSES!

**WE ARE SENSITIVE CREATURES**

INFORMATION FROM BOTH RESEARCH AND THE ACTUALLY AUTISTIC COMMUNITY INDICATES THAT AUTISTIC PEOPLE PROCESS SENSORY INFORMATION DIFFERENTLY TO NEUROTYPICALS

SENSORY PROCESSING IS DYNAMIC, NOT STATIC AND CAN FLUCTUATE EVEN DURING ONE SINGLE DAY

FOOD IS A MULTI-SENSORY EXPERIENCE , INVOLVING PRETTY MUCH ALL OF OUR SENSES SO EVIDENTLY THIS EXPERIENCE CAN BE DIFFERENT FOR US



Adapted from Pyramid of Learning (Williams & Shellenberger, 1-4)



# VISUAL- HOW DOES IT LOOK?







Just look at  
Instagram!



WHAT THIS MAKE YOU THINK? FEEL?



# AUDITORY – HOW SOUNDS AFFECT FOOD

- BEFORE HAND, ANTICIPATION – COOKING SOUNDS, SIZZLE, BUBBLE
- DURING EATING - CRUNCH, SQUELCH, POP
- “THE MUSIC OF MASTICATION!” – ALAN HIRSCH MD, RESEARCHER
- CACOPHONY OF CRUNCH
- CRUNCH TELLS US FOOD IS FRESH
- MORE LIKELY TO EAT CRUNCHY FOOD WHEN STRESSED

“Sound affects the experience of food. The noise draws attention to the mouth in the way something silent does not. If you’re eating pâté, your attention can drift elsewhere, to a television or to a dining companion. But a crunch will draw your attention to what you’re eating, making you concentrate on it. Noisy foods make you think about them.” – Charles Spence, PhD, gastrophysicist and professor of experimental psychology, on Sonic Chip Research



- HYPERACUSIS – V. SENSITIVE, SOUND INDUCED PAIN
- TOO STRESSED TO EAT!?
- MISOPHONIA –ANGER, RAGE, DISGUST FROM OTHER HUMAN INDUCED SOUNDS



# TACTILE – SENSE OF TOUCH

- HOW DOES IT FEEL IN MY MOUTH?
- IF I CAN'T TOUCH IT WITH MY HANDS HOW I CAN PUT IT IN MY MOUTH?
- SENSATION OF TEXTURE
- TEXTURE CHANGES AS WE CHEW



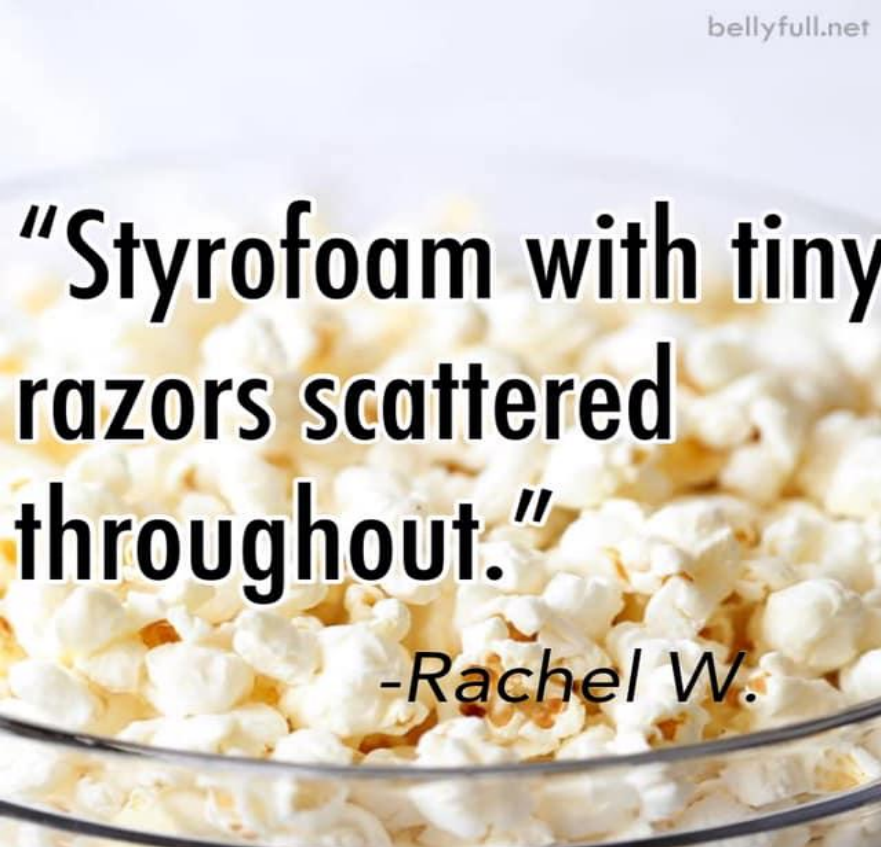
# DEVELOPMENTAL PROGRESSION OF FOOD TEXTURE

- THIN LIQUID – MILK , WATER
- HONEY THICK LIQUID
- PUREE
- MELTABLE SOLID
- NON-MELTABLE SOFT SOLID
- NON-MELTABLE CHEWY SOLID
- NON-MELTABLE HARD SOLID
- MIXED TEXTURE



MOUTHING, CHEWING, PUTTING FIST IN MOUTH HELP PUSH THE GAG REFLEX BACK

GAG REFLEX IS A SURVIVAL MECHANISM FOR BEFORE YOU ARE READY TO SWALLOW CERTAIN TEXTURES

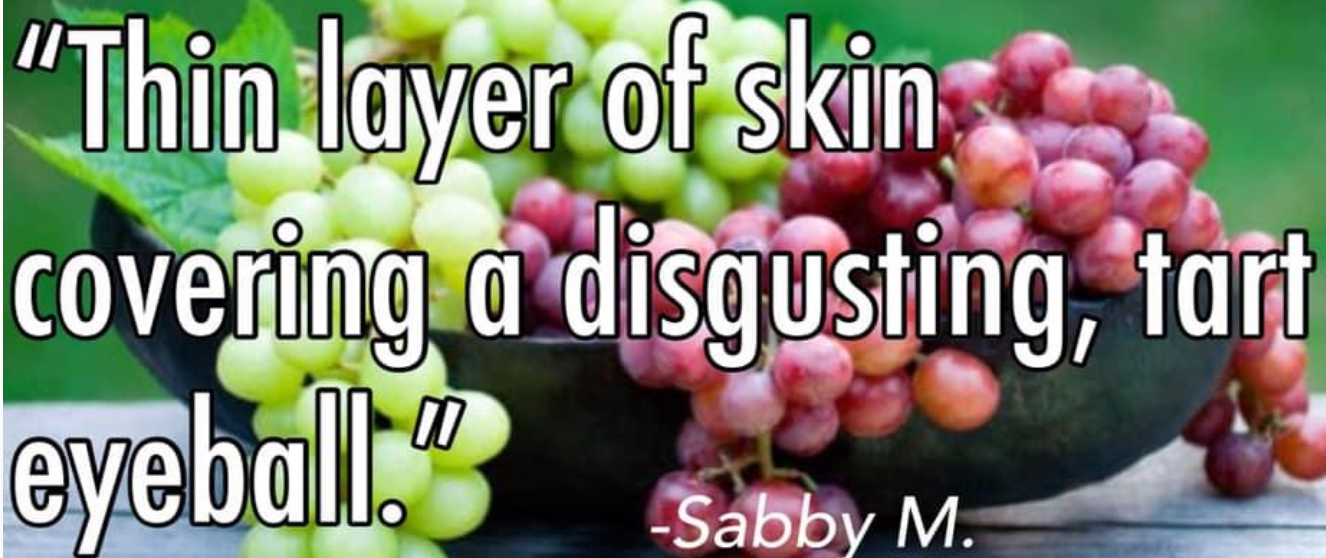


**"Styrofoam with tiny razors scattered throughout."**

*-Rachel W.*

Autistic  
People  
Review  
Foods

Via The  
Autistic  
Alien on  
Facebook



**"Thin layer of skin covering a disgusting, tart eyeball."**

*-Sabby M.*



**"Texture is almost identical to a foam mattress one might take camping."**

*-Kristy F.*



**"Feels like a party of slugs... in my mouth."**

*-Naomi T.*

**"Like human earlobes that squeak when you bite them."**

*-Sophia B.*

# WHY THEY EAT THIS, BUT NOT THAT



uniform texture  
stays the same with chewing  
always the same



different textures  
changes with chewing  
always different



## "Why does my child struggle with fruits and veggies?"

juicy



squishy



sweet



sour



The



same



every



time.





# GUSTATORY /TASTE



- FLAVOUR - SWEET, SAVOURY, SALTY, BITTER, SOUR, UMAMI
- AUTISTIC PEOPLE ARE OFTEN “SUPER TASTERS” MEANING MORE SENSITIVE TO TASTE SENSATION- THIS CAN LEAD TO STRONG FLAVOURS BEING VERY OVERWHELMING, SOMETIMES UNBEARABLE. THIS CAN LEAD TO A PREFERENCE FOR BLANDER FOODS
- OTHERS OF US ARE “SENSORY SEEKERS”, LOOKING FOR STRONG FLAVOURS

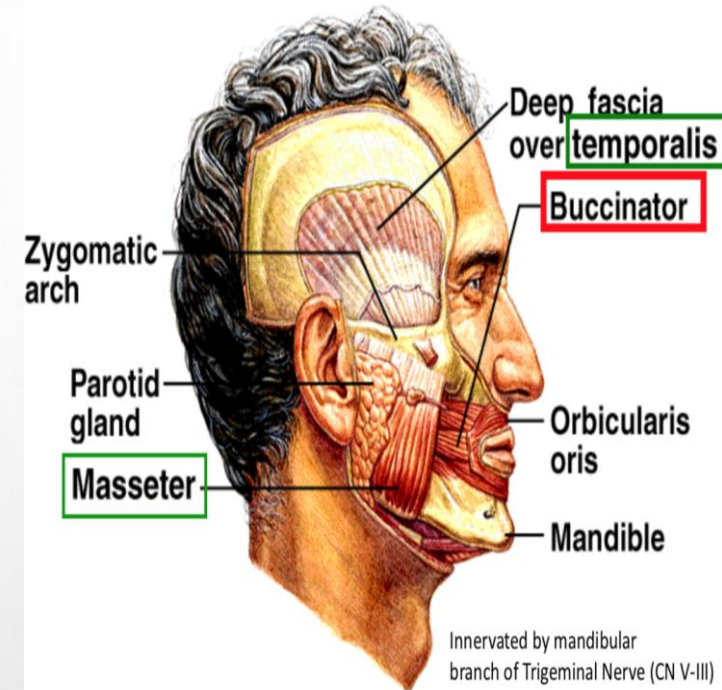
# OLFACTORY/ SMELL

- SMELL – MORE SENSITIVE THAN TASTE AND HUGELY INFLUENTIAL ON TASTE
- OLFACTORY BULB, CONNECTED TO LIMBIC SYSTEM AND RETICULAR ACTIVATING SYSTEM HENCE IMPACT ON EMOTIONS AND MEMORY
- ANOSMIA, POST COVID
- MANY OF US ND ARE VERY SENSITIVE

# PROPRIOCEPTION

- SENSATION FROM MUSCLES/ TENDONS/ JOINTS
- FEELING OF RESISTANCE – CAN FEEL GOOD OR LIKE TOO MUCH
- IN JAW, TONGUE, THROAT
- CHEWING
- AM I POSTURALLY SECURE?

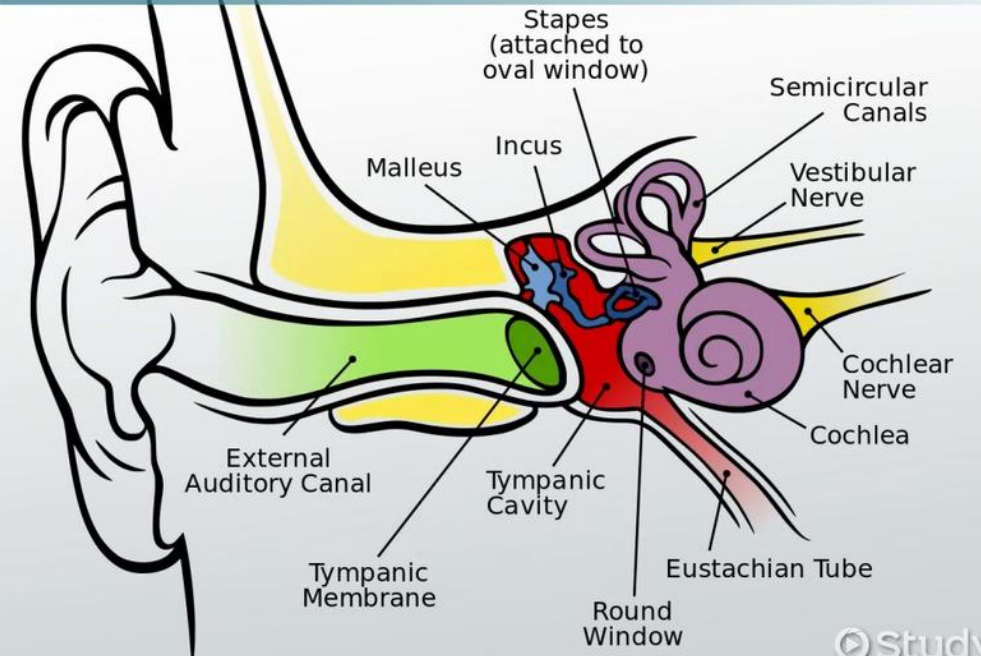
## Muscles of Mastication aka Chewing



# VESTIBULAR

- SENSE OF MOVEMENT, RELATIONSHIP WITH GRAVITY, POSITION IN SPACE
- AM I UPRIGHT AND IN AN OK POSITION?
- DO I FEEL STABLE AND SECURE?

## DEFINITION

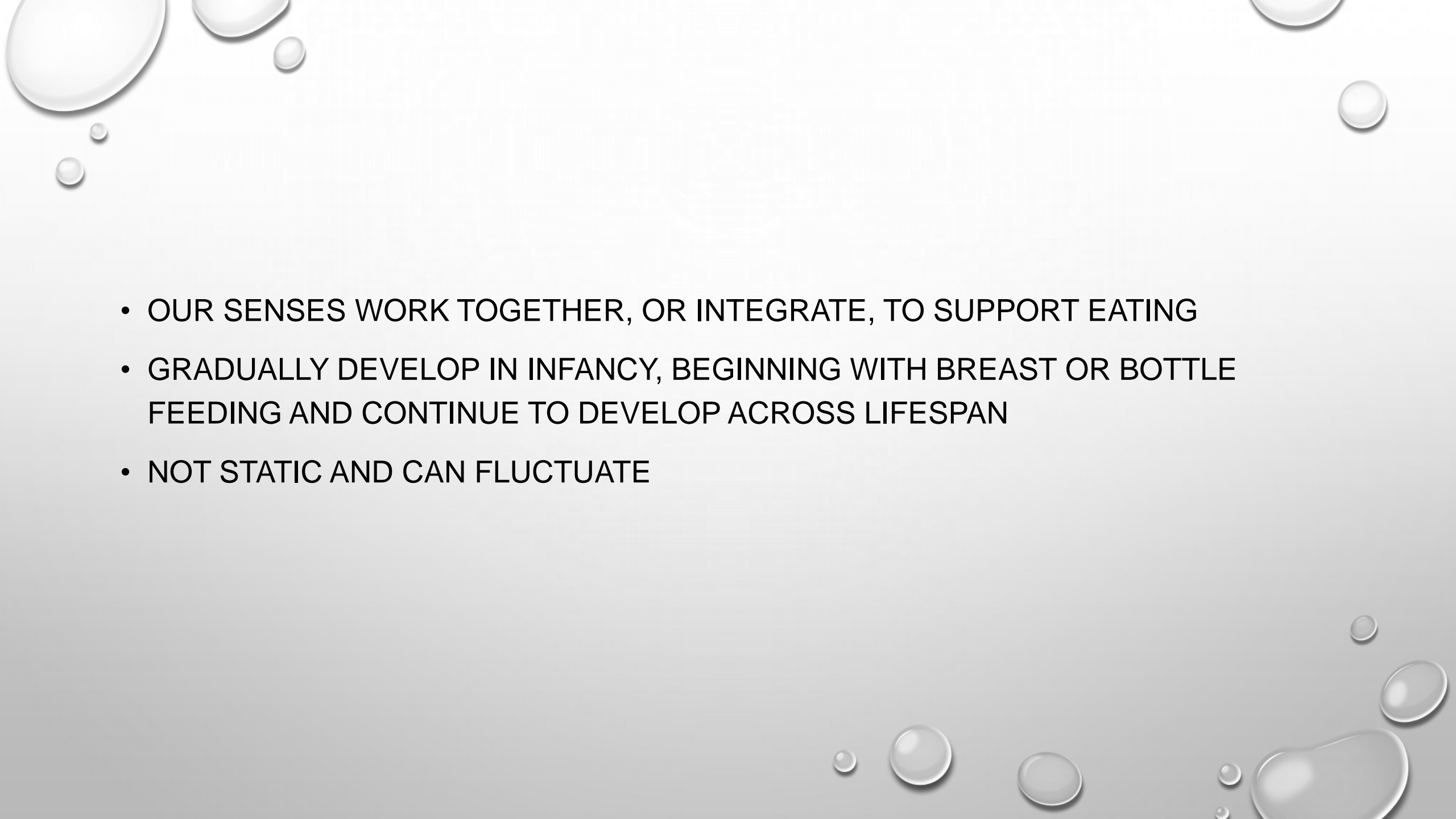


# INTEROCEPTION

- INTEROCEPTION – YOUR BRAIN’S PERCEPTION OF YOUR BODY’S STATE, TRANSMITTED FROM RECEPTORS IN ALL YOUR INTERNAL ORGANS
- VISCERAL SENSATION
- HELPS US MAINTAIN HOMEOSTASIS AND THUS ENGAGE IN SELF CARE
- RELATING TO FOOD – HUNGER, SATIETY, NAUSEA, CONSTIPATION, APPETITE
- WE OFTEN LEARN TO IGNORE THIS



**ANYONE REMEMBER THIS?**

- 
- OUR SENSES WORK TOGETHER, OR INTEGRATE, TO SUPPORT EATING
  - GRADUALLY DEVELOP IN INFANCY, BEGINNING WITH BREAST OR BOTTLE FEEDING AND CONTINUE TO DEVELOP ACROSS LIFESPAN
  - NOT STATIC AND CAN FLUCTUATE

# ANTICIPATION

- REVS UP THE DIGESTIVE SYSTEM – SALIVATION,
- ENTICING SMELLS, SOUNDS, SIGHTS ETC
- BEING IN A GOOD EMOTIONAL SPACE
- FEELING READY, FEELING HUNGRY
- ASSOCIATIONS – THE SMELL OF COFFEE? I AM READY FOR THIS WHEN I GET TO WORK!

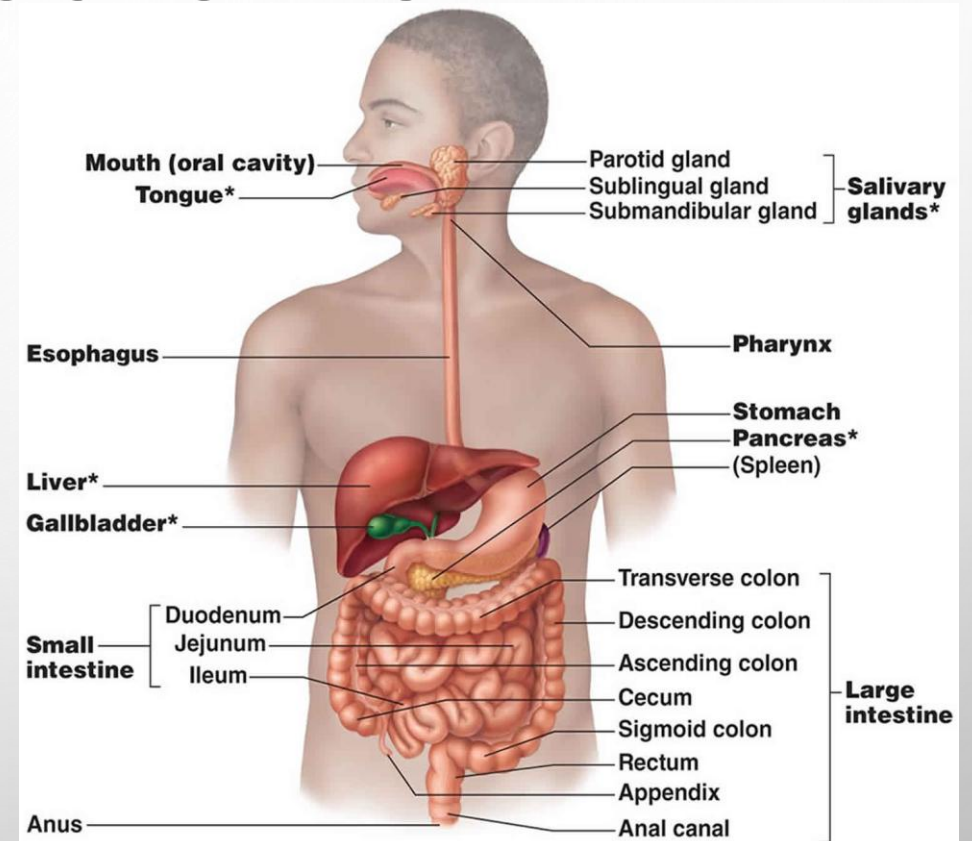






# ANATOMICAL STRUCTURES

- TEETH AND GUMS
- MUSCLES OF THE HEAD AND NECK
- FACIAL MUSCLES
- CRANIAL NERVES
- POSTURAL MUSCLES IN THE CORE AND BACK
- RESPIRATORY MUSCLES , RIB CAGE



# BIOLOGICAL INFLUENCES

- HORMONES – GHRELIN, LEPTIN, DOPAMINE
- INTEROCEPTION – HUNGER/SATIETY
- ILLNESS/NAUSEA/CONSTIPATION
- ACTION OF SMOOTH MUSCLE –  
INTESTINE ETC
- FOOD INTOLERANCE?

# DEMANDS OF EATING

- MOTOR SKILLS, COORDINATION, PRAXIS, UTENSIL USE
- SENSORY PROCESSING
- GAG REFLEX, ORAL SENSATION
- POSTURE
- MUSCLE TONE
- EMOTIONAL SECURITY
- DEMANDS, EXPECTATIONS AND AGENDA
- EXECUTIVE FUNCTION
- SOCIO-ECONOMIC FACTORS-ABUNDANCE AND SCARCITY



# MOTOR SKILLS, COORDINATION AND PRAXIS

- SOME OF US ARE DYSPRAXIC!
- COORDINATION OF BREATHING AND SWALLOWING IS SURPRISINGLY COMPLEX
- BITING, CHEWING AND SWALLOWING ARE MOTOR SKILLS
- ACTION OF GETTING FOOD TO YOUR MOUTH
- UTENSILS

Posture is  
important!



# FOOD IS EMOTIONAL

- WE CAN ASSOCIATE IT WITH EMOTIONS AND MEMORIES
- BEING STRESSED TRIGGERS RELEASE OF ADRENALINE, FIGHT/ FLIGHT/ FRIGHT/ FREEZE/ FAWN - THIS INHIBITS APPETITE
- I CANNOT EAT WHEN I AM UPSET
- STRESS EATING
- IMPACT OF STRESS, ANXIETY, GUILT, DISGUST
- EXCITEMENT, CONTENTMENT
- CERTAIN EMOTIONS MAKE ME NOT ABLE TO EAT/TASTE
- AM I COMFORTABLE AND SECURE ENOUGH TO EAT?
- MEMORIES AND ASSOCIATIONS
- FOOD =LOVE AND CARE?



# SOCIAL EXPERIENCE?



- EATING CAN BE SOCIAL
- SOCIAL ENVIRONMENT INVOLVES THE PEOPLE AROUND US
- SOME STUDIES SHOW PEOPLE EAT MORE AT MEALTIMES WITH GROUPS THAN WHEN ALONE –"SOCIAL FACILITATION"
- THINK OF RESTAURANTS, PARTIES, EVENTS, SOCIAL GATHERINGS AND KIDS AT SCHOOL
- NOT ALWAYS TRUE FOR AUTISTICS, SOME OF US PREFER TO EAT ALON





# CULTURE AND OCCASION FOOD



E.g. Occasion food and cultural food

You can be proud of and participate in your culture without enjoying its food

You do not have to eat the same as every one else

Social events don't always have to revolve around food

# THERE'S NO SUCH THINGS AS "BREAKFAST FOOD"!

- MARKETING HAS A MASSIVE INFLUENCE ON OUR DIETS
- INSIDIOUS
- ADS, LAYOUT OF SUPERMARKET, PACKAGING, PRODUCT PLACEMENT
- VERY TARGETED AT PARENTS
- FAST FOOD MANUFACTURERS KNOW WHAT THEY ARE DOING!
- HYPER PALATABLE FOOD, APPEALS TO EVOLUTIONARY INSTINCTS
- PREP FOR SCARCITY

# FOOD /S FUEL....BUT IT'S SO MUCH MORE

- EATING CAN BE A STIM
- CHASING DOPAMINE
- BINGE EATING
- EATING FOR FUN!
- EATING FOR SOCIAL REASONS



# GASTRIC DIFFICULTIES

- GI PROBLEMS SEEM TO BE MORE PREVALENT IN THE AUTISM COMMUNITY
- SOME STUDIES SUGGEST 4 TIMES MORE LIKELY TO EXPERIENCE GI DISTRESS
- ASSOCIATED WITH STRESS??
- EHLERS DANLOS AND HYERMOBILITY , GASTRO PARESIS
- ALLERGIES AND INTOLERANCES – COELIACS DISEASE, NUT ALLERGY ETC
- BE WARY OF QUACK DIETS
- SO MUCH NONSENSE.....
- NB AUTISM IS NOT CAUSED BY FOOD!!

# THE CONCEPT OF “SAMEFOOD”



- RELIABLE, PREDICTABLE FAMILIAR
- I KNOW I LIKE THIS!
- OFFERS ME COMFORT AND CONTROL WHEN MAYBE I DON'T HAVE THAT IN OTHER AREAS OF MY LIFE
- I MAY EAT THIS UNTIL I CAN'T STAND IT ANY MORE

# FOOD AVERSION

- NEOPHOBIA – VERY USUAL FOR TODDLERS!
- SENSORY AVERSIONS ARE NOT MERE DISLIKES
- REAL AND SIGNIFICANT
- DEEPLY PERSONAL
- SOMETIMES GENETIC (E.G. CORIANDER, CUCUMBER, MELON)
- MAYBE IT MADE YOU SICK BEFORE?
- IF YOU CAN'T RELATE OR UNDERSTAND, STILL BELIEVE



# ARFID

## **AVOIDANT OR RESTRICTIVE FOOD INTAKE DISORDER**

- THIS IS NOT JUST FUSSY EATING
- NOT ALWAYS CORRELATED WITH WEIGHT

### **THREE PRIMARY COMPONENTS TO ARFID:**

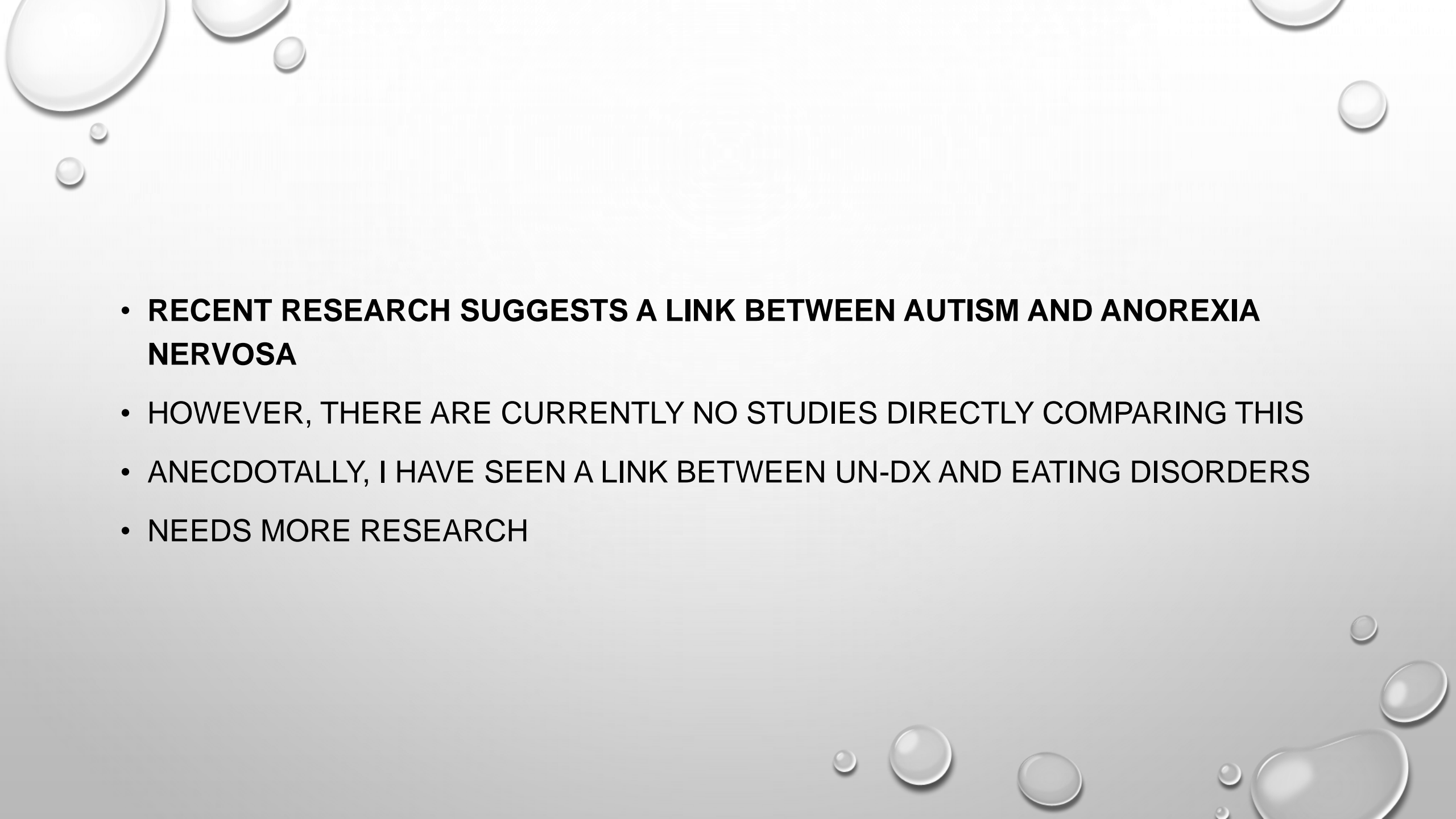
- 1.AVOIDANCE DUE TO THE SENSORY CHARACTERISTICS OF FOOD
- 2.A LACK OF INTEREST IN EATING OR FOOD
- 3.WORRIES ABOUT THE CONSEQUENCES OF EATING ( FEAR OF CHOKING, VOMITING ETC)

- CAN IMPACT ON HEALTH AND WELL-BEING
- PSYCHOSOCIAL IMPACT, QUALITY OF LIFE
- PAIN, FEAR, STRESS AND ANXIETY ETC
- WEIGHT GAIN OR LOSS

# MANAGING ARFID

- LEARNING HOW TO COPE WITH ANXIETY LINKED TO EATING OR PAST FOOD TRAUMA
- ADDRESSING PSYCHO-SOCIAL ASPECT
- ADDRESSING NUTRITIONAL IMBALANCE, MALNUTRITION, IF NEEDED
- EXPANDING THE RANGE OF FOODS CONSUMED, WITHOUT THREATS OR FORCE-FEEDING
- ACCEPTANCE-BASED INTEROCEPTIVE/EXTEROCEPTIVE EXPOSURE TREATMENT, TO UNDERSTAND BODILY SENSATIONS AND NEEDS
- BUILDING CONFIDENCE, FOR BOTH FAMILIES AND THE PERSON



- 
- **RECENT RESEARCH SUGGESTS A LINK BETWEEN AUTISM AND ANOREXIA NERVOSA**
  - HOWEVER, THERE ARE CURRENTLY NO STUDIES DIRECTLY COMPARING THIS
  - ANECDOTALLY, I HAVE SEEN A LINK BETWEEN UN-DX AND EATING DISORDERS
  - NEEDS MORE RESEARCH

# GROWTH AND DEVELOPMENT

- SUCH A WIDE VARIETY OF WHAT IS “NORMAL” AT MEALTIMES AND RELATING TO FOOD CONSUMPTION
- CHANGING NEEDS – QUANTITY, FREQUENCY ETC
- TASTE BUDS CHANGE OVER TIME
- SO DOES APPETITE – CAN TAPER OFF AS WE GET OLDER
- MEMORY AND ASSOCIATIONS IMPACT ON FOOD CHOICES OVER TIME





# PARENTAL INSTINCT

- MEALTIMES CAN BE STRESSFUL IN A CAREGIVER/CHILD SCENARIO
- ONE OF THE MOST BASIC EVOLUTIONARY DRIVES IS TO TAKE CARE OF YOUR CHILD – FEEDING THEM!
- GUILT, ANXIETY, STRESS, FRUSTRATION
- YOUR EMOTIONAL STATE CAN BE CONTAGIOUS – CO-REGULATION
- BEING FLEXIBLE ABOUT DEMANDS AND EXPECTATIONS



YOUR JOB IS TO *LET* YOUR CHILD EAT,  
NOT *GET* THEM TO EAT



# HOW TO SUPPORT A CHILD WITH EATING

- MODELLING WITHOUT EXPECTATION - DEMONSTRATING WITHOUT EXPECTING ANYTHING IN RETURN
- MODEL A RELAXED AND ENJOYABLE MEALTIME
- CHILDREN LEARN MORE THROUGH EXPERIENCING THAN BEING TOLD
- SHARE FOOD, FAMILY STYLE MEALS
- IT IS STILL OK IF YOU EAT DIFFERENT THINGS
- BE INTERACTIVE – EAT TOGETHER, LET THEM FEED YOU, JOIN IN, PARTICIPATE IN COOKING, SETTING UP ETC
- DON'T ALTER A FOOD YOUR CHILD LIKES WITHOUT THEM KNOWING. TRUST IS PRECIOUS, DON'T BREAK IT.



- TRY TO NOT SCOLD OR BRIBE AT MEAL TIMES
- FOOD IS NOT A REWARD OR A PUNISHMENT
- NOTICE DISTRESS AND BACK OFF
- HAVE A CLEAR BEGINNING AND END - DON'T MAKE MEALTIMES INDEFINITE
- “NO” IS ALLOWED
- PROVIDE ALTERNATIVES
- FORGET THE “NORM”
- REMEMBER TO MAKE YOUR CHILD FEEL GOOD ABOUT MEALTIMES, NOT DREAD THEM



# EXPLORATION THAT FEELS SAFE


- CHILD-LED OR SELF DIRECTED
- “HONOUR REFUSALS, “NO” IS ALLOWED
- EXPLORATION CAN BE ANYTHING – LOOKING, TOUCHING, LICKING, SMELLING, SPITTING, BEING NEAR
- FORGET ABOUT TABLE MANNERS
- JOIN IN
- BE CURIOUS!
- RELAX (OR TRY TO!) UNCERTAINTY DOESN'T FEEL SAFE







# HOW TO SUPPORT YOURSELF

- BE GENTLE, STRESS WILL ALWAYS MAKE IT HARDER
  - INTUITIVE EATING
  - HONOUR YOUR BODY AND WHAT IT IS TELLING YOU
  - DON'T PUSH YOURSELF TO EAT FOOD YOU HATE
  - ONLY EXPERIMENT IF YOU FEEL COMFORTABLE
  - MANAGE EXECUTIVE FUNCTION IF YOU CAN
- 

# WHEN EXECUTIVE FUNCTION IS HARD!

- WHEN YOU ARE STRESSED, TIRED, UNWELL, IN BURNOUT, OVERLOADED, IN HYPERFOCUS OR JUST STRUGGLING, EF WILL BE IMPACTED
- WHAT IS YOUR STARTING POINT? IS THE KITCHEN A MESS? DO YOU HAVE GROCERIES IN THE HOUSE??



# EXECUTIVE FUNCTION WORKAROUNDS

- CAPITALISE ON GOOD TIMES – SHOP, BATCH COOK ETC
- STOCK UP YOUR FREEZER IF YOU CAN
- BUY CONVENIENCE ITEMS E.G. PRE CHOPPED VEG ETC
- MEALS THAT DON'T REQUIRE PREP OR COOKING, MAYBE JUST ASSEMBLY
- SPECIFIC MEAL FOODS ARE NOT A THING! YOU CAN EAT WHATEVER YOU WANT WHENEVER YOU WANT
- TAKEAWAYS ARE OK
- DOES A SCHEDULE WORK OR NOT?
- ALLOW YOURSELF GRACE



# WHAT ACTUALLY MATTERS?

- HOW DO YOU FEEL ABOUT THESE THINGS?
- PERFECTION IS NEVER THE GOAL
- FED IS BEST
- TRY TO LET GO OF STRESS, ANXIETY AND GUILT
- MAKE YOUR OWN RULES – MAKE LIFE WORK FOR YOU/ YOUR FAMILY

# SHOULD YOU BE WORRIED?

- IF YOU HAVE CONCERNS, IT IS BEST TO CONSULT WITH A GP, PAED, PHN, REGISTERED DIETICIAN, OT, SLT, PSYCH ETC



# RESOURCES TO LEARN MORE

- ABBY SHARP
  - FEEDING LITTLES
  - BODYWHYS
  - FEEDING BYTES
  - DIET CULTURE REBEL
  - FEEDING PICKY EATERS
- 

