

Growth and Development

STUDENT NAME

Ryan Claggett

DEVELOPMENTAL STAGE

Infant (2 days to 1 year)

REVIEW MODULE CHAPTER

Ch. 3

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Posterior fontanel close by 2mo.
- Anterior by 12-18 mo.
- Gain 1.5 lbs/mo. during 5mo.
- Double by age 5mo
- Triple by 12 mo.
- Grow 1 in. /mo. for 6mo.
- increase by 50% by 12mo.
- Head circumference 7 by 0.75 in. /mo. for 3 mo, 0.4 in from 4-6, and 0.2 during 6-12mo
- 6-8 teeth erupt by first year
- 2mo = head up from prone
- 4mo = holds head unsupported
- 6mo = rolls from front to back
- 9mo = sits unsupported, eats pincer
- 12mo = place objects into container

Cognitive Development

- Piaget: Sensorimotor (birth to 24 mo.)
- Reflexive to simple repetitive to imitative
- Separation
- Object permanence (9-10 mo)
- Mental representation
- Crying is first comms.
- Cry for 1-1.5 hrs/day for 3 wks, then 2-4 hrs by 12 wks
- Cry by ↓ by 12 wks

Psychosocial Development

- Erikson: Trust vs. Mistrust (birth to one year)
- Delayed gratification or mistrust
- Separation anxiety by 4-8 mo, anticipate by 11-12 mo, Stranger Fear
- Mouths are pleasure-producers
- Hands and feet for play
- Smiling causes others to react

Age-Appropriate Activities

- Toys to stimulate senses and encourage development.
- Rattles, teething toys, pat-a-cake, balls, books, mirrors, bright toys, blocks

Health Promotion

- Place in a car seat at a 45° angle to prevent slumping or airway obstruction, facing the rear w/ safety belt
- Require a check-up, if discharged in <48 hrs after birth then be examined w/in 48 hrs of discharge.

Immunizations

- Birth: hep B
- 2mo: DTaP, rotavirus, inactivated polio, Hib, PCV, and hep B
- 4mo: DTaP, IPV, IPV, Hib, PCV
- 6mo: DTaP, IPV, PCV, hep B, IPV, Hib
- 6-12 mo: seasonal flu yearly

Health Screening

- Newborn screening (hearing, blood work, heart, growth measurements, sensory, developmental/behavioral, immunization, anemia, TB, oral health, anticipatory guidance)

Nutrition

- Breast milk until 6mo.
- Solids around 6mo.
- Weaning when infants show they are able to drink from a cup
- Bedtime feedings are the last to be stopped
- Sleep pattern by 3-5mo.

Injury Prevention

- Aspiration
 - hold infant for feedings
 - small objects avoided
- Drowning
 - Don't leave unattended in bath
 - close bathroom doors
- Falls
 - keep mattress in lowest position
 - place safety gates on stairs
- Suffocation
 - avoid plastic bags
 - keep pillows away from crib
- Infants placed on backs for sleep

STUDENT NAME

Ryan Claggett

DEVELOPMENTAL STAGE

Toddler (1-3 years)

REVIEW MODULE CHAPTER

Ch. 4

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Anterior fontanel closes by 18 mo.
- At 30 mo, weight 4x birth weight
- Gain 4-10 lbs/yr
- Grow 3 in/yr
- Head/chest circum. = by 1-2 yrs.
- 12 mo = builds a block tower
- 15 mo = takes a few steps indep.
- 18 mo = walks indep.
- 24 mo = runs, kicks a ball
- 30 mo = twist objects, turns book pages one at a time

Cognitive Development

- Piaget = Preoperational Stage
- object permanence ↑
- memories
- domestic mimicry
- symbolic objects and people

Psychosocial Development

- Erikson: autonomy v. shame and doubt
- independence is paramount
- egocentric, bad behavior punished
- toddlers develop gender identity by 3 yrs.

Age-Appropriate Activities

- parallel play
- filling/emptying containers, blocks, beads, tossing balls,
- finger paints, puzzles, crayons
- Temper tantrums
- Toilet training
- Consistent discipline

Health Promotion

Provide adequate nutrition in portioned amounts, encourage safe independence, protect from dangers, provide stimulation during play time.

Immunizations

- 12-15 = IPV, Hib, PCV, MMZ, varicella
- 12-23 = hep A, given in 2 doses 6 mo. apart
- 15-18 = diphtheria, tetanus, and acellular pertussis
- 17-36 = yearly flu, nasal spray at 2 yrs or older

Health Screening

Provide all recommended immunizations by age 2, pediatricians screen for autism and lead poisoning, provide adequate meals x3/day w/ snacks, address safety concerns

Nutrition

- Taste preferences
- Physiologic anorexia occurs
- 16-24 oz of milk/day
- Breastfeeding up to 2 yrs if desired
- Juice 4-6 oz/day
- 1 cup of fruit/day
- Finger foods w/ adult supervision, bite-sized pieces
- No drinking while lying down

Injury Prevention

- Aspiration
- Small objects avoided
- Keep balloons away
- Burns
- Check temp of bath water
- wear sunscreen
- Falls
- doors/windows locked
- Suffocation
- avoid plastic bags
- keep pillows away
- crib mattresses should fit tightly

Back of Toddler Remediation:

- Avoid foods that pose choking risk (grapes, hot dog)
- Toddlers tend to prefer finger foods.
- Limit juice to 4 oz of 100% fruit juice per day.

STUDENT NAME

Ryan Clayton

DEVELOPMENTAL STAGE

Preschooler (3-6 years)

REVIEW MODULE CHAPTER

Ch. 5

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Gain about 4.5-6.5 lbs/yr
- Grow 2.5-3.5 in/yr
- 3 yrs = use a fork, ride a tricycle, stands on one foot
- 4 yrs = catches large ball, serves themselves food, holds pencil between fingers/thumb
- 5 yrs = buttons some buttons, hops on one foot, ties shoes

Cognitive Development

- Piaget: preoperational phase
- more social awareness
- magical thinking
- animism
- imitation
- HME = follow sequence of daily events
- ↑ vocabulary

Psychosocial Development

- Erikson = initiative v. guilt
- guilt for misbehavior
- Kohlberg = moral development
- basic understanding
- justice and fairness
- Body Image
- comparison to peers
- Social
- no stronger anxiety
- pretend play is healthy

Age-Appropriate Activities

- Associative play:
- playing ball, puzzles, tricycles, pretend play, role playing, painting, skating, musical toys, electronic games

Health Promotion

Encourage vaccinations, adequate healthy nutrition, and protection from dangers.

Immunizations

- 4-6 yrs = Diphtheria and tetanus toxoids and pertussis, MMR, varicella, IPV
- 3-6 yrs = yearly flu

Health Screening

- Regular visits to pediatrician for screenings of developmental problems.
- Look over body for bruises/cuts, listen for coughing/sneezing
- Use smell to detect unusual odors.

Nutrition

- 1200-1400 kcal/day
- 13-19 g/day of protein
- total fat should be 30% of total caloric intake
- recommend 5 servings of fruit and veggies/day
- 2 hr or less of screen time, 0 servings of sugar beverages, and 1 hr of physical activity/day

Injury Prevention

- Bodily harm
- firearms should be kept locked away
- Drowning
- don't leave unattended in the bathtub
- Motor vehicle
- booster seat
- backseat
- supervise when playing outside

Preschooler Remediation:

- Sleep disturbances are common: use night lights.
- Prolonged separation can produce anxiety.
- Piaget: magical thinking = Inanimate objects are alive.

Growth and Development

STUDENT NAME Ryan Claff

DEVELOPMENTAL STAGE School-Age Child (6-12 yrs.)

REVIEW MODULE CHAPTER Ch 6

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Gain 4.4 - 6.6 lbs/yr
- Grow 2 in/yr
- Prepubescence - onset around age 9 in girls
- permanent teeth erupt
- immune system improves
- bones continue to ossify

Cognitive Development

- Piaget = concrete operations
- conceptual thinking
- masters concept of conversation
- learns to tell time
- classifies complex info
- able to see others' perspectives
- able to solve problems

Psychosocial Development

- Erikson = industry vs. inferiority
- meaningful contribution
- Late yrs = treat others like they want to be treated
- Self-concept
- confidence is gained
- Body Image
- curious about sexuality
- social
- peer groups, conformity

Age-Appropriate Activities

- 6-9 yrs = hopscotch, rope, collect, bicycles, organized sports.
- 9-12 yrs = build models, jigsaw puzzles, board and card games, organized competitive sports

Health Promotion

Appropriate/regular vaccines for children, regular pediatrician check-ups, adequate nutrition and protection from dangers.

Immunizations

- By 1 yr = DTaP, IPV, MMR, varicella
- yearly flu
- 11-12 yrs = Tdap, HPV, meningococcal vaccine

Health Screening

- Scoliosis
- Growth spurts
- Obesity
- BP, HR
- Hearing
- Vision
- Cholesterol
- Orthodontics
- Mental health (depression and anxiety)

Nutrition

- Toward end = eat adult portions
- Avoid food as a reward
- Emphasize physical activity
- Balanced diet
- Avoid skipping meals
- Model healthy behaviors

Injury Prevention

- Bodily harm
- Lock firearms
- Stranger safety
- Drowning
- Supervise in pool, teach to swim
- Motor vehicle
- teach seatbelt use
- backseat
- no riding in back of pickup truck
- Poisoning
- just say "no"

Growth and Development

STUDENT NAME

Ryan Claessett

DEVELOPMENTAL STAGE

Adolescent (12-20 years)

REVIEW MODULE CHAPTER

Ch. 7

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Final 20-25% of height
- Acne
- Females stop growing 2-2.5 yrs. after menarche, they grow 2-8 in and 15.5-55 lbs
- Males stop growing 18-20 yrs, they grow 4-12 in, 15.5-160 lbs
- in females = breast, pubic, axillary, menstruation
- in males = testes, pubic, penile, axillary, facial, vocal

Cognitive Development

- Piaget: formal operations
- evaluating quality of thinking
- maintain attention
- imaginative/idealistic
- think beyond current circumstances
- abstract possibilities and hypothetical scenarios

Psychosocial Development

- Erikson = identity vs. role confusion
- peers greatly influence behavior
- introspection ↑
- stability of emotions/larger
- sexual identity develops
- autonomy
- comparison
- best friends
- parent-child relations = > sense of independence

Age-Appropriate Activities

- nonviolent video games, nonviolent music, sports, caring for a pet, reading, social interaction

Health Promotion

Maintain yearly immunizations, follow recommended screenings w/ pediatrician, maintain adequate healthy nutrition, and encourage self-awareness of dangerous activities.

Immunizations

- 13-18 = catch-up doses for anything not received at 11-12 yrs.
- Meningococcal = 2nd dose @ 16 if 1st @ 11-12 yrs
- Covid, yearly flu

Health Screening

- Scoliosis
- Annual height/weight
- BP
- Hep/Het
- Universal lipid
- STIs if sexually active
- Depression, anxiety, substance use

Nutrition

- Increase quality nutrition based on needs
- No caloric restrictions, if indicated
- Avoid food rewards
- Emphasize physical activity
- Balanced diet
- Encourage healthy food selections

Injury Prevention

- Bodily harm
- psychologic screenings
- firearms locked
- discuss conflict resolution
- Drowning
- teach to swim and w/ others
- Motor vehicle
- drivers' education
- no cell phones
- Substance use
- ask about use
- discuss risks of smoking

Adolescent Remediation:

- Stressors that affect body image include surgery, loss of body function, and an unattainable body ideal.
- External influences can affect body image.
- The image established during adolescence is retained throughout life.

Growth and Development

STUDENT NAME

Ryan Clayett

DEVELOPMENTAL STAGE

Young Adult (20-35 years)

REVIEW MODULE CHAPTER Ch. 23

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Growth concludes @ 20
- CO and efficiency peak
- Muscles optimal from 25-30
- Childbearing is optimal pregnancy - r/t changes occur

Cognitive Development

- Piaget = formal operations
- optimal time for education
- critical thinking ↑
- memory peaks
- creative thought ↑
- social groups are relevant
- openness to change

Psychosocial Development

- Erikson = intimacy vs. isolation
- adult commitments / responsibilities
- personal beliefs / values
- formation of own family
- exercise / diet patterns
- true independence from parents
- ↑ depression / anxiety, esp. after birth of child

Age-Appropriate Activities

- Regular exercise, competitive sports, occupation-related activities, parenting, educating younger generation, reading

Health Promotion

Be aware of risks for substance-use disorders, periodontal disease, unplanned pregnancies, STIs, infertility, work-related injuries, violent death and injury

Immunizations

- Annual flu
- Tdap
- Catch-up for incomplete series, like hep A+B, MMR, varicella, HPV, pneumococcal and meningococcal infections
- Check on CDC's website for recommendations

Health Screening

- Follow age-related guidelines for screening
- Select a primary care provider for ongoing, routine medical care
- Provide education about contraception and regular physical activity

Nutrition

- Monitor for adequate nutrition and proper physical activity
- Monitor Ca²⁺ int females
- See myplate.gov for nutritional recommendations

Injury Prevention

- Avoid alcohol, tobacco, and illicit drugs
- Avoid driving impaired
- Wear a seat belt
- Install carbon monoxide detectors
- Secure firearms in a safe location

Growth and Development

STUDENT NAME Ryan Claggett

DEVELOPMENTAL STAGE Middle Adult (35-65 years)

REVIEW MODULE CHAPTER Ch. 24

EXPECTED GROWTH AND DEVELOPMENT

Physical Development	Cognitive Development	Psychosocial Development	Age-Appropriate Activities
<ul style="list-style-type: none"> ↓ in subcut. skin, furrow, hair, visual acuity, skeletal muscle, height, bone density, blood vessel elasticity, gastric secretions, GFR, sex hormones, glucose tolerance, metabolism 	<ul style="list-style-type: none"> • Piaget = formal operations - reaction time / speed of performance ↓ - memory is intact - crystallized intelligence remains - fluid intelligence ↓ slightly 	<ul style="list-style-type: none"> • Erikson = generativity vs. Stagnation - opportunity for creativity and productivity - contribute to next generation - religious maturity - advanced moral development - menopause depression, irritability, job performance - need to maintain and strengthen intimacy - empty nest syndrome 	<ul style="list-style-type: none"> • Helping the next generation, seeking opportunities to be creative and productive, becoming involved w/ community issues and activities, spending time on improving job performance

Health Promotion

- At risk for alterations in health: obesity, Type 2 DM, CV disease, cancer, substance use disorders, alcoholism, psychosocial stressors

Immunizations	Health Screening	Nutrition	Injury Prevention
<ul style="list-style-type: none"> • Annual Flu • Tdap • Zoster • pneumococcal • pertussis • Catch-up for incomplete series, like hep A+B, MMR, varicella, pneumococcal and meningococcal • Check recommendations via CDC 	<ul style="list-style-type: none"> • DXA for osteoporosis • Eye exams for glaucoma and other disorders q 2-3 yrs or annually, depending on provider • Mental health screening for anxiety / depression 	<ul style="list-style-type: none"> • Obtain adequate protein • ↑ consumption of whole grains and fresh fruits and veggies • Limiting fat and cholesterol • ↑ VitD and Ca²⁺ supplementation (esp. for females) 	<ul style="list-style-type: none"> • Avoid substances / alcohol • Avoid driving impaired • Wear a seatbelt • Install carbon monoxide detectors • Secure firearms in a safe location

Growth and Development

STUDENT NAME Ryan Claggett

DEVELOPMENTAL STAGE Late Adult (65 years and older)

REVIEW MODULE CHAPTER Ch. 25

EXPECTED GROWTH AND DEVELOPMENT

Physical Development

- Integumentary
 - ↓ skin turgor, thickening of nails, ↓ hair
- CV/Pulmonary
 - ↓ VC, ↓ CO, ↑ BP
- Neurologic
 - ↓ reaction time, ↓ visual acuity, ↓ spatial awareness
- GI
 - ↓ saliva, ↓ motility
- MSK = ↓ height, strength
- GU = ↓ bladder, BPH, ↓ breast tissue
- Endo = ↑ insulin resistance
- Immune = ↑ autoantibodies, ↓ T cells, ↓ stress response

Cognitive Development

- Piaget = formal operations
- maintain cognition
- ↓ neurotransmission + disease states = delirium, dementia, depression

Psychosocial Development

- Erikson = integrity vs despair
- adjust to retirement
- changes in family structure
- deal w/ multiple losses
- face death
- see self as aging person
- maintain good quality of life
- becoming more dependent
- frustration w/ body limitations

Age-Appropriate Activities

- Regular physical activity, participating in family gatherings, educating the next generation, enjoying retirement, practicing safe medication use

Health Promotion

Aware of managing chronic illness/risks; CAD, HTN, arthritis, osteoporosis, falls, depression, dementia, suicide, alcoholism, tobacco use disorder, stroke, DM, cancer, incontinence, abuse and neglect, cataracts, chronic pain, issues w/ poor dental hygiene

Immunizations

- Annual flu
- Tdap, varicella, herpes zoster, pneumococcal
- Hep A + B, Hib, meningococcal
- Follow CDC guidelines

Health Screening

- Annual screenings
- hearing
- fecal occult blood test
- DIZG (males)
- DXA (females)
- eye exam for glaucoma
- Periodic screenings
- depression
- cholesterol
- DM q 3yrs, or q 1-2yrs if ↑ blood glucose levels

Nutrition

- ↑ intake of Vit D, B12, E, folate, Ca²⁺
- ↑ fluid intake
- Take a multivitamin
- Limit Na⁺, fat, refined sugar, and alcohol
- Eat w/ others
- Wash hands and clean mouth
- Use glasses, dentures
- Promote physical activity to ↑ appetite

Injury Prevention

- Install grab bars in bathrooms and handrails on stairways
- Remove throw rugs
- Eliminate clutter
- Practice safe med use
- Use mobility aids
- Ensure adequate lighting
- Wear a seatbelt
- Wear a helmet while bike riding
- Install CO detector
- Secure firearms in a safe location

Late Adult Remediation:

- Get annual screenings for hearing.
- Get a shingles vaccination shot at 65 years old.
- Get a diabetes screening every 3 years.