


**Module 2:
Introduction to
Aging and ID:
Maintaining function and
well-being in later years**




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Section Objectives

Participants will be able to:


- Identify the normal changes of the body related to aging.
- Distinguish between normal aging and pathological aging.
- Define “intellectual disability.”
- Identify aging patterns particular to Down syndrome.



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What is Aging?


- Aging is generally considered progressive changes in the physiology of the body and mental processes.
- Aging is an active process that occurs over an individual’s lifespan, from birth until death.
- Patterns of aging are unique to each individual, marked by gains and losses.
- The following conditions impact aging:
 - Genetics
 - Lifestyle
 - Environment
 - Attitude



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How Do We Define 'Aging'?

- Gerontologists define aging or 'being older' generally as being in ones' 60s or 70s
- There are distinct categories of aging, including:
 - Chronological aging
 - Psychological aging
 - Social aging
 - Physical/biological aging



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What Happens as We Age?

Decreased Motor Skills <ul style="list-style-type: none">Decreased strength and coordinationDecreased flexibility	Impaired Senses <ul style="list-style-type: none">Vision ProblemsHearing Problems	Slower Reaction Time <ul style="list-style-type: none">Decreased processing of informationPain and stiffness in muscle and joints
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Normal Aging vs. Pathological Aging

- Normal aging leads to some typical and expected changes in our function and capacities
- Pathological aging is when certain age-related diseases or conditions become evident

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Lifelong vs. Late Life Disability

Lifelong Disability:

- Conditions present at birth or acquired in childhood or adolescence

Late Life Disability:

- Conditions resulting from injury, disease, decline or other factors later in life

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Overview: Intellectual vs. Developmental Disability?

- An **intellectual disability** impairs cognitive and personal function (self-direction and self-care) over a lifetime.
- A **development disability** (which may include an intellectual disability, but does not always imply intellectual impairment) impairs normal growth and development over a lifetime.

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What is an Intellectual Disability (ID)?

- ID is defined as below normative intellectual functioning due to cognitive impairment (organic or functional), present since birth or infancy.
- ID is not a mental illness or psychiatric impairment.
- ID varies in degree and co-impairment.
- ID is compensated by training, education, remediation, habilitation, and supports for life activities.

**Some still may refer to ID as "mental retardation"*

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What is a Developmental Disability?


- In the US, the federal Developmental Disabilities Act defines developmental disability as a lifelong condition that impairs normal development.
- Developmental Disability:
 - Manifests before age 22 (different in Florida)
 - Is attributed to a mental and/or physical impairment

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What is a Developmental Disability?


Developmental Disability:

- Requires individualized services over the lifespan
- Results in *substantial* functional limitations in 3 or more major life activities including:
 - ✓ self-care,
 - ✓ receptive and expressive language,
 - ✓ learning,
 - ✓ mobility,
 - ✓ self-direction,
 - ✓ capacity for independent living, and
 - ✓ economic self-sufficiency,

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What is Down syndrome (DS)?

- DS is a developmental disability, usually associated with intellectual disability (ID).
- DS occurs 1 in 750 live births.
- DS is caused by a genetic abnormality, Trisomy 21 (an extra chromosome). Types of Trisomy 21 include:
 - All cells of the body (95%)
 - Some of the chromosomes in all cells (2 – 3%)
 - All chromosomes in some cells of body, mosaicism, (2 – 3%)

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Why Focus on Down syndrome?

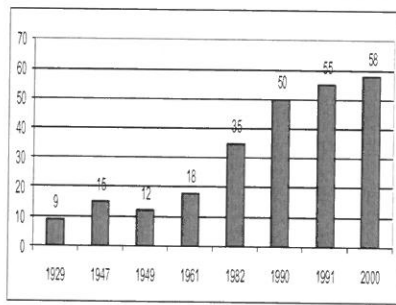
- Down syndrome is one of the most significant risk factors for Alzheimer's disease.
- If adults survive past age 40, some 25% will show clinical dementia
- If adults survive past age 60, some 60% will show clinical dementia



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Down Syndrome: Life Expectancy



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ED4

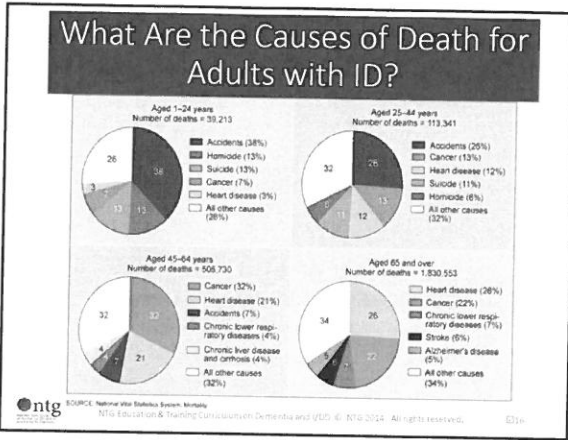
Life Expectancy: A Comparison

- Generally for adults age 40+, the average age of death (mortality) is in the low 70s
- Studies show that for adults (age 40+) with
 - ID – the average age death is about 66
 - Down Syndrome – the average age of death is about 56



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ED5



Interaction of Aging & Down Syndrome (DS)

- Life expectancy has continued to increase for people with Down syndrome.
- Aging increases risk for physical and cognitive changes for people with DS.
- Many individuals with DS age prematurely (age in their 50s).
- Adults with DS are at risk for diseases and changes about 20 years earlier than the general population.

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Risk factors – Aging & Down Syndrome

- Research indicates that the extra "gene dosage" caused by the abnormal third chromosome of Down syndrome may be a factor in the development of Alzheimer's disease.
- Early aging may also be a factor in the development of Alzheimer's disease.

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Typically Observed Behavioral Changes/Symptoms in DS

Change from previously observed behaviors or personality traits:

Apathy	Lack of pleasure	Withdrawal from activities previously enjoyed	Irritable, easily upset, volatile emotions, suspicious, paranoia	Decreased verbalizations, loss of language skills	Seizures
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Conclusions

- The nature of a person's impairments, genetics, and environment conditions and life experiences will determine and impact length of life.
- Generally, with improved health status, people with intellectual and other developmental disabilities are experiencing increase longevity.
- Healthy aging is the result of a healthy lifestyle over the lifespan.
- Aging causes bodies to change and accommodations may be necessary.

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Take-Away Points

1. Aging leads to changes in our bodies, some are normal and expected and some are linked to disease or impairment.
2. People with intellectual disabilities have expectations of surviving old age and not all are affected by dementia.
3. Adults with Down syndrome are at particular risk of Alzheimer's disease and dementia.

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