

# Bone Health 2023

These cue cards are created with the sole intention of providing **general advice** and **guidance** for people of all ages.

The information has been collated by members of the Physiotherapy Dept and the Dietetic Dept in St Michael's House. The references for the exercise and dietary information are included on each information sheet.

If you have any queries about any aspect of the information shared and its relevance to you, please consult a health care professional.

If you are returning to exercise after a break, then start with short sessions (10 to 15 minutes). Add five minutes to each session, increasing every two to four weeks.

Gradually build up to being active at least 30 minutes a day for most days of the week.

**If you have any concerns, please contact a healthcare professional for advice first.**



'Healthy  
Bones  
are  
Happy  
Bones'



## Bone Development

Bones growing in size.

## Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt (it is important to have **3 portions of calcium a day**) and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium:** 800 mgs daily

Ref: IOS, 2023

**Vitamin D:** 400 iu daily (10 mcg)

Ref: FSAI, 2020

## Exercise

Moderate to vigorous intensity activity for at least **60 minutes every day** to include muscle-strengthening, flexibility & bone-strengthening exercise 3 times a week  
**Examples of appropriate exercise include:** crawling, climbing, tumbling, rolling, running, playground equipment, gymnastics & dancing.

Ref: HSE National Physical Activity Guidelines for Ireland



  
**Bone Health**

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1-3yrs

## Bone Development

Bones growing in size.

### Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt (it is important to have **3 portions of calcium a day**) and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

### Recommended Daily Allowance

**Calcium:** 800mgs daily

Ref: [IOS, 2023](#)

**Vitamin D:** 400 iu daily (10 mcg)

Ref: [FSAI, 2023](#)

### Exercise

Moderate to vigorous intensity activity for at least **60 minutes every day** to include muscle-strengthening, flexibility & bone-strengthening exercise 3 times a week

**Examples of appropriate exercise include** running, climbing, gymnastics, team sports, racquet sports, dancing, hiking, ice skating, jump-rope

Ref: [HSE National Physical Activity Guidelines for Ireland](#)



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4-10yrs

## Bone Development

Bones growing in size and density.

### Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt (it is important to have **5 portions** of **calcium a day**) and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

### Recommended Daily Allowance

**Calcium:** 1200 mgs daily

Ref: IOS 2023

**Vitamin D:** 600 iu daily (15 mcg)

Ref: FSAI, 2023

### Exercise

Moderate to vigorous intensity activity for at least **60 minutes every day** to include muscle-strengthening, flexibility & bone-strengthening exercise 3 times a week

**Examples:** running, climbing, gymnastics, team sports, racquet sports, dancing, hiking, ice skating, jump-rope

Ref: HSE National Physical Activity Guidelines for Ireland



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## Bone Development

Bones growing in density and strength

## Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt (it is important to have **3 portions** of **calcium a day**) and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium:** 800 mgs daily

Ref: IOS, 2023

**Vitamin D:** 600 iu daily (15 mcg)

Ref: FSAI, 2023

## Exercise

Moderate to vigorous intensity activity for at least **30 minutes every day** to include muscle-strengthening, flexibility & bone-strengthening exercise 3 times a week

**Examples:** running, climbing, gymnastics, team sports, racquet sports, dancing, hiking, ice skating, jump-rope

Ref: HSE National Physical Activity Guidelines for Ireland



**Bone Health**

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## Bone Development

From 30-45 years adults are maintaining acquired peak bone mass. From 45 years of age natural bone loss is occurring. The priority now is to maintain bone to reduce rate of bone loss.

**Important - in menopausal women there is a rapid bone loss due to reduction in oestrogen.**

## Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt, it is important to have **3 portions** of calcium **a day** and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium:** 800 mgs daily

Ref: IOS, 2023

**Vitamin D:** 600 iu daily (15mcg)

Ref: INDI, 2023

## Important

Bone Health medication **should always** be taken as prescribed.



## Exercise

Moderate intensity activity **for at least 30 minutes a day 5 days a week** (or 150 mins a week).

**Examples:** brisk walking, running, team sports, racquet sports, dancing, hiking, indoor/outdoor gym equipment, gardening, Pilates, own body-weight workout, resistance bands, tai chi, martial arts, low impact aerobics  
Ref: HSE National Physical Activity Guidelines for Ireland

## Bone Development

From 30-45 years adults are maintaining acquired peak bone mass. From 45 years of age natural bone loss is occurring. The priority now is to maintain bone to reduce rate of bone loss.

## Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt, it is important to have **3 portions** of calcium **a day** and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium:** 800 mgs daily

Ref: IOS, 2023

**Vitamin D:** 600 iu daily (15mcg)

Ref: FSAI, 2023

## Important

Bone Health medication **should always** be taken as prescribed.



## Exercise

Moderate intensity activity for at **least 30 minutes a day** 5 days a week (or 150 mins a week)

**Examples:** brisk walking, running, team sports, racquet sports, dancing, hiking, indoor/outdoor gym equipment, gardening, Pilates, own body-weight workout, resistance bands, tai chi, martial arts, low impact aerobics.

Ref: HSE National Physical Activity Guidelines for Ireland



## Bone Development

From 45 years of age natural bone loss is occurring. The priority now is to maintain bone to reduce rate of bone loss.

## Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt, it is important to have **3 portions** of calcium **a day** and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium:** 800 mgs daily

Ref: IOS, 2023

**Vitamin D:** 600 iu daily (15mcg)

Ref: FSAI, 2023

## Important

Bone Health medication **should always** be taken as prescribed.



## Exercise

Moderate intensity activity for at **least 30 minutes a day** 5 days a week (or 150 mins a week)

**Examples:** brisk walking, running, team sports, racquet sports, dancing, hiking, indoor/outdoor gym equipment, gardening, Pilates, own body-weight workout, resistance bands, tai chi, martial arts, low impact aerobics.

Ref: HSE National Physical Activity Guidelines for Ireland





## Bone Development

Bone development occurs at a different rate in a person with an intellectual disability. This may be due to reduced movement, dietary intake, medical conditions and some medications.

## Diet

Important to have diet rich in **calcium** for example milk, cheese, yogurt, it is important to have **3 portions for adults** or **5 portions of calcium a day for teenagers** and **Vitamin D** for example eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium 1-3 yrs** 800 mgs daily, **4-10 yrs** 800 mgs daily, **11-17 yrs** 1200 mgs daily, **20-30 yrs** 800 mgs daily, **Over 30 yrs – Old Age** 800 mgs

Ref: IOS, 2023

**Vitamin D 1-10 yrs** 400 iu daily (10mcgs), **11-65 yrs** 600 iu (15mcgs), **> 65 yrs Healthy Older Adult** 600iu (15 mcgs), **> 65 yrs Housebound Older**

**Adult** 800 iu (20mcg)

Ref: FSAI, 2023

## Important

Bone Health medication **should always** be taken as prescribed.



## Exercise

**1-18 year** - Exercise for 60 minutes every day

**18+ years** - Exercise for 150 minutes per week

*Be as active as ability allows*

**Examples:** walking, running, jumping, hopping, dancing, gardening, hiking, tai chi, marital arts, racquet sports, team sports, low impact aerobics, low impact aerobics, resistance bands, weights, gardening.

Ref: HSE National Physical Activity Guidelines for Ireland



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Person with  
an intellectual  
disability

## Bone Development

Natural bone loss with age – lower bone mass.

## Diet

Important to have diet rich in **calcium** – e.g. milk cheese yogurt, **3 portions a day**

**Vitamin D** – e.g., eggs, oily fish, fortified cereals and milk and naturally from sunlight.

## Recommended Daily Allowance

**Calcium:** 800 mgs daily

Ref: IOS, 2023

**Vitamin D:**

**Healthy Older Adults** 15mcgs or 600 iu daily, **Housebound Older Adults** 20mcg or 800iu

Ref: FSAI, 2023

## Important

Bone health medication in older adults living in residential care settings with osteoporosis **should always be continued as prescribed.**

## Exercise

Moderate intensity activity for at **least 30 minutes a day 5 days a week** (or 150 mins a week). Focus on aerobic activity, muscle strengthening and balance.

**Examples:** walking, running, dancing, gardening, Pilates, own body-weight workout, resistance bands, tai chi, martial arts, low impact aerobics

Ref: HSE National Physical Activity Guidelines for Ireland



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