

# “Plum Good for You”

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## The Osteoporosis Continuum



Healthy spine



50 Menopausal



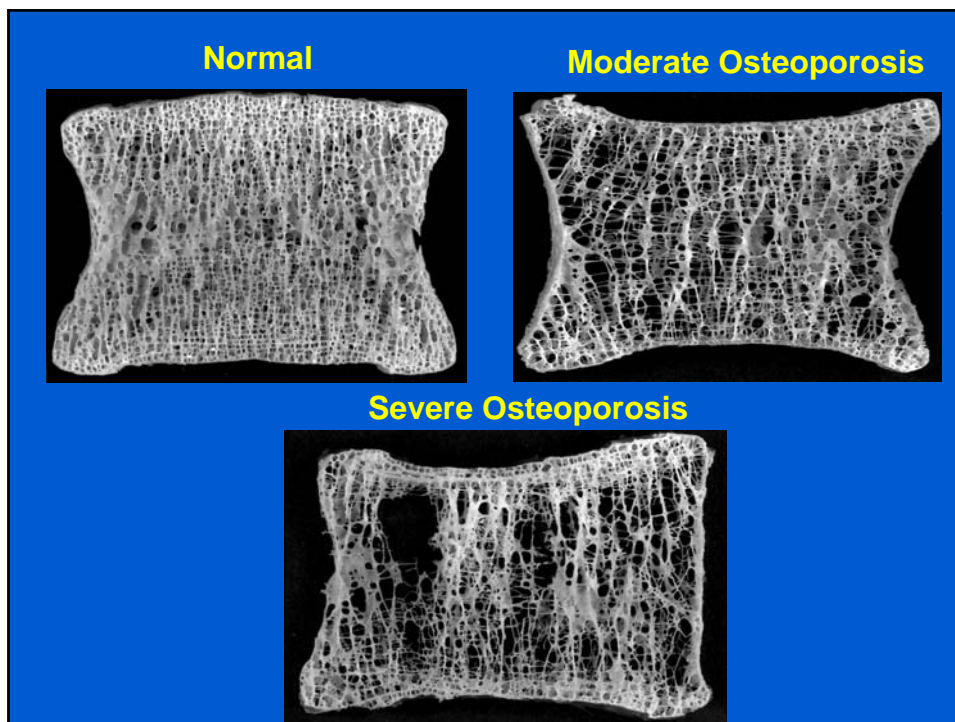
55+ Postmenopausal



75+ Kyphotic



Kyphotic spine



## Two kinds of osteoporosis:

- Post menopausal (estrogen deficiency)
- Age-related

## Prevalence and Costs

- In the US, 10 million people have osteoporosis
- Half of women and one-fourth of men will suffer an osteoporosis fracture within their lifetime
- Osteoporotic fractures account for:
  - ~\$14 billion in medical costs
  - >400,000 hospital admissions
- Projected annual costs of osteoporosis by 2040: ~\$50 billion

## Therapies for osteoporosis

- Teriparatide
- Calcium
- Vitamin D
- Bisphosphonates (Fosamax, Alendronate, Residronate)
- Estrogen
- Denosamab

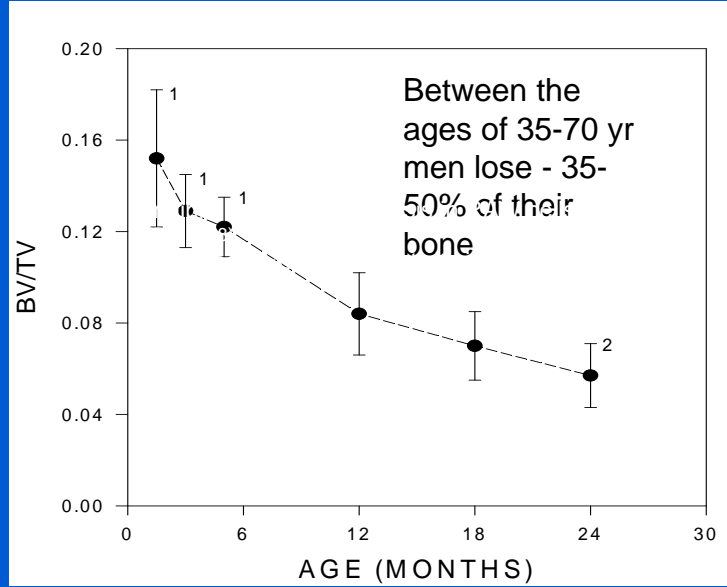
## Dietary Fruits & Vegetables are associated with:

- Increased bone in adolescent boys and girls
- prevention of bone loss with aging

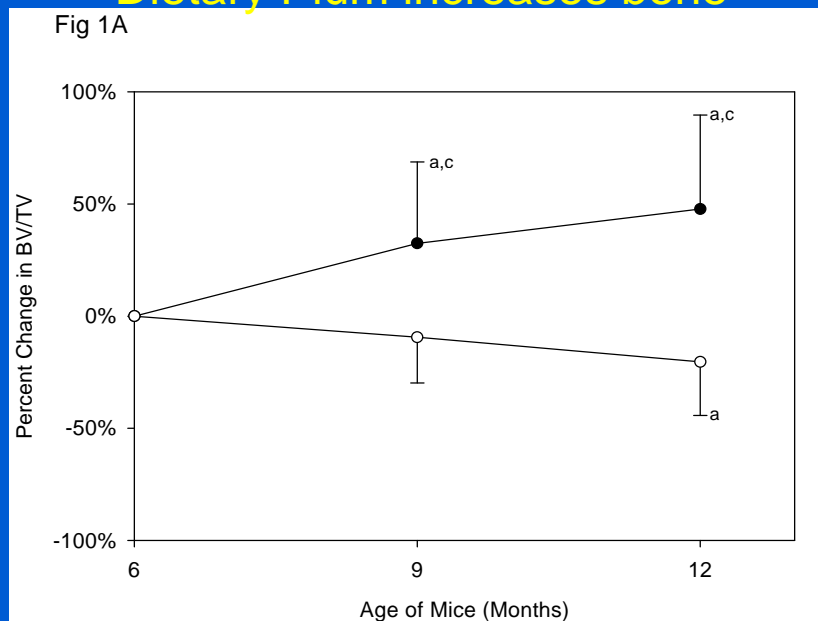
## Plum effects on bone:

- Reduces bone loss in OVX rat
- Restores bone in castrated rat

## Age-related Bone Loss in the Mouse

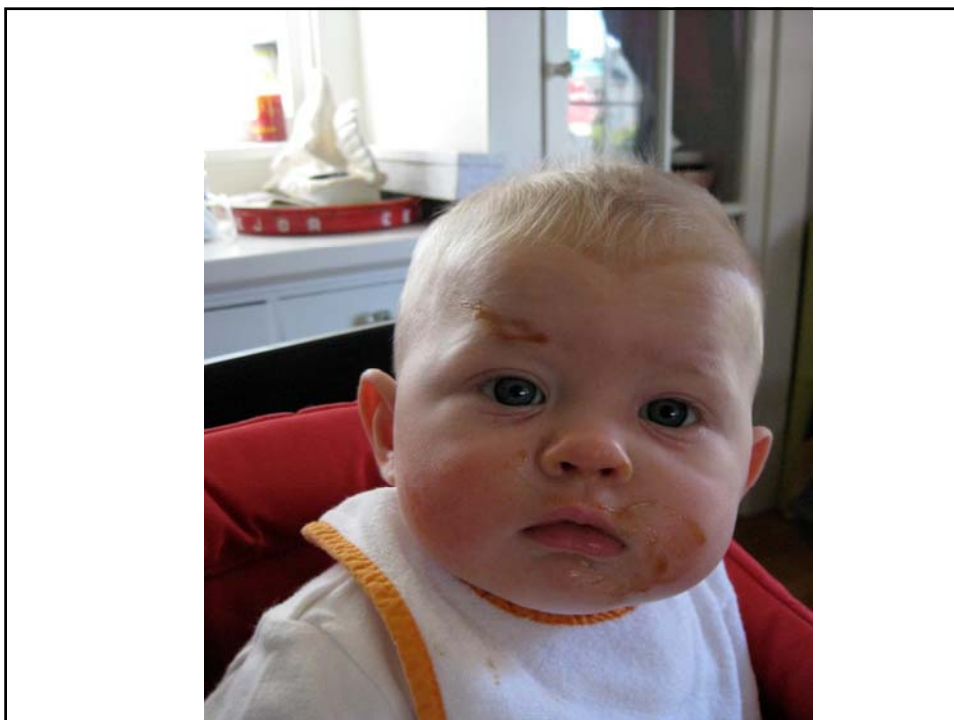


## Dietary Plum increases bone



## Planned studies

- Isolate the active compounds in plum
- Determine how they work
- Clinical study – does it work in humans?



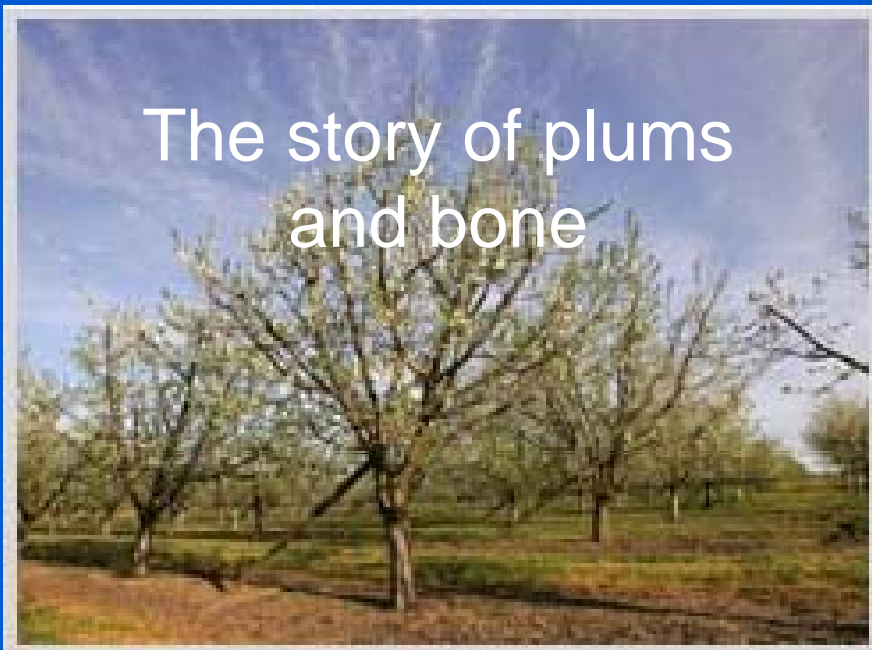
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The story of plums  
and bone



## Dietary Dried Plum Prevents Osteoporosis

