

“Prescribing” Exercise for Older Adults: ‘Art’ as much as ‘Science’

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Objectives

- Differentiate between “The Art” and “The Science”
- Be aware of some of the major non-physical obstacles to effective ‘prescription’ for older adults
- Help to develop your ‘Art’ by asking pertinent questions

What is “The Science”?

- ACSM Position Stands
 - 1998a “Quantity & Quality of Exercise ... in Healthy Adults”
 - 1998b “Exercise and Physical Activity for Older Adults...”
 - 2001 “Progression Models in Strength Training ...
- ACSM/CDC Recommendations
 - 1995 “Physical Activity and Public Health: A Recommendation from ...”

ACSM 1998a Position Stand

**“The Recommended Quantity and
Quality of Exercise for Developing and
Maintaining CardioRespiratory Fitness,
Muscular Fitness and Flexibility in
Healthy Adults”**

ACSM 1998b

Position Stand

- Exercise and Physical Activity for Older Adults
 - CRF
 - Muscular Fitness
 - Flexibility
 - Postural Stability
 - Frail/Very Old

ACSM 2001 Position Stand

Addressed maximizing strength gains

- Variety of FITT recommendations
- “Periodization”
- “Multiple set” vs “single set” recommended

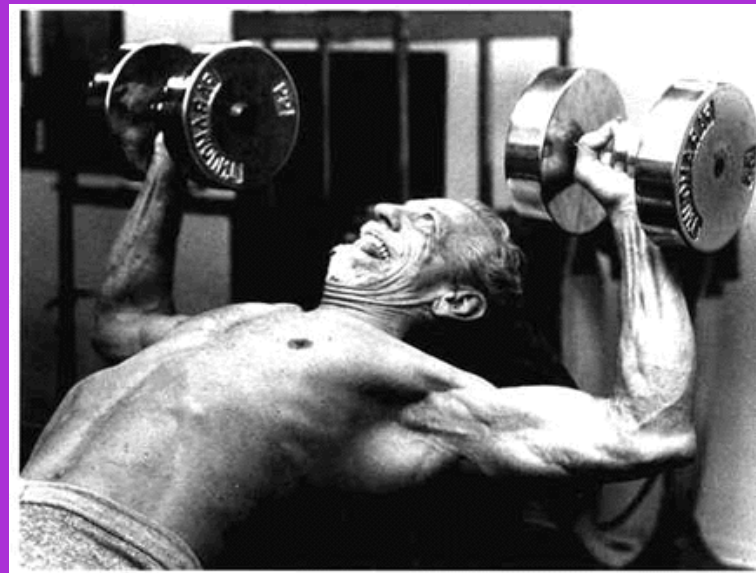
Summary comments on ACSM Position Stands/Guidelines

- Not really the basis of exercise planning or prescription
- Originally developed in the 1970's under a clinical cardiac rehabilitation model



Summary comments on ACSM Position Stands/Guidelines

- Established the science of the relationship between PA and health and performance outcomes
- Generally summarizes the FITT required for promoting fitness



ACSM/CDC 1995 Statement

“Every adult should accumulate 30 minutes or more of moderate intensity physical activity on most, preferably all days of the week”

Summary comments on 1995 ACSM/CDC Statement

- Generally outlines what is necessary to promote physical activity from a public health prospective
- Differs from prior recommendations - based predominantly on epidemiological studies and expressed in non-scientific/qualitative terms
- Moderate Intensity - Brisk walk etc.

What is “The Art”?

- I don't know much about Art but I know what I like?
- Art is “the making of things well”
Joseph Cambell (the Power of Myth)

Where “Art” thou?

In simple terms the Art is the “How to” of the Science - taking account of the wide range of FITT as well as the physical social and emotional individual differences

The Art Set?

- **Knowledge**
- **Understanding**
- **Application**
- **Experience**

The Art Set?

- **Knowledge** - we need to know what the Science is and what it is based on
- **Understanding** - we need to understand both the science and our client
- **Application** - we need to be able to apply the knowledge and understanding optimally for each client
- **Experience** - we need to build on and learn from our past and current experiences

Understanding Science

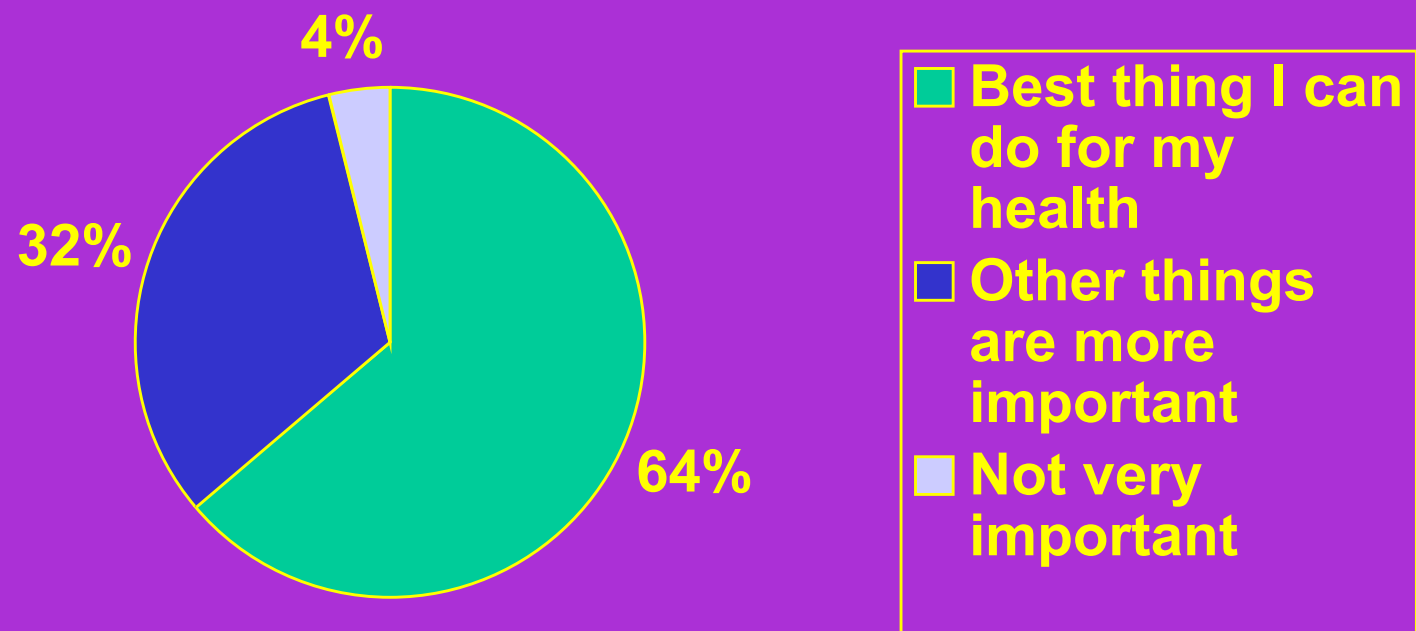
- Exercise guidelines were based on **averaged** data and usually expressed either as a single, or a range of values e.g.
 - “minimum of 10 minute bouts accumulated throughout the day”
 - “55/65% - 90% MHR”

Understanding Science

- Physical Activity guidelines were also based on **averaged** data and also usually expressed either as a single, or a range of values e.g
 - “...accumulate 30 minutes or more of moderate intensity ...”
 - “..can be performed in three bouts of 10..”

So ... what's going on out there?

Importance of Exercise for 50 plus Americans



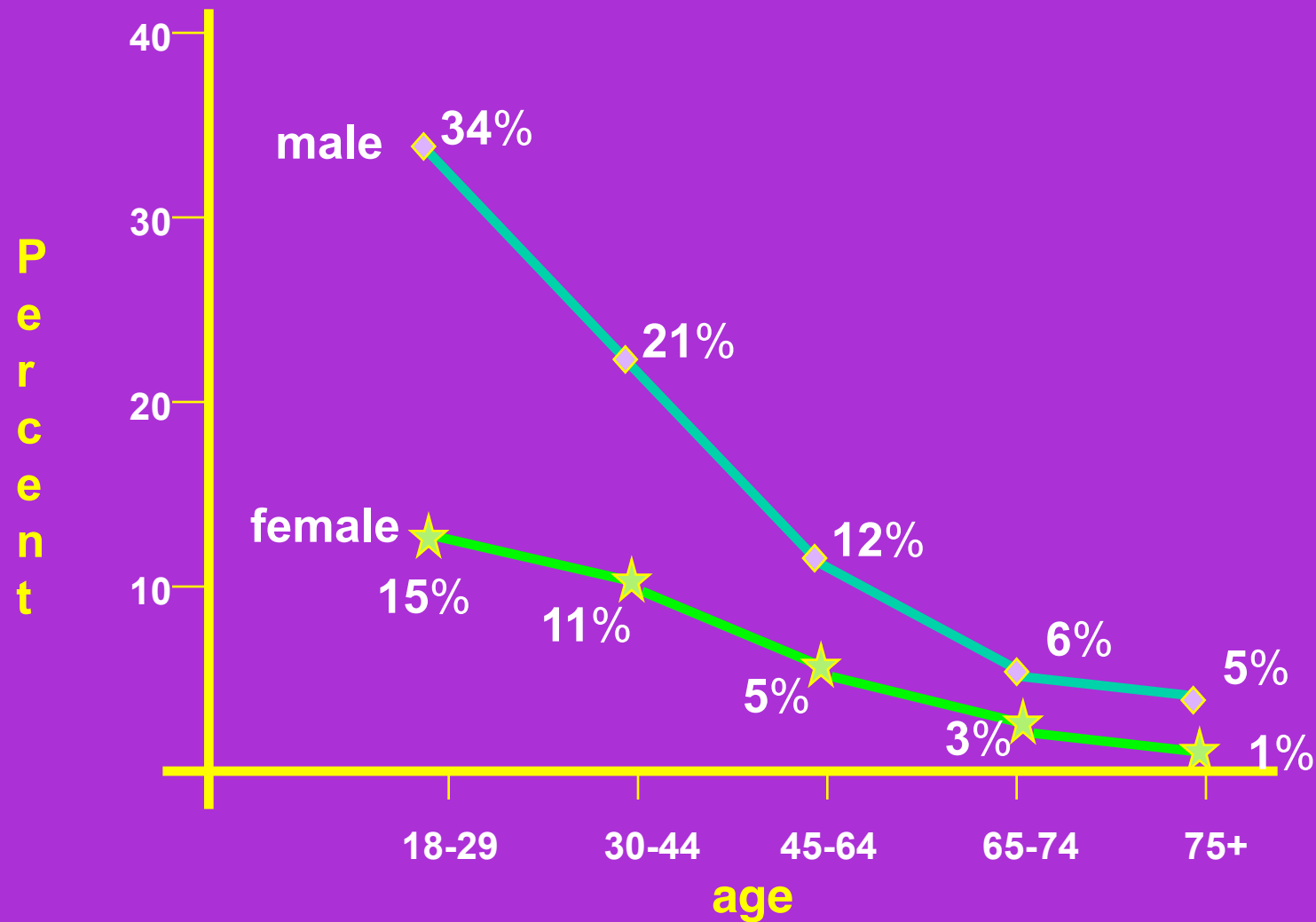
Source: AARP Survey: Attitudes and Behaviors 2002

The reality is that ...

- “Very few Americans aged 50+ achieve even the minimum amount of recommended PA”
- 60% of those 55 and older are completely inactive - even when including the “10 minute bouts” of ADL

Source: AARP Survey: Attitudes and Behaviors 2002

Strength exercise across the lifespan



Why does this happen?

- Lack of awareness and/or communication?
- ‘Conventional wisdom’ that exercise and particularly weight lifting is unsafe if you are ‘old’ ?
- We have a history of this when talking about or referring to our ‘declining years’ - even in the most public of places

Negative stereotypes, limited vision?

Can impact 'belief system' and so
contribute to a reluctance or antipathy for
engaging in any kind of exercise program
- or even perhaps for engaging with life!



There's more!

- Much of the published literature tends to focus on
 - physical and physiological outcomes
 - reducing negatives rather than improving positives
- There is an emphasis on orthopedic and cardiac safety issues, and the resultant programmatic impact on Frequency Intensity, Time and Type
- Physician's consent required for even low level PA

Art???

- The ‘Art’ of prescription includes
 - developing an awareness of issues or factors which may resonate with, and have relevance to older adults
- This may help to impact their opinions, attitudes and reactions to exercise and strength training

Art???

- The ‘Art’ of prescription includes the ability to:
 - recognize and respond to potentially negatives ‘cues’
 - present information in a way that has specific meaning and relevance for each individual

Relevant Factors??

- ‘Societal’
- ‘Generational’
- ‘Gender’

Societal issues - Ageism?

- Negative stereotypes abound
 - ‘You’ re too old’
 - ‘act your age’
 - ‘you’ re not as young as you were’
 - “...take it easy grandad”



Figure 1. Elderly people crossing the road.

Societal issues

- Less than 30 years ago even peer reviewed science was telling us either it wasn't safe - or it couldn't happen
- Doctors' consent needed for even low level exercise - heightens concern of 'suitability and safety'
 - 'internalized caution' when contemplating or even performing ST exercise.
- A "paradigm shift" from 'working' to 'working out' ?

Societal issues

- Horses sweat, men perspire but women just glow!
- “Social myth” of strength training ‘internalized’ during formative years -
 - who would want to do - or even think of doing this?
 - Back to the future?
 - Makes you “muscle bound”

Generational issues

- Attitudes to exercise and activity are different generationally
- Unchanging/slowly changing attitudes to the 'retirement years'
 - take it easy
 - watch the world go by
 - reward for a life of labour

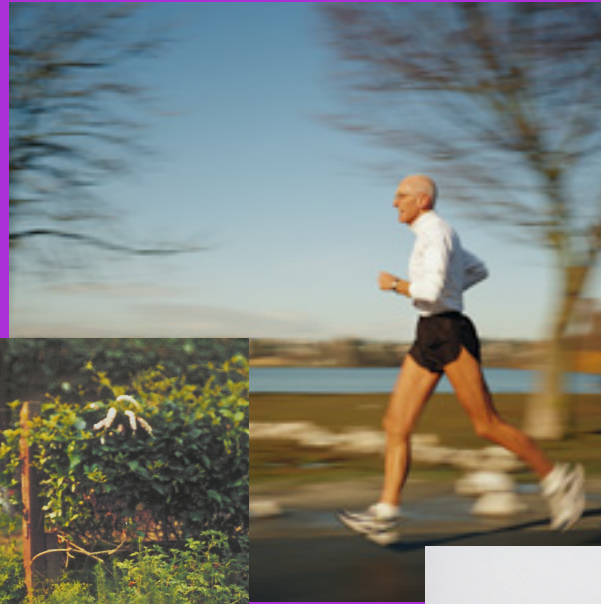
Gender issues

History and Herstory

- “Dangerous if not Deviant behavior??!!
- Not ladylike - and ‘unseemly’ for lady and gentlemen alike
- Even today there is still a gender oriented ‘vocabulary’ for and attitude to ‘working out’
 - ‘Muscular’ vs ‘Toned’
 - Shopping around for reassurance?

“The Message is the Media”

- “Successful Aging” = “Affluent Aging”?
 - both ends of the ‘Ageism continuum’



“The Message is the Media”

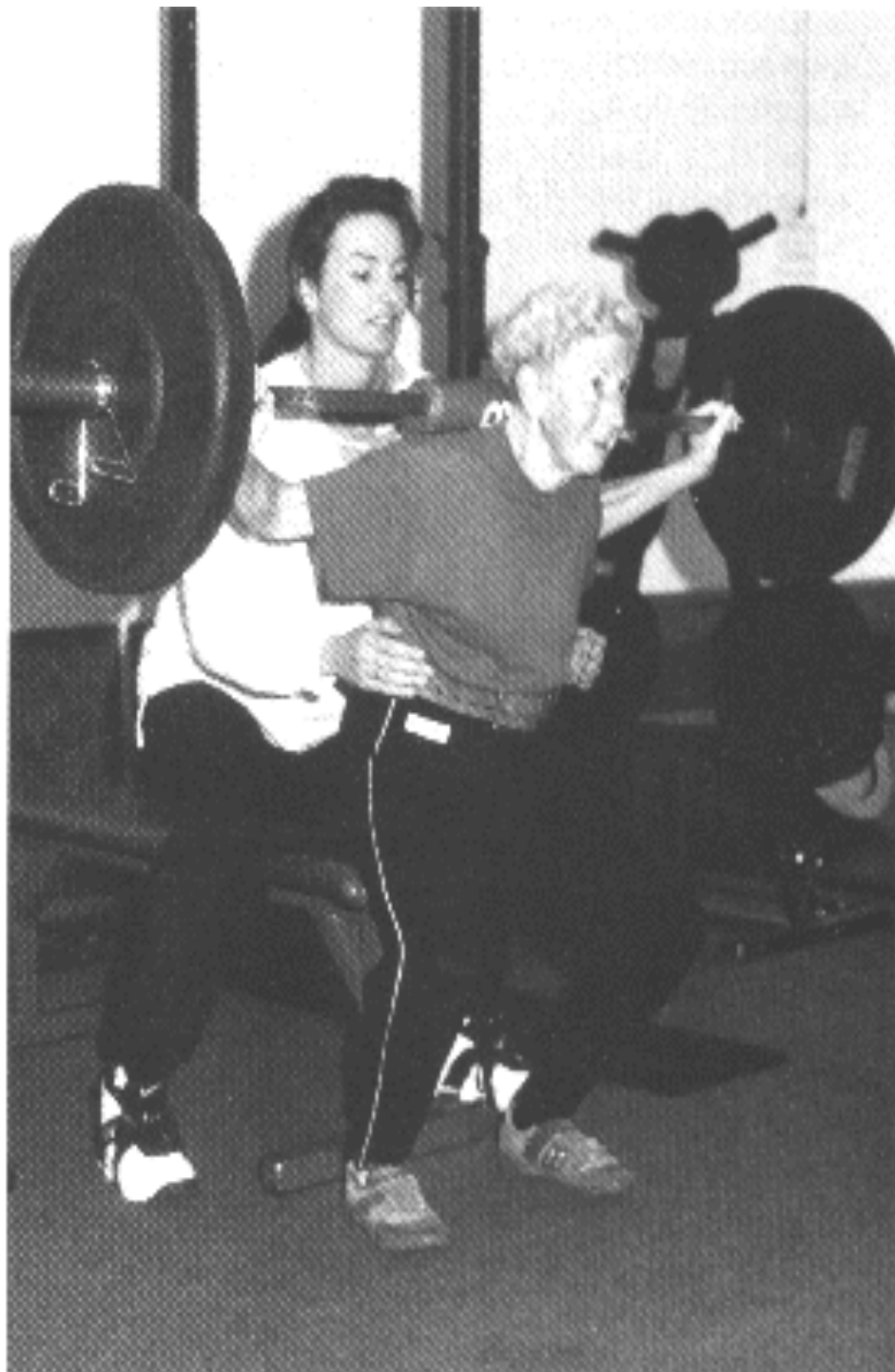
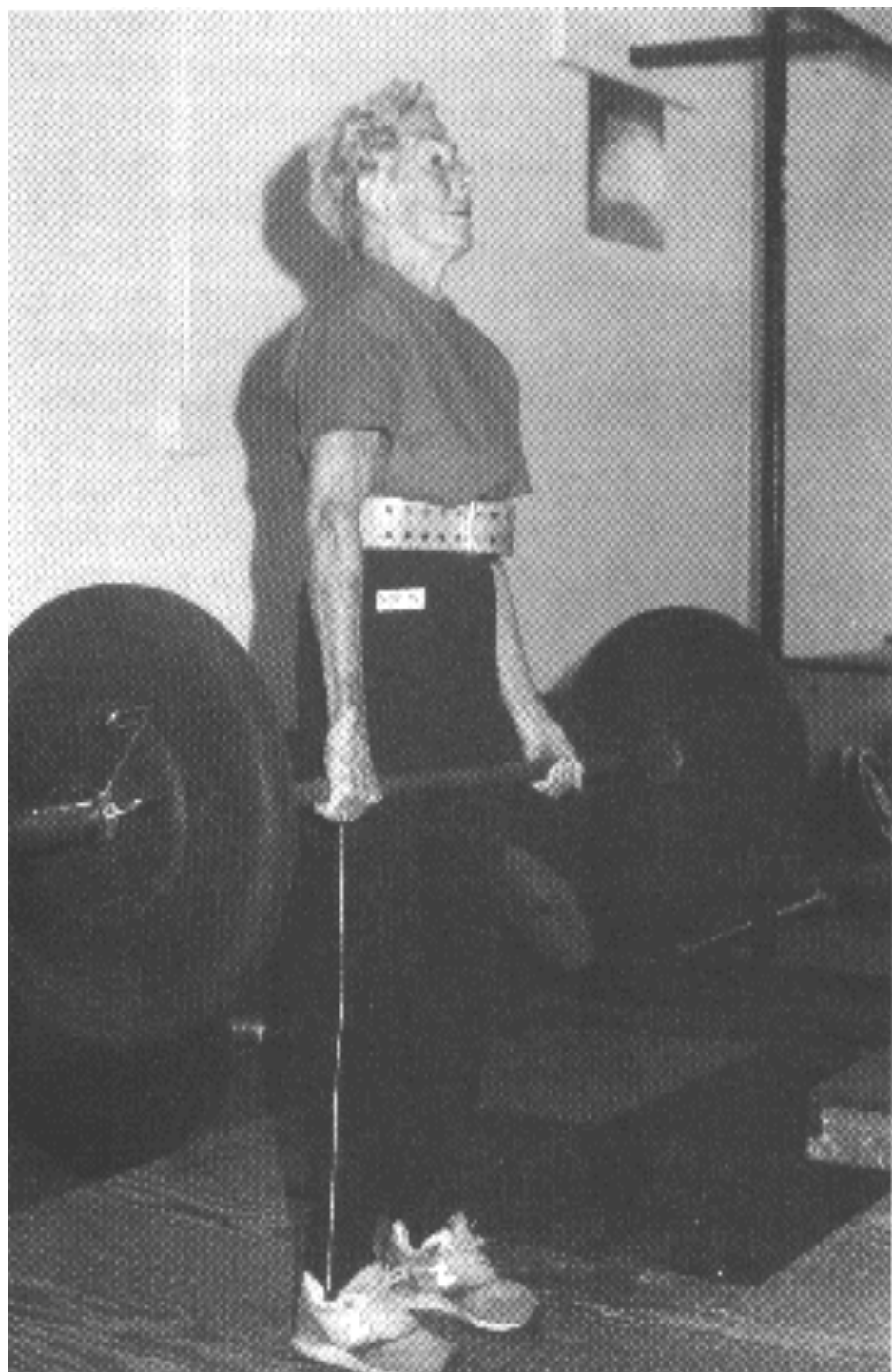
- Fitness still = ‘body beautiful’
- Impossible dream for most people at any age
- for older adults - still pressure to ‘conform’ to societal stereotype

..... or sometimes not!



“The Message is the Media”

‘She did WHAT????!!! Oh my goodness!!!
..... and HOW old is she???





The Art of Language

“A rose by any other name..??”

See also Journal of Active Aging

- Colin Milner
 - (“Speaking their language” Jan/Feb 2002)
- Kay Van Norman
 - (“The participation challenge” Sept/Oct 2004)

What's in a Word?

“I have good views and I have bad views”

Good Views

- “Activity”
- “Physical Activity
- “more than four days ..”
- “four or more days ..”
- “Most days ..”
- “Moderate”

Bad Views

- “Exercise”
- 5 days a week
- almost all days
- “Vigorous” (?)
- “Fitness”/ “In shape” (very neutral)

Source: AARP Survey: Attitudes and Behaviors 2002

“Art” Attack??

- Get to know the participant and their priorities
- Make comfortable with staff and surroundings
- Educate and involve family and friends
- Continually reinforce the safety and appropriateness
- Involve physician in process where possible

“Art” Attack??

- Combat “I can’t do that” or “I’m too old to do that” etc with patience, reference to active peers and positive reinforcement.
- Anticipate negative attitudes

I'm out of bed and
I made it to the keyboard.
What more do you want?



- **ESSENTIAL!** Get to know your participant and focus on things that have relevance and meaning for them.
- Be Creative!!!



REFRAME!!

- “Exercise” is typically viewed in media and in society in general as something unpleasant that we know we ‘should’ do.
- It’s something we ‘ought’ to do. That we need to do and that
- and so it’s something we’ve been meaning to do ... but

“Accentuate the positive Eliminate the negative”

Frank Sinatra (1952)

Most of benefits in health literature are expressed as reductions in negatives rather than increases in positives. So ...

- Get socks from under bed
- Lift things up/down from cupboards
- Carry luggage
- Move furniture
- Have fun!!

Hula!



**Herm Arrow, 75, and
Dorothy Roberts, 85,
having fun in a race
walking class**



Photo by Etta Clark from the books
Growing Old Is Not For Sissies, I and II

Karate black belt Eleanor Hyndman, 90

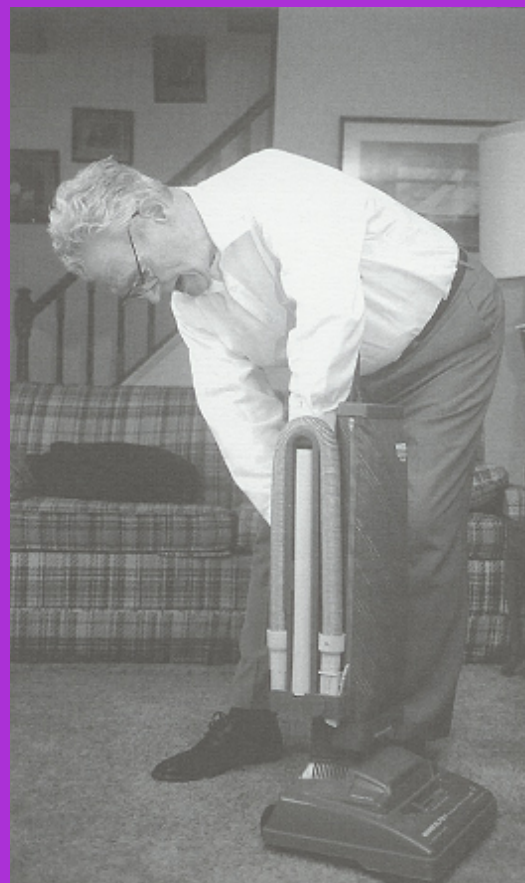


Photo by Etta Clark from the books
Growing Old Is Not For Sissies, I and II

From NIH SeniorHealth.gov @ <http://nihseniorhealth.gov/>

More “Reframing”

- Subtract the “Arithmetic” of Science from the sum total of your vocabulary!
- Eliminate the “Threshold” approach - there are no ‘magic numbers’ - every little bit (more) helps



More “Art” sketches

- For strength training initially use a ‘weight neutral’ measure to record progress
- Utilize a ‘single set’ protocol to maximize ‘cost – benefit’

More Art Approaches

- Be aware, listen, learn (It's all part of the Art)
- Empathize (?)
- Be respectful and non-patronizing
 - Don't stroke, pat or otherwise 'coddle'

Science says

- It should be noted however that the mere presence of cardiovascular disease, diabetes, stroke osteoporosis depression, dementia, chronic pulmonary disease chronic renal failure peripheral vascular disease or arthritis, is not by itself a contraindication to exercise

(ACSM 1998)

Conclusion

Developing the “Art” of your prescription is a continuous, ongoing process. Successfully merging the ‘Art’ with the ‘Science’ can make for a more effective and successful teacher.



YIPPEE!