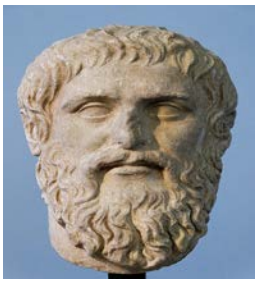
Exercise as Medication

Joseph Cummiskey MD
Dean, FSEM, Feb., 2012

This is the biggest branding of exercise since Plato, 400 B.C.



**"In order for man to succeed in life,
God provided him with two means,
education and physical activity.
Not separately,
one for the soul and the other for the body
but for the two together.
With these two means,
men can attain perfection"**

We prefer the term "Exercise as Medication" to avoid the commercial and possible legal aspects of the American Collage of Sport Medicine (ACSM) term of "Exercise is Medicine TM".

Not since Plato, in 400 BC commented on the importance of exercise have we seen such a degree of activity in the use of exercise. This was started with the American Collage of Sport Medicine initiative on "Exercise is Medicine", a trade mark and branded concept launched in Baltimore in Summer 2010.

In Europe, it is said that, 50% of the population participate in physical activity and 25% are members of a sports club. This rosy outline may not be a true reflection of each of our communities and there is no doubt that variation occurs in every area.

The European approach to this initiative is being lead by Professor Jüergen M. Steinacker of the Universitätsklinikum Ulm, Sport- und Rehabilitationsmedizin in cooperation with the European Federation of Sport Medicine Associations. At his request he was given speaking time at the Council of Delegates meeting (35 countries), the executive board meeting (15 countries) and at a scientific session on the Future of Sport Medicine in Europe at the 7th EFSMA meeting in Salzburg, October 2011. His request for the latter was

Dear Mr President, dear Dr Cummiskey, dear Joe,

"Exercise is Medicine" is a task force which we will try to generate the necessary momentum for promoting exercise in the daily work of medical doctors and their patients and for public action. It is therefore different to other prevention initiatives like "Agito mundo". Nine national organizations formed at a meeting in Cascais/Portugal the founding committee for Exercise is Medicine Europe *(Bruno Sesboüé which is on the EFSMA-Board took also part in this meeting).*

This European task force will be a network which should integrate highly reputated organizations. ***Exercise is Medicine*** will consist of an Executive Committee which I am chairing at the moment and there will be working groups like partnership, media and education. The German Sports Medicine

We suggest and ask kindly that the European Federation of Sports Medicine Associations should be a prominent member of Exercise is Medicine.

I provide some information with this e-mail to you and I would be very glad if about the necessary information you need from me at this stage.

Another suggestion would be to arrange an information meeting within the Salzburg congress for the EFSMA delegates. I will be at the Salzburg congress of EFSMA and there might be also a possibility to discuss this with you and your board.

Sincerely yours

Prof. Dr. Jürgen M. Steinacker

Exercise is Medicine - Europe
Universitätsklinikum Ulm, Sport- und Rehabilitationsmedizin
Steinhövelstr. 9, 89070 Ulm, Germany
www.uni-ulm.de/sportmedizin

We, in the Irish Sport and Exercise Medicine have been embracing this concept in a slightly different format over many years. There is an initiative at the Exercise Physiology level National level from the Faculty and a Community level. The exercise for the community has been run by members of the faculty and current board members for 10 years. A request for board discussion is currently an agenda item for November 2011 and February 2012.

1. **GP Exercise referral program**

   The GP exercise referral program is a joint initiative between the HSE/ICGP/ILAM (leisure industry body) which has been gradually rolled out over the country. Dr. John O'Riordan is the ICGP representative on National steering committee since its foundation. Last year the faculty requested and were granted representation - JOR acts as rep for FSEM.

There is an annual review with the ICGP involving HSE, the national coordinator for GPERP JOR and part of the executive of ICGP. This took place in September. There are a number of issues relevant to the faculty:

a. The ICGP has requested an evaluation of the existing program, which they feel will indicate the success of the scheme. This requires the input of the existing data into the new database. A discussion has taken place by teleconference regarding this process and the research evaluation process.
b. Funding has been received by the ICGP Mental Health director for the funding and evaluation of referral onto the scheme of those with depression anxiety. Simultaneously a psychiatric registrar approached the GPERP regarding a similar piece of research. They have been put in contact.
c. The meeting discussed the difficulties with the existing referral criteria which are very black and white and are preventing suitable referrals being placed on the scheme. They asked if the FSEM as the appropriate body could undertake a review of the referral criteria to the GPERP. JOR said he would discuss this with the dean and incoming board.
   JOR feels this requires a committee to evaluate appropriate referrals in all health categories. It should involve those with clear understanding of exercise guidelines. I feel this committee could also be the committee involved in developing exercise module below.

2. Joint HSE/ ICGP/ FSEM Exercise module

The physical activity coordinators HSE approached JOR regarding the feasibility/practicality for the development of a computer based exercise prescription program for general practitioners. This would be available on all the GP software packages. Some funding is available from the Obesity implementation Group for this.

There had been initial contact between FSEM and ICGP regarding the development of an exercise prescription education module.
The ICGP education director and JOR had a meeting with one of the HSE physical coordinators and outlined our plans. A further meeting is planned where a draft proposal is hoped to be developed.
If this is approved it will require input from FSEM and as JOR suggested above one committee could cover both tasks.
There is a question of funding regarding this project. As an outline figure 30,000euro is the sum for the development of this type of module. It is not expected to be profit generating. Some seed money may be required to get it up and running. The outgoing dean has given me permission to explore this and report back.

A presentation on "The Aptitude for Exercise in the Elderly" was presented by the dean at a meeting in Kuala Lumpur, Malaysia in May 2011.

Abstract presented at the Anti-aging, Aesthetic and Regenerative Medicine meeting KL 5.2011:

Aptitude for exercise in the elderly

Joseph Cummiskey MD
Dublin, Ireland

The essential features of the successful elderly athlete are outlined.

- Good medical care and prevention of illness
- Proper dietary habits
- Advice on food additives and supplements.
- Assistance with psychological preparation
- Measurement of exercise physiology and advice on endurance training
- Advice on hydration and the use of fluids.
- Good musculoskeletal care, with the avoidance and treatment of injuries (RICE).

Osteoporosis is the main preventable disease of the elderly with exercise. Other benefits include:

- Physical activity can reverse the aging process.
- This is done by delaying the decrease in motor control which improves motor activity and balance.
- It can improve the mental health by:
  - improving cognitive function
  - reducing depression
  - avoiding senility
  - Improving self esteem,

The benefits of exercise in the elderly are summarised.

- The reason to exercise is to improve the quality of life.
- Quality of life in general is improved in the elderly if they
  - enjoy life,
  - have good mental health,
  - increase social opportunities,
  - have financial independence and
  - are physically mobile.

Discussion document
EXERCISE PRESCRIPTION
Joseph Cummiskey MD
October 2011

Approach to Recommending Exercise in the healthy person 16 to 70 yrs of age

Pre-exercise Evaluation
Graded Exercise Testing
Writing the Exercise Prescription
Activity Selection Frequency
Duration and Intensity
The Exercise Session

Pre exercise evaluation

Level I.	history and physical examination ECG
Level II	Hx and PE, ECG Exercise CP test to exclude IHD and to get anaerobic threshold
Level III	Hx and PE, ECG possibly echocardiology, MRI heart Exercise CP test Exercise test with lactates to get a more accurate anaerobic threshold to better prescribe and monitor an exercise program
Level IV	Hx and PE, ECG Exercise CP test For research Right heart catheter Other tests

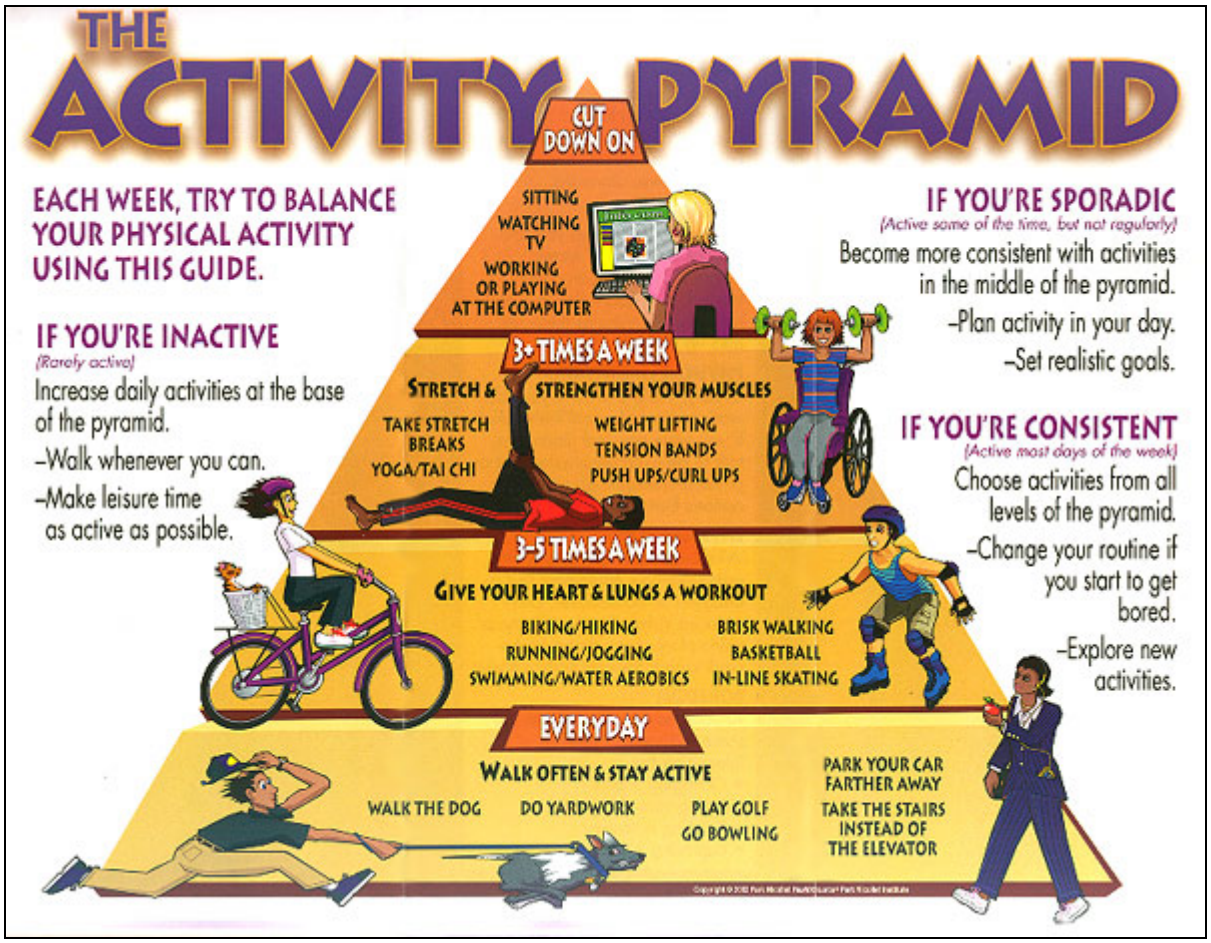
Writing the exercise prescription

Ideally a member or fellow of the FSEM

Follow up in 6 weekly intervals.

Other initiatives:

1. Approach to Recommending Exercise in the presence of underlying chronic medical condition in the 16 to 70 yrs of age group
2. Approach to Recommending Exercise in the healthy person over 70 yrs of age
3. Approach to Recommending Exercise in the healthy child less than 16 yrs of age



(For Educational Purpose ONLY)