

## Nutrition Policy for Healthy Lifestyles in Europe

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### Background

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Although a commitment in the White paper states that a nutrition policy will be developed in the EU, I have doubts if such a policy gets nowadays enough attention and comes fully from the ground. The same White paper forms also the basis for a new policy on Food Safety which is almost at the top of the EU agenda, after all the disasters the EU encountered over the past decade and the global disasters after the 11<sup>th</sup> of September 2001. The focus and attention on food safety is actually over exaggerated and the current crises in confidence relating to food safety needs to be put into more perspective because : nutritional imbalances account for over one hundred times more premature-preventable-death than food-borne infections in Europe. You might therefore understand my hesitation, if such a policy on nutrition gets the attention it deserves if politicians are still quarrelling in Laken (Belgium) recently over the site, where the new European Food Agency should be located. This Agency under the patronage of the European Commission Directorate General of Health and Consumer Protection (DG SANCO) is actually the Directorate that carries all the Community Action Programs on health promotion, information and training. They have to coordinate the EU and member state health promotion program on nutrition, diet and healthy lifestyles by establishing a network, strategy and action plan for the development of European dietary guidelines, which will provide a framework for the development of national food-based dietary targets. As Europe is in a flux (10 Eastern European countries want to join as soon as possible the EU) and with the engine of Europe (Germany) at the brink of recession, the

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conditions are not very optimal. The WHO report Health in Europe 1997, reveals that Europe's overall health is deteriorating for the first time since the Second World War. The reasons are quite obvious. The reason for the fall is the social and economic upheaval in the newly independent States of the former Soviet Union and in the countries of central and eastern Europe (some of which will become Member States of the European Union in the very near future) However, the report states that even among the 15 present countries of the EU there is little room for complacency. Life expectancy seems to approach limits for improvements in some countries especially in the North. The top health problems, cardiovascular disease, obesity, diabetes, osteoporosis and cancer, share the common risk factors :

**Unhealthy nutrition, lack of physical activity, smoking and heavy drinking** are lifestyle-related diseases and are now the leading causes for years of life lost in Europe

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### European Dietary Guidelines

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So it goes without saying that nutrition policy makers started in the late neigties with projects to try to improve the situation. The aims of those projects were to formulate a strategy and action plan for developing and implementing European dietary guidelines.

The 4 inter-linked components of the project were :

- 1) Evaluation of the role of diet and lifestyles in health and disease patterns in Europe.
- 2) The feasibility of developing an EU-wide framework for food based dietary guidelines.
- 3) Public Health nutrition strategies for implementing Food Based Dietary Guidelines (FBDG's) and for enhancing physically active lifestyles in Europe.

4) Evaluation of policy, trade, economic and technological aspects to improving nutritional status and lifestyles in the EU.

The results have been presented at a conference in May 2000 and the Eurodiet project final report has been published a year later (May 2001).

The four working parties have reviewed and discussed the various issues and in parallel sessions the practical connections between the project components were assessed for selected case themes :

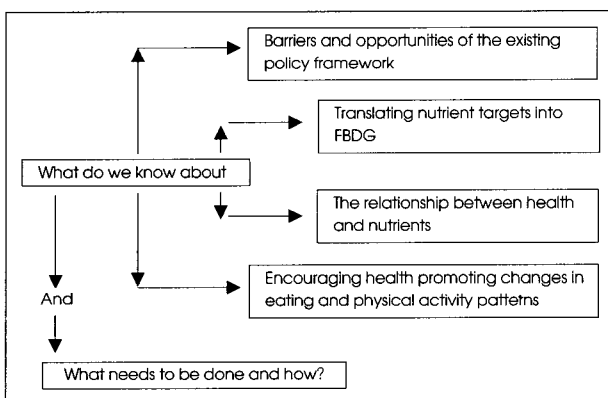
- 1) Fruit and vegetables
- 2) Fat
- 3) Physical activity
- 4) Vitamins and minerals
- 5) Carbohydrates

The project was evaluated by the former mentioned 4 inter-linked elements on the state of the art, by questioning "what do we know" and "what needs to be done and how" (See Scheme 1).

### The Main Conclusions of The Euro Diet Project

1) The burden of disease exists in the majority of the population, and not in high-risk groups. The optimal public health strategy is thus to focus on the population as a whole, rather than targeting those with increased risk factors or pre-existing disease.

2) Population goals for nutrients, some foods, and lifestyle features which are consistent with the prevention of



Scheme 1.

major public health problems in are specified in Table 1.

3) Within the EU intakes of nutrients and levels of physical activity often differ markedly from the optimum. In developing FBDG's, there is a need to recognize the difficulty of achieving these goals in the short term. Intermediate targets may be developed as a pragmatic step to improve health

4) Scientific considerations in translating population goals into FBDG's for individuals indicate that the appropriate development and delivery points are at regional/national level. The added value of EU level action lies in the harmonization of monitoring and surveillance systems to enable evaluation and effective health impact assessment.

5) At present, the most commonly applicable FBDG for the EU is for an increase in fruit and vegetables intake, and increased prevalence and duration of breast-feeding, accompanied by guidelines for increased physical activity.

**Table 1.** Population goals for nutrients and features of lifestyle consistent with the prevention of major public health problems in Europe

Component	Population goals
Physical activity levels (PAL)	PAL > 1.75
Adult body weight as BMI	BMI 21 – 22
Dietary Energy	Equal to energy value of PAL
Dietary Fat % E	20 – 35
Fatty Acids % total E : Saturated	7 – 10
Trans	< 2
Monounsaturated	10 – 15
PUFA (Total)	7 – 8
n-6	< 7 – 8
n-3	2g linolenic + 200mg very long chain
Dietary cholesterol	< 300mg
Alcohol, if consumed, (g/day)	24 – 36
Carbohydrates Total % E	55 – 75
Free refined sugars % E	< 10 – 12
Sugary food consumption, occasions per day	< 4
Fruit and Vegetables (g.d <sup>1</sup> )	> 400
Folate from food (μg.d <sup>1</sup> )	> 400
Dietary Fibre (g.d <sup>1</sup> )	> 25 (or 3g/MJ)
Sodium (expressed as sodium chloride) (g.d <sup>1</sup> )	< 6
Iodine (μg/d)	150 (infants – 50) (pregnancy – 200)
Calcium mg/day	800
Potassium g/d (mmol/d)	> 3.0
Iron (mg/d)	> 15
Fluoride (mg/l)	1
Vitamin D (μg/d) for elderly	10
Exclusive breast feeding	About 6 month

6) Given the variation in national health patterns within the EU, and the remarkable improvements in public health achieved by coherent and sustained national strategies introduced for example in Finland and Norway, there is a need to promote major changes in the prevalence of exclusive breast feeding, better dietary practices and increased physical activity in many parts of Europe over the next 10 to 20 years.

7) Substantial investment of resources will be necessary to develop public health nutrition strategies, but the amount of money needed is dwarfed by the potential these strategies have to decrease the social and economic burden currently imposed by diet and physical activity related diseases.

8) The evidence base, points to the importance of coordinate, multi-sectoral and population wide strategies. In order to develop and implement such strategies, identifiable structures and mechanisms will be needed at a national level within member States and at European level, the creation of a new European Standing Committee on Nutrition.

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## Observations

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Interesting is to know that the study this time is focussed on the population as a whole and not on high-risk groups! (concl. 1).

With respect to fruit and vegetables an other striking conclusion is conclusion number 5.

Although the inverse relationship between fruit and vegetables and colorectal cancer risk (CRC) has long been believed to represent the strongest epidemiological evidence, your country man Young-In Kim from the U. of Toronto (and I with him) do not believe this, based on conflicting data with regard to the effect of dietary factors, including fruits and vegetables on CRC risk. I base my thesis (different than Kim) on the fact that it is generally understood that the risk associated with a very low dose of a carcinogen is proportional to the risk associated with a higher dose. However, we are all subject to continual low doses of carcinogens in our diet that are derived from natural constituents of plants and man-made chemical contaminants, making up probably a very small fraction of our total load of carcinogens. Some protective mechanism in the body or natural protective chemicals in the diet might be responsible for dealing with this problem, but the mechanism is still poorly understood. A lot of water will flow through the Rhine before this mechanism is understood, because recently a European project was ter-

minated that worked on this processes in the gastric intestinal tract. One of the conclusions of this working group was that they do not know what 70% of the bacteria in the gastric tract are doing. Whatever the mechanisms are, one thing is clear that if all this mechanisms did not exist then the incidence of diet-related cancers would be much higher than the 30% now.

With this deliberations I will not suggest that fruit and vegetable are bad. Not at all!

We have learned from the Okinawa study the contrary. Okinawans do not drink or smoke much and they eat little meat : three-quarters of their food come from plants, with fruit, vegetables and fiber. The diet is low in fat and refined sugars. On top of that the islanders practice the cultural habit downing chopsticks at very first hint of fullness.

But there is more than this healthy diet. The Japanese study found out that dancing, walking, gardening and gentle martial arts such as t'ai chi are practiced by the middle aged and elderly. So no alcohol, smoking or prozac in times of stress.

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## Physical Activity

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The conclusions with respect to physical activity I can fully underline like the Okinawa study with respect to this physical activity, because it keeps you young and beautiful.

However one has to be member of a golf club and play every day in order to meet the criterion  $PAL > 1.75$ . For those who are not familiar with the term PAL here some explanation. PAL stands for Physical Activity Level. The PAL value is equivalent to 60 – 80 minutes walking daily to avoid weight gain on high fat intakes; this includes the 30 minutes goal for preventing CD and diabetes. Now I don't know what the Korean housewife is doing, but to run around  $1.75 \times 80$  minutes = 140 minutes daily seems to me quite a job.

Fountain-of-youth recipes of the monkey gland and sleep with a virgin variety are as old and as disreputable as human gullibility itself. Catalytic scavengers seem to be now the voodoo magic. Unfortunately one has to be a fruit fly to extend lifespan with 50% and maintain a youthful health and vigor by taking a drug (4-phenylbutyrate (PBA)) nowadays, if I have to believe researchers at the National Institute of Health and the California Institute of Technology both in the US.

I rather prefer my individual physical activity by doing

sports and stay young and healthy than taking those drugs or try to find out what researchers are telling me with a complicated framework of determinants of physical activity and eating behavior (Fig. 1).

No, than I am fonder of the poster recently sent to me by the International Food Information Council (IFIC) Foundation

(<http://ificinfo.health.org>) showing the two pyramids (Food Guide Pyramid and The Kids Activity Pyramid).

The Food Guide Pyramid (with an unusually flag on top of the pyramid for the amount of water to be consumed for the elderly) is well known by nutritionist, but the other one on activity is quite new (Fig. 2).

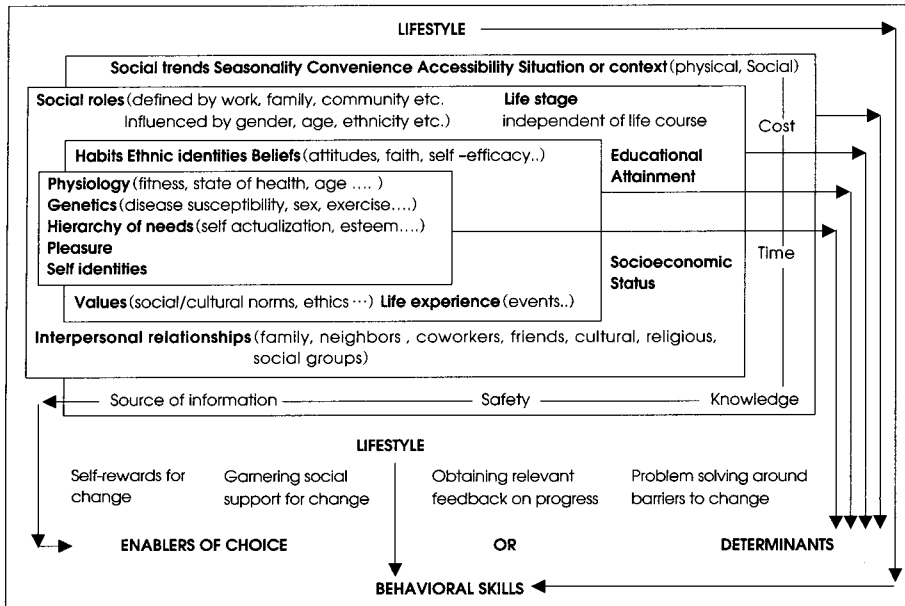


Fig. 1. Developing reasonable behavior awareness making a commitment setting expectations for change via tracking to change specific goals.

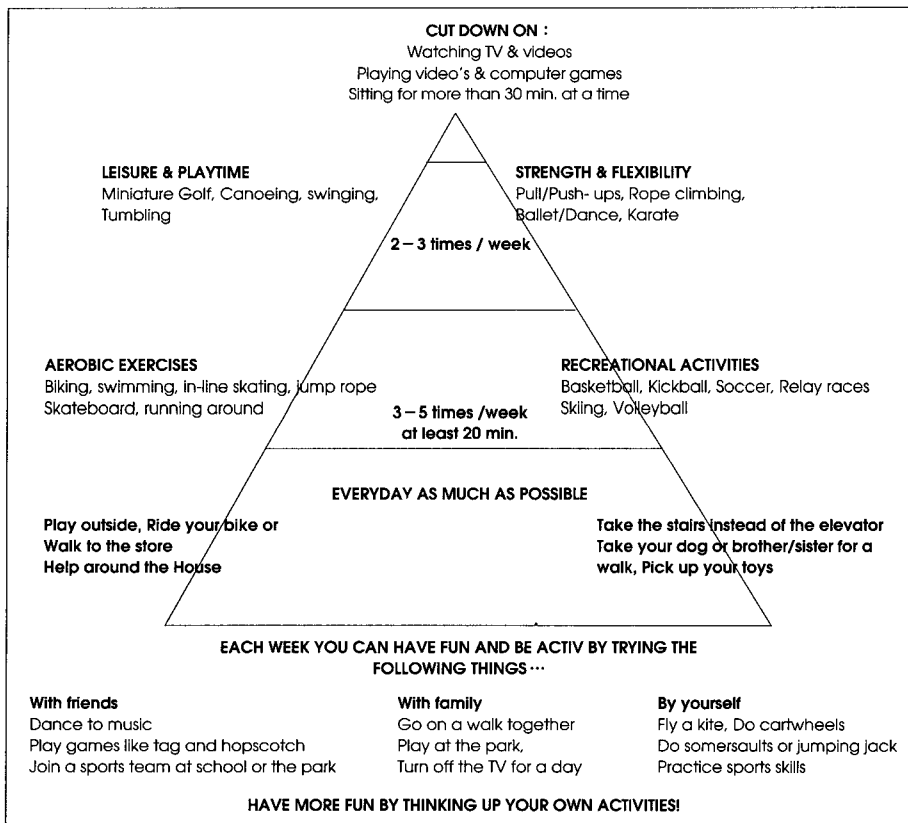


Fig. 2.

On the backside of the poster one can find 10 tips to healthy eating and physical activity (Fig. 3).

Although I think it is a good initiative, I wonder why such a pyramid is only for kids.

Maybe the other ones for adults and elderly will follow and I question if a poster approach is sufficient. It needs more than that!

Now what is the follow up on the Euro diet project in the different member states in the EU? Because of a lack of a comprehensive and systematic health impact analysis it is difficult to measure all this. The attributes of food mentioned nowadays are :

In The Netherlands the Health Council therefore reviewed earlier (1992) dietary reference intakes and came in July 2000 with recommendations on dietary reference intakes for : calcium, vitamin D, thiamin, riboflavin, niacin, pantothenic acid and biotin.

Recently in July 2001, dietary reference intakes on energy, proteins, fats and digestible carbohydrates (macronutrients) were published.

I don't know what other countries in the EU are doing at the moment, because as said there is no health impact analyses, but The Netherlands covers at least with these reports almost 50% of the attributes mentioned above, which is a quite satisfactory result.

## Policy

I started my contribution by mentioning the White paper on Food Safety that identified the need for a comprehensive and coherent nutritional policy for the EU. A pre-requisite for such a policy is comparable data on diet related health indicators, including nutrient and food intakes across Europe. There is therefore an urgent need for harmonized methods of nutritional and dietary surveillance in the EU.

All the ingredients such as an adequate structure enacted in Article 152 of the Amsterdam Treaty and a European Standing Committee on Nutrition supported by a strengthened Nutrition Unit within the Directorate General of Health and Consumer Protection (DG SANCO) and new programs of Community action in the field of Public Health, are all available to shape a coherent approach to the promotion of healthy diets and lifestyles throughout Europe. I am optimistic that on the very long term lifestyle changes will be implemented across Europe. At the moment however the EU

- 1) Start your day with breakfast
- 2) Get moving
- 3) Snack smart
- 4) Work up a sweat
- 5) Balance your food choices- don't eat too much of any one thing
- 6) Get fit with friends or family
- 7) Eat more grains, fruits and vegetables
- 8) Join in physical activities at school
- 9) Foods aren't good or bad
- 10) Make healthy eating and physical activities fun!

Fig. 3.

Vitamins	20%
Fat	13%
Fiber	12%
Minerals	11%
Calcium	8%
Flavor	4%
Protein	3%
Vitamin C	3%
Carbohydrates	2%
Calories	1%
All other attributes	22%

Fig. 4.

Region	1950-65		1966-80		1981-95		1995	
	Men	Women	Men	Women	Men	Women	Men	Women
Europe	4.6	0.3	12.5	1.4	17.7	2.9	17.7	3.1
North	2.1	0.4	4.0	1.0	5.6	1.5	6.9	2.1
Central	9.2	2.0	6.3	1.1	4.0	0.7	3.0	0.5
South	4.7	0.8	6.5	1.1	7.5	1.5	7.8	1.8
Average								

Fig. 5. Average age adjusted mortality rates from explicitly alcohol related causes for men and women (per 100 000, 15+) in the Northern, Central and Southern regions in Europe.

is to busy with the 10 Eastern European countries that want to join as soon as possible and at the same time fighting recession. Also issues like Food Safety and its Common Agriculture Policy stay high on the EU agenda. A nutrition policy however stands never on itself, because it is inter-linked with the problems of smoking (30 % of cancers) and consumption of alcohol (Fig. 5.) and its consequences. Special discouragement policies and prevention measures (see respectively "Öffentliche Gesundheit in Europa" -ISBN 92-828-0389-9 from 1997 and Alcohol in postwar Europe : Consumption, drinking patterns, consequences and policy responses in 15 European countries and the European Comparative Alcohol Study-ECAS from 2001)

In The Netherlands smoking comes down a little bit because of campaigns directed to the youth such as : "BUT I DON'T SMOKE" which discourages the youth because smoking is not "sturdy" any more. Still 37% of the Dutch males smoke (in the lower social class 40% and in the higher social class 31%). However the youth have started to smoke

younger and especially the ones from the lower social class with parents who smoke themselves. Trends like this are of course not representative for Europe, but it are merely indications.

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### Conclusion

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Europe is well on its way to fight the huge increase in several chronic diseases such as CVD and the pan-European “epidemic” in obesity and overweight and the linked diseases with this such as: diabetes, certain cancers, cvd and premature death. Also osteoporosis and its consequences for the elderly get attention. It is well aware that nutrition-related diseases are linked to dietary and lifestyle factors. It

is also aware that prevention is better than cure, because the cost of disability adjusted life year’s increase tremendous with a graying population. With the outcome of the Eurodiet project a set of food-based dietary guidelines and a pattern for physical activity have been established which form a strong justified science based policy for diet-related prevention and health promotion. The average budget of <1% of the total health budget for health promotion in the member states is far to low for implementation of a firm nutrition policy for healthy lifestyles in Europe. Since Europe is in a flux and at the brink of a recession and an entry of 10 new member states, I expect quite some delay in implementing this EU nutrition policy.