



**Position Paper of the Working Party on Information on  
Lifestyle and Specific Subpopulations**

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# 1 Background and reason for the report

The concept of “lifestyle”, the impact of certain lifestyles on the health and well being of the inhabitants of the European Union, and the specific aspects of health in subpopulations are considered in this document. The concept of “lifestyle” is confined to nutrition/physical activity, tobacco use, alcohol consumption, and illegal drug use. Specific subpopulations mainly refer to citizens of various age groups and gender, including girls and boys, women and men, as well as the male and female elderly. The health of the disabled, migrants, and persons of low socioeconomic position (deprived subpopulations such as the poor, homeless, unemployed) is another pillar of the Working Party. In addition, actions which can be taken to better inform major stakeholders on the subject including the European population are considered. The intent is to establish an effective approach to adequately inform all stakeholders and inhabitants of the European Union about the consequences of different lifestyle choices and specific aspects in the health of subpopulations, so that they can make better informed decisions. The Working Party on Information on Lifestyle and Specific Subpopulations covers the following subjects:

- Nutrition/Physical Activity
- Tobacco Use
- Alcohol Consumption
- Illegal Drug Use
- Child Health
- Gender-specific Health
- Health of the Elderly
- Migrant Health
- Health of Deprived Population Groups

These nine priority areas were chosen in alignment with areas covered in strand 3, Health Determinants of the European Union Health strategy. The scope may be expanded to additional elements in the future. It is clear that the above mentioned elements have a significant impact both individually and collectively on the health

and welfare of European citizens, creating an impact on public health. It is recognized, from a risk management perspective, that combinations of different potential negative lifestyle elements could create a cumulative synergy of health risks e.g. tobacco use and alcohol consumption together. In excess, the synergistic effect of combinations of these elements could be further amplified. Some of the health references which are covered later in this report include obesity, diabetes, and cardiovascular diseases, respiratory diseases, musculoskeletal diseases including arthropathies, cancer, and mental illnesses. It is often the less affluent and most vulnerable subpopulations – citizens of various age groups and gender, the disabled, migrant populations, and persons of low socioeconomic position (deprived population groups such as the poor, homeless, unemployed) – in society who are most strongly affected by ill health and decreased quality of life. Special efforts to protect the health of these population groups may positively influence the health and well being of the whole population.

The focus areas of the Working Party are linked with one another and there is a whole variety of cross-cutting issues between the 9 chosen subject areas. For example, the concept of health and health indicators concerning gender equity should consider and include a multitude of factors beyond individually-base physiology: socio-economic factors, nutrition, physical activity, health behaviours (i.e. substance abuse), health-damaging cultural attitudes, domestic and sexual violence, sexual behaviour, and living, working and environmental conditions, respectively, of women and men. All of these factors shape the diversity of health of groups of women and men. In addition, aspects discussed in health of the elderly are also relevant to elderly migrants and elderly persons of low socioeconomic position. Determinant interactions concerning the 9 subject areas have to be considered. Nevertheless, it is important to have a structured approach and define priority areas.

Currently, there is a lack of pan European focus on the collection and use of appropriate information and no centralised process. This is important, however, to gather and assimilate information to aid communication to stakeholders leading to effective decision making and communication campaigns to reach the European citizens. The need for this centralized approach is also pivotal to the European

Commission in the facilitation of effective understanding and scoping of issues from a member state or pan European basis to support policy making.

There are three types of information. Information may be explanatory, referring e.g. to determinants of smoking. Descriptive information is used for monitoring purposes. The third type of information is related to intervention and evaluation.

It is the intention of the European Commission to create an improved approach to establishing better and more accessible information on lifestyle elements and the health of subpopulations during the life cycle of the current and new Public Health Programme, leading to improved information access, decision making potential and communication to European citizens.

## **2 Vision of the Working Party on Information on Lifestyle and Specific Subpopulations**

The following vision has been developed:

***To provide sound information on lifestyle issues and  
\*specific subpopulations, so that stakeholders and  
European citizens can make informed decisions on  
enhancing health***

***\* including citizens of various age groups and gender, the  
disabled, migrants, and persons of low socioeconomic position (SEP)***

## **3 Scope and magnitude of the issues**

Centralised pan European and global representation along with comparable data in the area of lifestyle elements and health of specific and deprived subpopulations are either limited or non-existent. This fact challenges the ability to provide stakeholders including European citizens with important and necessary information on lifestyle choices and facts related to the health of specific and deprived subpopulations together with effective issue scoping for policy making purposes. It is the direct basis for the creation of this strategic initiative. The following gives perspective on the nine priority areas under consideration:

### **Nutrition and Physical Activity**

Unhealthy food choices as well as inadequate physical activity are among the most significant controllable risk factors affecting individuals' long-term health. Lifestyle-related risk factors and diseases, such as overweight, diabetes, cardiovascular, cerebrovascular and gastrointestinal diseases, some forms of cancer, osteoporosis and depression, are now the leading causes of disability-adjusted life-years (DALYs)

in Europe.

Across Europe the proportion of deaths attributable to physical inactivity is estimated to range between 5% and 10%. The growing prevalence of overweight and obesity in younger age groups in the population in almost all Member States is of particular concern. Overweight and obesity in young people may significantly influence their life expectancy.

The tendency towards sedentary lifestyle (television watching, computer usage, motor vehicle transportation) together with the increasing availability of snack/fast foods add to the risk of over indulgence together with insufficient exercise. Both nutrition and physical activity influence health. The insight into the underlying mechanisms of this combined effect is relatively meagre, and there is also a need for better and more relevant baseline data describing food intakes and physical activity habits amongst the general population. The rapidly growing prevalence of obesity and Type II diabetes exemplify our inability to prevent and tackle these major diseases.

Relevant and useful data on food intake and physical activity have been collected in most Member States, but comparing these data between countries is problematic. The intake of selected food items and the amount and pattern of physical activity in EU Member States have been assessed by the Commission's Eurobarometer 2002 and 2005 surveys (DG Communication). The DAFNE initiative aiming to harmonise dietary and related socio-demographic data collected through the national household budget surveys has been recommended as a realistic choice to nutrition monitoring, using comparable between countries data.

Dietary habits and everyday physical activity of the EU Member State populations depend on individual choices (cultural influences, food preferences) as well as on socioeconomic and environmental factors (e.g. affordability and availability of food products, facilities for exercise, quality and safety of products). Socioeconomic and environmental factors are, in turn, shaped by policies that are the responsibility of the Member States and the European Community (EC). When dealing with the

determinants of diet and physical activity a broad range of areas and activities has to be considered.

Examples are given in the Council Resolution of December 2000 on "*Health and Nutrition*" (2001/C 20/01). In the Resolution the EU Council invites the *Member States*, within the context of their nutritional health policy, to:

- (i) Set the population, from early childhood on, in better stead to make informed food choices by promoting healthy attitudes and eating and dietary habits and by providing relevant information.
- (ii) Involve all parties concerned in the discussion and promotion of nutritional health.
- (iii) Continue to develop the production, dissemination and implementation of nutritional health.
- (iv) Improve the nutritional knowledge of health professionals and those working in the field of foods and nutrition.
- (v) Participate actively in the data collection networks in Community activities, and in particular to produce scientific evidence.
- (vi) Encourage national experts to participate in Community activities, and in particular to produce scientific evidence.

Different efficient ways of promoting better nutrition within the EU, including local and national dietary guidelines, have to be studied and implemented. The EURODIET EU project is one example of such an initiative designed to provide simple advice on healthy diets. The project's results are daily recommendations for nutrition and physical exercise (see appendix II).

Future research and policy changes should moreover consider the following: impact of community policies on nutritional health and physical activity, continuing development of tools to monitor nutritional health, links between health, nutrition and physical activity, provision of adequate nutritional information including food labeling, advertising to children, and the use of new information technologies.

There is a need for improved information and greater knowledge of dietary and physical activity behaviour at the population level, as well as of their determining factors, in order to promote healthy lifestyles. It is necessary to compile and develop a sustainable health monitoring system covering both food intakes and levels and types of physical activity, so that the collection, sharing and diffusion of related lifestyle data across Europe (EU) is made possible. This means looking beyond



individual lifestyles and also considering health determinants relating to general living conditions.

Finally, there is a need in the area of dietary intake and physical activity habits to reduce economic and social inequalities by ensuring that all activities take into account those economic and social groups, which are at particular risk.

#### Top priorities / key areas for a European action plan:

- 1) Further development and testing of methodologies for assessment of food intake and physical activity, including alcohol intake, with emphasis on validity, reliability, and comparability;
- 2) Implementation and integration of the recommended methodologies for use in the different European monitoring systems currently under development;
- 3) Focus on young individuals (children and adolescents), i.e. food intake and physical activity and its determinants, in collaboration with current EU funded projects;
- 4) Sustainability and expansion of existing databases.

#### **Tobacco Use**

Tobacco is the single largest cause of avoidable death in the European Union, accounting for over half a million deaths each year and over a million deaths in Europe as a whole. Several national data sources indicate that the prevalence of smoking is increasing at a higher rate in women compared to men. This makes nicotine the number 1 cause of premature death in the European Union. It is estimated that 25% of all cancer deaths and 15% of all deaths in the Union could be attributed to smoking. In order to curb this epidemic, the European Community is actively developing a comprehensive tobacco control policy, which is characterised by a four-stage approach:

1. Legislative measures are the backbone of the Community's present and future tobacco control activities.
2. Support for Europe-wide smoking prevention and cessation activities is another important element in the tobacco control strategy.

3. Mainstreaming tobacco control into a range of other Community policies (e. g. agricultural policy, taxation policy, development policy) is essential in order to make sure that tobacco control principles are part of all relevant policies.
4. Making sure that the pioneering role of the European Community in many tobacco control areas produces an impact beyond the frontiers of the European Union to establish the Community as a major player in tobacco control at a global level. According to WHO figures, smoking is responsible for approximately five million deaths worldwide every year.

Tobacco use is a known or probable cause of approximately 25 diseases and even the WHO agrees that its impact on world health is not fully assessed. Persons who smoke their whole lives have a 50% chance that the cause of death is smoking-related. Half of smoking-related deaths occur in middle ages.

Some of the most common disease concerns are as follows:

Heart attack and stroke:

- UK studies show that smokers in their 30s and 40s are five times more likely to have a heart attack than non-smokers.
- Tobacco contributes to the hardening of the arteries, which can then become blocked and starve the heart of blood flow, causing symptoms of cardio- and cerebrovascular diseases.
- Smoking increases the risk of having a stroke.

Cancers:

- A primary health risk associated with smoking is lung cancer, which kills more than 20,000 people in the UK every year.
- US studies have shown that men who smoke increase their chances of dying from lung cancer by more than 22 times.
- Women who smoke increase their risk of dying of lung cancer by nearly 12 times.
- Lung cancer is a difficult cancer to treat - long term survival rates are poor.
- Smoking increases the risk of oral, breast, uterine, liver, kidney, bladder,

pancreas, stomach, cervical cancers, and leukemia.

Other respiratory problems:

- Another health problem associated with tobacco use is emphysema, an irreversible damage to the lungs, and chronic bronchitis.
- Exposure to secondhand smoke (passive smoking, involuntary smoking) is responsible for severe respiratory diseases in people who do not smoke, but who live or work with a smoker.

Harm to children:

- Smoking in pregnancy greatly increases the risk of miscarriage, is associated with lower birth weight babies and impaired child development.
- Smoking of parents following child birth is linked to sudden infant death syndrome (SIDS) and higher rates of infant respiratory illnesses such as bronchitis, colds, and pneumonia.

Nicotine, an ingredient of tobacco, is listed as an addictive substance by the US authorities. Although the health risks of smoking are cumulative, giving up tobacco use reduces the risk of smoking-related diseases. There are effective drugs and effective behavioural interventions to help people to overcome nicotine addiction. The ideal smoking cessation program is individualized to the personal characteristics of the patient and his / her environment. (Marlow, 2003)

Future impact of tobacco use:

- By 2020 the WHO expects the worldwide death toll to reach 10 million (per year), causing 17.7% of all deaths in developed countries.
- There are believed to be 1.1 billion smokers in the world, 800 million of them in developing countries.

Top priorities / key areas for a European action plan:

- 1) Biological interaction between smoking and genetic factors in determining chronic diseases;
- 2) Cost-effectiveness of smoking prevention trials in children and adolescents;

### 3) Relation between genetic factors and tobacco use.

#### **Alcohol Consumption**

Alcohol can affect almost every organ of the body, and is related to more than 60 different disorders with short and long-term consequences. For these conditions there is an increasing risk with increasing levels of alcohol consumption. While low risk alcohol consumption is not generally regarded as a significant health hazard or point of social concern, excessive or inappropriate consumption does lead to concern in both these key areas and is the subject of much debate from a public health perspective, leading to the need for better health statistics and available information for member states to manage the issue.

The population of the European region (EU25) consumes, on average, 11 litres of pure alcohol per capita per year, making the Union the region of the world with the highest alcohol consumption. Within the European Union region it is known that 55 million adults abstain from alcohol. Taking this into account, the average amount of alcohol consumed by an adult drinker is 15 litres of pure alcohol per year.

Worldwide, alcohol causes 3.7% of deaths (2.1 million) and 4.4% of DALYs (65 million). Of this global burden, 24% occurs in Western Pacific region-B, 16% in Europe region-C, and 16% in America region-B. This proportion is much higher in males (6.1% of deaths, 7.1% of DALYs) than females (1.1% of deaths, 1.4% of DALYs). These proportions are much higher in Europe, where alcohol is responsible in the European Region of the WHO for 10.8% of male and 1.9% of female deaths, and 16.7% of male and 3.8% of female DALYs, with the proportions increasing from west to east. Within subregions, the proportion of disease burden attributable to alcohol is greatest in the Americas and Europe, where it ranges from 8% to 18% of total burden for males and 2% to 4% for females. Besides the direct effects of intoxication and addiction resulting in alcohol use disorders, alcohol is estimated to cause about 20–30% of each of the following worldwide: oesophageal cancer, liver cancer, cirrhosis of the liver, homicide, epilepsy and motor vehicle accidents.

Some of the concerns within the EU can be summarised as follows:

## Health

- Liver disease – The risks of both liver cirrhosis and cancer of the liver increase with increasing alcohol consumption.
- Hypertension - Chronic ingestion of more than 30g of alcohol per day results in raised blood pressure in both men and women, increments of 10g/day raise blood pressure by 1-1.5% on average. About 7-11% of hypertension in the western industrialised countries is due to alcohol intakes exceeding 40g/day. Alcohol increases the risk of hypertension in a dose-dependent manner.
- Stroke - Alcohol is believed to be a contributor to ischaemic stroke, making up 85% of strokes, in which an artery supporting the brain is blocked, cutting off the supply of blood and hemorrhagic, 15% of all strokes, in which profuse bleeding occurs inside the brain. Binge drinking is believed to significantly increase the risk of stroke due to alcohol consumption.
- Coronary Heart Disease (CHD) – Although there remains considerable controversy, an intake of alcohol of around 10-20g/day has been shown to reduce the risk of CHD in middle-aged and older men and postmenopausal women. It is still unclear to which extent confounding factors are responsible for the protective effects of moderate alcohol intake concerning cardiovascular disease. Beyond this level, the risk of CHD increases. In particular, binge drinking increases the risk of heart arrhythmia and sudden death from heart disease.
- Pregnancy - Regular alcohol consumption impairs fetal growth and development leading to fetal alcohol syndrome, malformations and long-term disability. About 60,000 underweight births are caused by alcohol consumption each year in Europe. There does not appear to be a known safe limit of alcohol consumption in pregnancy.
- Cancer - Epidemiologic studies have shown potential links with breast, mouth, oesophageal, and larynx cancers due to heavy alcohol consumption, and to a lesser extent cancers of the stomach, colon, and rectum in a dose-dependent relationship. The risk factors of these significantly change if associated with other factors such as smoking.

## Social Impacts

These include:

- Violence – Alcohol is a risk factor for crime and domestic violence.
- Intentional Injuries – Alcohol increases the risk of homicide and suicide, with 40% of all homicides and some 1 in 5 of all suicides being due to alcohol.
- Unintentional Injuries – Alcohol increases the risk of accidents and injuries.
- Some 16% of all child abuse and neglect is due to alcohol, and some 7 million children (9% of all children) live in a family severely affected by alcohol.
- Increased accident risk and impaired work performance in the workplace.

### Top priorities / key areas for a European action plan:

- 1) Harm done to others (than the drinkers themselves), including babies and children;
- 2) Alcohol and health inequalities across Europe;
- 3) Impact of different alcohol policy options on reducing morbidity and mortality, with particular reference to changing the drinking culture.

### **Illegal Drug Use<sup>1</sup>**

Globally, 0.4% of deaths (0.2 million) and 0.8% of DALYs (11.2 million) are attributed to overall illegal drug use. The attributable burden is consistently several times higher among men than women. Illegal drug use accounts for a higher proportion of disease burden among low mortality, industrialized countries in the Americas, Eastern Mediterranean, and European regions than in other regions of the world. In these areas it accounts for 2–4% of all disease burden among men.

The current analysis focuses primarily on the burden attributable to problematic drug use, defined as 'injecting drug use or long duration / regular use of opioids, cocaine

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<sup>1</sup> Non-medical use of drugs that have been classified and placed under international control by the 1961 UN Single Convention on Narcotic Drugs (as amended in 1972) and drugs placed under international control by the 1971 UN Convention on Psychotropic Substances. (For further details see <http://eldd.emcdda.europa.eu>)

and / or amphetamines'. Less regular use of these drugs and use of other illegal drugs, such as ecstasy and hallucinogens, are not included as there is insufficient research to quantify their health risks.

Cannabis is treated separately because, although there is growing demand for cannabis treatment and concern about the consequences of regular cannabis use, a clear understanding about the relationship between patterns of use and the development of dependence and / or other health problems at the population level is currently lacking. A growing body of work has documented an association between cannabis use and both psychological and physiological problems but debate is ongoing on the nature and strength of the relationship found.

Because the use of illegal drugs is often hidden, it is difficult to estimate the prevalence of their use and the occurrence of adverse health consequences. Despite these difficulties, it is apparent that illicit drugs cause considerable disease burden and their use is increasing in many countries, particularly in central and eastern European countries with little past history of such. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) reports estimates of the prevalence of problematic opioid use at national levels that range between 1 and 8 cases per 1,000 population aged 15-64 years. There are annually between 7,000 and 8,000 acute drug-related deaths reported in the EU, with opioids being found in around 70% of them. Of the total number of requests for drug treatment reported in 2004, opioids (mainly heroin) were the main drug of choice in around 60% of cases.

Cocaine accounts for around 8% of all drug treatment requests and of new clients entering treatment for cocaine use in the EU, around 80% report using cocaine powder and 20% crack cocaine. In the EU, Bulgaria, Romania, and Norway it is estimated that on average 0.5% of adults aged 15-64 years have used cocaine in the last month (current use).

Cannabis use is reported as the main reason for treatment attendance by around 15% of those seeking treatment at drug services in Europe, and by 27% of those who are seeking treatment for the first time in their life, making it the next most commonly reported drug after heroin. In the EU, Bulgaria, Romania, and Norway

between 0.5% and 8% of adults aged 15-64 years report using cannabis in the last month.

The mortality risks of illegal drug use varies by drug type and increase with frequency and quantity of use. The most hazardous patterns are found among injecting drug users. Studies of treated injecting opioid users show that this pattern is associated with increased overall mortality, including that caused by HIV/AIDS, overdose, suicide, and trauma. Other less quantifiable adverse health and social effects include other blood borne diseases such as hepatitis B and hepatitis C and criminal activity associated with problematic or dependent drug use.

Five key indicators on illegal drug use have been developed and need to be fully implemented in the near future. Epidemiological data from the indicators, together with an understanding of national reporting systems allow the monitoring of illegal drug use at the European level.

There is still a need for better coordination in the European community regarding statistics and information on the subject of illegal drug use to make better information available, to communicate more effectively to the European public and to support effective policy making.

Top priorities / key areas for a European action plan:

- 1) Injecting drug use (Injecting drug use is associated with increased overall mortality and morbidity, particularly that caused by drug overdose and blood borne infectious diseases such as HIV / AIDS, hepatitis B, and hepatitis C.);
- 2) Long duration / regular use of opioids, cocaine and / or amphetamines (Opioid substitution treatment is increasing in Europe. In some European countries at least one in four requests for drug treatment is cocaine related. There is little consensus on what constitutes appropriate treatment for cocaine problems.);
- 3) Early use of cannabis and other illegal drugs (Use of cannabis and other psychoactive substances during adolescence has been associated with the later development of problem drug use. In some EU countries trend analysis shows a decrease in age of first use during the past decade.);



4) Regular / intensive use of cannabis and other illegal drugs (see paragraph on cannabis).

### **Child Health**

Child health covers maintaining the health, improvements in wellbeing and development from birth to young adulthood. It spans the complete care of the children's and adolescents' physical, mental, and social health. Areas of development include physical growth, pubertal maturation, cognitive transitions, psychosocial and social maturation. Physical development is most rapid in the first five years of life; in the later years social and behavioural patterns are significant.

A healthy childhood is a critical determinant for health and development in adolescence and beyond. Good physical and mental health, as well as the knowledge and means to sustain good habits are key factors for healthy development as many of the health compromising behaviours emerge during childhood. It is known that the major causes of mortality and morbidity in youth are behaviour related, and therefore preventable.

Health related problems prevalent in later childhood and adolescence include unintentional injuries (such as motor vehicle accidents, drowning and sports/recreational related, most of which affect boys more often than girls), alcohol consumption, tobacco use, illegal drug use, obesity/overweight, eating disorders, teenage pregnancy and childbearing, and sexually transmitted infections, including HIV.

Mental illnesses pose an increasing burden of disability on children. Mood disorders such as depression are known to be associated with academic, social, and behavioural problems during childhood and adolescence. Attention deficit hyperactivity disorder (ADHD) is linked with developmental delay. Mental health policy concerning children and adolescents needs to be better integrated into the overall healthcare system in order to close the treatment gap in this area. It is also important to promote preventive interventions, as they have been shown to cause sustained reduction of depression, aggressive and delinquent behaviour, as well as

alcohol, tobacco and illegal drug use. (WHO, 2003)

A balanced diet is essential for child health as it influences both, cognitive development and growth. Children who do not follow a balanced diet are at risk for lifetime healthcare problems such as obesity, high blood pressure, cardiovascular diseases, and diabetes. The consequences of these diseases play out over the lifespan, as unhealthy children typically grow up to be unhealthy adults.

Child abuse or neglect as well as witnessing violence at home and in the community compromises children's development, mental and physical health.

While advances have been made in the reduction of childhood infectious diseases (vaccination, nutrition, sanitation etc.), chronic diseases commonly found in adults are beginning to present in children. Lifestyle changes as well as social and physical factors are responsible for the rise and earlier onset of childhood diseases. Improvements concerning children's physical environment (exposure to automobile emissions, second hand smoke, fumes from cleaning supplies, mould, asbestos in school buildings, lead poisoning, contaminants in food and water) are still unsatisfying in most European countries.

The World Health Organization (WHO) Regional Office for Europe is currently promoting the European Strategy for Child and Adolescent Health and Development, which all States have committed to address between 2005 and 2008. (WHO, 2005) This gives an important context within which the European Commission can promote its own declared priority on child health. An earlier and still ongoing initiative is that on the Children's Environment and Health Action Plan for Europe (CEHAPE), led by WHO and widely supported.

#### Top priorities / key areas for a European action plan:

A number of important child health information initiatives are already being sponsored by DG SANCO, including the Scientific Platform on behavioural determinants of obesity, and projects on child safety and perinatal health. Given that background, and the current WHO initiatives, the following are further issues which

remain to be addressed, which form suggested priorities for Commission action:

1) Measuring and monitoring health, well being, and morbidity of children

It is a priority to study the pattern of health of children, their physical and mental well being and its compromises, and identifiable morbidity of a transient or permanent nature. This is a higher priority than the analysis of patterns of child mortality. It is also essential to focus on health and well being of children, the positives, as well as on illness as the negatives. This will encourage coverage of positive mental health and measurement of mental well being, harmonising with other European priorities but measured specifically for children of different ages;

2) Child impairment, disability, and special needs

Measurement and impact assessment of impairment and disability in children differ significantly from that in adults. The impact of disability on children's lives at different stages of development varies. The development of a variation for children of a measurement tool based on the ability to perform activities of daily living is a priority;

3) Intentional harm and injury to children

The improvement of information and pooling of information from across Europe is a priority. In addition, it is necessary to define "intentional harm" and provide a platform to support and harmonise efforts to establish statistical reporting systems in hospitals and primary care to seek improved identification and measurement of the problem.

### **Gender-Specific Health**

"Gender" refers to the social construction of what it means to be a man or a woman. In contrast to "sex" which refers to biological and physiological differences between men and women, "gender" describes roles, responsibilities, activities and norms about acceptable behaviour for women and men in a specific culture, all of which may undergo changes in a given context.

Differences in prevalence / incidence, natural history, diagnosis, and treatment of disease between men and women have frequently been documented. Women differ greatly from men in how their bodies are affected by major diseases. (Denton, 2004; Iredale, 2007) E.g. risk factors, symptoms and treatment of cardiovascular diseases vary between the genders. Differences in health behaviour (e.g. tobacco use), risk taking, and medical care utilization are major components contributing to gender

differences in health and longevity. Interactions between the social environment, genes, and biology are responsible for the observed differences in longevity, health and human development between men and women. Exploration of gene-environment interactions is fundamental to the understanding of gender-specific health.

In general, women experience greater morbidity than men although women's life expectancy is higher. As the proportion of women in the population increases through lifetime, women are at higher risk for experiencing age-related morbidity and are less likely to rely on assistance from a spousal partner. (Wang et al, 2004) The female adult mortality rate is lower than the male adult mortality rate in almost all countries in the world. The expected number of years to be lived by a female newborn is at least 80 in most Western European countries, Japan, the US, and Canada, and below 40 years in some African countries. In older ages women have clear survival advantages compared to men. (UN, 2005) Much of women's health risk is associated not only with biological differences between men and women and women's reproductive role but with gender inequality in social, educational, cultural, and economic status. In addition, women have lower access to health care and encounter more often high-risk sexual intercourse and violence.

As a movement, men's health is only beginning to gain momentum. Western societies typically ignore e.g. the economic and political significance of the processes of socialisation that prepare men to fight in wars or to work in hazardous industries. Little regard is collectively given to their contribution to the ill-health of men. Research into men's health is lacking but it is important to generate a more comprehensive, and less naïve, understanding of what engenders or endangers the health of men and the ones with whom they live and work.

Smoking has been identified as the primary determinant of the convergence in mortality differentials between men and women in industrialized countries in the second half of the twentieth century. (Pampel, 2002)

Psychosocial determinants of health are generally more important for women and

behavioural determinants are more important for men. Higher rates of accidents (traffic accidents, work-related accidents) and violence-related mortality in men seem to be due to differences in gender norms about risk-taking and social protection. The described gender differences contribute to inequalities in health between men and women. (Denton, 2004)

Loosening of social norms about women's work outside of the home in European countries is related to increases in psychosocial stress and poor health in women, who have to balance responsibilities at home and at work. (Lorber, 2005) Concerning women's health it is essential to consider a lifespan and multiple role perspective.

Gender-specific health is multidetermined and includes many modifiable factors which need to be identified and considered in appropriate interventions.

There is still a lack of data on gender differences in health and changing gender relations which have profound influence on patterns of health and disease. (Walter, 2004)

#### Top priorities / key areas for a European action plan:

- 1) The implementation of gender mainstreaming is a core prerequisite for any biomedical research; in particular any agenda setting requires a mandatory reflection how women and men are potentially affected by the "chain of research", i.e. hypothesis, diagnostic tools, therapies, prevention rehabilitation programs, and finally health information messages. Examples of diseases relevant to gender research are cardiovascular diseases, e.g. acute coronary syndrome, and mental illnesses, e.g. depression and schizophrenia);
- 2) "Gender" needs to be operated as a top priority strategy as it needs to be explicitly integrated into any "social" and "economic" development for the embetterment of the health of European populations. Social and economic inclusion of all European populations requires that the resources and risks of all – diverse – groups are recognized. It is adamant that gender equality and the empowerment of women are recognized as one top health priority to try to achieve the Millenium Development Goals.

## **Health of the Elderly**

In wealthy countries, life expectancy has now surpassed 75 years. (UNPD, 2005) Lower birth rates and growing longevity have led to an overall increase in both the absolute number and relative proportion of older people in the general population. The older population is projected to expand rapidly in the coming decades.

Longevity leads to changing patterns of mortality, morbidity, and disability. The elderly suffer more often from chronic and degenerative illnesses and are at higher risk of suffering from multiple co-morbidities and experiencing limitations in performing activities of daily living compared to the younger population. Chronic diseases may contribute to the gradual loss of senses such as sight and hearing, to impaired mobility, to increased risks of falls and fractures, and to disability in the performance of activities of daily living.

Quantitative research on determinants of healthy aging is needed to understand the mechanisms by which factors that may increase the quality of life in the elderly operate and to plan and evaluate interventions aimed to prevent avoidable decline in quality of life and to cure and rehabilitate unhealthy old individuals. This field of research remains underdeveloped and the available investigations suffer from methodological limitations, namely lack of data comparability.

Age-related mental illnesses, especially dementia, are particularly difficult to cope with. Dementia is a condition of irreversible decline in cognition, functioning and behaviour. Alzheimer's disease accounts for approximately 60-70% of dementia cases. The primary risk factor for dementia is age, with the prevalence doubling for every 5-year age group after the age of 65 and reaching as high as 39 percent after age 90. (Jorm, Jolley, 1998)

Chronic diseases exact a heavy burden on older adults due to associated long-term illness, diminished quality of life, and increased health care costs. Although the risk of disease and disability clearly increases with advancing age, poor health is not an inevitable consequence of aging. A healthy lifestyle (including regular physical activity, a balanced diet, and avoidance of tobacco consumption) is the

recommended course for prevention. Screening for early detection is also recommended for illnesses for which treatment is available (some cancers, diabetes and its complications, etc.).

Despite the overall progress in life expectancy, new and re-emerging health threats have the potential to reverse this progress. Mortality reversals have e.g. occurred in Eastern Europe and the former Soviet Union. A deteriorating health system combined with the hardships of the transition to a market economy has hampered the fight against adult cardiovascular disease, alcohol and tobacco related mortality, and drug-resistant tuberculosis. The rapid spread of obesity and diabetes also has the potential to reduce life expectancy gains.

Care-giving responsibilities put a heavy burden on societies. Patterns of care-giving have been changing as the numbers of younger family members available to provide care has been shrinking and women, who traditionally are the main family caregivers, increasingly participate in the labour force. Spouses are still the main caregivers for both men and women. Because of the sex differential in longevity, however, women are more likely than men to find themselves without a spouse and to be living alone when they need care.

Population aging is an aggregate mark of human success in improving living conditions and curbing risks of death through innovations in public health and medicine. However, insufficient preparedness for the needs of an aging population on the part of health and social service providers is a challenge confronting societies at all levels of development. European countries intensively debate how to fund generous pensions and health programs as there are fewer working-age adults to support the elderly. Additional concerns about the quality and cost of institutional care are garnering attention in many countries.

#### Top priorities / key areas for a European action plan:

- 1) Long-term care in the elderly and social networks as well as economic effects of chronic disease among the elderly;
- 2) Potentially avoidable admission rates for chronic diseases among the elderly;

### 3) Determinants of healthy aging.

#### **Migrant Health**

Migration denotes any movement from one locality to another. People who migrate are called migrants, more specifically emigrants or immigrants depending on the perspective. Voluntary migration within one's region, country, or beyond is distinguished from involuntary migration, including trafficking in human beings and ethnic cleansing. Migrants may be legally or illegally living in the host country. Migrant seasonal (farm) workers are a subpopulation of migrants.

Refugees are persons seeking asylum in foreign countries in order to escape persecution, political repression, war, extreme poverty, and natural disaster.

Migration is increasing worldwide. Today, sizable groups of different nationalities have been living for 10 years or longer in Europe, outside their country of origin. (Iögd, 2003)

Migrants and refugees who are a growing minority in several EU member states have to be considered as social groups in need of special attention. (EC, 2003)

In the European Union, there are about 25 million migrants (non-nationals). The majority of foreigners are citizens of non-EU-25 countries. Most of them originate from Mediterranean countries, former colonies, and countries of Central and Eastern Europe. The strict immigration regulations in the EU member states result in an increasing number of persons with illegal abode. (Iögd, 2003)

Foreign citizens show differences in the age structure. Non-nationals (NN) tend to be younger than the native population (N) (age-group 20-39 years: 41% of NN, 28% of N; age-group 65+ years: 9% of NN, 17% of N). The proportion of males in non-national populations is significantly higher than in the native populations. (EUROSTAT, 2006)

Immigrants show a lower average level of income, education, and social status compared to the native population. Migrants mostly work in industry and in the services sector often characterised by unfavourable working conditions (shift work, physically and mentally demanding work) and live in poor housing. Rates of



unemployment are higher in migrants compared to the native population. In addition, migrants are increasingly confronted with racial discrimination leading to feelings of threat to their safety and health. (lögd, 2003) Persons granted asylum are not allowed to work in some European countries. If they do work on the side, they often face detrimental working conditions and lack social security.

The first generation of labour migrants is characterised by a status of good health. This phenomenon is called "healthy migrant effect". Over the years and generations, this effect typically wears off. The second generation of immigrants is socio-culturally situated between their parents' country of origin and the country in which they were born. Low socioeconomic status and sociocultural problems result in worsening health status. (lögd, 2003)

Unfulfilled expectations and difficulties in adapting to the foreign culture may be risk factors for depression, reactive psychiatric diseases as well as psychosomatic disorders and diseases from which migrants suffer more often than the native population. The higher incidence of work accidents among migrants may be explained by dangerous workplaces and cultural characteristics or language problems in understanding working protection measures. (lögd, 2003)

Health, work, and migration seem to be reciprocally influenced. Immigrants' poor health increases the risk of unemployment and sick leave. Immigration may also bring about an inferior position in the labour market leading to poor health due to exposure effects. In general, the influence on health is more marked for female immigrants than for immigrant men. (Akhavan, 2004)

In order to increase the evidence of the association between migrant status and health and well-being it is not only important to conduct health surveys or studies with the primary aim of obtaining data on migrant health. It is also important to improve the participation rate of migrants in all health surveys and design questionnaires in such a way that migrants can be identified and subgroups of migrants can be differentiated in the dataset. Specific surveys need to be conducted for migrant groups who are not sufficiently well represented in existing data sets.

### Policy implications:

- Policies have to focus on specific health problems of migrant groups and recognize the critical role of socioeconomic factors.
- Political attention on national and European levels on consequences of migration for health and health care must be increased.
- Empirical research has to focus on health relevant aspects of the general situation of migrants, including the growing number of senior migrants, and on the health status itself. (Mohammadzadeh, 2005)
- Projects which consider the participation of migrants and good quality data analyses in the field of migrant health should be granted additional funds as these specific activities require resources.
- Health policies towards asylum seekers vary significantly across the European Union. Legal restrictions in access to health care for asylum seekers have to be abolished in order to adequately meet these populations' health needs. (Norredam, 2006)
- In order to increase the use of health care systems, health care services must be culturally and linguistically acceptable. In primary and public health services awareness must be raised concerning the health status and needs of immigrants from specific countries and cultures.

### Top priorities / key areas for a European action plan:

- 1) Collection and analysis of descriptive data, in order to compare health and health determinants (including health care utilization) among migrants between countries (including countries of origin where feasible);
- 2) Studies of the causes of higher rates of certain health problems among migrants (e.g. hepatitis, diabetes, schizophrenia, traffic injuries ...);
- 3) Development and evaluation of interventions and policies, by carrying out studies of promising approaches (e.g. to improve health care access and responsiveness).

### **Health of Deprived Population Groups**

Genetic and environmental factors affect the health of the individual. Environmental factors include social characteristics across the lifespan on the individual as well as

on the societal level. Living conditions, income (household's net income), education, employment and working conditions, occupational class, social inclusion and exclusion as well as access to the health care system are important determinants of health. Homelessness, unemployment, and poverty are characteristics of low socioeconomic position. Persons living with disabilities may also be disadvantaged. The modification of social characteristics is a major opportunity for public health policy and practice to improve the population's health.

It is important to recognize that health inequalities are not only a matter of specific groups (e.g. the poor) having much worse health than the rest of the population, but of a gradient which can be seen from top to bottom of society and vice versa.

Persons of low socioeconomic position more frequently live in conditions which are detrimental to health. They work more often under adverse conditions and have less recreational activities. Unbalanced nutrition, tobacco use, and alcohol consumption are more prevalent in groups with low socioeconomic position.

Throughout the world, socially disadvantaged people show higher morbidity and mortality than people in more privileged social positions. Social inequalities in health are increasing, but health policies are still dominated by disease-focused solutions that largely ignore the social environment. As a result health interventions have obtained less than optimal results. There is evidence that policy and action to address the social dimensions of health can improve health. (WHO, 2006)

Differences in life expectancy are typically 5 years or more, differences in healthy life expectancy even 10 years or more between higher and lower educational, occupational or income groups. Thus, effective intervention strategies need to be developed in order to better address the needs of deprived population groups and consequently reduce social inequalities in health. Most European countries (exceptions: UK, Netherlands, Sweden) are still in early stages of policy development related to health inequalities. Especially applicant countries are characterized by substantial social inequalities in health and a lack of experience in dealing with them. (Eurothine, 2006)

Policy implications:

- Improving the health of deprived population groups and people of lower socioeconomic position is crucial for improving population's health. (Huisman, 2004)
- Although most effective strategies in promoting the health of deprived population groups and reducing inequalities in health still need to be identified, there is no doubt about the necessity of multilevel interventions in order to effectively prevent social inequalities in health. Interventions have to focus on the individual as well as on interpersonal, organizational, and societal characteristics. Public policy is a critically important level in the prevention of social inequalities in health.
- Reducing cardiovascular disease mortality in the lower educated population should be a public health priority throughout Europe. Developing effective methods of behavioural risk factor reduction in the lower socioeconomic groups should be a top priority in cardiovascular disease prevention. (Mackenbach, 2000)
- European collaboration in exchanging experiences concerning interventions and policies may benefit each country's population.

As measurements of socioeconomic position and health as well as their association vary across studies and countries, comparability of results and data is often not given. If comparable data are available, international comparisons (international comparative research) remain essential contributors to the explanation of social inequalities in health. (Huisman, 2004)

#### Top priorities / key areas for a European action plan:

- 1) Improved monitoring, by looking at trends over time of health and health determinants by socioeconomic group in different European countries (e.g. to check whether certain agreed upon targets are likely to be met in the future);
- 2) More explanatory work, taking advantage of on-going longitudinal studies in different European countries, aiming at finding entry-points for policies to reduce health inequalities (e.g. to assess the role of various lifestyle factors, occupational risks, psychosocial stress, health care quality, ...);
- 3) Development and evaluation of interventions and policies, by carrying out controlled (quasi-) experimental studies of promising approaches in different

settings, and by assessing the transferability of results from one setting to the other.

## **4 Strategy and Organization**

To work towards this vision, the following components have been identified by the Working Party on Information on Lifestyle and Specific Subpopulations as key factors for success:

- Developing an evidence base about lifestyle and subpopulations associated indicators and health determinants.
- Further developing and improving reliable information on consumption/behavior patterns in the European countries as well as providing it to all Member States and interested stakeholders. Sustaining and expanding existing databases on lifestyle issues.
- Developing and improving regular European health reporting on specific (children, women, the elderly, migrants) and deprived (the poor, homeless, unemployed, disabled) population groups.
- Developing and making available a database with examples of good practice and principles in the prevention of diseases associated with lifestyle aspects.
- Setting up peer-reviewed information in form of a report or continuous monitoring and making the information publicly available.

### **The following key actions are proposed:**

A centrally coordinated group (central core group) is proposed to fulfill the following:

- Set directions, make decisions on funding, and evaluate priorities, information on the priority areas, and gaps of information on a regular basis (clear project management).
- Create a knowledge platform populated by peer reviewed information aligned to the vision.
- Establish a lifestyle information system containing statistics relating to relevant lifestyle determinants.
- Establish an information system on the health of specific (children, women,

the elderly, migrants) and deprived (the poor, homeless, unemployed, disabled) subpopulations.

- Establish a communications function to inform internal and external stakeholders (dissemination of information).
- Identify and involve centers of excellence for the nine elements within the EU. Each center of excellence will be lead by a subject manager. The subject managers will be members of the central core group together with the technical management center in Dresden.

The following four requirements will be fulfilled by appropriate organizations identified within the European network. Governance over the whole approach will be achieved via a **strategic steering group** populated by accredited network members and other nominated member's necessary to achieve the function.

## 1. The knowledge platform

### Purpose

The knowledge platform will be created in order to store and make available peer reviewed best practice information on lifestyle choices and the health of specific and deprived population groups. It will comprise information on direct and indirect impacts from these elements to enable better informed decision making. Regular health reporting on lifestyle and specific and deprived subpopulations must be developed and improved. Examples of reports may be:

- food consumption/availability patterns and health impacts
- physical activity patterns and health impacts
- tobacco use and smoking cessation
- health impact of smoking
- substance abuse and its impact on health and well being
- considerations specific to the health of children, women, the elderly, and migrants

- evaluation of the health of deprived population groups (the poor, homeless, unemployed, disabled)

This approach will enable the accumulation of European knowledge on a member state/pan European level and will help avoiding “reinventing the wheel” together with rapid and effective knowledge sharing. It is essential that the knowledge platform will be easily accessible to European Union stakeholders interested or involved in the subject.

To make this possible centres of excellence have been identified from the network and tasked to create the knowledge platform. The priorities recommended according to the listed subjects have been nominated by the subject managers of these centres of excellence.

## **2. Information system containing data and statistics related to relevant lifestyle determinants and the health of specific and deprived population groups (Health Portal)**

### **Purpose**

The development and implementation of a comprehensive, easily accessible information system on lifestyles and the health of specific and deprived population groups - with an initial focus on the nine elements (nutrition and physical activity, smoking, alcohol and illegal drug use, child health, gender-specific health, health of the elderly, migrant health, health of deprived population groups) – is a key component of the vision and strategy. Examples of information will be calorie consumption patterns, smoking incidence rate, calories consumed during exercise etc. However, stakeholders need more than just data. They need the information contained within data. The responsibility of the management of the European information system is to provide all stakeholders on the Community as well as on the Member State level with the best available statistical information on the scope of the issues related to lifestyle as well as on specific aspects concerning the health of the defined subpopulations.

## **Proposed approach**

A European data clearing house should be designed as a one-stop shop for all relevant statistical information about lifestyle issues and issues related to the health of subpopulations in the EU. Particular aims are to ultimately provide comparable data.

## **Components**

Data warehouse, online shop, added-value reports, stakeholder-services and data maintenance together build the data clearing house of the Working Party.

**Data Warehouse:** A data base should pool together existing registers on all elements of lifestyle and the health of subpopulations. Pre-requisite for this data warehouse approach is to build up a sustainable basis for data administration, responsible for central data management and quality assurance, integration of identified "secondary" data sources and a first level of statistical analysis and reporting.

**Online shop:** The data warehouse should provide a user-friendly access to the comprehensive set of data.

**Reports:** Added-value data retrievals from these databases should be made available in the form of regular publications (e.g. thematic short reports and fact sheets, customised reports for key account customers, knowledge base of user requests).

To make this possible a centre of excellence will be identified from the network and tasked to create the information system.

## **3. Communications function to inform internal and external stakeholders**

### **Purpose**



The purpose is to increase awareness to external stakeholders leading to greater influence and impact together with enabling enhanced synergy and effectiveness for project and programme managers.

In order for the EU Working Party on Information on Lifestyle and Specific Subpopulations to operate effectively and to provide appropriate influence, it is essential that both internal and external communications are effectively managed. Internal communication refers to informing all involved parties associated with projects and programmes aligned to the strategy. External communication refers to the communication of targeted information and messages to external stakeholders, e.g. the media, the general public, the WHO etc.

A communications function and strategy is essential to the success in progressing towards the overall vision and will include:

- identification of internal and external stakeholders
- development of methods and tools for communication
- development of a communications plan
- establishment of peer review processes for all external communication
- implementation of internal and external communication as necessary

In order to achieve this, a communications officer will be identified to develop and carry out the function for the group.

#### **4. Centers of Excellence and Subject Managers**

##### **Purpose**

It is essential to the group that European "Centers of Excellence" will be identified and involved in the process of moving towards the vision of making available information on lifestyle, specific and deprived population groups in a comprehensive and user friendly way across Europe. The Centers of

Excellence will be focal points for the provision of scientific leadership behind the elements of lifestyle and the health of the defined subpopulations being considered. They will in the first instance be identified by the strategic steering group and for this first phase must represent the best possible leadership in the nine chosen elements (nutrition/physical activity, tobacco use, alcohol consumption, illegal drug use, child health, gender-specific health, health of the elderly, migrant health, and health of deprived population groups). Identified experts of the nine elements (subject managers) lead the centers of excellence. The subject managers should be leaders in their area, should have a deep understanding of the entire subject, and create, coordinate, and effectively manage a European and international network in their fields. It is also proposed to proactively involve the subject managers in the strategy of the Working Party. The Centers of Excellence and their subject managers will be a primary source of data and information to support the strategy and approach and will act as potential magnets for other organizations and resources in the EU to focus on the defined elements chosen, hence creating critical mass. The nine centers of excellence will be linked by their subject managers who are part of the central core group of the Working Party.

Subject managers will be:

- Michael Sjöström (Karolinska Institutet, Dept of Biosciences and Nutrition, Unit for Preventive Nutrition, Sweden) – Nutrition / Physical Activity
- Michael Rigby (Centre for Health Planning and Management, Keele University, UK) – Child Health
- Walter Ricciardi (Istituto di Igiene, Università Cattolica del Sacro Cuore, Rome) – Tobacco Use and Health of the Elderly
- Antonia Trichopoulou (University of Athens Medical School, Department of Hygiene and Epidemiology) – Health of the Elderly
- Martina Dören (Clinical Research Center for Women's Health, University Charité, Berlin) – Gender-Specific Health

- Johan Mackenbach (Department of Public Health, Erasmus MC, Rotterdam) – Migrant Health and Health of Deprived Population Groups
- Deborah Olszewski (European Monitoring Centre for Drugs and Drug Addiction, Lisbon) – Illegal Drug Use
- Andrew McNeill (Institute of Alcohol Studies, London, UK) – Alcohol Consumption

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## List of Member States by WHO Region and Mortality Stratum

African Regions	Region of the Americas	Eastern Mediterranean Region
Algeria – AFR-D	Antigua and Barbuda – AMR-B	Afghanistan – EMR-D
Angola – AFR-D	Argentina – AMR-B	Bahrain – EMR-B
Benin – AFR-D	Bahamas – AMR-B	Cyprus – EMR-B
Botswana – AFR-E	Barbados – AMR-B	Djibouti – EMR-D
Burkina Faso – AFR-D	Belize – AMR-B	Egypt – EMR-D
Burundi – AFR-E	Bolivia – AMR-B	Iran, Islamic Republic of – EMR-B
Cameroon – AFR-D	Brazil – AMR-B	Iraq – EMR-D
Cape Verde – AFR-D	Canada – AMR-B	Iran, Islamic Republic of – EMR-B
Central African Republic – AFR-E	Chile – AMR-B	Iraq – EMR-D
Chad – AFR-D	Colombia – AMR-B	Jordan – EMR-B
Comoros – AFR-D	Costa Rica – AMR-B	Kuwait – EMR-B
Congo – AFR-E	Cuba – AMR-A	Lebanon – EMR-B
Cote d'Ivoire – AFR-E	Dominica – AMR-B	Libyan Arab Jamahiriya – EMR-B
Democratic Republic of the Congo – AFR-E	Dominican Republic – AMR-B	Morocco – EMR-D
Equatorial Guinea – AFR-D	Ecuador – AMR-D	Oman – EMR-B
Eritrea – AFR-E	El Salvador – AMR-B	Pakistan – EMR-D
Ethiopia – AFR-E	Grenada – AMR-B	Qatar – EMR-B
Gabon – AFR-D	Guatemala – AMR-D	Saudi Arabia – EMR-B
Gambia – AFR-D	Guyana – AMR-B	Somalia – EMR-D
Ghana – AFR-D	Haiti – AMR-D	Sudan – EMR-D
Guinea – AFR-D	Honduras – AMR-B	Syrian Arab Republic – EMR-B
Guinea-Bissau – AFR-D	Jamaica – AMR-B	Tunisia – EMR-B
Kenya – AFR-E	Mexico – AMR-B	United Arab Emirates – EMR-B
Lesotho – AFR-E	Nicaragua – AMR-D	Yemen – EMR-D
Liberia – AFR-D	Panama – AMR-B	
Madagascar – AFR-D	Paraguay – AMR-B	
Malawi – AFR-E	Peru – AMR-D	
Mali – AFR-D	Saint Kitts and Nevis – AMR-B	
Mauritania – AFR-D	Saint Lucia – AMR-B	
Mauritius – AFR-D	Saint Vincent and the Grenadines – AMR-B	
Mozambique – AFR-E	Suriname – AMR-B	
Namibia – AFR-E	Trinidad and Tobago – AMR-B	
Niger – AFR-D	United States of America – AMR-A	
Nigeria – AFR-D	Uruguay – AMR-B	
Rwanda – AFR-E	Venezuela, Bolivarian Republic of – AMR-B	
Sao Tome and Principe – AFR-D		
Senegal – AFR-D		
Seychelles – AFR-D		
Sierra Leone – AFR-D		
South Africa – AFR-E		
Swaziland – AFR-E		
United Republic of Tanzania – AFR-E		
Zambia – AFR-E		
Zimbabwe – AFR-E		

## Mortality Strata

- A. Very low child, very low adult
- B. Low Child, low adult
- C. Low child, high adult
- D. High child, high adult
- E. High child, very high adult



European Regions	South-East Asia Region	Western Pacific Region
Albania – EUR-B Andorra – EUR-A Armenia – EUR-B Austria – EUR-A Azerbaijan – EUR-B Belarus – EUR-C Belgium – EUR-A Bosnia and Herzegovina – EUR-B Bulgaria – EUR-B Croatia – EUR-A Czech Republic – EUR-A Denmark – EUR-A Estonia – EUR-C Finland – EUR-A France – EUR-A Georgia – EUR-B Germany – EUR-A Greece – EUR-A Hungary – EUR-C Iceland – EUR-A Israel – EUR-A Italy – EUR-A Kazakhstan – EUR-C Kyrgyzstan – EUR-B Latvia – EUR-C Luxembourg – EUR-A Malta – EUR-A Monaco – EUR-A Netherlands – EUR-A Norway – EUR-A Poland – EUR-B Portugal – EUR-A Republic of Moldova – EUR-C Romania – EUR-B Russian Federation – EUR-C San Marino – EUR-A Slovakia – EUR-B Slovenia – EUR-A Spain – EUR-A Sweden – EUR-A Switzerland – EUR-A Tajikistan – EUR-B The former Yugoslav Republic of Macedonia – EUR-B Turkey – EUR-B Turkmenistan – EUR-B Ukraine – EUR-C United Kingdom – EUR-A Uzbekistan – EUR-B Yugoslavia – EUR-B	Bangladesh – SEAR-D Bhutan – SEAR-D Democratic People’s Republic of Korea – SEAR-D India – SEAR-D Indonesia – SEAR-B Maldives – SEAR-D Myanmar – SEAR-D Nepal – SEAR-D Sri Lanka – SEAR-B Thailand – SEAR-B	Australia – WPR-A Brunei Darussalam – WPR-A Cambodia – WPR-B China WPR-B Cook Islands – WPR-B Fiji – WPR-B Japan – WPR-A Kiribati – WPR-B Lao People’s Democratic Republic – WPR-B Malaysia – WPR-B Micronesia, Federated States of – WPR-B Mongolia – WPR-B Nauru – WPR-B New Zealand – WPR-A Niue – WPR-B Palau – WPR-B Papua New Guinea – WPR-B Philippines – WPR-B Republic of Korea – WPR-B Samoa – WPR-B Singapore – WPR-A Solomon Islands – WPR-B Tonga – WPR-B Tuvalu – WPR-B Vanuatu-WPR-B Viet Nam – WPR-B

## Comparisons between EHN and draft WHO/FAO Goals

COMPONENT	EHN POPULATION GOAL *	DRAFT WHO/FAO GOAL
Saturated fat	Less than 10% energy	Less than 7% energy
Trans fats	Less than 2% energy	Less than 1% energy
Fruit and vegetables	More than 400g/day	More than 400g/day
Salt	Less than 6g/day	Less than 5g/day
Physical activity level	PAL of 1.75	A total of hour per day on most days of the week of moderate-intensity activity ....
Body mass Index	BMI 23**	BMI 21
Total fat	Less than 30% energy	15-30% energy
Polyunsaturated fat	No goal	6-10% energy
n-6 polyunsaturated fat	4-8% energy	5-8% energy
n-3 polyunsaturated fat	2g/day linolenic + 200mg/day very long chain Fatty acids	1-2% energy
Cholesterol	No goal	Less than 300mg/day
Total carbohydrate	More than 55% energy	55-75% energy
Dietary fibre	More than 25g/day (or 3g/MJ)	No goal
Folate	More than 400ug/day from food	No goal, but draft report suggests that the lack of goals for micronutrients 'should not imply a lack of concern for other nutrients'
Protein	No goal	10-15% energy
Sugary foods/free sugars	4 or less occasions/day	Less than 10% energy

## Notes

- \*EHN's population goals are expressed as a recommended maximum (less than x) or minimum (more than x), unless there is evidence that both high and low intakes are of concern and an ideal range is then given. The goals are for the average (mean) of populations, and are not for individuals.
- \*\* The Eurodiet Core Report specifies a population goal for BMI of 21-22 on the basis that a BMI of 21-22 is the optimum population mean BMI, which both limits the likelihood of underweight and of obesity (Eurodiet Working Party 1:Final Report). However, because of strong representation from EHN members, and in consultation with the Rapporteur of Eurodiet Working Party 1, Professor WPT James, EHN has revised this goal to take into account increasing levels of overweight and obesity in Europe. A BMI of 23 lies halfway between the ideal goal of 21 and 25 (our best estimate of the mean BMI for people living in the European Union).