

EXECUTIVE SUMMARY

For the majority of European adults, who neither smoke nor drink excessively, what they eat and how physically active they are, are the most significant controllable risk factors affecting their long-term health. *Public Health Nutrition (PHN)* focuses on the promotion of good health through healthy food habits and a physically active lifestyle and the prevention of related illness in the population. However, PHN includes factors such as socio-economic, demographic and anthropometric factors and other factors related to nutritional status and the promotion of healthy habits. Specific indicators such as breast-feeding initiation and duration, total alcohol intake and drinking pattern, physical activity level and pattern and aerobic fitness have to be considered in a PHN context. The present project, *Monitoring Public Health Nutrition in Europe*, was therefore necessary to cover the topic as a whole, and specifically, to create a “user-window in nutrition” within the *Health Monitoring System*.

The original project aims, reformulated during the project period to better correspond to the current situation in the *Health Monitoring Program*, were as follows;

1. To develop a theoretical framework for the selection and prioritization of indicators for monitoring Public Health Nutrition;
2. To identify indicators relevant to the monitoring of Public Health Nutrition;
3. To examine the nutritional aspects and proposals another monitoring projects;
4. To consider other novel proposals for monitoring Public Health Nutrition;
5. To integrate these into a recommended list of indicators for Public Health Nutrition;
6. To integrate the surveillance system into training and educational systems, in particular the Program for the European Masters in Public Health Nutrition.

Seven *Primary Categories (PC)* for investigation were identified at a *Plenary Meeting* in Luxembourg, October 2000. These were:

- PC 1. Health promotion
- PC 2. Food and nutrient intake, including breastfeeding and alcohol
- PC 3. Nutritional status and physical activity habits and fitness
- PC 4. Socio-demographic factors
- PC 5. Inequality
- PC 6. Genetic factors and interactions
- PC 7. Life stages and vulnerable/critical periods

Three *Working Parties* provided useful comments on the prioritizing of the many indicators. These comments were then fed to the co-ordinators in the *Executive Committee*, who further developed a prioritization scheme. The *Report Committee* took responsibility for preparing the report. Meanwhile experiences were presented and discussed at several international meetings. Information was also disseminated through publications and newsletters, and through training at Master’s and PhD levels over Europe.

The information gathered on possible indicators and related operational measures, are here described on next page, by Primary Category. In most cases, operational measures can be defined in detail from their generic indicators. However, in some instances the level of detail of these corresponds to such an extent that it is difficult to make a distinction, such is the case for alcohol. Standardized methods for data collection are also given in the Report. Recommendations for indicators for monitoring PHN in the EU are:

Indicator	Operational measure
Health promotion	
Nutrition policy	A Nutrition Policy with specific recommendations is set down in national or Government legislation.
Nutritional fortification	A unified practice of food fortification and monitoring of the incidence of related diseases impact, efficacy and side effects across the European Union.
Sociodemographic/economic	
Age	Percentage of population over the age of 71 years.
Education	Percentage of population with only elementary education and below.
Occupation	Percentage of the adult population in manual occupations.
Household income	Percentage of households with a total income below 50% of the median income of the country.
Unemployment	Percentage of the population that have been unemployed for more than 12 months.
Food and nutrient intake	
Consumption /Availability of vegetables (excl. potatoes and vegetable juice)	Average per capita adult intake of less than 300g/day
Consumption /Availability of fruit (excl fruit juice)	Average per capita adult intake of less than 100g/day
Consumption /Availability of fish	Diets that contain less than 200g of fatty fish a week
Saturated fatty acid content of the typical diet	Average diet with a saturated fatty acid content of more than 10% of energy intake
Consumption /Availability of meat and meat products	Average per capita adult intake of more than 80g red meat/day
Poly-unsaturated fatty acid content of the typical diet	Average diet with less than 7-8% of energy from PUFA
Mono-unsaturated fatty acid content of the typical diet	Average diet with low MUFA
NSP content of the typical diet	Average diet with less than 25g/d
Vitamin content of the typical diet	Diet with levels of Vit C, D, E, folate and carotenoids below recommended levels
Mineral content of the typical diet	Diet with levels of Fe, I, Ca and Se below recommended levels
Breastfeeding (bf)	
Initiation	Total and exclusive bf at birth, i.e. throughout the first 48 hrs of age
Duration	Total breastfeeding at 6 months of age (can be collected during routine check-up close to 6 months, giving the range of data collection)
Quality	Exclusive breastfeeding at 6 months of age (can be collected during routine check-up close to 6 months, giving the range of data collection)
Alcohol	
Total consumption	Total alcohol consumption per capita per beverage category
Abstainers	The share of abstainers in the total population
Drinking Pattern	The share of heavy drinkers in the total population
	The share of the total alcohol consumption consumed as an intoxicant
	The frequency of heavy drinking occasions (binge drinking)
	The share of total alcohol consumption consumed with meals
Nutrient status	
Carotenoid status	Retinol and total plasma carotenoids levels of a representative sample of the population, in the routine nutritional surveys. Age-gender specific cut-off points to be determined
Fatty acid profile	Total plasma cholesterol and cholesterol fractions, fatty acid cholesterol esters levels of a representative sample of the population in the routine nutritional surveys. Age-gender specific cut-off points to be determined
Folate status	Erythrocyte folate levels of a representative sample of the population in the routine nutritional surveys. Age-gender specific cut-off points to be determined
Selenium status	Plasma selenium levels of a representative sample of the population in the routine nutritional surveys. Age-gender specific cut-off points to be determined
Iron status	Haemoglobin, serum ferritin and serum transferrin receptor using appropriate cut off points by age and gender
Vitamin D status	Circulating levels of 25-hydroxy vitamin D 3 provide the most appropriate measure of vitamin D status
Anthropometry	
Body composition (BMI)	Height and weight, Waist/hip ratio, Sagittal abdominal diameter
Physical activity and Fitness	
Level	The total amount of activity expressed either as activity energy expenditure or physical activity level (PAL), assessed using the Int Phys Activity Questionnaire (IPAQ)
Pattern	Time (mins/day or week) spent at health enhancing physical activity level (IPAQ)
Inactivity	Time (mins/day or week) spent sitting (IPAQ)
Determinants	Environmental determinants for physical activity
Fitness	Aerobic power, assessed using the UKK Walk Test 2 km, and UKK Fitness Test Battery

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