



PLAN FOR
THE PROMOTION
OF PHYSICAL ACTIVITY
AND BALANCED DIETS

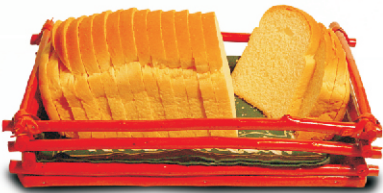
2004-2008





Publisher:
Junta de Andalucía. Consejería de Salud

Design, editing and printing:
FORMA animada S.L.L.



PLAN FOR
THE PROMOTION
OF PHYSICAL ACTIVITY
AND BALANCED DIETS

2004-2008







INDEX

PRESENTATION	09
I. INTRODUCTION	13
II. RISK FACTORS	25
1. Unbalanced diet	
2. Overweight and obesity	
3. Sedentary lifestyles	
III. THE ANSWER: A HEALTH PROMOTION PLAN	47
IV. WORK APPROACH AND IMPLEMENTATION	51
V. OBJECTIVES, STRATEGIES AND INDICATORS	55
1. Aimed at the GENERAL POPULATION.	
2. For the HEALTH SERVICES.	
3. Aimed at the SCHOOL POPULATION.	
4. Aimed at the WORKING POPULATION.	
5. Aimed at FOOD MANUFACTURING COMPANIES.	
6. Aimed at the CATERING AND LEISURE INDUSTRY.	
7. AWARENESS.	
VI. ASSESSMENT	69
VII. BIBLIOGRAPHY	71





PRESENTATION

During the last decades of the twentieth century and the first years of the twenty first, health problems caused by lack of exercise and obesity leading to cardiovascular disease, diabetes and some kinds of cancer have become increasingly important.



We are all aware of the impact these health issues have on morbidity and mortality; so much so that one of today's priorities is to find a solution to these problems. In fact, both the WHO-Europe, in its "Health21" survey, and the European Union have underlined the importance of the impact of obesity and sedentary lifestyles, especially in industrialised countries.

Preliminary programmes and plans based on improving medical response in these cases soon paved the way for more efficient programmes aimed at addressing the underlying causes of obesity and lack of exercise, namely, what we eat and how much, or how little, exercise we do. For this reason the Public Health 2003 – 2008 programme of the European Union has drawn attention to the need for plans and processes aimed at providing a comprehensive solution to this public health problem.

Following these guidelines, Andalusia is in the process of developing the Plan for the Promotion of Physical Activity and Balanced Diets, within the framework of the 3rd Andalusian Health Plan. The main aim of this programme is to empower people to make informed choices regarding their diet and to engage in physical exercise suitable to each individual's circumstances.

The Plan rests on three key strategies: The first aims at promoting a balanced lifestyle consisting of an unrestricted but healthy diet combined with enough physical exercise to avoid excessive weight gain and to counterbalance a possibly sedentary way of life which reduces the risk of ill-health.

The second strategy involves several sectors and entails the necessary participation, or greater commitment, from other sectors of society such as manufacturing companies and the entertainment business, public institutions (such as Sport, Education, Agriculture, Consumer Affairs and user and consumer groups under the tutelage of various scientific institutions. The aim is for these sectors to work together, each according to their field of expertise, to aid in the overall implementation of the Programme.

The third strategy entails the active involvement of the citizens. When all the members of our Autonomous Region have improved their diet, are healthier and fitter and have enjoyed the process of change knowing that in doing so they have reduced the risk of serious illness, it can safely be said that we have succeeded in reaching our goals.

This Plan, therefore, not only provides answers to a growing problem identified by scientists and doctors, but also addresses a particular need felt by all members of our society which makes the implementation of the programme particularly rewarding to us. In the final analysis, it will encourage members of the public to adopt a healthier lifestyle, and enable public institutions to provide the information and services necessary to make this possible.

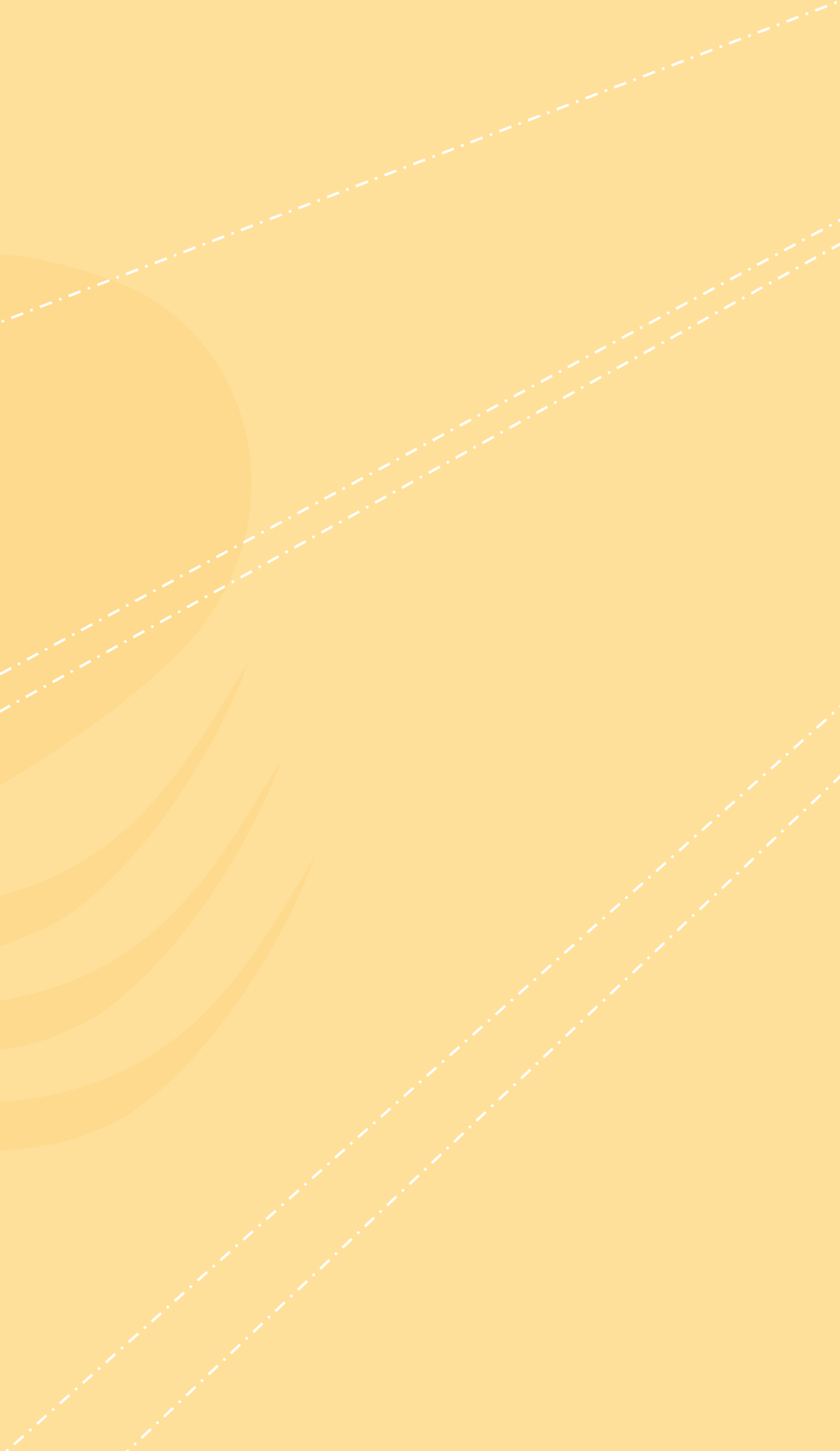
The Plan for the Promotion of Physical Activity and Balanced Diets is, therefore, aimed at all members of Andalusian society and calls for the participation not only of the medical profession but also of other sectors in an effort to prevent disease and promote well-being.

I am sure that through this Plan we will be able to develop a strategy to promote healthy living which will benefit the quality of life of the Andalusian region as a whole. We are committed to developing successful health policies built around multisectoral and individual involvement.



Finally, I would like to express my thanks to those professionals from both the public and private sectors, who, with their hard work and enthusiasm, have helped design this project and make it a combined success.

REGIONAL HEALTH MINISTER
Francisco Vallejo Serrano



Plan Physical Activity and Balance Diets

INTRODUCTION



- I. INTRODUCTION.**
- II. RISK FACTORS.
- III. THE ANSWER: A HEALTH PROMOTION PLAN.
- IV. WORK APPROACH AND IMPLEMENTATION
- V. OBJECTIVES, STRATEGIES AND INDICATORS
- VI. ASSESSMENT
- VII. BIBLIOGRAPHY



I. INTRODUCTION

One of the priorities of the 3rd Andalusian Health Plan (13) is to **“Promote healthy lifestyles in all social situations as a means of improving health”**. This entails promoting physical exercise and a balanced diet as a means of preventing obesity, cardiovascular, metabolic and osteoarticular diseases. This course of action has been defined within objectives 2, 3, 4,5,6,7 and 8 of the programme.

The 3rd Andalusian Health Plan also underlines the relationship between lifestyles, standard of living and health - nowadays no-one denies the advantages of leading a healthy life: eating well, doing exercise and sport, having a good social life, pursuing healthy leisure activities, etc.

The programme, which has been created within the framework of cooperation between the Andalusian administrations, local corporations, professionals and members of society, has 4 key aims, the foremost of which is to **“1. Improve the health of the Andalusian public, increase life expectancy and reduce periods of ill-health.”** The programme's multisectoral plan of action emphasises the need to reinforce health education to empower individuals to make informed choices about diet and physical exercise and to reduce consumption of tobacco, alcohol, drugs and prescription medicines.

According to the survey carried out for the 3rd Andalusian Health Programme, the close, complex relationship between an individual's health and his/her lifestyle is well documented and is one of the Public Health system's principle areas of study and action. Medical science has always been aware of the effect that diet and exercise have on individual health. Nowadays, dietary habits and physical activity are considered to be a determining factor in the overall health of all countries, especially those of the industrialised world.

Diet is made up of different components which can be considered separately, though not completely independently. On the one hand, the “what do you eat?” factor can cause certain illnesses due to a lack of some nutritional substances and a surfeit of others; on the other hand there is the “how much do you eat?” factor - overeating, which is one of the main issues facing today's Public Health systems owing to the prevalence of obesity and other nutritional disorders.



As far as eating and exercise are concerned, individuals apply their own belief systems and interpretative theories which define how they relate to their bodies. These theories affect dietary habits inasmuch as they are conditioned by how individuals obtain their basic resources and means of existence and by their relationship with these elements. This may partly explain the evolution of these habits over time and could give an insight into the collective dietary habits of each sector of society and explain the certain "affinity" to particular dietary habits which seems to exist among individuals within the same socio-economic strata.

At the same time, humanity, especially in industrialised countries, has undergone a drastic change in lifestyle over the last century. Throughout history, man has used his body as a means of obtaining food, of travelling, of establishing relationships, etc. Over the last few decades, however, the situation has changed owing to far-reaching innovations which have affected our way of life: the motorcar, public transport, long-distance communications, etc. have all gradually relegated our previously vital organism to a mere physical body that can carry out its daily tasks with practically no activity whatsoever. Nevertheless, our body has not had time to adapt to such an accelerated pace of change and, logically, our health suffers as a result.

Behavioural changes frequently develop into pathologies. New dietary habits together with the lack of physical activity have given rise to the most prevalent health problems in today's 21st century society.



The following chart illustrates a few examples of the possible relationship between certain pathologies and dietary risk factors. (8)

Pathology	Factores de riesgo de origen alimentario
High blood pressure	Insufficient intake of fruit and vegetables Excessive alcohol consumption Excessive salt consumption
Cerebral and cardiovascular diseases	Insufficient intake of fruit and vegetables Excessive consumption of saturated fatty acids Insufficient intake of fibre-rich foods
Cancer (above all, colon, breast, prostate and stomach)	Insufficient intake of fruit and vegetables Excessive alcohol consumption Excessive salt consumption Insufficient intake of fibre-rich foods Insufficient physical activity or excess weight
Obesity	Excessive energy intake Insufficient physical activity
Noninsulin dependent diabetes (type 2)	Obesity Insufficient physical activity
Osteoporosis	Insufficient calcium intake Insufficient vitamin D intake Insufficient physical activity
Dental decay	Frequent consumption of fermentable carbohydrates/ high-sugar-content food and drink
Dental erosion	Consumption of high-acid-content foods, drinks or fruits
Iodine-deficiency disorders	Insufficient intake of fish or iodine-rich foods
Premature birth and low birth weight	Malnutrition
Ferropenic anaemia	Insufficient, or lack of, iron intake Insufficient intake of fruit, vegetables and meat
Spina bifida	Insufficient consumption of folic acid and folate Insufficient intake of fruit and vegetables
Low resistance to infection	Insufficient intake of fruit and vegetables Insufficient intake of micronutrients Lack of, or insufficient, breast feeding
Food allergies	Allergens present in food
Infectious food poisoning	Pathogenic microorganisms present in food
Non-infectious food poisoning	Pathogenic substances present in food, such as dioxins, mercury, lead and other heavy metals, agrochemical residue and other contaminating agents

Source: European Commission: Progress report on the European Commission investigation into nutrition in Europe, 2003.

On the other hand the World Health Report 2002 carried out by the World Health Organisation (WHO, 57), describes how the combination of a few risk factors alone can account for a significant proportion of all deaths and diseases occurring in most countries. As far as chronic illnesses are concerned the outstanding risk factors, apart from tobacco and alcohol, are obesity, physical inactivity, insufficient intake of fruit and vegetables as well as several intermediate conditions such as high blood pressure and increased seric cholesterol and blood sugar levels.

Moreover, according to the World Health Organisation, lack of exercise causes over two million deaths a year worldwide. If this is further aggravated by dietary deficiencies and smoking, lack of exercise is a contributing factor in nearly 80% of cases of premature heart disease and is one of the ten main causes of death or disability in the world.

In the light of these findings, it is not surprising that the WHO considers obesity and lack of exercise to be the real 21st century plague in the western world. These findings prompted the WHO to coin the slogan "Move for Health" to commemorate the World Health Day 2002, calling on people, communities and countries to take action to combat the consequences of these serious health problems.

In the present situation, therefore, the priority of all health programmes instigated by first world countries should not only be to combat widespread obesity but also to address its underlying causes. This entails taking positive action to deal with issues arising from poor eating habits and lack of exercise. Health plans and other comprehensive plans as well as other promotional strategies should be aimed at fostering the idea that a balanced diet goes hand in glove with an adequate exercise plan.

In 2002 the 55th World Health Assembly proposed the creation of an international policy on diet and exercise (61). Following these recommendations, a proposal has recently materialised which aims to define the best way to promote health and reduce the risks of noncommunicable chronic disease. The proposal stresses the need for all relevant sectors of society to take part in the project, including the civil society and the food industry.



Also in 2002 the European Parliament and the European Council endorsed a new community action programme for the public health sector (9), to be put into effect over 2003 and 2008. This new programme defines three overall aims: to provide information on health, to take immediate action against health risks and to foster health through health determinants via health prevention and promotion. The actions included in the third objective address specific questions such as nutrition and are based on multisectoral initiatives which include measures to be taken in other social areas such as the environment and the consumer society.

Among the priorities established in the aforesaid programme are the need to tackle health determinants within various contexts such as working conditions and healthcare, underlining the need for medical personnel to systematically include these initiatives in their day to day contact with patients.

As far as dietary habits and exercise are concerned, the programme sets out guidelines on the eating habits of children and adolescents, raises the question of prevention and dictates measures to be taken against obesity, and analyses attitudes towards diet, breast feeding and physical activity. The programme favours policies which encourage new, healthy habits in schools, the work place, town planning, construction and in leisure related activities.



The importance of working in consensus with all sectors of society is essential to bring about the necessary social changes. The success of a health programme aimed at empowering individuals to adopt a healthy way of life lies precisely in the awareness that what can be achieved in one context, e.g. in the work place or in schools, can also be applied to others (40).



Repercussions on Health

The traditional Andalusian dietary formula has always been based on the so-called “Mediterranean Diet”, which consists of large quantities of vegetables, fruit and fish and is characterised by the use of unsaturated oils such as olive oil.

Over the years it has become apparent that adherence to the Mediterranean diet helps prevent certain disorders such as cardiovascular disease. In fact, a Mediterranean diet combined with physical exercise is one of the main strategies in the fight against this disease.

On the other hand, the excessive intake of energy-dense foods and saturated oils is considered to be one of the main causes of dietary related diseases and has an important impact on disabilities and deteriorating quality of life, not to mention escalating economic and social costs.

The pattern of mortality and morbidity found in Andalusia is identical to that found in the rest of Spain and throughout the European Union i.e. illness and death related to unsuitable lifestyles such as unbalanced diet, lack of exercise, smoking, etc. This lifestyle is directly linked to serious pathologies such as cardiovascular disease, diabetes and certain kinds of cancer - diseases which cause concern not only because of their prevalence in modern society, but also due to the alarming increase of cases.

Cardiovascular disease and diabetes are respectively the most widespread pathologies in Andalusia and also the commonest cause of death in our region and as such, merit closer examination.

As far as cardiovascular disease is concerned, there is a consistent link between cardiovascular risk and diet (47). There is ample scientific evidence to suggest that a reduction in the intake of saturated fats and an increased consumption of fruit and vegetables helps reduce the risk of cardiovascular pathologies and cerebral vascular accidents, which indicates that a change in diet would have considerable impact on the incidence of chronic illnesses (40, 55).

Spain's dietary habits have significantly changed over the past three decades; there is a marked tendency towards a less healthy diet which increases the risk of heart disease. Recent studies have shown that the average consumption of saturated fats and cholesterol in Spain exceeds

the recommended limit for a balanced diet, with Andalusia being one of most affected communities (49).

Other studies have confirmed that obesity, when measured against Body Mass Index (BMI), is either directly linked to an increase in the rate of cardiovascular diseases and diabetes or has an impact on other risk factors such as high blood pressure and hypercholesterolemia (25).

The DRECA Survey (on diet and the risk of cardiovascular disease in Andalusia) carried out in our autonomous region set out to determine the scale of cardiovascular risk factors. The results confirmed those of previous studies and highlighted the direct relationship between obesity and other cardiovascular risk factors such as high blood pressure, dyslipemia and diabetes.

Prevalence of cardiovascular risk factors among adults with BMI > 30

Hypertension	43,6 %
Tobacco	28,1 %
Diabetes	11,6 %
Hypercholesterolemia	19.8 %
Hypertriglyceridemia	10.5 %

Fuente: Servicio Andaluz de Salud. Estudio DRECA, dieta y riesgo de enfermedades cardiovasculares en Andalucía,1999.



One of the positive factors revealed in the aforementioned survey was that many of the traditional, healthy ingredients, such as vegetables, fruit and fish, which make up the Mediterranean diet, are still being consumed in Andalusia. Nevertheless, there is excessive consumption of products rich in saturated fats which are associated with an increase in cardiovascular risk. The calorie-rich diet in Andalusia is therefore compatible with the obesity rate identified in other surveys.

On the other hand, some qualitative surveys carried out on dietary habits have concluded that, although the traditional Mediterranean balanced diet is generally adhered to, modern dietary habits are leading to unhealthy trends. The ingredients of today's diet reveal high levels of consumption of meat, fish and dairy products (the latter is due to dairy by-products such as yoghurts, milk-based desserts and cream cheese) and insufficient cereal consumption (except pasta and pastries, which have risen over the past few years), potatoes and pulses. The use of fresh fruit and vegetables has decreased over the past ten years but has been partly offset by an increase in the intake of processed vegetables and garden produce (3). It is clear that a return to the traditional Mediterranean diet should be fostered and promoted.

The negative impact which Diabetes Mellitus type 2 has on health services has already been mentioned. Estimates show that this form of diabetes affects 7% of the Andalusian population and owing to the serious complications that can arise (problems related to eyesight, circulation, etc) it now constitutes one of the most pressing health issues. A healthy lifestyle based on physical exercise, balanced diet and optimum weight is an essential factor in the prevention and treatment of this disease.

A further alarming feature in the spread of this disease is the suspected increase in cases in children, a trend which is observed in Andalusia and also in the rest of the world. Experts believe that the growing number of children suffering from diabetes, particularly type 2, is related to changing lifestyles.

This theory stems from data obtained in other countries where the link between diabetes and over-eating and lack of exercise has been established. In the U.S.A. over 20% of children and adolescents are overweight and show signs of glucose intolerance and type 2 diabetes, a situation which clearly demonstrates the relationship between diabetes and obesity. According to some experts, the increase of diabetes in this age group is a growing paediatric epidemic (46, 53).

Although more studies need to be carried out to substantiate this hypothesis, the American Diabetes Association has warned of the rise in type 2 diabetes both in obese and normal-weight children and has called for further research to determine the magnitude of the problem. In spite of the limitations of the existing surveys, all the evidence suggests that the situation could be even more serious than is presently suspected (2).

Following the guidelines laid out by the 3rd Andalusian Health Plan together with the Comprehensive Diabetes Plan (11) and the Comprehensive Oncology Plan (12), and based on ongoing research into the parameters of nutrition and physical activity within the Andalusian Region, the initiative was taken to launch the Plan for the Promotion of Physical Activity and Balanced Diets. The aim of this plan is to prevent prevailing diseases and to improve the quality of life within the Andalusian region by encouraging people to engage in physical activity and adopt a balanced diet.







Plan Physical Activity and Balance Diets

RISK FACTORS



- I. INTRODUCTION.
- II. RISK FACTORS.**
- III. THE ANSWER: A HEALTH PROMOTION PLAN.
- IV. WORK APPROACH AND IMPLEMENTATION
- V. OBJECTIVES, STRATEGIES AND INDICATORS
- VI. ASSESSMENT
- VII. BIBLIOGRAPHY





II. RISK FACTORS

1. UNBALANCED DIET

As has already been seen, qualitative surveys on eating habits in the Andalusian region have shown that although there is adherence to the traditional balanced diet (which is similar to the Mediterranean diet) there is evidence to suggest that modern dietary habits are leading to unhealthy trends.

According to the DRECA Survey, one of the characteristic ingredients of the Andalusian diet is unsaturated oils (olive oil, blue fish) although some changes need to be introduced, i.e. a reduction in the consumption of animal proteins (except fish), dairy products and by-products and of fats (particularly, saturated fatty acids). The survey also recommends consumption of bread and cereals (preferably wholemeal), vegetables, fruit, pulses and garden produce.

Consumer Habits

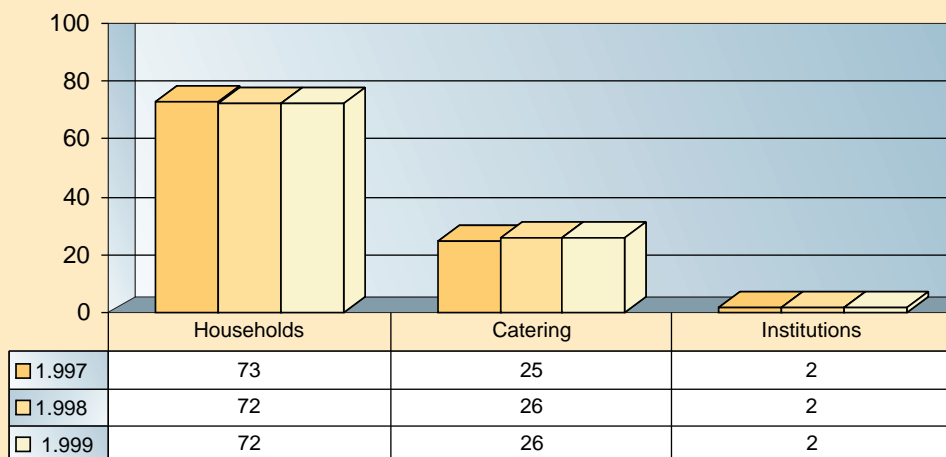
Studying the evolution of the consumption of foodstuffs over the past few years throws light on modern consumer habits and enables us to assess these factors correctly. The Spanish Ministry of Food and Agriculture prepares a detailed annual report on the consumption of foodstuffs in the country, known as the Food Consumption Chart

Drawing on data from the chart for 2001 the total expenditure on food increased during 2001 to €61.44 thousand million, which represents an 8.3 % rise over the figures for 2000.

Of this total expenditure €44.74 thousand million correspond to domestic outlay, €15.55 thousand million to the catering industry and €1.16 thousand million to institutions.

The overall division of expenditure was the same as the previous year: household spending accounts for 73% of the total while the remaining 23% corresponds to other sectors.

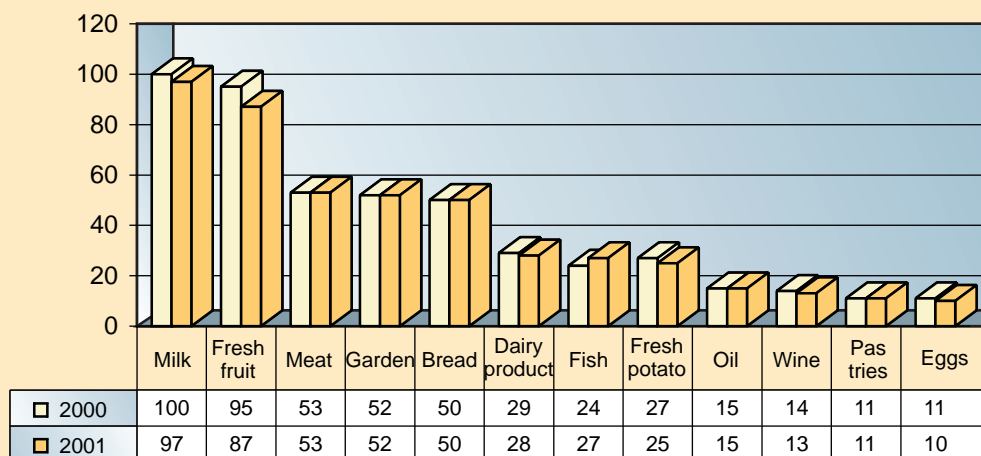
Distribution of expenditure (%)



Source: Ministerio de Agricultura, Pesca y Alimentación. Panel de Consumo Alimentario, 2001.

Expenditure on food has been rising at a steady 1.5% from 1997 to 2001.

Household food consumption, Per capita consumption 2001 and 2002



Source: Ministerio de Agricultura, Pesca y Alimentación. Panel de Consumo Alimentario, 2001.



On a nationwide basis the evolution of domestic consumption of the main food groups shows that fresh fruit, mineral water, fruit juice and fish experienced the greatest increase in 2001. On the other hand there was a decrease in the consumption of table wine, pulses and fresh potatoes.

General dietary trends in Andalusia over the past few years show a decrease in the consumption of cereals (particularly bread), vegetables and garden produce and an increase in the consumption of dairy products.

Domestic food expenditure was €1,105.17 per person / household during 2001, an increase of 9.3% over the previous year.

Other important figures are to be found in the latest Continuing Survey of Family Budgets (Encuesta Continua de Presupuestos Familiares) (14) where it can be seen that Andalusians spend 16.21% of their domestic budget on food for household consumption and a further 8.56% on meals in restaurants and other venues outside the home – figures which are in line with the rest of Spain.

It is also interesting to highlight the direct relationship between food expenditure and the age of the head of the household and the inverse relationship between the educational level of the latter and the density of population.

Psychosocial aspects

In order to assess and explain dietary trends it is important not only to be aware of the eating habits of the population as a whole but also of the obstacles that, in their opinion, prevent them from leading a healthier lifestyle. The Institute of European Food Studies (IEFS) has carried out various studies (27) into the behaviour of the population of fifteen European countries. In one survey the factors which most influenced people's decision about what to eat were analysed and showed that, for the European consumer, the most important considerations are Quality, Price, Flavour, Healthy Food and Family Preferences; the Quality factor was the most voted by all nationalities.

Important differences between socio-economic groups have also come to light. For example, while men – especially young men – consider Flavour to be the most important factor, women are more concerned with buying Healthy Food. Also, Flavour and Healthy Food were considered incompatible by some consumers.

The Price factor was high up on the scale for the unemployed and retired. The survey calls on legislators to ensure that the necessary ingredients for a healthy diet should remain within reach of the household budget.

Findings also revealed that the socio-economic level of the family and the educational level of the mother influenced the consumption of certain foods such as fish, meat, fruit and vegetables and dairy products (52)

Age is another factor that affects diet. Young members of the European Union considered *Convenience* (ready-made meals, easily prepared food and fast food) to be an important factor in their choice of food.

Finally, it must be stressed that the main source of dietary information for most of the inhabitants of the European Community are health professionals, followed by the media (television, radio, magazines and newspapers), information printed on the packaging and friends and family.

There also seems to be a relationship between interest in nutrition and the amount of knowledge an individual has on the subject; the more interested a person is, the more concern there is about being informed on what he/she eats. Within the European population the group most interested in receiving dietary information consists of women between 35 and 54 with a secondary education or higher. Studies carried out in Spain bear out these findings. (24)

However, this pattern varies somewhat in the case of the young. This could be due to the fact that they are not primarily interested in obtaining information. Several studies carried out in Spain highlight the lack of knowledge children and adolescents show about nutrition (7.50), although they are certainly interested in the subject and are concerned about what they eat. Another important factor to take into account is that a high percentage (56%) has a say in the choice of the household menu (24).

Family preferences are very important not least because most children and adolescents have their main meals at home (52). It has already been seen that the group most concerned with choosing a healthy diet is made up of women, particularly mothers.



Although the lifestyle of the young is greatly swayed by the media, they are paradoxically highly critical of the influence it has on them. There is evidence to suggest that the group most influenced by opinions expressed in the media are women (24).



II 2. OVERWEIGHT AND OBESITY

One of the commonest means of defining an individual's nutrition is by calculating the Body Weight Index (BWI). This is done by dividing the person's weight (in kgs) by the square of his/her height (in metres). For example, a person weighing 70 kgs and measuring 1.7 m has a BWI of 24.2 kg/m².

Current BWI Classification	
Severe malnutrition:	< 16 kg/m ²
Moderate malnutrition:	16-16.9 kg/m ²
Slight malnutrition:	17-18.5 kg/m ²
Normal:	18.5 - 24.9 kg/m ²
Grade I overweight:	25-26.9 kg/m ²
Grade II overweight (pre-obesity):	27-29.9 kg/m ²
Type I obesity:	30-34.9 kg/m ²
Type II obesity:	35-39.9 kg/m ²
Type III obesity (morbid):	40-49.9 kg/m ²
Type IV obesity (extreme):	> 50 kg/m ²

Source: SENC: Guías alimentarias para la población española, recomendaciones para una dieta saludable, 2001.

Based on these risk factors, the findings of the DRECA survey carried out within the Andalusian Region showed how the Body Weight Index increased with age (even in children over 5) and established the prevalence of obesity among adults at 23.3%.

As far as dietary habits are concerned, high levels of consumption of meat and cold cuts such as sausages, ham, etc, pastries, biscuits and cakes were detected, especially among children and young people. The survey concludes that there is an excessive consumption of products high in fatty acid content which is linked to an increase in cardiovascular risk.



These factors represent a hypercaloric dietary pattern which is compatible with high levels of obesity (51).

These findings, together with those of other surveys, highlight the existence of a public health problem not only in Andalusia, but also in the rest of Spain and establish the need for a plan of action.

The Spanish Society for the Study of Obesity (SEEDO, 2000) (3) establishes the incidence of obesity among the 25 – 60 age-group of the Spanish population at 14.5 % at the time of the survey, with obesity being more prevalent among women than men. The prevalence of obesity also increased significantly with age both among women and men.

The results of a survey carried out by the Regional Ministry of Health (10) on the 25 – 60 age-group of the Andalusian population were even less optimistic with 39% of Andalusians suffering from overweight, 21.6% of whom can be classified as obese.

Percentage of the Andalusian population between 25 and 60 suffering from overweight and obesity

Age	Overweight (BWI 25-29.9 Kg/m ²)		Obesity (BWI ≥ 30 Kg/m ²)	
	Women	Men	Women	Men
25-39	24	43.5	7.6	11.9
40-49	36.1	48	23.7	21.4
50-60	40	47.6	38.7	26.6
Total	31	45.9	23.3	19.9
Total	39		21.6	

Source: Consejería de Salud: Valoración del estado nutricional de la Comunidad Autónoma de Andalucía, 2000.

Furthermore, the BWI values based on measurements of height and weight established by the Andalusian Health Survey (50) show that Andalusians over 15 have an average BWI of 25.5 kg / m². The BWI exceeds 25 kg / m² (overweight) after 25 years and rises steadily from that age onwards. Men have a 0.9% higher index than women.

BWI by age groups, Andalusia, 1999

	16-24	25-44	45-54	55-64	65-74	75	Total
Weight	65.53	70.71	74.4	74.32	72.76	69.71	70.72
Height	1.6998	1.6767	1.6513	1.6378	1.6262	1.6225	1.6662
BWI	22.7	25.2	27.3	27.7	27.5	26.5	25.5

Source: Consejería de Salud: Encuesta Andaluza de Salud, 1999. (calculo de IMC elaboración propia).

It is also important to bear in mind that overweight and obesity are not restricted to adults but are increasingly prevalent in children and adolescents, both in Andalusia and worldwide (43).

Psychosocial aspects.

This overview would not be complete without taking into account what individuals think of their bodyweight. Andalusians have a somewhat negative opinion on this subject. Within the sample group, 35.1% considered their weight / height relationship to be slightly or very much above ideal proportions. This opinion was more prevalent among the 45 – 74 age-groups.

Perception of Weight by Age Groups, Andalusia, 1999

	16 24	25 44	45 54	55 64	65 74	75	Total
Overweight	19.8	33.69	47.97	48.12	41.64	32.15	35.1
Normal weight	68.46	59.65	47.73	47.49	53.13	61.37	57.78

Source: Consejería de Salud: Encuesta Andaluza de Salud, 1999.



II. 3. SEDENTARY LIFESTYLES

Sometimes, the terms physical activity, exercise and sport are used indiscriminately. However, as scientific terms, they can have very different meanings. The European Union Food Information Council (EUFIC) makes the following distinctions (15):

Physical activity: All bodily movements that result in energy expenditure. This includes daily routine activities such as household jobs, shopping, working, etc.

Exercise: Planned and structured repetitive movements designed specifically to improve fitness and health.

Sport: Physical activity that involves structured competitive situations governed by rules.

Activity and Physical Exercise

As far as the first group is concerned, the findings of the Andalusian Health Survey of 1999 (50) show that over half of the population leads a sedentary lifestyle.

Type of Free-Time Physical Exercise, by gender (%)

	Man	Woman	Total
Sedentary, does no physical exercise in free time	48.04	58.90	53.47
Does some physical activity or occasionally does sport	35.68	34.65	35.16
Does regular physical activity several times a month	10.14	4.01	7.08
Does physical activity several times a week	5.86	1.94	3.90

Source: Consejería de Salud. Encuesta Andaluza de Salud, 1999.

Type of Free-time Physical exercise, by age (%)

	16-24	25-44	45-54	55-64	65-74	75 <	Total
Sedentary, does no physical exercise in free time	35.15	50.72	59.77	63.41	66.27	73.93	53.47
Does some physical activity or occasionally does sport	37.76	36.82	35.00	34.21	32.39	21.17	35.16
Does regular physical activity, several times a month	18.42	7.08	2.67	1.75	0.90	0.95	7.08
Does physical activity several times a week	8.37	4.94	1.98	0.50	0.30	0.24	3.90

Source: Consejería de Salud. Encuesta Andaluza de Salud, 1999.

The importance of walking should not be underestimated. Even though it is not considered a sport as such, it has lately become very popular as a means of keeping fit, according to those consulted in the survey. As far as walking is concerned, the latest findings are encouraging: 65.6% of the Andalusian population engages in this activity – a slight increase over the 1999 figures (61%) and almost 12 points above the estimated national average for 2000 (54%). This marked difference between Andalusia and the rest of Spain may be due to the Southern climate which favours this kind of activity.

Analysing the results of the survey by gender it can be seen that women (69.2%) walk more than men (61.6%).

Moreover, over half of the population use walking as a means of doing physical exercise either every day or most days. 63.8% said that they walked every day and 16.1% that they walk two or three times a week, so it can safely be said that almost 80% of the population who walk for exercise do so on a regular basis.



Sport (31)

Comparing the results of the surveys of 2002 and 1999, there is evidence of the growing importance of doing some kind of sport, either active or passive, as a leisure activity, especially among the young. 27% of Andalusians of 16 or over claim to Do sport, compared with 22.6% in 1999.

On the other hand, the estimate of adults (16 and over) who participate in sports activities was 32.4%, which gives a total of approximately 1.9 million people taking active part in some kind of sport – a figure which is 5 points lower than the average for Spain as a whole.

Looking closer at these figures, important differences between age groups can be appreciated. It can be seen, therefore, that in the preceding twelve months 53.2% of members of the youngest study group, the 16 – 25 age groups, participated in sports activities.

This number decreases significantly as the average age increases, reaching a minimum of 6.8% in the 65 and over age group. In addition, taking education levels into account, it can be seen that the increase in sports activities is in direct proportion to the level of education.

Taking all the factors into consideration, it can be seen that gender, age and education play an important part in sports activities; the Andalusian most likely to do sport is a male of between 16 and 25 years of age with a high level of education.

Sports Facilities (44)

A study of the type of sports facilities available in Andalusia will make it possible to satisfy the needs of the population as far as physical activity and sports are concerned.

There is usually no need for specific sports facilities in order to engage in recommended keep-fit activity; all that is needed is a change in the way daily activities are carried out. However, parks play an important part in the daily life of the Region as they provide an open space where members of the public feel free to move at will.

According to a survey carried out in 1995 by the Andalusian Institute of Statistics (IEA, 30), every town in Andalusia has a park and there is an average of 2.9 parks per town.

Number of parks per province and municipal average, Andalusia, 1995.

	Number of parks	Average number of parks per municipality
Almeria	283	2,7
Cadiz	133	3,0
Cordoba	180	2,4
Granada	551	3,3
Huelva	263	3,3
Jaen	233	2,4
Malaga	307	3,1
Seville	246	2,3
Andalusia	2196	2,9

Source: IEA: Sistema de Información Multiterritorial de Andalucía (SIMA).

Parks by Level of Maintenance, Andalusia, 1995

	Good	Fair	Bad	Under construction	Total
Almeria	16,61	22,61	29,68	31,10	100
Cadiz	12,03	24,81	30,83	32,33	100
Cordoba	4,44	21,11	32,78	41,67	100
Granada	17,06	25,95	28,86	28,13	100
Huelva	17,49	27,76	28,90	25,86	100
Jaen	7,73	24,03	32,19	36,05	100
Malaga	11,40	27,36	30,62	30,62	100
Seville	4,47	23,17	34,15	38,21	100
Andalusia	12,52	24,95	30,60	31,92	100

Source: IEA: Sistema de Información Multiterritorial de Andalucía (SIMA).

Another interesting factor to bear in mind is how Andalusians make use of sports facilities designed for physical exercise and sport. Firstly, 50.2% usually use public facilities (either municipal or other), which represents a 4 point increase over the 1999 estimate.



Secondly, 26.9% of Andalusians who do sport use public grounds, which is less than the 1999 figures, and thirdly, 19.6% now go to private clubs which is an increase of 5 points over the previous survey.

Having sports facilities in the neighbourhood is an important factor and can determine whether a person does sport or not. Generally, most Andalusians who use public facilities consider them to be close enough to their homes; 38.4% consider the number of facilities to be sufficient and 34.4% consider them insufficient. When comparing this information to that of the 1999 survey, a substantial rise (9.6) in the number of people who consider there to be a sufficient number of sports facilities can be observed.

As far as fitness is concerned, Andalusians as a whole consider themselves to be *"Fit"* or *"Fairly fit"* (77.6%). Only 2.4% consider themselves to be *"Very unfit"* and 11.5% consider themselves to be *"Fairly unfit"*.

The Workplace

Workplace activity has an important effect on fitness. According to the findings of the Andalusian Health Survey of 1999, half the working population of Andalusia carry out their daily activity *"Standing, with little movement"* and one in three workers spend their working day *"Sitting for most of the time"*.

Type of physical exercise involved at work or daily activity by gender and age (%)

	Man	Woman	Total
Sitting for most of the day	39.41	31.01	35.21
Mostly standing, with little movement	39.47	60.94	50.20
Walking, carrying weight	13.41	6.97	10.19
Heavy labour requiring great effort	7.18	0.74	3.96

Source: Consejería de Salud. Encuesta Andaluza de Salud, 1999.

	16-24	25-44	45-54	55-64	65-74	75 <	Total
Sitting for most of the day	49.50	23.32	20.93	35.09	52.84	60.90	35.21
Mostly standing, with little movement	37.99	58.00	59.77	52.26	40.30	35.31	50.20
Walking, carrying weight	8.90	12.75	11.86	9.90	6.12	3.08	10.19
Heavy labour requiring great effort	3.15	5.64	6.74	2.51	0.15	-	3.96

Source: Consejería de Salud. Encuesta Andaluza de Salud, 1999.

Comparing the differences between men and women, it can be seen that most women do their work standing (54%), a higher percentage than men (36.9%). However, more men (10.7%) do "*Heavy labour, work which requires great physical effort*", compared to 2.5% of women.

Sports activities in the workplace in Andalusia by work force, 2001			
	Are there any organised sports activities in your workplace? (%)		Total (%)
	Si	No	
Between 150 and 300 employees	16,36	83,64	100
Between 300 a 500 employees	19,35	80,65	100
500 or more employees	32,14	67,86	100
Total	21,05	78,95	100

Source: Otero Moreno: El deporte en los centros de trabajo de Andalucía, 2001.

It is interesting to observe that 21.05% of the sample companies provide their employees with organised sports activities; the greater the number of employees, the higher the percentage of companies organising sports activities, with up to 32.14% in companies with 500 or more employees.

The kind of sports organised in the workplace in Andalusia are usually of a competitive nature, the most popular being indoor football, tennis and football although there is also bowls, aerobic and swimming.

Theoretically, the benefits derived from any physical activity and sports can be extrapolated to the workplace; these include motivation, improved productivity, the prevention of risks at work and the reduction of costs and



absenteeism. However, risk sports can cause injuries and therefore sick leave. On the other hand, according to the figures below, there is little evidence of the existence of occupational keep-fit exercise programmes in Andalusian companies.

Companies organising physical activity to improve occupational health, 2001 (%)

	Are there any occupational keep-fit programmes in your workplace?	Is your company aware that physical activity in the workplace improves workers' health?
Sí	2,6	44,7
No	97,4	26,3
N/A	--	28,9
Total	100,0	100,0

Source: Observatorio del Deporte Andaluz: El Deporte Andaluz en Cifras 2002.

There are very few companies which organise occupational keep-fit programmes; in fact, only 2.6% of sample companies offered this service.

On the other hand, 44.7% of the sample companies claimed they were aware that physical activity improves occupational health. The reasons for this are discussed above.

Companies with sports activities which engage in competitive sports, 2001

Do company teams engage in competitive sports?		
Si	No	Total
83,3	16,7	100

Source: Observatorio del Deporte Andaluz: El Deporte Andaluz en Cifras 2002.

Most companies with occupational sports activities have competing teams (83.3%), a fact which underlines the importance of competitive occupational sports activities. Among financial companies, the percentage was 80%.

Of all the sample companies, 9% have their own sports facilities and 6% have agreements with independent sports facilities, although most companies have little information about how best to establish agreements with public and private sports facilities. It should be noted that half the companies who have their own sports facilities organised sports activities for their workers.

Percentage of companies receiving some kind of aid for organised sports activities, 2001

	Receives aid or subsidies (%)			Total (%)
	Yes	No	Don't know	
Between 150 and 300 employees	--	98,2	1.8	100
Between 300 and 500 employees	3,2	90,3	6,5	100
500 or more employees	10,7	78,6	10,7	100
Total	3,5	91,2	5,3	100

Source: Observatorio del Deporte Andaluz: El Deporte Andaluz en Cifras 2002.

The above table shows that companies with 150 to 300 employees do not receive any kind of aid to finance their sports activities compared to companies with more than 500 employees which receive the most aid or subsidies.

Psychosocial aspects

As far as physical activity is concerned, conclusions were again based on surveys carried out on the population of Spain and the rest of Europe for the IEFS and those carried out on the Andalusian population by the Regional Ministries for Sport and Tourism and Health.

In a recently published report comparing the physical activity of the Spanish population with that of the rest of Europe (54), the IEFS showed that a higher number of Spaniards were reticent about changing their



attitude to physical exercise than their European counterparts and were less likely to persevere when they made a change for the better. The Spaniards who expressed this opinion were typically individuals with a low level of education who are married, smoke and are obese.

According to the IEFS report on attitudes to physical activity, the average European consumer does not regard exercise/activity as one of the 3 main factors which affect health (in Spain, these factors are smoking, diet and consumption of alcohol), nor does he or she consider it to be one of the 3 main factors in weight gain (food preferences, fat and sugar consumption).

Among Spaniards, 37% do not engage in any regular physical activity (walking, gardening, cycling, swimming, etc) although some sociodemographic variables affect this figure: men engage more often in these activities, although within this group overweight men with a basic level of education are the least likely to do so. Of the group which engages in these kinds of activities, a large percentage (82% of Europeans) considers them to be an important factor in keeping fit.

Among the main reasons given for doing physical exercise / activity are "*To keep healthy*", "*To reduce tension*" and "*To keep fit*".

In Andalusia, those who regularly do some kind of sport claim to do it "*for fun and as a hobby*" (46.5%) and "*to do some kind of physical exercise*" (also 46.5%), followed by "*because I like doing sport*" (33.2%). The same reasons are to be found in the 1999 survey.

If men and women are divided into separate groups, important differences can be seen. For men, the main reason for doing sport is "*for fun and as a hobby*" (55.7%) while for women the main reason is "*to do some kind of physical exercise*" (60.5%).

Among the main obstacles cited among Spaniards for not doing more sport were:

- Need to work or study,
- Little interest in sport,
- Bad health,
- Elderly,
- Need to take care of children / the elderly (three times more frequent in women),
- No need to do exercise.

Among Andalusians who claim not to do any sport, the main reasons given were "*Not enough time*" (56.1%) followed by "**laziness and reluctance**" (24.2%); these are similar to the 1999 figures. An important development is that less Andalusians justified not doing sport due to being "*elderly*" (23.8%) in the 2000 compared with the 1999 study (28.3%), while those giving "*tired after finishing work or study*" (22.2%) as a reason has increased when compared with 1999 study (15.5%).

A number of those consulted had previously done some kind of sport but had given it up for various reasons, the main ones being "*not enough time*" (22%), "*tired after finishing work or study*" (14.6%) or "*injury*" (12.2%).

Generally speaking, the surveys indicate that approximately half of Europeans think they already do enough exercise and do not need to do more, particularly among the elderly and the less educated. Among those who do no exercise, 41% think they do not need to do more.

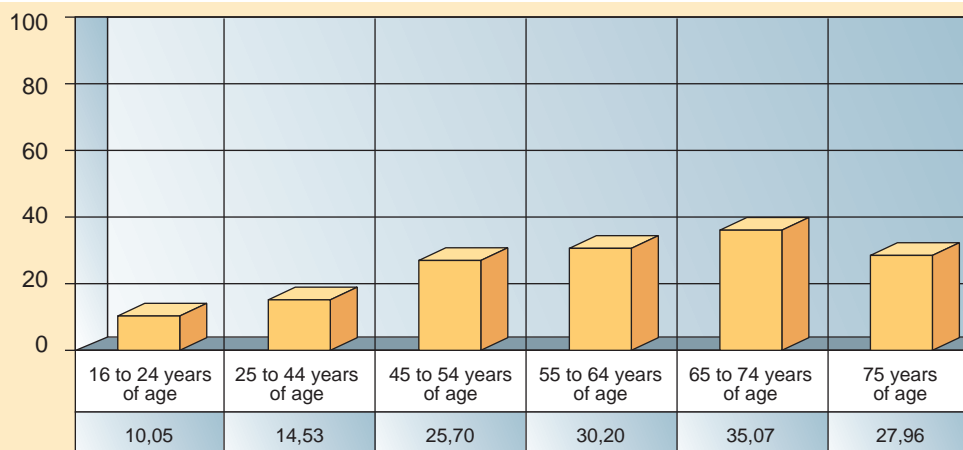
Of the sample group, 75% consider health professionals to be a good source of information about the benefits of physical activity.

In Andalusia 20.04% of the 15-years-and-over population have received medical advice to engage in physical exercise; 24% of women act on this advice compared to 16.01% of men. In the following graph it can be seen that the older the patient, the more frequent the recommendation to do exercise:





% of individuals who declare to have received a medical recommendation to engage in some type of physical exercise.



Source: Consejería de Salud. Encuesta Andaluza de Salud, 1999.

It is also important to bear in mind that the young are very concerned with their appearance, although the reasons differ according to gender. A survey has revealed that girls show a greater interest in diet, while boys are more concerned with being satisfied with their physique and whether they are thin or well-proportioned (24).

Another study has shown that the group least concerned with doing physical exercise, irrespective of gender, are married individuals with a primary level of education, who smoke and are obese.

IEFS recommendations regarding Physical Activity (27):

1. Increase awareness of the benefits that physical activity has on health, irrespective of body weight.

2. Increase awareness of the fact that physical activity includes all kinds of activities such as gardening, walking, dancing, football, etc, and not only "sport". This entails conveying messages to the effect that the greatest benefits of physical activity can be achieved by changing a sedentary lifestyle for one with a moderate degree of daily physical exercise.

3. Promote the concept that physical activity alleviates stress.
4. Ensure that health professionals understand the benefits of physical activity and receive adequate advice about how to encourage physical activity.





FINAL CONCLUSIONS TO BE DRAWN FROM THE SITUATION ANALYSIS:

1. Andalusia's traditional Mediterranean diet provides a very favourable starting point for maintaining good health, although this balance is under threat from certain dietary tendencies that need to be corrected. Statistics show a negative picture as far as the prevalence of overweight and obesity in our region are concerned.

2. The evidence uncovered in this report should serve as a point of inflection to strengthen the need for intervention through a plan of action.

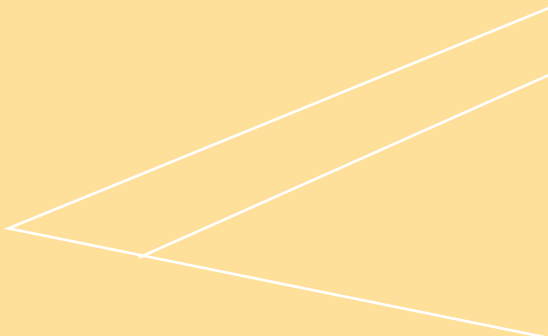
3. Any future interventions should include health determinants, i.e. adequate physical exercise and a balanced diet and their effects on the prevention of prevalent diseases such as cardiovascular disease, obesity and diabetes and some kinds of cancer.

4. The basic intervention strategy must be based on factors related to fostering and promoting health with a view to enjoying a better quality of life. A balanced diet should be compatible with enjoyment of life and should be instigated during childhood.

5. Any plan of action should include all the institutions and social agents involved within the framework of the health agreement resulting from the 3rd Andalusian Health plan. This involves the individual members of our region, their common forums, companies... even the Regional Government as the entity responsible for safeguarding health and food safety.

6. The programme should be designed as a single action plan which unifies the interests of all the sectors involved as well as the aims and strategies peculiar to each area and of course the resources necessary for attaining the goals laid out in the plan.

The Intervention Plan requires a process of monitoring to assess the level of fulfilment of each of the proposed aims; a set of indicators will be put in place to show the evolution of the data throughout the plan and a commission will be set up to monitor progress.



Plan Physical Activity and Balance Diets

THE ANSWER: A HEALTH PROMOTION PLAN



- I. INTRODUCTION.
- II. RISK FACTORS.
- III. THE ANSWER: A HEALTH PROMOTION PLAN.**
- IV. WORK APPROACH AND IMPLEMENTATION
- V. OBJECTIVES, STRATEGIES AND INDICATORS
- VI. ASSESSMENT
- VII. BIBLIOGRAPHY



III. THE ANSWER: A HEALTH PROMOTION PLAN:

As has been mentioned previously, one of the main lines of action of the 3rd Andalusian Health Plan aims to improve health from within social settings by promoting healthy lifestyles. The 3rd objective in particular, is aimed at women and describes a programme which intends to "*promote well-being and quality of life*". The areas of action are:

- *Gender-based health-orientated action plans*
- *Reduce the role of carers and create programmes of rest, training and support for the care of dependent patients or those with chronic disease.*

The actions designed to, among other things, reduce unhealthy habits by promoting a balanced diet and healthy physical exercise contained in the first strategy, are therefore specifically aimed at women.

Likewise, the first strategy of the 6th objective ("*To encourage healthy lifestyles*") has as its first strategy *the development of health education as a means of promoting a balanced diet, physical and other activities which are beneficial to health*.

In accordance with the objectives and strategies defined in the aforementioned plans, especially the Andalusian Health Plan, and consequent to the requirements revealed by the surveys, the main aim of the Plan for the Promotion of Physical Activity and Balanced Diets will be:

To promote physical activity and a balanced diet among the inhabitants of Andalusia as a means of preventing illness and disability and improving quality of life.

In order to achieve this, each of the areas of intervention has been assigned specific objectives. These areas of intervention have been defined as: general population, health services, education and businesses.

All these areas will have to include a series of key common strategies based on:

- **The need for a three-sided alliance**

- Among government areas involved in the plan, based on input from different sectors and more directly the Ministries of Health, Agriculture and Fishing, Consumer Affairs, Education, Tourism and Sports, Social Affairs, Employment and Technological Development.
- Among concerned civil organisations (business organisations, consumer groups, neighbourhood associations, etc) and the Regional Government.
- With the population as a whole, where the FAMILY is the central operative element and with individual members of the Andalusian region, in an effort to intervene in the determinants of individual health which is the underlying concept of the programme.

- **Diversification according to areas of intervention.** Once all the key players have converged, it will be necessary to diversify their efforts according to their areas of action. As far as the first stage of intervention is concerned, these areas have been defined as: general public and risk public, education, health and companies.

- The configuration of the **assessment and monitoring system** should provide a permanent link with the public, establish a context for training needs, define the course of the research and identify weak points in order to redirect the plan should it be deemed necessary.





Plan Physical Activity and Balance Diets

WORK APPROACH AND IMPLEMENTATION



- I. INTRODUCTION.
- II. RISK FACTORS.
- III. THE ANSWER: A HEALTH PROMOTION PLAN.
- IV. WORK APPROACH AND IMPLEMENTATION**
- V. OBJECTIVES, STRATEGIES AND INDICATORS
- VI. ASSESSMENT
- VII. BIBLIOGRAPHY





IV. WORK APPROACH AND IMPLEMENTATION

The design of the Plan was based on a meta-analysis of various surveys published by the WHO and the European Union as well as surveys carried out within our Autonomous Region where recommendations on diet and physical activity can be found.

The aims of the plan were complex and required the contributions of many different organisations and institutions; this called for the creation of an Interdepartmental Committee to act as the organ responsible for the design, monitoring, assessment and coordination of the Plan.

Having adapted the findings to our socio-cultural environment, a preliminary draft was drawn up in which the problem of sedentary lifestyles and obesity in Andalusia were described and the general aims, development, monitoring and assessment guidelines for the Plan were laid down.

The Committee provides a framework for the various institutions most involved in promoting healthy lifestyles, i.e. physical activity and a balanced diet. The first draft of the Plan was presented to the members of the Interdepartmental Committee during their first meeting on 28 May, 2003.

The committee is primarily composed of professionals from several public and private sectors; it is characterised by openness and flexibility and members from other organisations or institutions can join at any specific time if the members so decide. It is chaired by the Director General of Public Health and Participation.

The initial composition is as follows:

Regional Government

- Regional Ministry of Health
 - Directorate General for the Organisation of Processes and Training
 - Andalusian Health Service (AHS): Operative Planning Service.
 - Hygiene and Food Safety Service
 - Epidemiology Service
 - Health Promotion and Medical Surveillance Service

- Regional Ministry of Education: Directorate General for Educational Assessment and Teacher Training.
- Regional Ministry of Agriculture and Fisheries, Directorate General for Industry Agriculture and Food, Mediterranean Food Institute.
- Regional Ministry of Social Affairs.
- Regional Ministry of Tourism and Sport, Andalusian Centre for Medicine and Sport
- Regional Ministry of Governance: Directorate General for Consumer Affairs.

Local Government

- Andalusian Federation of Municipalities and Provinces (AFMP) – Andalusian Healthy Cities Network (AHCN).

Professional Associations

- Andalusian Society of Clinical Dietetics and Nutrition (ASCDN).
- Andalusian Family and Community Medicine Association (AFCMA).

User and Consumer groups

- Andalusian Board of Users and Consumers.

Business Organisations

- Confederation of Andalusian Entrepreneurs (CAE).

A preliminary draft was drawn up which was then amended and extended by the representatives of the various institutions and social organisations involved until a final draft was achieved incorporating final amendments proposed by the members; this was subsequently approved in a second meeting of the Committee. This process, therefore, has produced a document unanimously approved by all the members of the Committee.

Another of the aims of the second meeting of the Committee was to design a series of activities to be carried out by each of the institutions represented. The end result was the Programme of Activities 2003 – 2004.

The Committee also agreed to meet at least once a year in order to monitor the progress of the Plan. In this meeting, the previous year's report is presented and the Programme of Activities for the following year, together with the budget, is approved. To achieve this, the following working instruments will need to be developed:

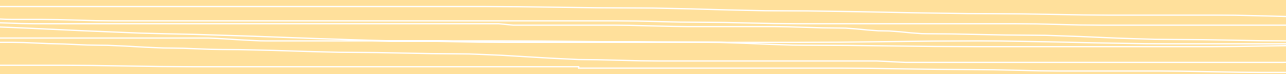


- An annual report monitoring the progress of the Plan in which the proposed objectives and activities for the year are described and contrasted with the results obtained within the same period, including any incidences which may have occurred.
- An annual programme describing both common strategies and those corresponding to various areas of activity. These activities will be organised within a schedule approved by all the sectors involved and will be consistent with the comprehensive plans of all the institutions, organisations and associations involved in the Plan. Proposals should also be drawn up for the following year, based on proposals forwarded by the members of the Committee.

The Committee will be empowered to create Working Panels to carry out the Annual Programme of Activities. The Working Panels will be responsible for carrying out all the objectives or activities proposed by the Committee.

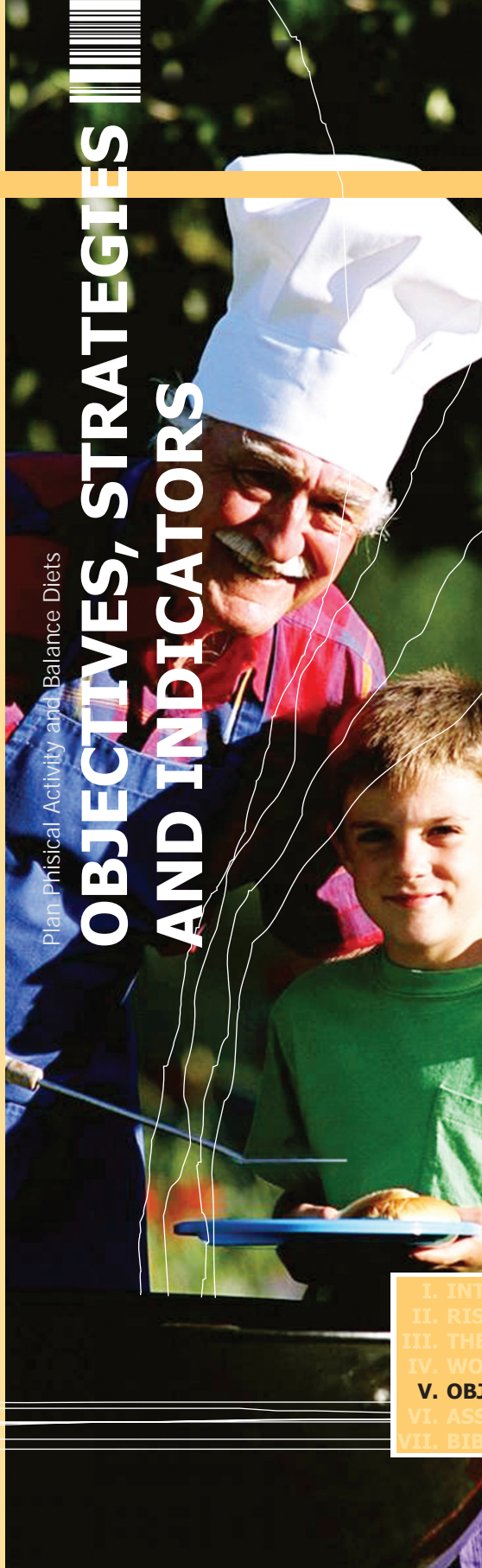
The formation of the Working Panels will depend on the activity proposed by each institution (organisations will also be invited to intervene), which will be presented in its final form before the rest of the Committee prior to approval.





Plan Physical Activity and Balance Diets

OBJECTIVES, STRATEGIES AND INDICATORS



- I. INTRODUCTION.
- II. RISK FACTORS.
- III. THE ANSWER: A HEALTH PROMOTION PLAN.
- IV. WORK APPROACH AND IMPLEMENTATION
- V. OBJECTIVES, STRATEGIES AND INDICATORS**
- VI. ASSESSMENT
- VII. BIBLIOGRAPHY



V. OBJECTIVES, STRATEGIES AND INDICATORS

Aimed at the **GENERAL POPULATION**

Objectives

- 1.1. The Andalusian population will understand the advantages of physical activity and the most recommendable activities for each social group (age, gender, etc.).
- 1.2. The Andalusian population will understand the benefits of a balanced diet and the recommendations to maintain it (dietary composition, frequency of consumption, etc).
- 1.3. Andalusian families will be empowered to make informed decisions regarding information on packaging labels, improving their daily diet and controlling their food budget.
- 1.4. Andalusian families will be informed about correct methods of food storage.
- 1.5. The Andalusian population will have access to basic information enabling them to correctly interpret advertising concerning diet and exercise and will be informed of the most wide-spread high-risk practices (miracle diets and uncontrolled physical exercise).

Strategies

- Publicity campaigns containing recommendations regarding physical activity and diet should be organised through the media: TV, radio, billboards, etc.
- Agreements will be signed with Non Governmental Organisations working with promotion and participation in health, high-risk groups and/or socially excluded groups (the disabled, drug addicts, etc), professional associations and user groups in order to strengthen the message of the Plan.

- Agreements should be signed with media representatives (national and local television and radio channels) and with other groups and associations to broadcast messages relating to health promotion.
- A webpage, available to all the institutions involved, will be designed containing information about the Plan.
- Marketing support materials will be printed (flyers, posters) containing information about food storage and labelling.
- Various strategies will be developed aimed at specific population segments such as children and the elderly, designed to address their particular circumstances.
- Specific population groups, such as retired people, will be encouraged to participate in activity programmes and to use sports facilities.
- Public activities and sporting events included in the Plan, such as amateur races, conferences on physical activity and diet organised in each province, open days, etc, will be encouraged.
- An index of community resources on physical activity will be published.

Indicators

- Number of information campaigns carried out in various media, divided by 1000.
- Amount of marketing support materials published per thousand inhabitants.
- Number of educational activities and open days organised per province.



For the **HEALTH SERVICES**

Objectives

- 2.1. Health professionals and local and regional health authorities will be provided with all the necessary support materials to recommend physical activity and a balanced diet to any person who contacts the Andalusian Public Health System, for any reason.
- 2.2. In the interests of prevention and improved health, healthcare processes will include specific prescriptions on diet and physical activity wherever appropriate.
- 2.3. In general, health services will recommend patients to engage in physical activity suitable to their personal and medical circumstances and will foster healthy dietary habits.
- 2.4. Health professionals will recommend and promote breast-feeding and healthy infant and baby feeding, according to the guidelines of the Health Child Programme.
- 2.5. Health professionals will inform certain population groups on the measures to be taken to avoid diseases caused by malnutrition or deficiencies (intake of iodine, iron, folic acid in pregnancy, etc).
- 2.6. People who have to make use of sports programmes and facilities for health reasons will be able to access these services through the health service.
- 2.7. Health programmes, particularly mother and baby programmes, will include specific strategies on diet and physical activity.

Strategies

- Medical personnel and other professionals responsible for sports and physical activity (regional and local authorities) will receive training on the subject of physical activity and diet.

- A training programme, mainly in primary health care, will be developed for medical personnel.
- A programme aimed at training health agents or health promoters (according to different age groups) will be designed and developed to foment health education in social environments.
- Recommendations on diet and physical exercise will be incorporated into all comprehensive healthcare processes which address the prevention and cure of cardiovascular diseases, cerebro-vascular accidents, cancer, osteoporosis, type 2 diabetes, high blood-pressure and obesity.
- A “Minimum Advice” protocol to be applied by all healthcare professionals will be developed and used in primary health care.
- Information about nutrition and physical exercise aimed at the general population and at health care professionals will be developed and published.
- Steps will be taken to combat cases of malnutrition among high-risk groups (institutionalised and hospitalised patients) which will include: surveillance for cases of malnutrition and planning healthy and nutritious menus for this group.
- The collaboration of local councils, AFMP/AHCN, etc. will be sought to enable patients with a medical prescription to use certain facilities and health improvement programmes.

Indicators

- Percentage of patients with dietary recommendations to engage in physical exercise in order to prevent diseases linked to incorrect diet and insufficient physical activity.
- Number of persons included in specific health programmes aimed at physical activity and diet.



- Number of “Minimum Advice” protocols dispensed in primary health care.
- Number of training courses held.
- Educational materials published, according to type.
- Prevalence of malnutrition in high-risk groups.

Aimed at the **SCHOOL POPULATION**

Objectives

- 3.1 Activities aimed at heightening parent awareness of the importance of educating their children in the benefits of a balanced diet and regular physical exercise will be organised in day nurseries belonging to the Regional Ministry of Social Affairs.
- 3.2 Efforts will be made for infant education, primary and secondary education students to adopt a healthy and balanced diet and appreciate the benefits of physical activity.
- 3.3 Primary and secondary education students will receive basic education on healthy dietary habits and the importance of physical activity.
- 3.4 Students studying health-orientated university courses (medicine, nursing, pharmacy, etc), will receive specific training on diet and physical activity.
- 3.5 The Plan will be incorporated within other programmes (the Andalusian Plan for Healthy Companies, Fitness for Young People etc).
- 3.6 Educational centres will be offered basic information on teaching food preparation, consumption and conservation.
- 3.7 Educational centres with dining halls will be encouraged to offer more balanced and suitable menus.
- 3.8 Educational centres will be encouraged to provide appropriate areas for physical exercise.

Strategies

- The Ministry of Science and Education and the Andalusian universities will be asked to collaborate in the design and implementation of educational programmes on physical activity and diet and other initiatives appropriate to the circumstances.



- Collaboration and involvement in complementary out of school activities to take place within an educational context will be created: the Andalusian breakfast, advertising on school buses, etc.
- The existing provincial infrastructures used for other programmes (Accident, Fitness for Young People, etc) will be used to coordinate these educational activities.
- The Ministries of Health and Education and Science will work together to publish educational and promotional materials.
- Various activities (courses, conferences, etc) aimed at all levels of educational personnel, including infant education centres, will be organised. These activities will aim to provide sufficient training on balanced diet and physical activity.
- Existing day nurseries could also be used to organise activities aimed at providing information to pupils' mothers and fathers and making them aware of the importance of healthy eating habits and physical activity, both for their children and for themselves.
- Training courses will be organised for teachers in collaboration with scientific societies operating in Andalusia: (ASCDN, ASEN [Andalusian Society of Endocrinology and Nutrition], AFCMA).
- Agreements will be reached with private educational centres to promote physical activity and healthy eating habits and to design suitable balanced menus for their students.
- Efforts will be made to endow educational centres with appropriate sports facilities.

Indicators

- Number of primary and secondary educational centres including programmes on physical activity and balanced diets.
- Number of universities offering courses on physical activity and balanced diets, according to type of university.

- Number of day nurseries offering courses on balanced diets and physical activity.
- Number of activities (courses, conferences, etc) aimed at training day nursery personnel on the subject of diet.
- Number of infant education centres organising activities aimed at informing pupils' parents about physical activity and balanced diet.
- Number of university faculties including subjects relating to diet in their curriculum.
- Number of educational centres with suitable facilities for physical exercise.



Aimed at the **WORKING POPULATION**

Objectives

- 4.1. Companies will be encouraged to organise programmes promoting physical activity and balanced diets based on the guidelines laid out by the Plan for Healthy Companies.
- 4.2. Companies will be encouraged to introduce suitable, balanced menus in their canteens, following the guidelines of the Plan for Healthy Companies.

Strategies

- The outline of a programme of diet and physical activity training will be created.
- Through agreements negotiated with companies, strategies aimed at introducing programmes promoting physical activity, healthy diets and balanced menus will be designed.
- The subjects of diet and physical activity will be included in the Plan for Healthy Companies.

Indicators

- Number of companies adhering to the physical activity and balanced diet programme of the Plan for Healthy Companies.
- Number of companies adhering to the programme for healthy canteen menus.

Objectives

- 5.1. Recommendations will be made to include basic information on balanced diets in training programmes for food handlers.
- 5.2. Food manufacturing companies will be advised to offer information about the nutritional content of their products to the general public.

Strategies

- The basic outline of the training programme on balanced diets and physical activity for food handlers will be determined.
- Information strategies will be created whereby companies will be advised to extend the nutrient profiles on food labels and consumer recommendations.

Indicators

- Number of food manufacturing companies adhering to the programme for balanced diets within the Plan for Healthy Companies.
- Number of food manufacturing companies adhering to the diet and physical activity training programme contained in the aforementioned Plan.
- Number of training centres including diet and physical activity in training programmes for food handlers.
- Number of products/companies modifying nutrient profiles on food labels.



Aimed at **CATERING AND LEISURE COMPANIES**

Objectives

- 6.1. Companies will be advised to include basic information on balanced diet in training programmes for food handlers.
- 6.2. Catering companies providing meals for company canteens, schools, residential homes, etc, will be advised to introduce healthy menus.
- 6.3. Steps will be taken to encourage the restaurant industry (bars, restaurants, etc) and tour operators to offer their clients healthy food and balanced menus.
- 6.4. Such companies will be encouraged to make use of suitable information to enable them to use healthier ingredients in the preparation of their menus.
- 6.5. The restaurant industry will be supplied with sufficient information and means to provide their clients with healthy food choices.
- 6.6. The restaurant industry will be encouraged to include food choices which cater for groups suffering from specific health problems (diabetics, celiacs, etc).

Strategies

- The current regulations on training programmes for food handlers will be revised or modified as necessary.
- The basic outline of the balanced diet and physical activity programme will be created.
- Through agreements with companies, strategies for introducing programmes to promote physical activity and balanced diets will be devised (Plan for Healthy Companies).

- Suitable plans of action will be designed to address the situation in dining halls in old people's homes and in day nurseries.
- Public information campaigns (about nutritional values, consumer advice, etc) will be designed.
- Companies within the restaurant industry will receive information about the dietary needs of certain groups and how to prepare simple and easily designed menus to accommodate their needs.

Indicators

- Companies within the restaurant industry following the balanced diet programme in the Plan for Healthy Companies.
- Companies within the restaurant industry following the diet and physical activity training programme in the aforementioned Plan.
- Number of training centres including physical activity and balanced diet within food handler training programmes.



AWARENESS

Objectives

- 7.1 The dissemination and organisation of events on productive experiences involving physical activity and balanced diets will be promoted.
- 7.2 Steps will be taken to provide the general public with greater knowledge on dietary and nutritional habits and physical activity; this will include measures designed to facilitate the assimilation of intervention policies.

Strategies

- A System of Epidemiological Surveillance will be created to report on obesity and other diseases related to overeating, dietary imbalances and sedentary lifestyles.
- An Andalusian Nutrition Survey will be carried out.
- Diet and physical activity will be one of the priority contents of calls to procure subsidised research projects and other such specific programmes.
- An annual competition on diet and physical activity will be held.
- The creation of a register to detect the prevalence of malnutrition in institutionalised patients will be promoted.

Indicators

- Evolution of results of the Nutrition Surveys.
- Number of subsidised projects.



Plan Physical Activity and Balance Diets

ASSESSMENT



- I. INTRODUCTION.
- II. RISK FACTORS.
- III. THE ANSWER: A HEALTH PROMOTION PLAN.
- IV. WORK APPROACH AND IMPLEMENTATION
- V. OBJECTIVES, STRATEGIES AND INDICATORS
- VI. ASSESSMENT**
- VII. BIBLIOGRAPHY





VI. ASSESSMENT

An annual report based on the monitoring and assessment systems will be created. This report will be based on the indicators attached to the objectives for each area and the final results will show the evolution and end result of the different processes.

The following working instruments will be required:

- A monitoring system for the area of epidemiological surveillance (based on the 3rd Health Plan) will be defined. This system will show the basic indicators on the evolution of dietary habits and physical activity within the Andalusian region. Among the most relevant sources of information will be the Andalusian Health survey, the National Health Survey and the Andalusian Nutrition Survey.
- An annual report based on the information systems of the Regional Ministry of Health will be drawn up. By means of this report, citizens will be informed of the progress of the Plan and of the social and health benefits arising from it.



Plan Physical Activity and Balance Diets

BIBLIOGRAPHY



- I. INTRODUCTION.
- II. RISK FACTORS.
- III. THE ANSWER: A HEALTH PROMOTION PLAN.
- IV. WORK APPROACH AND IMPLEMENTATION
- V. OBJECTIVES, STRATEGIES AND INDICATORS
- VI. ASSESSMENT
- VII. BIBLIOGRAPHY**





VII. BIBLIOGRAPHY

1. Aguilera F, Muñoz M, Llopis J, Matiz FJ. Valoración del estado nutricional en una población de niños andaluces. *Aten Primaria* 1990 ; 7: 265-270.
2. American Diabetes Association. Type 2 diabetes in children and adolescents. *Diabetes Care* 2000; 23: 381-89.
3. Aranceta J, Pérez Rodrigo C, Serra Majem LL, et al.- Prevalencia de la obesidad en España: resultados del estudio SEEDO 2000. *Med Clin (Barc)* 2003; 120: 608-612
4. Aranceta J. Situación actual de la alimentación en España. en "Guías alimentarias para la población española", SENC 2001.
5. Banegas JR, Villar F, Pérez C, Jiménez R, Gil E, Muñiz J, et al. Estudio epidemiológico de los factores de riesgo cardiovasculares en la población española de 35 a 64 años *Rev. Sanid Hig Publica* 1993; 67: 419-445
6. Banegas JR, Rodríguez Artalejo F, Martín JM, Rey J. Comer menos grasa para prevenir la cardiopatía isquemia; impacto potencial de Strategies poblacionales e individual de control de la colesterolemia en España. *Med Clin* 1993; 101: 81-86.
7. Cano Fernández C, Chocrón González Y, Martínez Nieto JM, Rodríguez Martín A, Ruiz Jiménez MA, Díaz Vázquez MC, Rendón Gómez MA. Nivel de conocimientos sobre alimentación/ nutrición en adolescentes escolarizados de Cádiz. *Aten Primaria* 1998; 22: 33-38.
8. European Commission: Progress report on the European Commission investigation into nutrition in Europe. Directorate General for Health and Consumer Protection Luxembourg: Office for Official Publications of the European Communities, 2003.

9. European Council. Programme of Community Action in the Field of Public Health 2003-2008. (<http://europa.eu.int>)
10. Consejería de Salud. Valoración del estado nutricional de la Comunidad Autónoma de Andalucía. Consejería de Salud. Junta de Andalucía, 2000 (available at <http://www.csalud.junta-andalucia.es>).
11. Consejería de Salud. Plan Integral de Diabetes de Andalucía 2003-2007. Sevilla: Consejería de Salud, Junta de Andalucía, 2002.
12. Consejería de Salud. Plan Integral de Oncología de Andalucía 2002-2006. Sevilla: Consejería de Salud, Junta de Andalucía, 2002.
13. Consejería de Salud. III Plan Andaluz de Salud 2003-2008. Sevilla: Consejería de Salud, Junta de Andalucía, 2003.
14. Consejería de Economía y Hacienda. Encuesta Continua de Presupuestos Familiares Base 1997: resultados para Andalucía años 1998 y 1999. Sevilla: Consejería de Economía y Hacienda, IEA. Junta de Andalucía, 2002. (www.iea.junta-andalucia.es/ecpf).
15. European Union Food Information Council (UEFIC) . (<http://www.eufic.org/sp/home/home.htm>)
16. Contreras J. La obesidad: una perspectiva sociocultural. *Form Contin Nutr Obes* 2002; 5(6): 275-86.
17. Bulletin of the European Union nº L 271 de 9/10/2002. Decision No 1786/2002/EC of the European Parliament and of the Council adopting a programme of Community action in the field of public health (2003-08)
18. Dixey R, Heindl I, Loureiro I, Perez-Rodrigo C, Snel J, Warnking P. Healthy eating for young people in Europe a school-based



- nutrition education guide. WHO Regional Office for Europe; 1999.
19. EUROPREV Coordinating Group. Preventable Health Conditions in Europe. An approach to morbidity prevalence and mortality from data bases. 1998.
 20. Felicitas Domínguez-Berjón M, Borrell C, Nebot M, Plasència A.- La actividad física de ocio y su asociación con variables sociodemográficas y otros comportamientos relacionados con la salud. *Gaceta Sanitaria* 1998; 12, 3: 100 – 109.
 21. Fernández-Real JM et al. : Evolución ponderal en la población de Girona, 1989-1999. *Rev Clin Esp* 2003; 203: 57-63.
 22. Fundación para la Educación Pública y la Formación en Cáncer (FEFOC). Nutrición y cáncer. (www.fefoc.org/nutrici.htm)
 23. Gómez JA. Los factores de riesgo cardiovascular en la población española: estudio DRECE. V Simposio internacional sobrealimentación lípidos y arterosclerosis. Madrid, 1996.
 24. Goñi Murillo C, Vilches C, Ancizu Irure E, Arillo Crespo A, Lorenzo Reparas V, Ancizu Iribarren P, Áriz Vidondo M, Martínez Inda MJ.- Factores relacionados con los comportamientos alimentarios en una población juvenil urbana. *Aten Primaria* 1999; 23: 32-37.
 25. Guallar-Castillón P, Banegas Banegas JR, García de Yébenes MJ, Gutiérrez-Fisac JL, López García E, Rodríguez-Artalejo F: Asociación de la enfermedad cardiovascular con el sobrepeso y la obesidad en España. *Med Clín (Barc)* 2002; 118: 616-618.
 26. Guiu Viaplana A, Rosell Murphy M, Martínez Artés X, D. van Esso Arbolave, Cirera Codina T, Ramón Hernández E: Evaluación de un programa de ejercicio físico supervisado en atención primaria *Aten Primaria* 1998; 22: 486-490.

27. Institute of European Food Studies. A Pan-EU Survey on Consumer Attitudes to Physical Activity, Body-weight and Health. (<http://www.iefs.org>)
28. Institute of European Food Studies. A Pan-EU Survey on Consumer Attitudes to Food, Nutrition and Health. Report number two: Influences on food choice and sources of information on healthy eating. (<http://www.iefs.org>)
29. Institute of European Food Studies. Dietary Changes. (<http://www.iefs.org>)
30. Instituto de Estadística de Andalucía. Sistema de Información Multiterritorial de Andalucía (SIMA). (<http://www.iea.junta-andalucia.es>)
31. Instituto Andaluz del Deporte. Hábitos y Actitudes de los andaluces ante el deporte 2002. Observatorio del Deporte Andaluz, Consejería de Turismo y Deporte, 2003.
32. James WPT, Isaksson B. Healthy Nutrition: Preventing Nutrition-Related Diseases in Europe. ASPH. Consejería de Salud. Junta de Andalucía, 1994.
33. Kraus RM, Reckelbaum RJ, Ermst N, Fisher E, Howard BV, Knopp RH et al. Dietary guidelines for healthy adults. A statement for health professionals from the nutrition committee. American Heart Association Circulation 1996; 1795-1800.
34. Kraus WE, Houmard JA, Duscha BD et al. Effects of the amount and intensity of exercise on plasma lipoproteins. N Engl J Med 2002; 347: 1483-1492. (www.nejm.org)
35. León E, Benedi A, Calle Pascual AI: Eficacia de los programas conductuales para mantener a largo plazo la pérdida de peso de personas obesas con diabetes mellitus tipo. *Endocrinología* 1999; 46.



36. Manson JA, Greenland P, LaCroix AZ, et al. Walking compared with vigorous exercise for the prevention of cardiovascular events in women. *N Engl J Med* 2002; 347: 716-725.
37. Martínez Vizcaíno F, Salcedo Aguilera F, Rodríguez Artalejo F, Martínez Vizcaíno V, Domínguez Contreras ML, Torrijos Regidor R: Prevalencia de la obesidad y mantenimiento del estado ponderal tras un seguimiento de 6 años en niños y adolescentes: estudio de Cuenca. *Med Clín (Barc)* 2002; 119: 327-330.
38. Mendoza Berjano R, Sagrera Pérez MA, Batista Foguet JM. Conductas de los escolares españoles relacionadas con la salud (1986-1990). CSIC, Madrid, 1994.
39. Ministerio de Agricultura, Pesca y Alimentación. Panel de consumo alimentario.
40. Ministerio de Sanidad y Consumo. Evidencia de la eficacia de la promoción de la salud. Madrid: MSC, 2000. (disponible en <http://www.msc.es/salud/epidemiologia/home.htm>)
41. Moran J. Lactancia materna en España. Situación actual. *An Esp.Peditr* 1992; 36.1: 45-50.
42. Moreiras O, Carvajal A, Campa M.T. Tendencias de los hábitos alimentarios y estado nutricional en España. Resultados de la encuesta de presupuestos familiares (1964-1991) documento de consenso sociedad española de nutrición comunitaria. Barcelona: edit SG; 1995: 105-117.
43. Ogden CL, Flegal KM, Carroll MD, Jonson CL. Prevalence and trends in overweight among US children and adolescents, 1999-2000. *Jama* 2002; 288: 1728-1732.
44. Otero Moreno, JM (dir.). El Deporte Andaluz en Cifras 2002. Málaga: Consejería de Turismo y Deporte. Observatorio del Deporte Andaluz, 2003.

45. Ransome OJ, Chalmers B, Herman, SG. Factors influencing breast-feeding in an urban community. *Med J* 1989; 76: 431-433.
46. Rocchini, Albert P. Childhood obesity and a diabetes epidemic. *N Engl J Med* 2002; 346: 1390-1393. (www.nejm.org.)
47. Rodríguez Artalejo F, Banegas Banegas JR, de Oya Otero M. Dieta y enfermedad cardiovascular. *Med Clin(Barc)* 2002; 119: 180 – 188.
48. Royo-Bordonada MG, Gorgojo L, de Oya M, Garcés C, Rodríguez-Artalejo F, Rubio R, del Barrio JL, Martín-Moreno JM: Variedad y diversidad de la dieta de los niños españoles: Estudio Cuatro Provincias. *Med Clin (Barc)* 2003; 120: 167-171.
49. Rubio MA, Gutiérrez Fuentes JA, Gómez Gerique JA, Ballesteros MD, Montoya MT. Estudio DRECE: dieta y riesgo de enfermedades cardiovasculares en España. Hábitos alimentarios en la población española. *Endocrinología y Nutrición* 2000; 47 (10): 294 – 300.
50. Sánchez Cruz, JJ (coord.): Encuesta Andaluza de Salud, 1999. Consejería de Salud. Junta de Andalucía, 2003.
51. Servicio Andaluz de Salud. Estudio DRECA, dieta y riesgo de enfermedades cardiovasculares en Andalucía. Consejería de Salud, Servicio Andaluz de Salud. Junta de Andalucía, 1999.
52. Serra Majem LL, Ribas Barba L, Pérez Rodrigo C; Román Viñas B, Aranceta Bartrina J. Hábitos alimentarios y consumo de alimentos en la población infantil y juvenil española (1998-2000): variables socioeconómicas y geográficas. *Med Clin (Barc)* 2003; 121: 126 –131.
53. Sinha R, Fisch G, Teague B, et al. Prevalence of impaired glucose tolerance among children and adolescents with marked obesity. *N Engl J Med* 2002; 346: 802-10.



54. Sociedad Española de Nutrición Comunitaria (SENC). Guías alimentarias para la población española, recomendaciones para una dieta saludable. Madrid: Sociedad Española de Nutrición Comunitaria, 2001.
55. Trichopoulou A, Costacou T, Bamia C, Trichopoulos D. Adherence to a mediterranean diet and survival in a greek population. *N Engl J Med*. 2003; 348: 2599-2608.
56. Varo Cenarruzabeitia JJ, Martínez González M.A, Sánchez-Villegas A, Martínez Hernández JA, de Irala Estévez J, Gibney MJ. Actitudes y prácticas en actividad física: situación en España respecto al conjunto europeo. *Aten Primaria* 2003; 31 (2):77-86.
57. World Health Organization. World Health Report 2002: Reducing Risks, Promoting Health Life. Geneva: World Health Organization, 2002.
58. World Health Organization. CINDI dietary guide. WHO-Europe; 2000.
59. World Health Organization. Healthy living. WHO; 1999.
60. World Health Organization. Health 21. Geneva: WHO-Europe; 1999.
61. World Health Organization. Process for a strategy on diet, physical activity and health. WHO; 2002.
62. World Health Organization. The first action plan for food and nutrition policy. WHO; 2001.
63. World Health Organization. Targets for health for All. Copenhagen: WHO Regional Office for Europe; 1985.
64. World Health Organization. Development of food and nutrition action plans in southern European countries. WHO-FAO; 2002.



Plan Physical Activity and Balance Diets

AUTHORS





AUTHORS OF THE PLAN

MANAGEMENT

M^a Antigua ESCALERA URKIAGA

Director General of Public Health and Participation. Regional Ministry of Health.

Javier ORTIZ GONZÁLEZ

Head of Health Promotion and Medical Surveillance Services.
Directorate General for Public Health and Participation. Regional Ministry of Health.

Jesús MUÑOZ BELLERIN. (Coordination)

Specialist. Directorate General for Public Health and Participation. Regional Ministry of Health.

AUTHORS

Javier ALONSO ALFONSECA

Nutrition and Biochemical Unit Manager.
Andalusian Centre for Medicine and Sport.
Regional Ministry of Tourism and Sport.

Diego APARICIO IBÁÑEZ

Andalusian Consumer and Users Association Representative

Javier BLANCO AGUILAR

Specialist. Directorate General for Public Health and Participation
Regional Ministry of Health.

Germana CABALLERO LOPEZ

Specialist. Directorate General for Educational Assessment and Teacher Training.
Regional Ministry of Education.

Jose Antonio CONEJO DIAZ

General Coordinator for Environmental Health.
Regional Ministry of Health.

Confederation of Andalusian Entrepreneurs (CAE)

Carmen Pilar JIMÉNEZ LORENTE

Nutrition and Physical Activity Work Group Coordinator
Andalusian Family and Community Medicine Association (AFCMA).

Francisco JIMÉNEZ LUQUE

Director of the Mediterranean Food Institute
Regional Ministry of Agriculture and Fisheries.

Carmen LAMA HERRERA

Specialist. Andalusian Health Service.

Ana Reyes LÓPEZ HERNÁNDEZ

Head of Day Nursery Services.
Regional Ministry of Social Affairs.

Catalina MONAGO RAMIRO

Head of the Education and Consumer Promotion Service. Directorate
General for Consumer Affairs.
Regional Ministry of Governance.

Teresa MUELA TUDELA

Secretary of the Andalusian Network of Health Cities.
Andalusian Federation of Municipalities and Provinces.

Jesús MUÑOZ BELLERIN

Specialist. Directorate General for Public Health and Participation.
Regional Health Ministry.

Rafael MURIEL FERNÁNDEZ

Specialist. Directorate General for Public Health and Participation.
Regional Health Ministry.

Jesús PEINADO ALVAREZ

Head of Food Hygiene and Safety Services.
Regional Ministry of Health

**Antonio PÉREZ DE LA CRUZ**

President of the Andalusian Society of Clinical Dietetics and Nutrition.

Miguel PICÓ JULIA

Specialist. Directorate General for Public Health and Participation.
Regional Health Ministry.

Juan PINILLA MUÑOZ

Specialist. Directorate General for the Organisation of Processes and Training
Regional Health Ministry.

Juana M^a RABAT RESTREPO

Vicepresident of the Andalusian Society of Clinical Dietetics and Nutrition.

Isabel REBOLLO PEREZ

Secretary of the Andalusian Society of Clinical Dietetics and Nutrition.

Alfredo RUBIO SANZ

Head of Epidemiological Services.
Regional Health Ministry

María F VALLINO LLABRES

Specialist. Directorate General for Public Health and Participation.
Regional Health Ministry.

PLAN FOR
PROMOTION
OF PHISICAL ACTIVITY
AND BALANCES DIETS



2004-2008

